REPRODUCTIVE HEALTH BENEFITS: Panacea for Attaining The SDGs

59th

Proceedings of the

Scientific Conference &
ANNUAL GENERAL MEETING

of the

Society of Gynaecology and Obstetrics of Nigeria (SOGON)



OLUYOLE 2025

EDITORS

Olayinka Ogunbode
Ayodeji Adeyanju
Olubukola Adesina

PROCEEDING OF THE 59TH SCIENTIFIC CONFERENCE AND ANNUAL GENERAL MEETING OF THE SOCIETY OF GYNAECOLOGY AND OBSTETRICS OF NIGERIA (SOGON)

OLUYOLE 2025

THEME

REPRODUCTIVE HEALTH BENEFITS: Panacea for Attaining The SDGs

SUB-THEMES:

- **Maternal Mortality** - Collaborations, Policies and Partnerships to the Rescue
- **Minimally Invasive Surgeries** - Successes and Challenges in the LMICs
- **Gynaecological Cancers** - Reducing the burden, Improving the Outcomes
- **Family Planning** - the Pains and Gains: Lessons for Progress

24 - 28 November 2025

Venue
International Conference Centre, Ibadan

EDITORS

Olayinka Ogunbode
Ayodeji Adeyanju
Olubukola Adesina

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Leil One Nigeria Enterprises (Jopeak Nigeria Limited)
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Welcome Address by the President

Prof. Okechukwu C. Ikpeze MBBS (Ib), FRCOG (UK), FMCOG, FWACS, FICS, FISS

On behalf of the Exco and Council of the Society of Gynaecology and Obstetrics of Nigeria (SOGON) it is my great honour and privilege to welcome you all to the 59th Annual General Meeting and Scientific Conference of our great Society taking place at Ibadan, the beautiful capital city of Oyo State, Nigeria.

This year marks 60years of the founding of SOGON (1965) with Prof Okoronkwo (OK) OGAN as the first President. Ibadan has featured prominently in the the growth and development of our Society. As a pre-eminent University town in Nigeria she has been the home of some of the most eminent patriots of our genealogy including Prof J.B. Lawson, Past Presidents Prof. O.A. Ojo, Prof. V.E. Aimakhu and Prof. L.N. Ajabor (later relocated to Benin City). It has been a seat of learning that produced many, including my humble self and eminent classmates of SOGON family who met and learned directly under these patriots in person -Prof Isaac F. Adewole (Past U.I. VC; Past Hon Minister of Health), Prof . Ayo Arowojolu (Past Chair O&G NPMCN) to mention only but a few. She has also had other great teachers and influencers of O&G whom we have also been very privileged to meet in person and learn directly under their wings - Please permit me to name only but a few – Emeritus Prof E Akande, Prof A. Adeleye, Prof. O Ogunbode, Prof O.A. Ladipo, Prof. E. Otolorin, Prof O. A. Ojengbede, Dr A. O. Marinho and others. I take a bow to salute these great men on whose shoulders I am so humble to stand on today as their erstwhile student and now the SOGON President.

Ibadan has successfully hosted several SOGON AGMs, including an International Conference, in the past. It is therefore very fitting that the Western Sector was given the hosting rights for the present 2025 Annual General Meeting and Scientific Conference. The Council is of the firm conviction that the Local Organising Committee would rise to the occasion and also give us an uncommon, successful and unforgettable experience. The Council noted that the city is very accessible by air and by rail from every part of the country.

The Local Organising Committee ably led by The Sector Chairman Prof Olubukola Adesina has been in contact with Exco and Council and has given us the greatest assurances of an excellent outing. They have worked very hard to package and give us this wonderful event. Thank you LOC, Western Sector and and her members for your hard work and hospitality.

The 59th AGM and Scientific Conference provide us great platforms and opportunities for SOGON members, our partners and other professional groups involved in women's health to interact, share ideas, network and push the agenda for the highest levels of healthcare for our women through their journey from childhood to reproductive years and beyond.

SOGON OLUYOLE 2025 has the main theme : REPRODUCTIVE HEALTH BENEFITS: Panacea For Attaining The SDGs. It promises to provide an educational experience that will be second to none.
This will be complemented by captivating social activities which we enjoin you to savour because we already know of the great hospitality of Ibadan and the Western Sector.

This AGM and Scientific Conference is the second since I was elected the President of the Society of Gynaecology and Obstetrics of Nigeria in November 2023. In this period of time we have been involved in the following key projects:

- FIGO/SOGON LEADERSHIP DEVELOPMENT INITIATIVE (LDI:REACH) with activities in Gombe, Enugu, Kano and Lagos States focusing on reduction of Maternal Morbidity and Mortality from Preeclampsia/Eclampsia and from Postpartum Haemorrhage. SOGON Exco has invited the key actors from project States and LDI Champions to a meet and share session at this conference.
- The Global Health Workforce Programme (GHWP) is a collaboration involving many Global partners – SOGON, RCOG, THET, ACEPHAP, UK International Development, Ducit Blue and the FMoHSW. It focuses on improving Essential Gynaecological Skills (EGS) among Health workers in Nigeria and elsewhere. This project has come to a very successful close, with a possible extension through the Leventis Group being awaited.



- AMPLI-PPHI Project Accelerating Measurable Progress and Leveraging Investment for PPH Impact. In this project SOGON partners Unitaid, Jhpiego, FIGO and FMoHSW . It focuses on utilisation of newer medications, and devices in providing catalytic reduction of maternal mortality from PPH.

  The project is being executed at the National level and in Kebbi and Ondo States, Additionally, three States (Anambra, Kwara and Rivers) have been designated as Learning Hub States. SOGON members and other relevant health care workers in these States have been enlisted and are being trained and equipped with advocacy and other skills necessary to improve investment and utilization of newer drugs and materials for prevention and management of PPH. May I appreciate our National PPH Champion Dr Aisha Nana Adamu (Asst SG). Dr Theresa Iriyenikan (Champion ONDO), the Leaders in the Hub States – Prof Abiodun Aboyeji (VP1), Prof Rosemary Ogu (MWAN Past President) and Prof Ifeanyi Ezebialu (Asst SG) for the wonderful work they are doing. In the present Scientific Conference there will be a special plenary session by JHPIEGO AND SOGON to showcase this very important work. There will also be Pre-conference workshops and trainings by SOGON and Jhpiego to build capacity of young SOGON members and others to deliver high quality care in labour and PPH prevention and Management. 12 selected candidates will be trained as Master Trainers by a team led by the SOGON National Master Trainer Prof Oliver Ezechi, who has been adequately prepared and equipped for the role at the last FIGO Congress in Cape Town.

- SOGON is also working with many other partners, often sharing expertise with these bodies including the FMoHSW(Family Health, Safe Motherhood, Nutrition and other divisions). Other important partners include the development Research and Projects Centre (dRPC), ACEPHAP Kano, CCTRIS Lagos to whom we extend our appreciation.

- During this Conference The National Task Force for Elimination of Cervical Cancer in Nigeria will hold a plenary session to showcase aspects of the great ongoing work. This Task Force is an initiative of the Federal Government of Nigeria and Chaired by one of our distinguished icons Prof Isaac F. Adewole, Past VC UI and past Hon Minister of Health. Some of our members (including my humble self) are Subcommittee Chairs or members. I implore you to join the session and be part of this progressive move. Congratulations to IFA and team.

SOGON greatly appreciates the cooperation of all these and other partners and friends who have enabled us to be the VOICE OF WOMEN'S HEALTH IN NIGERIA.
During the 2025 FIGO Congress in Cape Town, our great Society was retained in the FIGO Governing Council hence allowing me as SOGON President to continue to sit in this highest decision making FIGO Council. I wish to very heartily congratulate SOGON on this continuing achievement and recognition.
Engaging SOGON members in all our activities is an important goal of this administration.
In all our activities we have endeavoured to engage SOGON Sector Chairs, State Coordinators and other active members in the Project States.
We have also been able to raise Project Champions from among the SOGON members participating in the various projects. They continue to serve effectively in their various roles.

- **THE SOGON WEBSITE** has been upgraded to feature most of our activities. Full restoration and greater applicability are being pursued.

Please always visit **www.sogon.org** to get important information. Very soon you will be asked to follow us on X, Facebook, You Tube, LinkedIn and other social media handles.

- **The SOGON Flagship Journal**

The Tropical Journal of Obstetrics and Gynaecology(TJOG) has maintained very high quality and regularity. It is accessible on the Journal and SOGON websites for free.
The Distinguished Editor in Chief Prof Patrick Daru and the editorial team need to be commended. TJOG is now published four times a year, of very high standards in terms of peer review mechanism, impact, citation index, article quality and journal rating. I am assured that it will soon become listed in highly rated indexing platforms, having largely satisfied the requirements. Professor PH Daru has completed his five-year single tenure and very meritoriously acquitted himself. I hereby appreciate and commend him for wonderful service rendered to SOGON.
The EXCO has applied due process as enshrined in the Constitution to select and appoint a successor after competitive interview. It is therefore my pleasure to welcome Prof. A. Ocheke as the next Editor in Chief. Congratulations. Please lend her your support and send your papers to TJOG for publication.
Today, I wish to express deep gratitude to the Government and good people of Oyo State for hosting us.
Finally, I want to thank the Executive Council and all our members including the Trustees, Elders, Senior and other Colleagues for your tremendous support and encouragement. May God bless us all.

SOGON PRESIDENT



Welcome Message From LOC Chairman
Prof. Olubukola Adesina

Your excellencies, on behalf of the Executive Committee, members of the SOGON Western Sector and Members of the LOC, I welcome you all to the **59th Annual General Meeting & Scientific Conference of the Society of Gynaecologists and Obstetricians** tagged ' SOGON OLUYOLE 2025'. We welcome you to Ibadan, a city founded in 1829 as a war camp of allied Yoruba forces. We welcome you to Ibadan, the city of 'brown' roofs and a city of many firsts, a city with vibrant culture and rich history as a Yoruba military and administrative hub.

The **Theme for the conference: Reproductive Health Benefits: A Panacea for Achieving the SDGs** has been chosen in view of the fact that with 2030 just around the corner, there is an opportunity for us all to evaluate, refocus, collaborate, re-callibrate and explore partnerships to attain the goals and improve our indices. The subthemes include Maternal mortality and the possibility of collaborations and partnerships as a means of rescue; Gynaecologic cancers including Cervical Cancer and the opportunities to reduce the burden and improve the outcomes among our women. Family planning, with the pains and gains being lessons for our progress. In the midst of all these challenges, we must keep up with the rest of the world and so despite the challenges, the potential for successes of Minimally Invasive surgeries will ensure we stay abreast with the rest of the world.

The Society of Gynaecology & Obstetrics of Nigeria was established in 1965 with the vision that Nigerian women achieve the highest possible standards of physical, mental, reproductive and sexual health and wellbeing throughout their lives. These annual sessions provide a platform for networking, showcasing research activities and building capacity. This conference is a homecoming because it all started here in the South-West. And so, we are honoured that the SOGON Council, distinguished Elders, Senior Colleagues and Colleagues, indeed Distinguished SOGONITES from all over the country and the from the Diaspora have gathered here in Ibadan.

Ibadan remains a major commercial and industrial hub. Ibadan remains a vibrant blend of ancient history and modern development, serving as a crucial educational, commercial, and administrative centre in Nigeria.

We welcome you to explore several historical and modern landmarks such as the citadel of learning - University of Ibadan (first and the best), Cocoa House, Mapo Hall, Bower's tower, Agodi Gardens, the premier teaching hospital and national treasure- the University College Hospital, Obafemi Awolowo Stadium.

Once more, your excellencies, distinguished Elders, Senior Colleagues and Colleagues, indeed Distinguished SOGONITES from all over the country and the from the Diaspora welcome to SOGON OLUYOLE 2025.



COMMUNIQUE ISSUED AT THE END OF THE 59TH ANNUAL GENERAL MEETING AND SCIENTIFIC CONFERENCE OF THE SOCIETY OF GYNECOLOGY AND OBSTETRICS OF NIGERIA (SOGON) HELD AT THE INTERNATIONAL CONFERENCE CENTER, UNIVERSITY OF IBADAN, IBADAN, OYO STATE, NIGERIA BETWEEN 24TH – 28TH NOVEMBER 2025

Preamble

The 59th Annual General Meeting and Scientific Conference of the Society of Gynaecology and Obstetrics of Nigeria (SOGON) was convened in Ibadan, Nigeria, from the 24th to the 28th of November 2025. Under the theme **"Reproductive Health Benefits: Panacea for Attaining the Sustainable Development Goals (SDGs)**. The conference extensively discussed the worsening maternal mortality ratio and major contributors to this ugly situation, ranging from inadequate fund allocation for health in the National and subnational budgets, insecurity and emigration of health workers to greener pastures, among other factors. However, considering the 2030 target for attaining the SDGs, Nigeria can still improve on the poor indices if adequate measures are put in place.

The sub-themes were carefully selected to address critical facets of women's health and well-being in Nigeria. They are as follows:

I. Maternal Mortality- Collaborations, Policies and Partnerships to the Rescue
II. Gynaecological Cancers- Reducing the burden, improving the Outcomes
III. Minimally Invasive Surgeries- Successes and Challenges in the LMICs
IV. Family Planning- The Pains and Gains: Lessons for Progress

Day One: Council Meeting

The conference began with the traditional SOGON Council meeting which was held on Tuesday, 25th November, 2025. Some important decisions were taken at the Council meeting, notably reconstitution of the Board of Trustees, appointment of a new Editor in Chief of the Tropical Journal of Obstetrics and Gynaecology, upward review of annual and life membership dues and the approval of the bid of the North Central Sector to host the 2028 National Conference.

Day Two: Courtesy Visits, Preconference workshops, Symposium on SOGON projects, Annual General Meeting and welcome cocktail.

The day started with a courtesy call to the Chief Medical Director of University College Hospital, Ibadan, Prof. Jesse Otegbayo. He welcomed Council members warmly into his office and pledged his unalloyed support throughout the conference. SOGON made a donation of sphygmomanometers and chairs for use at the antenatal clinic. Council members also paid a courtesy call on the Provost, College of Medicine, Prof. Temidayo Ogundiran. He appreciated the Society for coming and wished the Society a successful conference. Again, SOGON made a donation of five hundred thousand naira to support indigent medical and dental students, a gesture well appreciated and applauded by the management of the College.



The preconference workshops drew in more than 300 participants, offering hands-on training and quality workshops on important areas in Obstetrics and Gynaecology. Four different workshops ran concurrently and include:

I. From Paper to Electronic Labour Care Guide: Competency-Based Training
II. Genomic and Precision Medicine approaches in Obstetrics and Gynaecological Practice
III. Different audiences, different styles: Advocacy 101 for Obstetricians and Gynaecologists
IV. Training on Hormonal Intrauterine Device for Health Care Providers
V. Master Trainers' Course on WHO PPH Guidelines.

The workshops allowed participants to engage actively in practical sessions focusing on these critical areas. The symposium on Accelerating Measurable Progress and Leveraging Investments for Postpartum Haemorrhage Impact (AMPLI-PPHI raised awareness of members on SOGON ongoing projects and partnerships. The advocacy workshop was chaired by the SOGON President, Prof. Okechukwu Ikpeze and co-chaired by VP-1 Prof. Abiodun Aboyeji and VP-2, Prof Christopher Aimakhu.

The Annual General Meeting, led by the President, Prof. Okechukwu Ikpeze, began with an opening speech highlighting the remarkable achievements made since he assumed office two years ago. Important Council decisions were also presented and ratified by the AGM. This was followed by the presentation of the Secretary General's report, and a detailed audited financial report for the year/Honorary Treasurer's Report. The Report of the Editor in Chief of the Tropical Journal of Obstetrics and Gynaecology was also presented.

Day Three: Opening Ceremony and Scientific Conference

This marked the official opening ceremony, with over 500 participants, including dignitaries, members, and the media. The Honourable Minister of State for Health, Dr Iziaq Adekunle Salako, ably represented by Dr Babatunde Ladi Akinyemi, declared the Conference open. The LOC Chairman, Prof. Olubukola Adesina, welcomed everyone and underscored the theme's relevance, noting that, with 2030 just around the corner, there is an opportunity to evaluate, refocus, collaborate, recalibrate, and explore partnerships to attain the goals and improve our indices.

Prof Okechukwu Ikpeze, as the President of SOGON, reiterated the profound significance of the conference's theme and subthemes.

The highlight of the opening ceremony was the keynote lecture delivered by Prof. Peter N. Ebeigbe, a renowned gynaecologist, President of the National Postgraduate Medical College, and a teacher and global health expert. Prof Ebeigbe's presentation, titled "Reproductive Health Benefits: Panacea for Attaining the SDGs", underscored the alarming indices of maternal health in low- and middle-income countries, especially in Nigeria, with five years remaining to achieve the SDGs. He outlined essential strategies to reverse this trend, shedding light on important measures crucial for achieving and sustaining the goals and improving the indices despite Nigeria's current multifaceted difficulties.



The major highlight of the conference was the induction ceremony welcoming 101 new members into the Society by the President, Prof. Okechukwu Ikpeze assisted by the Secretary General, Prof. Azubuike Onyebuchi.

Day Four: Plenaries and Scientific sessions

The day started with the Prof J. B. Lawson Memorial Lecture presented by Professor I.O. Morhason-Bello, ``**Emerging Sexual Behaviours and Concordant HPV infections and Cancers in Women: Facts or Fallacy?**

The lecture highlighted the importance of sex and new sexual behaviours, especially as they relate to HPV as a major etiological factor causing cervical cancer and, more recently, heart disease. He highlighted the World Health Organisation Cervical Cancer Global Elimination Strategy, the promotion of Routine HPV Immunisation in Nigeria and the need to be aware of sexual behaviours that can cause serious health challenges and worsen our health indices.

The day continued with other plenary and parallel sessions with over 150 scientific abstracts presented, and contemporary issues and topics were extensively discussed.

Observations

The conference discussions centered on the following:

- The probability of Nigeria meeting the SDG goals 2030 is shaky if drastic actions are not taken and urgent intervention implemented immediately.
- There is a rising maternal mortality ratio, worsening Nigerian health indices
- There is an increasing uptake of minimally invasive surgery in Nigeria. However, the rising cost of the equipment with worsening economic challenges has made minimally invasive surgery a great deal in most low and middle-income countries, including Nigeria.
- Gynaecological cancers, especially cervical cancer, remain the second most common cancer among Nigerian women, and it is almost entirely preventable. However, emerging sexual behaviours are making eradication of this scourge a major challenge.
- Family planning uptake is still suboptimal in Nigeria.

Recommendations

Based on these observations, the following recommendations were proposed:

- There is a need for increased health financing in our budget and judicious use of resources. There is a need for urgent actions and interventions for Nigeria to achieve the SDGs. It is possible if concerted efforts are put in place.
- Mass HPV vaccination campaigns should be sustained and advocacy to our religious and traditional leaders, to foster acceptance among adolescent girls. There is a need for improved hygiene, lifestyle modifications, especially unusual sexual practices, in reducing HPV infection and the scourge of cervical cancer.
- There is a need for the government to eradicate import duties on equipment for minimal



access surgery to make the procedure more affordable.

- Encouraging community access to family planning commodities, provision of family planning commodities, dispelling myths, and ensuring obstetric care accessibility.
- Continued collaboration with SOGON and other critical stakeholders in reducing maternal morbidity and mortality to achieve the SDGs by 2030.

Appreciations

1. The President of the Federal Republic of Nigeria, Asiwaju Bola Ahmed Tinubu GCFR
2. The Executive Governor of Oyo State, Engineer Oluseyi Makinde
3. The Coordinating Minister of Health and Social Welfare, Prof. Muhammad Ali Pate
4. The Honourable Minister of State for Health and Social Welfare, Dr Isiaq Adekunle Salako
5. The Honourable Commissioner of Health, Oyo State, Dr Oluwaserimi Adewumi Ajetunmobi
6. Chief Medical Director, University College Hospital, Ibadan, Prof. Jesse Abiodun Otegbayo
7. The Provost, College of Medicine, UCH, Ibadan, Prof. Temidayo Ogundiran
8. International Donor agencies/Partners, especially Jhpiego and other sponsors/exhibitors.
9. All our speakers, including the Keynote Speaker, Prof Peter Ndidi Ebeigbe, and Prof J.B. Lawson Memorial Lecturer, Prof I.O. Morhason-Bello
10. All members of the LOC.
11. All members, SOGON Western Sector
12. All Sector Chairmen and esteemed members
13. All SOGON members
14. All other guests
15. Member of the Press

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Prof Okechukwu Ikpeze
President, SOGON

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Prof. Azubuike Onyebuchi
Secretary General, SOGON



59TH SOGON Annual General Meeting & Scientific Conference (OLUYOLE 2025)

PROGRAM OF EVENTS

WEDNESDAY, 26TH NOVEMBER TO FRIDAY 28TH NOVEMBER, 2025.

DAY	TIME FRAME	ACTIVITIES	PRESENTERS/CHAIRMAN	VENUE
	9:00 am	REGISTRATION CONTINUES		
	10:00am – 2:30 pm	Pre-conference Workshop (session 4 hours, 30mins)		
	10:00am – 2:30 pm	From Paper to Electronic Labour Care Guide: Competency-Based Training	Dr Jaiyeola Oyetunji	**Ibadan Business School, Bodija, Ibadan**
	10:00am – 2:30 pm	Genomic and Precision Medicine approaches in Obstetrics and Gynaecological Practice	HPV Consortium	**Maternal and Child Health building, UCH, Ibadan**
	10:00am – 2:30 pm	Different audiences, different styles: Advocacy 101 for Obstetricians and Gynaecologists	Dr Funmilola OlaOlorun	**CANHENT Hall, Circular Road, UCH, Ibadan**
	10:00am – 2:30 pm	Training on Hormonal Intrauterine Device for Health Care Providers	Prof Michael A. Okunlola	
	1:30pm – 2:30 pm	LDI: REACH	SOGON President	**Paul Hendrickse Lecture Theatre, College of Medicine**
	2:30pm – 3:30 pm	AMPLI - PPHI	SOGON President	
	3:00pm – 4:00pm	Orientation of the new Inductees	SOGON Secretary General	
	3:30pm – 5:00 pm	National Task Force- Cervical Cancer Elimination	Prof I. F. Adewole Chairman	
	5:00pm – 7:00pm	Annual General Meeting	SOGON President	
	7:00pm	Cocktail	UCH Management	**College Quadrangle**



DAY	TIME FRAME	ACTIVITIES	PRESENTERS	VENUE	CHAIRMAN OF SESSION	CO-CHAIRMAN OF SESSION
Thursday	7.30am	REGISTRATION CONTINUES				
	8.00am – 9.30am	Young Gynaecologist Majekodunmi Prize (**Thomas Oritsejolomi Hall**)		International Conference Center, Ibadan	PANEL OF JUDGES Prof. A. Aboyeji Prof. B. Bako Prof. K. Adesina Dr. N. Obi Prof. OUJ Umeora Prof A. Gbadegesin	*Rapporteur* *Dr. Abduls-Salam*
	9:30 am – 10:30am	Presidential Session (**Thomas Oritsejolomi Hall**)			Prof. O. Ikpeze	
	10:30 am – 11:00 am	Tea Break				
	11:00 am – 1:00 pm	Opening Ceremony **Keynote lecture:** Reproductive Health Benefits, A Panacea for Achieving the SDGs)	Prof P. N. Ebeigbe	International Conference Center		
	1:00 pm – 1:40 pm	Lunch Break /Flash Symposium				
	1:40 pm – 2:20 pm	Technology - Powered Solutions to Africa's Maternal Mortality Crisis – Bridging the Healthcare Access Gaps	Yewande Maborukoje ***Field Technology***	International Conference Center Ibadan	Prof. C. Aimakhu	Dr. M. Adedeji *Dr. O.O. Lawal (Rapporteur)*
	2:20 pm – 3:00 pm	**PLENARY SUBTHEME 1** - Maternal Mortality-Collaborations, Policies and Partnerships to the Rescue	Prof Halima Mukaddas		Prof. A.O Omigbodun	Prof. A. Usman *Dr.O.O Saanu (Rapporteur)*
	3:00 pm – 3:40 pm	Improving Maternal Outcomes in the Private Sector Through Health System Strengthening: Evidence from the FORMOM Program	Thelma Oriade ***SOLINA Centre for International Development and Research***		Prof. J. Tukur	Prof. P. Fiebai *Dr. R.O Balogun (Rapporteur)*
	3:40 pm – 4:20 pm	**PLENARY SUBTHEME 2** - Gynaecological Cancers-Reducing the Burden, Improving the outcomes	Prof Olusegun Kayode Ajenifuja		Prof. A. Fabanwo	Prof. I. Ezebialu *Dr. M. Ogunkuade (Rapporteur)*
	4.20PM – 4:40PM	Oral Health and Perinatal Care: Evidence for response in Nigeria	Prof. Oliver Ezechi		Prof. O. Fasubaa	Dr. E. Nzeribe *Dr. O.C Idowu (Rapporteur)*
	4:40PM – 4:50PM	TRANSPORT IVF AND CRYOPRESERVATION	The Bridge Clinic		Prof A. Fawole	Prof E. Enabudoso
	4:50pm – 6:50pm	ABSTRACT SESSION/ CONFERENCE COMMUNIQUE				*Dr. O.A. Adedeji (Rapporteur)*
	6:50PM	VARIETY /ABULA NIGHT				



DAY	TIME FRAME	ACTIVITIES	PRESENTERS	VENUE	CHAIRMAN OF SESSION	CO-CHAIRMAN OF SESSION
Friday	7:30AM	REGISTRATION CONTINUES				
	7:30AM – 9:00AM	ABSTRACT SESSIONS		International Conference Center Ibadan		
	9:00AM – 10:00AM	**JB LAWSON Memorial lecture:** Emerging Sexual behaviours and Concordant HPV infections and Cancers in Women: Facts or Fallacy?	Prof I. O. Morhason-Bello		Prof. P. Aboyeji	Dr. A. Marinho *Dr. T.A. Tsele (Rapporteur)*
	10:00 AM – 10:40AM	Updates on Jhpiego's Innovations to Improve the Quality of Intrapartum Care and European Union/Unitaid Funded AMPLI-PPHI Project Implementation in Nigeria	Dr Jaiyeola Oyetunji ***JHPIEGO International***		Prof. E. O. Otolorin	Dr. F. Zara Mairami *Dr. A.S. Olagunju (Rapporteur)*
	10:40AM – 11:20AM	Expanding capacity and conducting translational research for maternal mortality reduction in Nigeria: the CCTRIS experience	Prof. Bosede Afolabi ***CCTRIS Presentation***		Prof. E. Ezenkwele	Prof. N. Enaruna *Dr. S.A. Adeyanju (Rapporteur)*
	11:20AM – 11:45AM	Improving Maternal and Fetal Outcomes in High -Risk Pregnancies: Focus on WHO's Recent Guidelines on Sickle Cell Disease in Pregnancy.	Prof. Bosede Afolabi ***WHO Presentation***		Prof. J. Mutihir	Prof. M. Ekot *Dr. O.O Oni (Rapporteur)*
	11:45AM – 12:15PM	TEA BREAK				
	12;15PM– 12:55PM	**PLENARY SUBTHEME 3** - Minimally Invasive Surgeries - Success and Challenges in the LMICs	Prof Jude Ehiabhi Okohue	International Conference Center Ibadan	Dr. L. Akinola	Dr. G. Obajimi *Dr. A.S Olutoye (Rapporteur)*
	12:55PM – 1:10PM	DC Lab			Prof M. Abdul	Dr F. B. Adewale *Dr. S. Salufu (Rapporteur)*
	1:10PM – 1:20PM	CARROT TOP				
	1:20PM – 1:30PM	NORDICA				
	1:30PM – 2.30PM	FRIDAY PRAYER				
	2:30 PM – 3:10PM	From communities to delivery rooms: Innovative approaches to advancing maternal and reproductive health	***MRHC Presentation***	International Conference Center Ibadan	Dr. Aisha Adamu	Dr A. Fasanu *Dr. J.A Oguntola (Rapporteur)*
	3:10PM – 3:50PM	**PLENARY SUBTHEME 4** - Family Planning - The Pains and Gains: Lessons for progress	Prof Josiah Turi Mutihir		Prof. J. Imaralu	Dr. M. Umemmuo *Dr. A.J. Ogunshola (Rapporteur)*
	3:50PM – 4:30PM	1. Biogenerics: 10 minutes 2. Med height: 10 minutes 3. Elbe: 10 Minutes 4. Medbury: 10 Minutes			Prof. Pius Idowu Ade-Ojo	Dr Theresa Irinyenikan Dr Sanusi *(Rapporteur)*
	4:30PM – 6:30PM	ABSTRACT SESSION/ CONFERENCE COMMUNIQUE				
	6.30PM	DINNER				
DEPARTURE						



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Peri-Operative Vaginal Cleansing Using 4% Chlorhexidine-Gluconate Versus 10% Povidone-Iodine Solution to Prevent Post-Caesarean Endometritis in Ilorin: A Randomized Control Study

Nasiru I. Orisankoko[1], Olayinka R. Balogun[1,2], Abiodun S. Adeniran[1,2], Hadijat O. Raji[1,2], Ganiyat A- Adegboyega[1]

Affiliations

[1]Department of Obstetrics and Gynaecology, University of Ilorin Teaching Hospital, Ilorin, Kwara State

[2]Department of Obstetrics and Gynaecology, Faculty of Clinical Sciences, College of Health Sciences, University of Ilorin, Ilorin, Kwara State

Corresponding Author:

N. I. Orisankoko.

Department of O&G, University of Ilorin Teaching Hospital, Ilorin.

+2347037957122 / nasiruibrahim424@gmail.com

Introduction

- Caesarean section (CS) is one of the commonest obstetric procedures and the rate is increasing globally.
- In spite of improvements in surgical techniques and use of broad-spectrum antibiotics, infectious morbidity such as endometritis remains a major concern
- Puerperal sepsis remains a major cause of maternal morbidity and mortality especially in Nigeria
- Endometritishas been reported to be about 10 times more common after CS compared to vaginal delivery
- In a Cochrane review, the incidence of endometritis was 7% after elective and 30% following non-elective CS.[5]
- Therefore, complimenting prophylactic antibiotics use with other simple, easy, inexpensive, effective and reproducible methods to reduce the occurrence and attendant complications of endometritis will be of benefit to our postpartum women.
- Despite reported significant of peri-operative vaginal cleansing, the practice has not feature in most SOP of CS, underscore the need for more studies to justify its inclusion.

Objectives

- The primary objective was to compare the effect of peri-operative vaginal cleansing using 4% chlorhexidine-gluconate versus 10% povidone-iodine in reducing post-caesarean endometritis, with specific objectives to
- 1. Determine the incidence of post caesarean endometritis following peri-operative vaginal cleansing using 4% chlorhexidine solution compared to 10% PVP-I.
- 2. Presence of patient reported adverse reaction to the vaginal cleansing agent (vaginal dryness, burning sensation, vaginal itching, vulva rashes, vulva swelling, and vulva pain).



- 3. Relationship between risk factors for endometritis and occurrence of endometritis.
- 4. Neonatal outcomes especially first and fifth-minute Apgar scores as well as admission into neonatal intensive care unit (NICU).

Methodology

- The study was a RCT (Superiority), double-blind study, among parturient that had non-elective CS at UITH
- A total of 136 participants who satisfy the inclusion criteria were recruited into the two groups of the study, (comprising 68 participants in each group)
- Group A received 4% chlorhexidine while group B received 10% povidone-iodine for peri-operative vaginal cleansing
- All participants received same antibiotic in peri- and post-operative period
- Data was collected on socio-demographic and obstetric characteristics, post-CS morbidity, side effects of vaginal cleansing agents and delivery outcome.
- Participants were placed in dorsal positions
- The vaginal cleansing was done by the trained research assistant, who scrubbed and put on sterile gloves, parted the labia with his/her non-dominant hand
- Using three pieces of sterile gauze soaked in the required cleansing agent. The soaked gauzes were folded and grasped with sterile sponge holding forceps to clean the vagina from the apex to the introitus with attention to the anterior, posterior and lateral vaginal walls as well as the fornices.
- Such that the sponge was rotated 360° in the vagina and the entire process lasted about 20 seconds and repeated thrice.
- Daily temperature, pulse rate, uterine size / tenderness and lochia characteristic were recorded for the first five days post-surgery, in addition to general physical examinations and lochia m/c/s on day 3 post operation.
- Follow up schedule was at postnatal visit on day 7 and 14 after delivery. Prior to the visit, participants were contacted on phone on, to enquire on the symptoms of endometritis.
- Statistical analysis was done using computer software IBM SPSS Version 26.0. Setting the level of significance (p-value) at <0.05.

Results/Discussion

- A total of 189 women who had non-elective CS during the study period were screened for eligibility, 136 eligible women who consented to participate were recruited and randomized into the study groups, 9 participants did not complete the study (3 left the hospital before collection of sample for lochia m/c/s while six were lost to follow up).
- There were no statistically significant differences in the socio-demographic and obstetric characteristics as well as details of the caesarean section across study groups.
- However, the incidence of clinical diagnosed post-caesarean endometritis was higher in the povidone-iodine group but the differences were not statistically significant (1; 1.6% vs. 2; 3.1%; p=0.641)



- The incidence of laboratory diagnosed endometritis were 5 (3.9%), 2(3.2%) occurred in group A, and 3 (4.7%) in group B, the difference was also not statistically significant (f= 0.006, p = 0.523).
- Also, there is no statistically significant difference between the incidence of post-CS endometritis diagnosed by clinical and laboratory methods.
- The maternal side effects of the vaginal cleansing agents among study participants were similar between the two groups (f=1.849, p=0.137).
- There were no statistically significant differences in the fetal outcome between the two groups, (f=3.069, p=0.150).
- There was statistically significant relationship between membranes rupture greater than 18 hours (OR=8.638, 95% CI=0.563-5.721, p=0.022) and blood-stained liquor (OR=8.833, 95% CI=0.074-45.200, p=0.018) with occurrence of post-caesarean endometritis.

Conclusion/Recommendations

- The study concludes that 4% chlorhexidine gluconate solution is not superior to 4% povidone iodine as a vaginal cleansing agent in the peri-operative period for the prevention of post-caesarean section endometritis. However, both agents showed a similar safety profile for both the mother and newborn.
- The study recommends that chlorhexidine-gluconate should be considered as an alternative to PVP-I for peri-operative vaginal cleansing, particularly in women with contraindications to the use of 10% PVP-I or where not available.
- Recommend multi-center trial with the view to validating these findings and include vaginal cleansing in SOP of CS.



Comparison of Immediate and Early Oral Feeding Regimens following Uncomplicated Caesarean Sections in Ile-Ife, Nigeria: A Randomized Controlled Trial

Ubom AE, Fasubaa OB, Orji EO, Ojo O,Okenwa GF

Affiliations

Department Of Obstetrics, Gynaecologyand Perinatology, Obafemi Awolowo University Teaching Hospitals Complex, Ile-ife, Nigeria

Introduction

Caesarean section is the most commonly performed obstetrics procedure worldwide.Globally, regional caesarean section rates vary between 5% in sub-Saharan Africa to 42.8% in Latin and the Caribbean.Caesarean section is the most commonly performed obstetrics procedure worldwide. In Nigeria, rates of 5.39% -40.1% have been reported in various studies.

Traditionally, oral intake following CS was delayed until return of bowel function.Early initiation of oral feeding was thought to exaggerate the transient postoperative ileus that follows CS.

It has however been demonstrated that the duration of postoperative ileus following caesarean section is relatively short. There is evidence to suggest that bowel activity does not totally cease postoperatively.

Paucity of data on safety of immediate versus early oral feeding following CS is one of the justifications for this study.

Objective:

To evaluate the safety and benefits of immediate oral feeding (IOF) in comparison to early oral feeding (EOF) following uncomplicated caesarean sections (CS).

Methods:

This randomized controlled trial was conducted in the Department of Obstetrics, Gynaecology, and Perinatology, Obafemi Awolowo University Teaching Hospitals Complex, Nigeria, between August 2022 and January 2023. One hundred and sixty-two consenting women undergoing uncomplicated CS under regional anaesthesia were randomized equally into IOF and EOF groups. Oral feeding was commenced in the IOF and EOF groups 2 hours and 6 hours post-CS, respectively. Interval to return of bowel sounds, passage of flatus, passage of stool, ambulation, & breastfeeding was noted. Data was analysed using IBM SPSS (v25). Ethical clearance was obtained (ERC/2022/06/04)

Results:

There were no statistically significant differences in time intervals to return of bowel sounds (120.0 min vs. 240.0 min, *P*=0.056), passage of flatus (900.0 min vs. 1,120.5 min, *P*=0.131), passage of stool (1,920.0 min vs. 2,139.5 min, *P*=0.234), ambulation (608.5 min vs. 892.5 min, *P*=0.379) and eligibility for discharge (1,648.7 ± 614.9 min vs. 1,709.7 ± 541.5 min, *P*=0.509) between the IOF and EOF groups. However, women in the IOF group established breastfeeding (300.0 min vs. 1,278.0 min, *P*=0.020) and commenced regular diet (604.4 ±



29.7 min vs. 840.0 ± 0 min, *P*<0.001) significantly earlier than women in the EOF group. There were no statistically significant differences in the occurrence of ileus and severe/paralytic ileus (*P*=1.000 each) and postoperative fever (*P*=0.620) between the two groups.

Table 1: Times to return of gastrointestinal function, commencement of normal diet, ambulation, establishment of breastfeeding & eligibility for discharge of the study participants

Time interval (min) to	Total (n=162)	Immediate Oral Feeding Group (n=81)	Early Oral Feeding Group (n=81)	*p*-value
Return of bowel sound	146.5 (120.0-360.0)	120.0 (120.0-360.0)	240.0 (120.0-360.0)	0.056
Passage of flatus	960.0 (600.0-1,461,5)	900.0 (540.0-1,290.0)	1,120.5 (600.0-1,627.5)	0.131
Passage of stool	2,100.0 (1,200.0-2855.3)	1,920.0 (1,080.0-2,576.8)	2,139.5 (1,265.8-2,920.0)	0.234
Commencement of normal diet	721.5 ± 220.0	604.4 ± 29.7	840.0 ± 0	**<0.001***
Ambulation	720.0 (480.0-1,200.0)	608.5 (464.8-1,305.0)	892.5 (483.5-1,143.8)	0.379
Establishment of breastfeeding	549.0 (150.8-1,545.0)	300.0 (126.5-1,440.0)	1,278.0 (300.0-1,560.0)	**0.020***
Eligibility for discharge	1,679.6 ± 577.8	1,648.7 ± 614.9	1,709.7 ± 541.5	0.509

Table 2: Postoperative complications of the study participants

Complication	Total (%) (n=162)	Immediate Oral Feeding Group (%) (n=81)	Early Oral Feeding Group (%) n=81)	*p*-value
Nausea	5 (3.1)	2 (2.5)	3 (3.7)	1.000
Vomiting	4 (2.5)	2 (2.5)	2 (2.5)	1.000
Diarrhea	0	0	0	-
Abdominal distention	1 (0.6)	1 (1.2)	0	1.000



Ileus	1 (0.6)	1 (1.2)	0	1.000
Severe ileus/paralytic ileus	1 (0.6)	1 (1.2)	0	1.000
Postoperative fever	4 (2.5)	1 (1.2)	3 (3.7)	0.620

Discussion

Similar to our study findigns, Teoh et al, Mulayim et al, Ahmed et al and Jalilan et al also reported no differences in return of bowel sounds, passage of flatus and time interval to ambulation between women who had immediate and early feeding post-CS.

In the study by Teoh et al, women in the immediate feeding group had significantly reduced time to regular food intake (4.2 ± 2.7 hours versus 20.0 ± 6.8 hours) and earlier commencement of breastfeeding (26.5 ± 14.1 hours versus 38.8 ± 21.8 hours).

Weinstein et al also reported a statistically significant earlier commencement of regular diet (2.0 days versus 2.3 days, p=0.008) amongst women who ate immediately after CS.

Early establishment of normal diet post-CS is beneficial in preventing the depletion of nutrient stores which accompanies the increase in nutritional requirements postoperatively.

It attenuates the postoperative metabolic response to surgical stress, counteracts postoperative protein and skeletal muscle catabolism, enhances anabolism, and provides energy for optimal wound healing and functional recovery.

The incidence of hyperglycemia from postoperative insulin resistance is also reduced with earlier postoperative feeding and establishment of normal diet, consequently reducing the risks of SSI, postoperative morbidity and mortality.

Given the many infant health benefits of breastfeeding, earlier establishment of breastfeeding is a significant benefit of immediate feeding post-CS found in this study.

Conclusion:

This study found a significant association between immediate feeding and earlier establishment of breastfeeding and commencement of normal diet.

There were no differences in postoperative complications and level of satisfaction with the timing of commencement of oral intake between the immediate and early feeding groups.

Oral feeding can, thus, safely be commenced two hours following uncomplicated CS, with the benefits of earlier establishment of breastfeeding and commencement of normal diet compared to early postoperative feeding.

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Perinatal Outcomes of Early Onset Growth Restricted Fetuses with Absent/Reversed Umbilical Artery End Diastolic Flow Monitored with Ductus Venosus Doppler in Ile-Ife, Osun State, Nigeria.

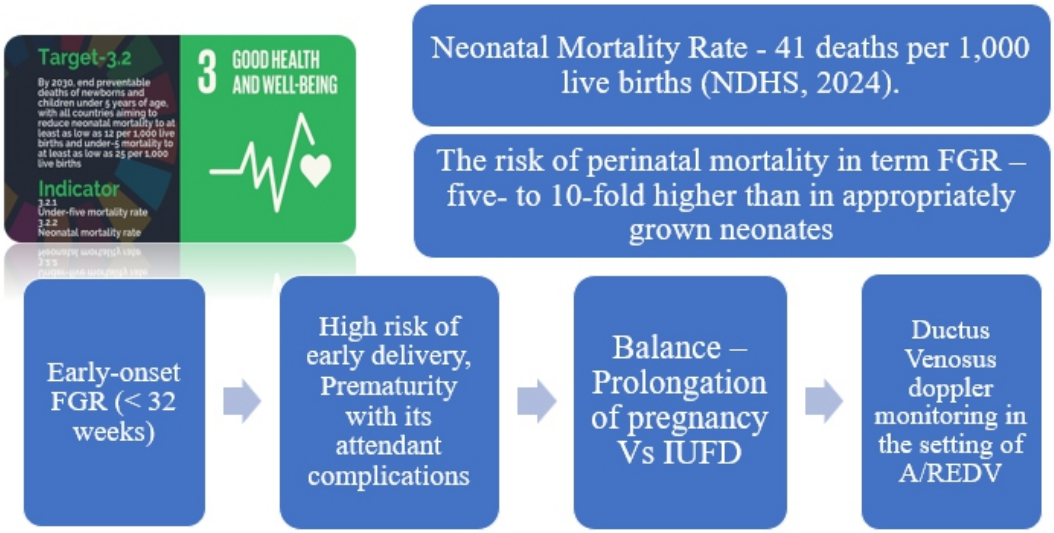
Annat Isah-Raji.[1], Ibraheem O. Awowole[1], Olumide A. Adeniyi[1],
Henry C. Anyabolu[2], Ebunoluwa A. Adejuyigbe[2].

Affiliations
[1]Department of Obstetrics and Gynaecology, Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, Osun State, Nigeria.
[2]Department of Paediatrics and Child Health, Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, Osun State, Nigeria.

Corresponding Author
Isah-raji A.
Department of Obstetrics and Gynaecology, Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, Osun State, Nigeria.

Introduction

Growth restricted fetuses have EFW/AC less than the 10th centile, in the presence of abnormal doppler parameters, or EFW/AC less than the 3rd centile, irrespective of the doppler findings. Early onset fetal growth restriction (FGR) occurs at an estimated gestational age (EGA) of <32weeks, and is a significant contributor to neonatal mortality (NNM). The SDG 3.2 target proposes that all countries should aim to reduce neonatal mortality to at least 12 per 1000 live births. However, at the 2024 Nigeria Demographic and Health Survey (NDHS) report, the neonatal mortality rate was 41 per 1000 live births, 400% above the SDG 2030 target. It has also been reported, that neonates who had FGR stand a 5 to 10 times higher risk of suffering perinatal mortalities. This underscores the need for proper monitoring of these fetuses. This presents a management dilemma regarding striking a balance between prolongation of pregnancy to increase maturity, reduce complications of prematurity and possible neonatal death on the one hand, and the need for timely intervention to prevent IUFD on the other, especially when the there's absent or reversed EDF on UA Doppler on the background of extreme prematurity. At that point the only option left for fetal surveillance is the DV Doppler.

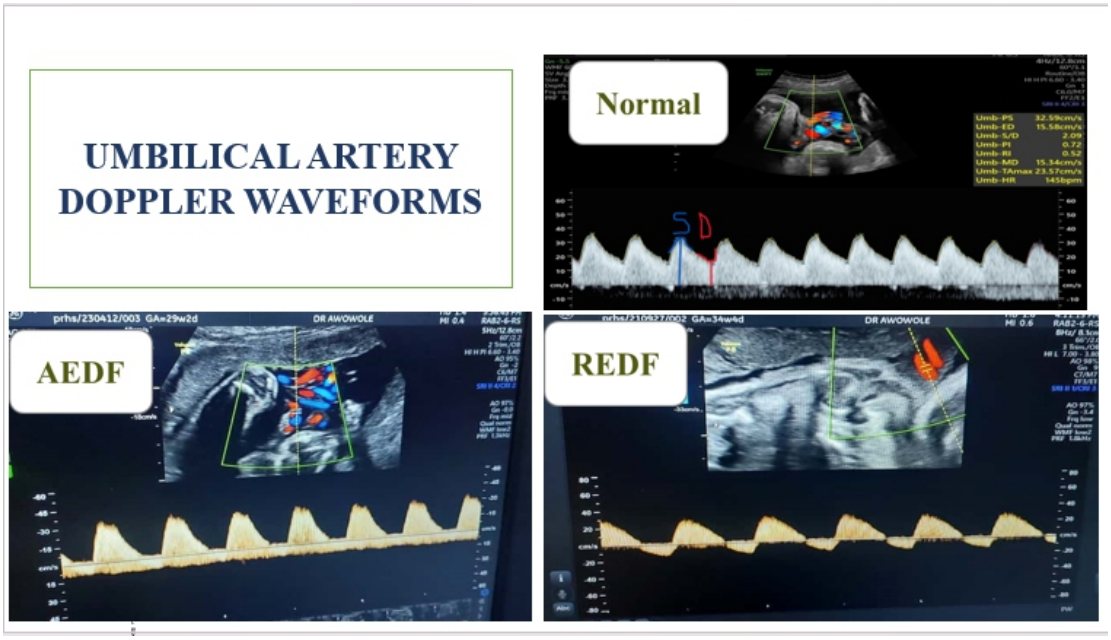


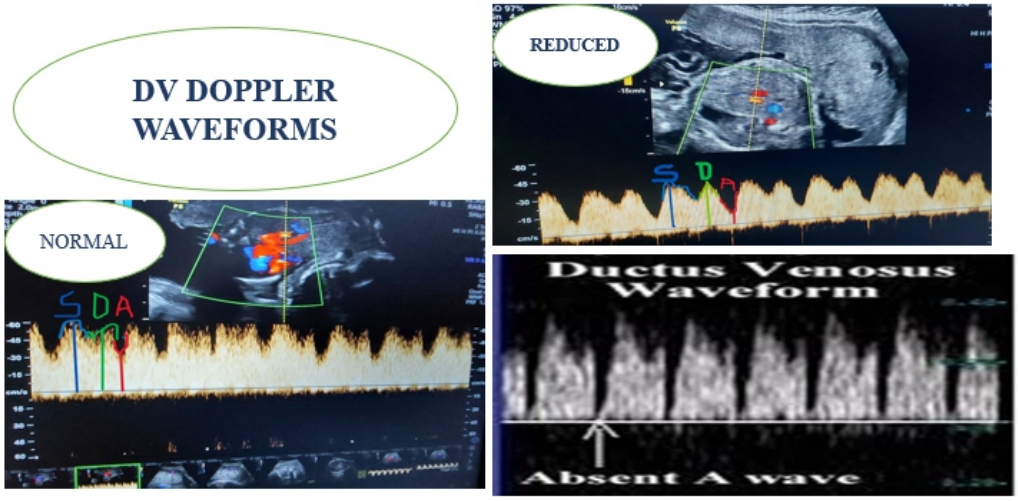
Objective

The objective of this study was to explore the role of ductus venosus (DV) Doppler in improving the perinatal outcomes of pregnancies with early onset FGR and absent /reversed umbilical artery end diastolic flow (A/REDF) at the Obafemi Awolowo University Teaching Hospitals', Ile-Ife, Osun state, Nigeria.

Methods

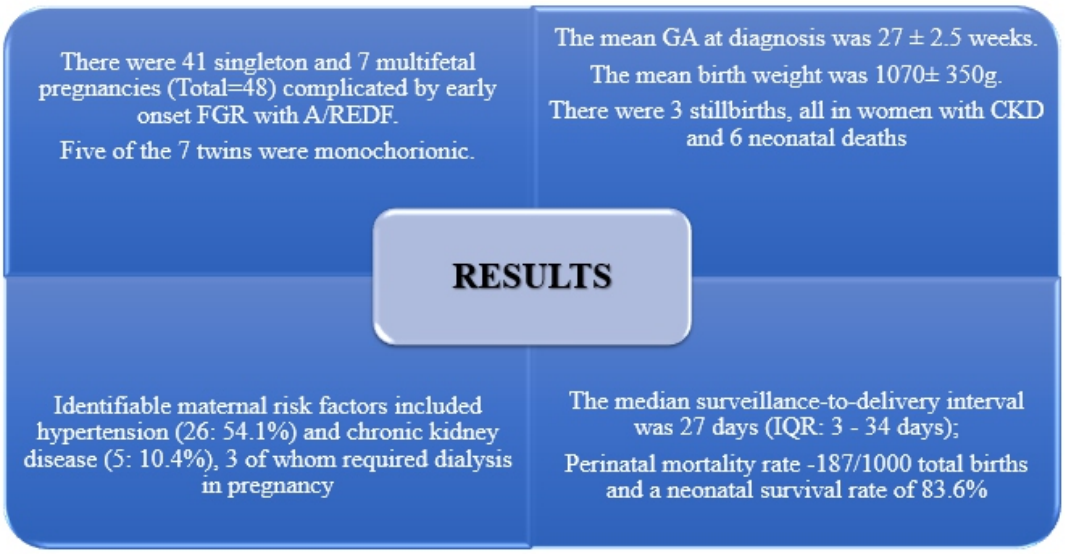
This was a prospective cohort study, wherein growth-restricted fetuses with A/REDF before the gestational age (GA) of 32 weeks were monitored with daily DV Doppler, between October 2018 and June 2025. Caesarean section was performed at an estimated gestational age of 32 weeks, or earlier for fetuses with absent "A" wave on DV doppler assessment. Multidisciplinary care was provided in conjunction with the Neonatology team.





Results

A total of 48 pregnancies complicated by early onset FGR with A/REDF were recruited into the study. Of these, 41were singletons, while 7 were multifetal pregnancies. The mean estimated gestational age at diagnosis was 27 ± 2.5 weeks, and the most common identifiable maternal risk factors were hypertension in more than half of the participants, (26: 54.1%) and chronic kidney disease, in about ten percent of the women (5: 10.4%). Of the women who had CKD, about 60% of them required dialysis in pregnancy. There was a wide range of surveillance to delivery interval, with an IQR of 3 - 34 days, and a median surveillance-to-delivery interval of 27 days. A significant proportion (69%), of the babies were born at EGA of 32 weeks, while fifteen babies were delivered before 32 weeks due to absent "A" wave on DV doppler assessment. The mean birth weight was 1070± 350g, confirming significant growth restriction. There were 3 stillbirths, all in women with CKD and 6 neonatal deaths, with a perinatal mortality rate of 187/1000 total births.





Discussion

The findings in this study, are slightly similar to those reported from the Trial of Randomized Umbilical and Fetal Flow in Europe (TRUFFLE) study.



Cureus

Cureus. 2025 Sep 21;17(9):e92838. doi: 10.7759/cureus.92838

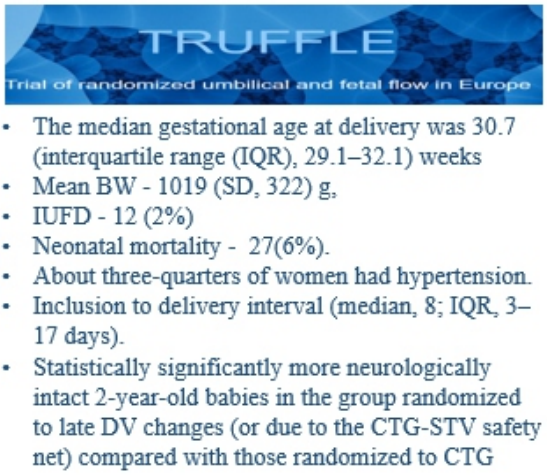
Predictive Value of Venous Ductus Doppler in Perinatal Outcomes in Fetal Growth Restriction

Branka Cancarevic Djalic [1,2,3], Dragica Draganovic [2], Tanja Milic-Radic [1], Suzana Sobot [3], Bojana Popovic [1],

A pathological DV was recorded in 15.4% of fetuses with FGR. In this subgroup, acidosis (pH <7.20) occurred in 100% of cases and was significantly less frequent among fetuses with normal DV findings (p <0.001). At one minute, a low AS (0-3) was present in 75% of newborns with pathological DV, and at five minutes in 25%; all newborns with pathological DV had an AS of ≤7 at both time points, whereas an AS of ≥7 predominated in the normal DV group (p <0.01). Neonatal morbidity was present in 100% of newborns with pathological DV compared with 29.5% in the normal DV group (p <0.001). During the first month, all newborns with pathological DV demonstrated neurological injury on early assessment.

Conclusion

DV Doppler adds clinically actionable information to arterial Doppler in FGR by identifying venous decompensation at a stage when intervention may alter outcome. Incorporating DV evaluation into routine surveillance can trigger timely delivery when venous compromise is present and support expectant management when venous flow remains normal, helping clinicians balance the risks of prematurity against progressive hypoxic-ischemic injury and may inform perinatal care pathways.



TRUFFLE

Trial of randomized umbilical and fetal flow in Europe

- The median gestational age at delivery was 30.7 (interquartile range (IQR), 29.1–32.1) weeks
- Mean BW - 1019 (SD, 322) g,
- IUFD - 12 (2%)
- Neonatal mortality - 27(6%).
- About three-quarters of women had hypertension.
- Inclusion to delivery interval (median, 8; IQR, 3–17 days).
- Statistically significantly more neurologically intact 2-year-old babies in the group randomized to late DV changes (or due to the CTG-STV safety net) compared with those randomized to CTG

Related findings include a wide inclusion to delivery interval, similar mean birth weights, and the prevalence of hypertension as a risk factor noted in the mothers of affected babies. We had a significantly higher surveillance to delivery interval of 27 days, as compared 8 days, as reported in the aforementioned study. They however had a significantly lower stillbirth rate, and NMR, likely due to the availability of more sophisticated equipment and level of care compared to the low- and middle-income countries. On the long term, there was statistically significantly more neurologically intact 2-year-old babies in the group randomized to late DV changes (or due to the CTG-STV safety net) compared with those randomized to CTG.

It has been estimated that for every additional day spent in utero, the fetuses gain 1-2% chance of survival following delivery, especially in babies less than 32 weeks. This brings to fore, the importance of DV doppler monitoring as it helped prolong the timing of delivery, while providing information on the need for timely intervention to improve perinatal outcome, and reduce the risk of IUFD.

Branka et al, in their study on the predictive value of DV doppler in perinatal outcomes in FGR, laid credence to this, as they noted that DV doppler adds a clinically actionable information to arterial doppler in FGR, by identifying venous decompensation at a stage when intervention may positively alter the outcome.

Conclusion

DV Doppler monitoring has been shown to prolong the diagnosis-delivery interval with improved perinatal survival among fetuses with early onset FGR and A/REDF. Thus, routine monitoring of such fetuses with DV Doppler is advocated.



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Knowledge, Attitude, and Practice of Menstrual Hygiene among Students of An Inclusive Secondary School in Benin City, Nigeria

Chidinma J. Anya, Ijeoma Nnodim, Azubuike A. Anya, Lamuel O. Edenene, Odinichi O. Eboh and Emily Osobase

Contact: odinichiokolo@gmail.com

Introduction

Menstruation is a normal, cyclical physiological process marking reproductive maturity in adolescent girls. Inadequate knowledge and poor menstrual hygiene management (MHM) contribute to infections, social withdrawal, and school absenteeism (1–3). Menstrual health is increasingly recognized as a critical component of adolescent reproductive health (4). Nonetheless, significant disparities remain in menstrual education, access to sanitary products, and the provision of inclusive support for adolescents with disabilities.

Aims and Objective

The aim of this study is to access the level of knowledge, attitude, perception and practice of menstrual hygiene among secondary school students in an inclusive secondary school.

Materials and Methods

This descriptive cross-sectional study was conducted among 269 female students aged 10–22 years at Ihogbe College, Benin City, Edo State, Nigeria.

Stratified sampling was used. A semi-structured questionnaire assessed knowledge, attitudes, and hygiene practices.

Knowledge scores ≥70% were categorized as good. Data were analyzed using chi-square and Fisher's exact tests ($p<0.05$).

Ethical approval was obtained from UBTH Ethics Committee.

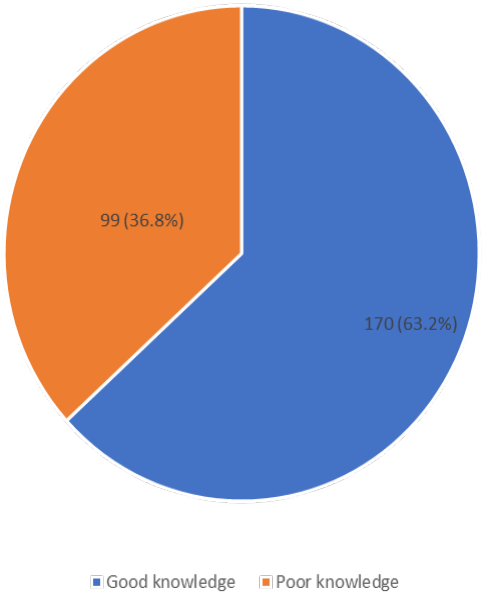


Results

TABLE 1: SOCIODEMOGRAPHIC PARAMETERS OF RESPONDENTS		
Variable	Frequency (n = 269)	Percent
Age group (years)		
10 – 14	97	36.1
15 – 19	162	60.2
≥20	10	3.7
Mean ± SD	15.4 ± 2.5	
Class		
JS1	53	19.7
JS2	56	20.8
JS3	46	17.2
SS1	39	14.5
SS2	59	21.9
SS3	16	5.9
Religion		
Christianity	259	96.3
Islam	10	3.7
Has a disability		
Yes	26	9.7
No	243	90.3

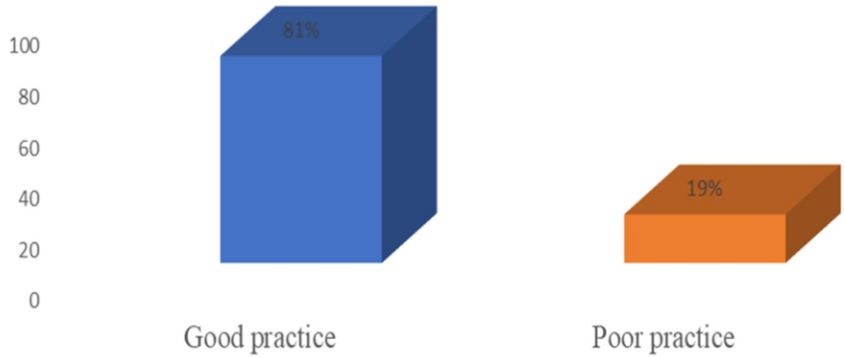


FIGURE 1: OVERALL KNOWLEDGE OF MENSTRUATION



Overall, Eighty-one percent of respondents have good practice of menstrual hygiene

FIGURE 2: OVERALL PRACTICE OF MENSTRUAL HYGIENE.



Majority 81% of students had good hygiene practices



TABLE 3: ATTITUDE OF PARTICIPANTS TOWARDS MENSTRUATION

Parameters		Agree n=269(%)	Disagree n=269 (%)	p- value
How girls feel during menstruation	I feel ashamed	93 (34.6)	176 (65.4)	<0.001*
	I feel insecure	131 (48.7)	138 (51.3)	0.715
	I worry that others can smell me	153 (56.9)	116 (43.1)	0.028*
	I am scared	113 (42.0)	156 (58.0)	0.010*
	I stay away from other people	113 (42.0)	156 (58.0)	0.010*
	I stay away from church/place of worship	25 (9.3)	244 (90.7)	<0.001*
	I stay away from school	26 (9.7)	243 (90.3)	<0.001*
	I should not take a bath or shower	12 (4.5)	257 (95.5)	<0.001*
	I am unclean	155 (57.6)	114 (42.4)	0.015*



TABLE 4: ASSOCIATION BETWEEN PRACTICE OF MENSTRUAL HYGIENE AND SOCIODEMOGRAPHIC ATTRIBUTES

Variable	Practice of menstrual hygiene		Test statistic	P value
	Good(n=218) Freq(%)	Poor(n=51) Freq(%)		
Age group (years)				
10 – 14	82 (84.5)	15 (15.5)		
15 – 19	128 (79.0)	34 (21.0)		
≥20	8 (80.0)	2 (20.0)	χ^2= 1.212	0.545
Class				
JS1	40 (75.5)	13 (24.5)		
JS2	45 (80.4)	11 (19.6)		
JS3	39 (84.8)	7 (15.2)		
SS1	33 (84.6)	6 (15.4)		
SS2	46 (78.0)	13 (22.0)		
SS3	15 (93.8)	1 (6.2)	χ^2= 3.875	0.567
Religion				
Christianity	211 (81.5)	48 (18.5)		
Islam	7 (70.0)	3 (30.0)	χ^2= 0.824	0.364
Knowledge of menstruation				
Good	154 (90.6)	16 (9.4)		
Poor	64 (64.6)	35 (35.4)	χ^2= 27.404	<0.001
Physically challenged				
Yes	17 (65.4)	9 (34.6)		
No	201 (82.7)	42 (17.3)	χ^2= 4.592	0.032



Knowledge was a significant determinant of hygiene e practice ($p < 0.001$) as a higher proportion (90.6%) of respondents with good knowledge practiced good hygiene compared to those who did not. Hygiene practice was significantly higher ($p = 0.032$) among students without disability compared to those with disability

Discussion

This study shows that while most students at Ihogbe College have good basic knowledge of menstruation, important gaps remain in understanding key aspects such as age at menarche and the hygienic nature of menstrual blood. Negative attitudes, including shame, insecurity, and social withdrawal—were common and reflect broader cultural stigma surrounding menstruation. Hygiene practices were generally good, though issues with pad disposal and delays in changing materials point to inadequate school WASH facilities. Knowledge was significantly associated with better hygiene behavior. Notably, students with disabilities practiced good menstrual hygiene at lower rates than their peers, underscoring the need for inclusive menstrual health interventions and accessible school environments.

Conclusion and Recommendation

Menstrual knowledge and hygiene practices were generally satisfactory, but stigma, poor attitudes, and infrastructural barriers persist. Educational interventions and improved school sanitation can significantly enhance menstrual dignity.

Schools, policymakers, and NGOs should collaborate to ensure menstruation does not limit adolescents' education or wellbeing.

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Exploring Mental Morbidities Following Early Pregnancy Loss Among Women in Benin City: A Mixed-Method Multicentre Study

Iweka RO,[1]Enabudoso E.J,[1] Ogbebor AO,[2] Ande ABA,[1]Ehimigbai ME,[3]Koleoso O[3]

Affiliations

1. Department of Obstetrics and Gynaecology, University of Benin Teaching Hospital, Benin City, Edo State. Nigeria.
2. Department of Obstetrics and Gynaecology, Centre of Excellence in Reproductive Health Innovation (CERHI), University of Benin, Benin City, Edo State. Nigeria.
3. Department of Mental Health, University of Benin Teaching Hospital, Benin City, Edo State. Nigeria.

Corresponding Author:
Dr Reuben Obioma IWEKA, Registrar, Department of Obstetrics and Gynaecology, University of Benin Teaching Hospital, Benin City, Nigeria.
Email: iwekar@gmail.com Phone: +2347032039469

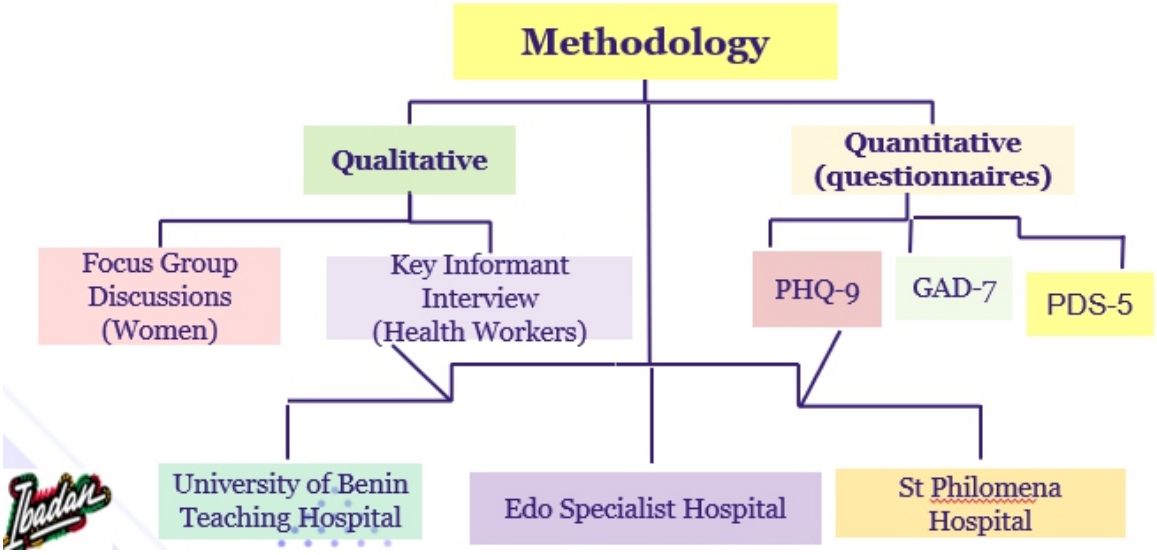
Background:
Early Pregnancy Loss (EPL) is a profoundly traumatic experience that affects women both physically and emotionally. While the physical complications of EPL are often recognized and managed, the associated mental health burden remains largely overlooked in clinical practice. Many women experience significant emotional distress, including anxiety, depression, and post-traumatic stress disorder (PTSD), yet these psychological morbidities are frequently ignored and underreported. In Benin City and similar low-resource settings, the lack of structured psychological support further contributes to unmet mental health needs among affected women. This study was therefore conducted to better understand the prevalence, pattern, determinants, and lived experiences of mental morbidities following EPL, and to highlight the gaps in care.

Objectives:
The general aim of the study was to assess the prevalence, pattern, determinants, and lived experiences of mental morbidities following early pregnancy loss in Benin City. The specific objectives were: (1) to determine the prevalence of anxiety, depression, and PTSD at discharge, 6 weeks, and 3 months after EPL; (2) to determine the pattern of mental morbidities among affected women; (3) to assess the relationship between sociodemographic characteristics and mental morbidities; (4) to identify predictors of mental health morbidities following EPL; (5) to explore women's lived experiences, coping mechanisms, and cultural interpretations after EPL; and (6) to obtain healthcare providers' reflections on current gaps and opportunities for psychological support.

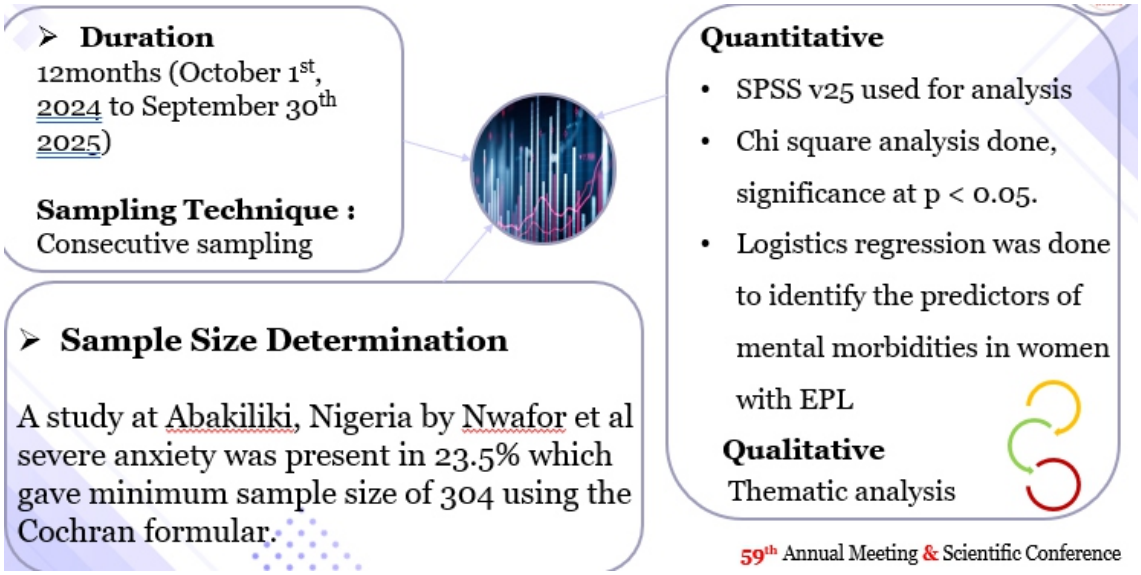
Method:
A mixed-method multicenter study was conducted at Edo Specialist Hospital, the University of Benin Teaching Hospital, and St. Philomena Hospital. In the quantitative component,



participants were consecutively recruited over 12 months (October 1, 2024 – September 30, 2025). The sample size was 304, calculated using Cochran's formula based on a previous prevalence of severe anxiety (23.5%) from Nwafor et al. Data collection instruments included the PHQ-9 for depression, the GAD-7 for anxiety, and the PDS-5 for PTSD.



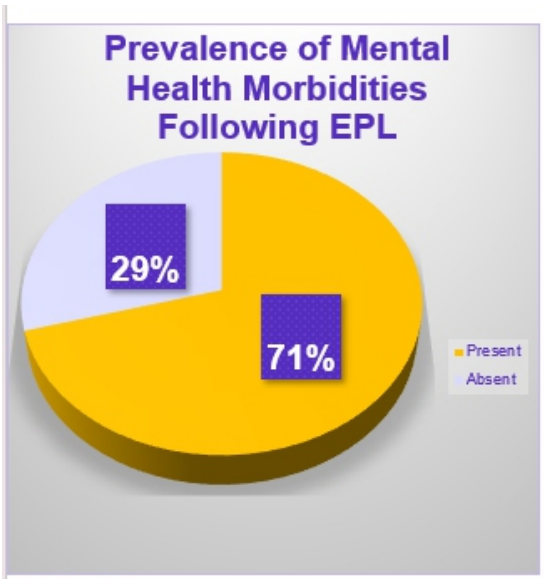
Data were analysed using SPSS version 25, with Chi-square tests employed to determine associations at a significance level of $p < 0.05$, and logistic regression used to identify predictors of mental morbidities. The qualitative component involved Focus Group Discussions among women who experienced EPL and Key Informant Interviews with healthcare workers. These data were analysed using thematic analysis to identify major themes such as emotional responses, coping mechanisms, and cultural beliefs.





Results:

Participants' mean age was 30.2 ± 6.2 years, and the overall prevalence of mental morbidities was 71%. At baseline, 35.3% of women had severe anxiety, 29.3% had severe PTSD, and 32.1% had severe depression.



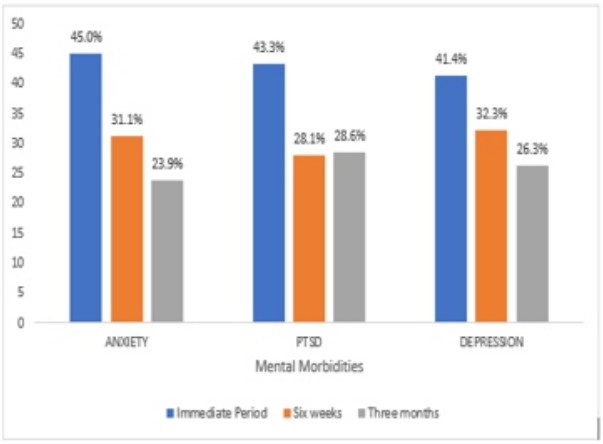


Figure 1: Mental Morbidities following Early Pregnancy Loss in the Immediate "post-pregnancy loss" period, 6 weeks and 3 months among Study Participants

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Table 1: Sociodemographic Characteristics and PTSD at Three Months among Study Participants

Level of education	Yes	No	Test Statistics	p-value
None	2 (66.7)	1 (33.3)	Fishers Exact Test = 11.848	**0.004**
Primary	6 (85.7)	1 (14.3)		
Secondary	23 (29.1)	56 (70.9)		
Tertiary	33 (26.2)	93 (73.8)		
Marital relationships				
Monogamous	56 (27.9)	145 (72.1)	Fishers Exact Test = 5.368	**0.032**
Polygamous	8 (57.1)	6 (42.9)		
Spouse level of education				
Primary	5 (71.4)	2 (28.6)	Fishers Exact Test = 8.173	**0.014**
Secondary	20 (40.8)	29 (59.2)		
Tertiary	30 (26.1)	85 (73.9)		

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Table 2: Sociodemographic Characteristics and Anxiety Disorder among Study Participants

Age group 2months				
16-19	5 (83.3)	1 (16.7)	Fishers Exact Test = 11.230	**0.008**
20-29	33 (33.3)	66 (66.7)		
30-39	47 (51.6)	44 (48.4)		
40 and above	6 (31.6)	13 (68.4)		
Spouse level of education 3months				
Primary	6 (85.7)	1 (14.3)	Fishers Exact Test = 10.717	**0.003**
Secondary	28 (57.1)	21 (42.9)		
Tertiary	42 (36.5)	73 (63.5)		

Table 3: Sociodemographic Characteristics and Depression among Study Participants

Age group (years) 6weeks				
16-19	5 (83.3)	1 (16.7)	Fishers Exact Test = 10.101	**0.015**
20-29	49 (49.5)	50 (50.5)		
30-39	62 (68.1)	29 (31.9)		
40 and above	8 (42.1)	11 (57.9)		

By six weeks, these proportions decreased to 20.9%, 13.5%, and 24.7% respectively, and by three months to 22.3%, 9.3%, and 23.3%. The study demonstrated a clear and statistically significant decline in all measured mental morbidities, anxiety, PTSD, and depression across the three follow-up intervals. Scores were highest immediately after the pregnancy loss and decreased significantly by six weeks, with further improvement by three months. This reduction was confirmed by repeated-measures analysis of variance, which showed highly significant p-values for anxiety ($p < 0.001$), PTSD ($p < 0.001$), and depression ($p < 0.001$), indicating that time had a substantial effect on improving psychological outcomes.

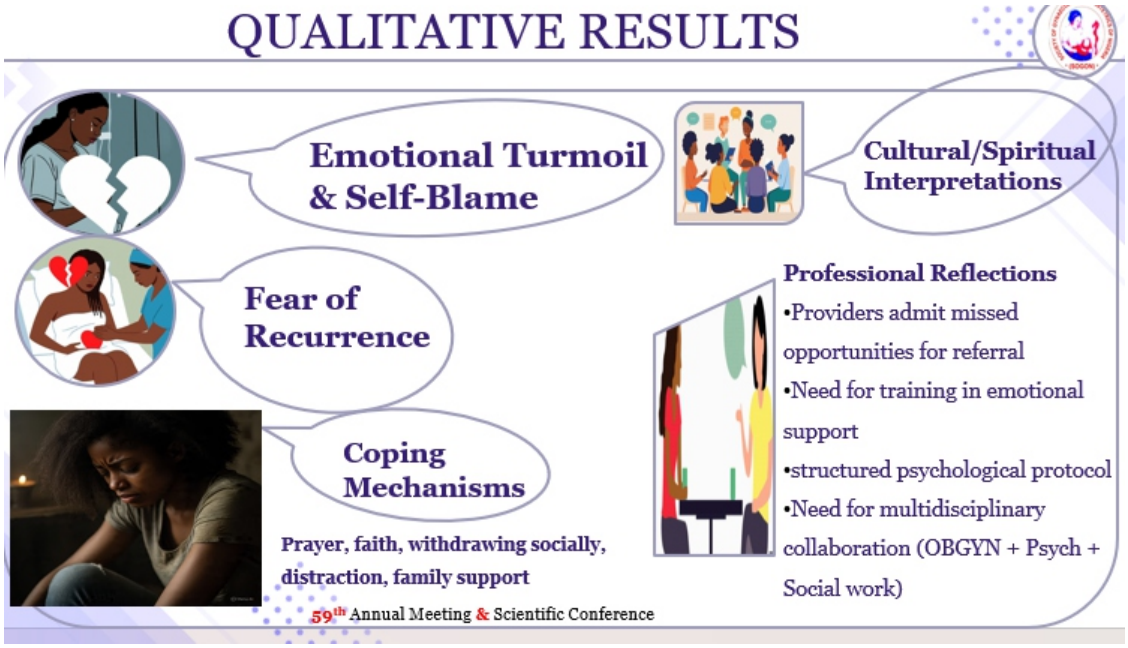
Table 4: Predictors

Variables	B (regression coefficient)	p-value	Odds ratio	95% C.I. for Odds ratio Lower	Upper
PTSD at 3months					
Marital relationship					
Monogamous	-1.224	**0.047**	0.294	0.088	0.985
Polygamous*			1		
Level of Education					
None/primary	1.932	**0.008**	6.906	1.654	28.832
Secondary/Tertiary*			1		



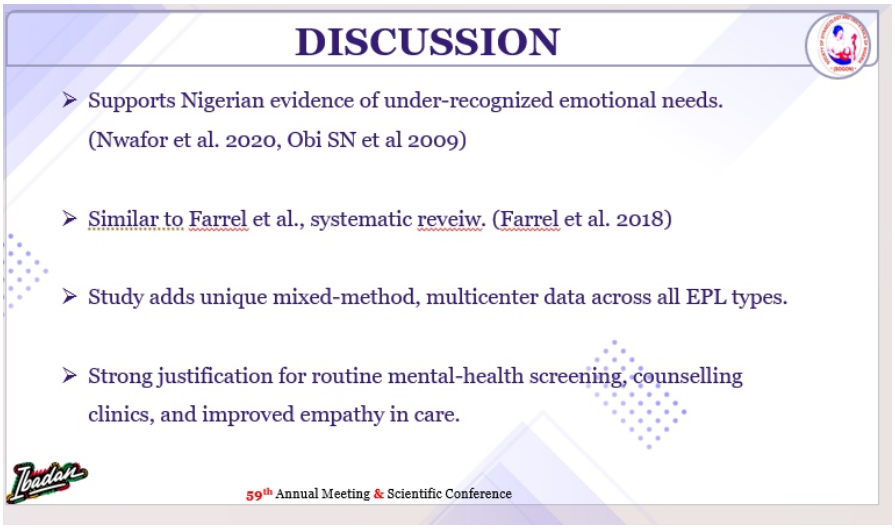
Age was found to be a significant determinant of anxiety at both six weeks and three months. Younger women, particularly adolescents aged 16–19 years and those in their thirties, were significantly more likely to exhibit anxiety symptoms compared to older participants. This association reached statistical significance at six weeks ($p = 0.028$) and strengthened further by three months ($p = 0.008$), suggesting that younger age groups remain more psychologically vulnerable over time. Additionally, the spouse's level of education showed a statistically significant relationship with anxiety at three months ($p = 0.003$). Women whose spouses had lower levels of education, particularly primary or secondary education, were more likely to experience persistent anxiety than those whose spouses were tertiary-educated. This indicates that partner education, which may reflect household literacy, economic stability, or quality of emotional support, plays an important role in long-term mental health outcomes after early pregnancy loss.

Together, these findings highlight that while psychological symptoms improve significantly over time, younger women and those with lower-educated partners remain at heightened risk for prolonged anxiety, underscoring the need for targeted psychological support in these groups. Younger age and lower spouse education were significantly associated with higher depression and anxiety rates.



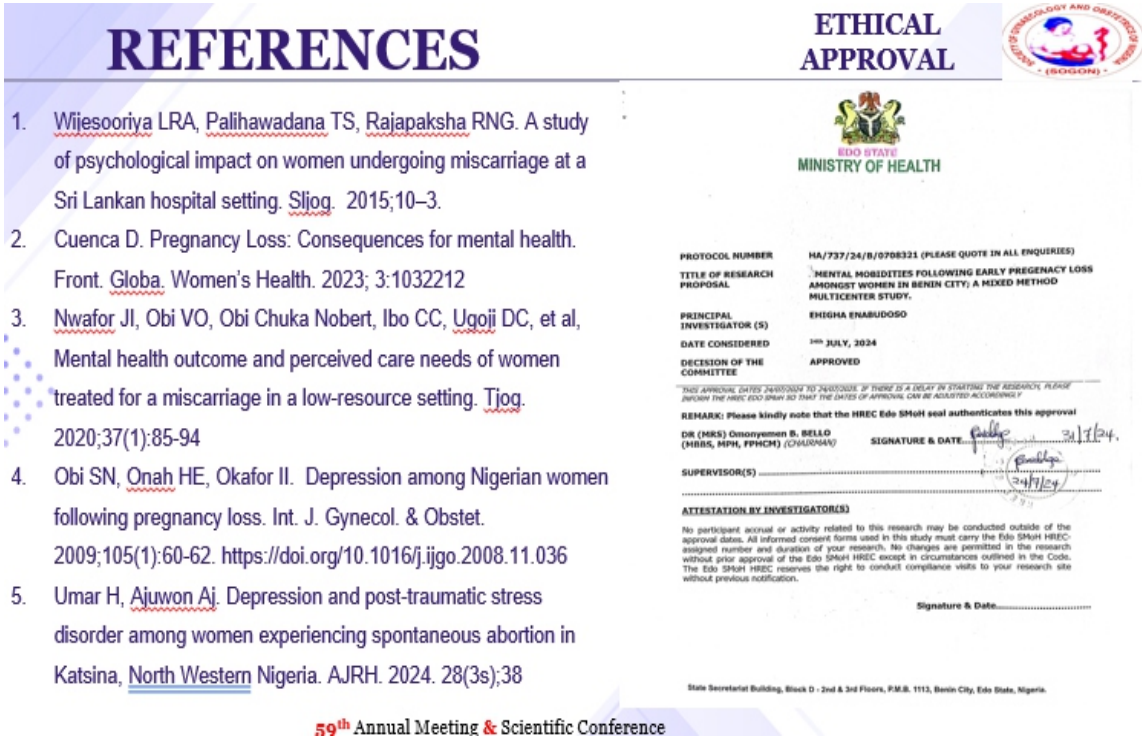
Qualitative themes highlighted intense grief, self-blame, fear of recurrence, cultural and spiritual interpretations, stigma, inadequate psychosocial support, inadequate follow-up care, and a strong call for structured post-loss counselling. Recovery was facilitated by faith, family support, and empathetic healthcare interactions.





Conclusion:

Early pregnancy loss is associated with substantial and persistent psychological distress, with anxiety, depression, and PTSD significantly improving over time but remaining pronounced in younger women and those with lower-educated partners. These findings highlight the need for routine mental-health screening, structured counselling, and integrated psychosocial support within post-EPL care to enhance women's emotional recovery and overall well-being.





Comparing Blood Loss Estimate in Caesarean Section Using Weighing Scale for Measuring Blood Loss and Visual Estimate byAnaesthetists

Olaolu O. Oni[1,2], Olugbenga O. Saanu[1,2], Bankole A. Adewumi[1,2], Esther Saviour[1], Oluwabidemi Oladapo[1], Idayat Akorede [1], Taiwo Akande [1], Olusola Oyelola[1], Oluwapelumi Oke[1] and Oladapo O. Olayemi[1,2].

Affiliations

[1]Department of Obstetrics and Gynaecology, University College Hospital (UCH), Ibadan, Nigeria.
[2]Department of Obstetrics and Gynaecology, College of Medicine, University of Ibadan, Ibadan, Nigeria

Corresponding Author

Dr. Bankole A. Adewumi
Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria.
badewumi@outlook.com, 08033967253.

Introduction

- Intra-operative blood loss during surgical obstetric procedures such as the Caesarean section (CS) remains a significant contributor to maternal morbidity and mortality *(Doctorvaladan et al, 2017)*
- An accurate blood loss estimate (BLE) at CS is clinically vital for the timely management of Postpartum Haemorrhage (PPH). *(Włodarczyk, et al, 2025)*
- Visual estimation (VE) is widely used: immediate; cheap; no equipment, imprecise and underestimate actual loss. *(Edilu et al, 2024)*
- Weighing scale (WS) is an objective method: change in weight of swabs plus measured suction content; Quantitative *(ACOG, 2019)*
- LMIC has limited access to rapid laboratory result and reliance on clinical judgement make the accuracy of intraoperative blood-loss estimation even more consequential
- If VE is shown to be systematically biased, then clinicians can be trained, or routine WS adopted, to improve recognition of PPH (blood loss ≥1,000 mL), reduce delays to intervention, and to improve maternal outcomes.

Objectives

To compare BLE obtained by the WS and by VE during caesarean sections in University College Hospital (UCH), Ibadan

Specific Objectives:

- To measure the mean/median difference (and 95% limits of agreement) between WS and VE of blood loss for individual caesarean deliveries in UCH
- To assess correlation between the two methods of BLE in UCH
- To evaluate the sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) of VE for detecting PPH using WS as reference.
- To determine factors associated with discrepancies between WS and VE



Methods

- Study Design: A prospective observational comparative study involving paired measurements of blood loss (WS and VE) for each CS case.
- Study Setting: Department of Obstetrics and Gynaecology, University College Hospital (UCH), Ibadan
- Study Population:
  Inclusion: All consenting women underwent CS during the study period.
  Exclusion: Combined procedures (e.g. hysterectomy, myomectomy)
- Sample Size: To detect a mean difference of 100 mL between the methods with SD of 300 mL, we set alpha 0.05 and power 80%, approximately 81 paired sample size.
- Data Collection Procedure:
  VE: by anaesthetist at end of CS without access to WS result.
  WS: (Wet - Dry) + (Suction volume – liquor volume) with 1g = 1ml
  Proforma – Demography, Parity, GA, CS type, Surgeon cadre, Coexisting uterine fibroids, multiple gestation etc.

Statistical methods:

- Analysis done with SPSS v. 27; Descriptive statistics for baseline variable
- Shapiro-Wilk test used to check for the normality of the data
- Wilcoxon Signd Ranks test compared the VE and WS values
- Bland–Altman analysis for 95% level of agreement (LOA) of the two methods
- Correlation analysis (Pearson or Spearman based on normality)
- Contingency table derived and the sensitivity, specificity, PPV, NPV of VE in detecting ≥1000 mL blood loss (PPH)
- Multivariate analyses for examined predictors of discrepancy
- $p < 0.05$ regarded as significant

Results

Table 1: Normality analysis

	Skewness	Kurtosis	Shapiro-Wilk test	*p*-value
Visual Estimate (VE)	1.37	1.39	0.851	< 0.001
Weighing Scale (WS)	1.079	2.345	0.943	< 0.001

Table 2: Descriptive Data with relevant statistics

	N	Mean (ml)	SD (ml)	Median (ml)	Range (ml)	Shapiro-Wilk test	*p*-value
VE	81	420.74	222.47	350	100 - 1100	0.851	<0.001
WS	81	539.35	215.68	522	140 - 1365	0.943	<0.001
Difference(VE – WS)	81	-118.61	188.7	-136	-596 - 542	0.950	0.003
Abs Diff [VE – WS]	81	177.02	134.59	166	2 - 596	0.915	<0.001

Wilcoxon signed-rank test ($W = 515$, $p < 0.001$)



- The median age of the participants was 33.0years, and 77.8% were booked in UCH. Notably, the majority of the CS were primary CS (77.4%), done at term (76.1%) by a senior registrar (80.6%).
- The average blood loss for the participants by WS was 523.3mls, which was greater than 416.7mls obtained by VE, and this was statistically significant (p=0.004).
- Prevalence of PPH among the participants was 4.2% with WS, and 77.8% of the participants had their blood loss underestimated with VE.
- Incidentally, most participants with PPH were done by a senior registrar as elective CS under spinal anaesthesia and had no previous abdominal surgeries.

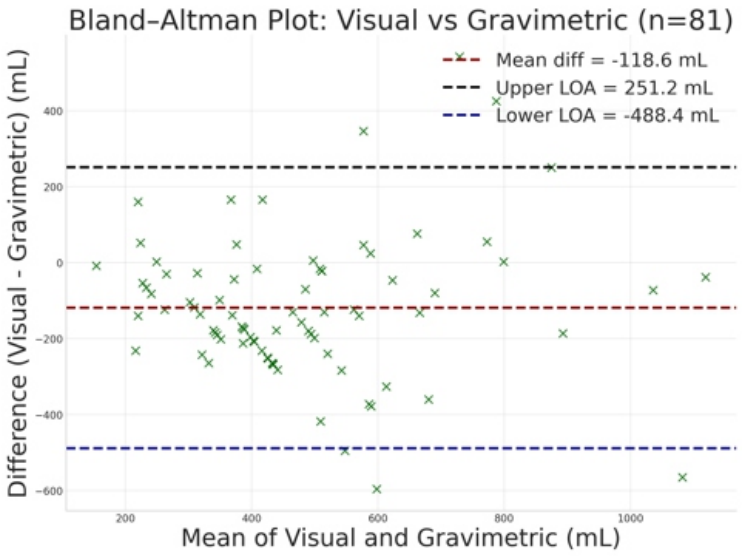


Figure 1: Scatter lot of Visual Estimation and Weighing Scale measurement Blood loss

Correlation between the two methods of blood estimation

Spearman correlation between VE and WS: $\rho = 0.84$, p-value < 0.001

- strong rank correlation (they are related but not interchangeable)

Proportional bias

Spearman Correlation between mean measurement and difference: $\rho = -0.092$, p-value = 0.41

- No evidence of proportional bias (the difference does not clearly increase with magnitude).



Results (contd.)

Multivariate Predictive Modelling for inaccuracy of VE

	Coefficient	*p*-value
Constant	259.24	0.101
CS Type	-107.00	0.095
Multiple Gestation	24.19	0.810
Coexisting uterine Fibroids	-48.66	0.587
Previous uterine Scar	-43.82	0.551
Primary CS	84.34	0.244
Cadre of Surgeon	-17.88	0.810

- No strong independent predictors
- Large absolute errors regardless of surgeon cadre, CS type, maternal factors
- Visual estimation unreliable even under optimal conditions

Figure 2: Multivariate Model for VE difference

Conclusion:

- Visual estimation (VE) of intraoperative blood loss during caesarean section is significantly inaccurate.
- VE systematically underestimates actual blood loss and demonstrates poor agreement with weighing scale (WS)/gravimetric method.
- For safe clinical practice, especially for timely recognition and management of PPH at CS, the WS method should be preferred over visual estimation.

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Effectiveness of Adjunctive Use of Calcium Gluconate in the Prevention of Atonic Primary Postpartum Haemorrhage: A Randomised Controlled Trial

Ilori S. O[1], Adekanle D. A[1], Fasanu A. O[1], Adeyemi, A.S.[2]

Affiliations
[1]Department Of Obstetrics and Gynaecolgy, UNIOSUN Teaching Hospital, Osogbo.
[2]Department Of Obstetrics and Gynaecolgy, LAUTECH Teaching Hospital, Ogbomoso.

Corresponding Author
Ilori Solomon Olusegun
Department Of Obstetrics and Gynaecolgy, Uniosun Teaching Hospital, Osogbo.
drsegunilori@gmail.com, 08036156939, 08077799296

Background
Primary postpartum haemorrhage (PPH) is a common cause of maternal morbidity and mortality worldwide and accounts for nearly one-quarter of all pregnancy-related deaths. Multiple studies have suggested that many deaths associated with PPH could be prevented with prompt recognition and more timely and aggressive treatment. The most common aetiology of PPH is uterine atony (impaired uterine contraction after birth), which occurs in about 80 percent of cases. Atony may be related to over distention of the uterus, infection, placental abnormalities, or bladder distention, though the majority of women who develop PPH have no identifiable risk factors.
Actin-myosin interaction in the myometrium, which is triggered by calcium-dependent phosphorylation of myosin in the thick filament is responsible for uterine contraction. Also, calcium is an essential co-factor in the coagulation cascade.

Objective
This study determined the effectiveness of adjunctive use of Calcium gluconate in preventing atonic post-partum haemorrhage.

Materials and Methods
This study was a double-blind randomised controlled trial, carried out at UNIOSUN Teaching hospital, Osogbo to determine and compare the effectiveness of calcium gluconate with placebo in the prevention of atonic postpartum haemorrhage. Voluntary, written, informed consent was obtained prior to enrolment in the study. Recruitment of patients was done at the labour ward. Patients in active phase of labour at term were recruited. Only booked patients were recruited. Booking cards were reviewed and management of patients was individualized. All participants were monitored with partograph.
Block randomization was used to allocate and assign the eligible participants once they are in second stage of labour after the delivery of the foetal head. The eligible women were randomly allocated to two study groups using computer generated table of random numbers giving equal chance to all participants. Personal identifiers were removed to ensure confidentiality. The allocations were placed in opaque envelopes by the first research assistant. The researcher, participants and the two other research assistants were blinded to



the randomization. Allocation took place by drawing the next (consecutively numbered) sealed opaque envelope. Group A is the women who received intravenous Calcium gluconate and Group B, women who received placebo.

The pre-delivery PVC were obtained for the two groups and each group had the standard active management of third stage of labour.

Eligible women in group A received 10mls of 10% of calcium gluconate in 10mls of 0.9% normal saline over 5-10 minutes after delivery of the foetus in addition to the 10IU of Oxytocin administered as part of the active management of third stage of labour. The women in control group (group B) got placebo which was 10mls of sterile water in 10mls of 0.9% Normal saline over 5-10 minutes after delivery of the foetus also in addition to the 10IU of oxytocin that was administered as part of the active management of third stage of labour.

The volumes of blood loss in each group were determined using Brass V drapes which were positioned at the buttocks of the patients after the delivery of the baby before delivery of the placenta and left for 2 hours. Blood loss was measured by the Researcher from immediately after delivery and cord clamping until 2 hours after delivery. The uterine contraction and tonicity were subjectively assessed every 15 minutes for 2 hours post-delivery. The 24-hour post-delivery packed cell volumes and those who needed additional uterotonic to achieve a well contracted uterus were determined.

Results

Participant's baseline socio-demographic and obstetric characteristics were comparable between the two groups, with no statistically significant differences in age, parity, gestational age at delivery, or mean birth weight of the neonates ($p > 0.05$ respectively).

Primary Outcomes of the participants

Variable	Control (N=43) Mean ± SD	Test (N=43) Mean ± SD	T value	p-value
Post-delivery PCV (%)	28.98±1.77	30.37±2.72	2.824	0.006*
Volume of blood loss at delivery (mls)	391.86±83.05	288.37±93.76	5.418	0.001*



Secondary Outcomes of the participants

Variable	Control (%)	Test (%)	Df	X^2 value	p- value
Need for use of additional uterotonics					
Yes	23(53.5)	10(23.3)	1	10.310	0.004*
No	20(46.5)	33(76.7)			

The mean estimated blood loss in Group A is 288.37±93.76 ml which was significantly lower than 391.86±83.05 ml in Group B.

The mean incidence of those who required additional uterotonics was 23.3 % in Group A which is significantly lower than 53.5 % in Group B ($p < 0.05$).

Conclusion

This study showed that the adjunctive use of 10mls IV 10% calcium gluconate in addition to the traditional AMTSL is effective in reducing blood loss in women who had spontaneous vaginal delivery at term, with better PCV and reduced need for additional uterotonics.

Hence, 10% calcium gluconate is an effective adjunct to the traditional AMTSL in the prevention of PPH secondary to uterine atony.



Birth preparedness and complication sreadiness among pregnant women in selected primary healthcenters in Oyo-West Local Government, Nigeria

Esther Oluwatoyin Famutimi[1,2], Oni Dorcas Oyindolapo[3], Oluwakemi Aderonke Osundara[4], Welma Lubbe[1], Timothy A. O. Oluwasola[5], Funmilayo Adeniyi Okanlawon[6]

Affiliations

[1]NuMIQ Research Focus Area, Faculty of Health Sciences, Potchefstroom, South Africa
[2]Clinical Nursing Department, University College Hospital, Ibadan, Nigeria,
[3]Department of Nursing, Atiba University, Oyo, Nigeria.
[4]Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria
[5]Department of Obstetrics and Gynaecology, College of Medicine, University of Ibadan; University College Hospital, Ibadan, Ibadan, Nigeria.
[6]Faculty of Nursing, Chrisland University, Abeokuta, Nigeria

CorrespondingAuthor

Dr Esther Oluwatoyin Famutimi (PhD),
Postdoctoral Research Fellow at North-West University, South Africa, and Deputy Director of Nursing, University College Hospital, Ibadan, Nigeria.
famutimiesther@yahoo.com;+2348032379954

Background:

- The global maternal mortality rate (MMR) continues to represent a considerable challenge to public health.
- In 2020, approx. 800 women die daily due to preventable complications associated with pregnancy and childbirth, which translates to one fatality occurring every two minutes (UNICEF 2023)
- Maternal mortality (MM) risk remains highest in Sub-Saharan Africa. This sub-region accounts for around 70% of global MM(World Bank, 2023).
- Birth preparedness and complication readiness (BPCR) is a preventive intervention that encourages pregnant women to make smart decisions on maternal health care services and prepare for potential complications (WHO 2025)
- The knowledge and avoidance of anticipated complications and the preparedness for delivery will guarantee early access to skilled maternal and neonatal care, particularly in the labour process (Suleiman et al., 2023)

Problem Statement and Justification

- Despite global commitments, MM continues to be high in nations such as Nigeria. Socioeconomic limits, poor care, and inadequate health facilities all contribute to higher maternal mortality rates (UNICEF, 2023).
- Maternal death also entails important social and economic impacts that will most likely destroy the family system and put the health and life of her offspring at risk (UNFPA, 2021).



- Therefore, policymakers and health workers need to be aware of the patients' knowledge and practice of BPCR, to establish individualized needs and to deploy effective, community-appropriate maternal health interventions

Objectives

- The main objective: to assess the knowledge and practice of BPCR among women in selected primary healthcare centers in OWLG.

The specific objectives:

- To determine the socio-demographic, cultural, and economic elements affecting BPCR practices among expectant mothers in chosen primary healthcare centers within the OWLG.
- To evaluate the understanding of BPCR among expectant mothers in designated primary healthcare facilities in OWLG.
- To explore the barriers preventing effective BPCR implementation and utilization among pregnant women in selected primary healthcare centers in OWLG.

Methods

This was across-sectional descriptive study of 244 pregnant women in selected PHCs with in the OWLGA, which were recruited using multistage sampling. Data were collected through a validated structured self-administeredquestionnaire that was reviewed by experts, and Cronbach's alphaforinternal consistency reliability value of 0.78was obtained. Statistical analysiswas conductedusing StatisticalPackageforSocialSciencesversion 25, with descriptive and inferential statistics used toanalyse data at a $p < 0.05$ level of significance.

Result:

Thestudyfoundamean ageof30.54±7.32yearsamong respondents.

Table 1: showing the socio-demographic characteristics data of respondents

S/N	Variables	Categories	Frequency	Percentage (%)
1.	Age	26 - 35	120	49.2
2.	Marital status	Married	190	77.9
3.	Tribe	Yoruba	176	72.1
4.	Religion	Christianity	118	48.4
5.	Occupation	Businesswoman/Trader	104	42.6
6.	Education	O' Level	85	34.8
7.	Gravidity	2	72	29.5
8.	Parity	1-2	135	55.3
9.	NO. Alive	2	82	33.6
10.	GA	4-6 month	110	45.1
11.	Amount earned monthly	₦10, 000 - ₦30, 000	104	42.6
12.	Spouse edu. level	Tertiary	134	34.9
13	Amount earned by spouse	₦31, 000 - ₦60, 000	92	37.7



- 82% have heard about BPCR and 45% received the information from health workers.
- The key components: Identifying a skilled birth attendant, a health facility for delivery, saving money, arranging transportation and Packing delivery kit, 61.5%, 65.6%, 57.4%, 55.3% and 49.2% respectively.
- Danger signs: Severe vaginal bleeding, Convulsion, Swollen hand/face, Blurred vision and High fever, 69.7%, 61.5%, 49.2%, 41% and 45.1% respectively.
- 86.1% answered yes to possibility of complications during pregnancy, labour and after delivery. 78% said yes to the fact that being prepared can reduce maternal deaths
- Their self-rating of knowledge about BPCR was good, fair, and poor: 61.5%, 28.7% and 9.8% respectively.
- The barriers to BPCR: distance (9%), transportation (58.2%), cost (13.9%), family support (16.8%), and health workers' attitude (4.1%).
- The barriers preventing them from preparing a birth kit or other necessary items for delivery were financial constraints and a poor attitude.
- Barriers to BPCR services were financial constraints, lack of knowledge, cultural beliefs, and poor attitude.
- Binary logistic regression revealed that respondents with good knowledge were 2.2 times more likely to have good practice (OR=2.2, p=0.02), while those with poor knowledge were 4.1 times more likely to have poor practice (OR=4.1, p<0.001).

Conclusion

- Thisstudyestablishedastrongrelationshipbetweenknowledgeandpracticeof BPCR,Targeted interventionsmaycontributetobetterresultsinmaternalhealthamongwomen.
- Findings inform policyandpracticeto reducematernal morbidity andmortality inOWLGA.

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Missed Opportunities along the PMTCT Pathway: Timing of HIV Diagnosis and ART Initiation as Determinants of Perinatal HIV Transmission — A Cohort Study

Sunday Oladimeji Oyerinde[1], Olutosin Alaba Awolude[12], Olubukola Adeponle Adesina[12]

Affiliations
[1]Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria
[2]Department of Obstetrics and Gynaecology, College of Medicine, University of Ibadan, Nigeria

Corresponding Author:
Sunday Oladimeji Oyerinde Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria
Email: sunday.oyerindedimeji@gmail.com | Phone: +2348033802369

Introduction

- Despite major advances in PMTCT, late maternal HIV diagnosis and delayed ART initiation continue to fuel preventable perinatal HIV transmission, particularly among women classified as high-risk—defined by WHO criteria as ART initiation ≤4 weeks before delivery, unsuppressed viral load, or peripartum seroconversion.
- These reflect persistent missed opportunities along the care cascade.
- These high-risk scenarios leave infants especially vulnerable during the critical peripartum period when maternal viraemia is unchecked.
- Examining how the timing of HIV diagnosis and ART initiation influences perinatal transmission among this high-risk group is crucial for optimising PMTCT strategies and closing gaps in the elimination of mother-to-child HIV transmission.

Objective

- To assess the prevalence, risk characteristics, and perinatal HIV transmission among high-risk HIV-positive pregnant women, with emphasis on the timing of HIV diagnosis and ART initiation along the PMTCT pathway.

Methodology

- A prospective cohort study was conducted among HIV-positive pregnant women attending the University College Hospital, Ibadan, between January and September 2020.
- Ethical approval was obtained from the University of Ibadan/University College Hospital Ethics Committee (UI/UCH EC19/0217).
- High-risk status was defined using WHO criteria—ART initiation ≤4 weeks before delivery, unsuppressed viral load, or peripartum seroconversion.
- HIV-exposed infants underwent DNA PCR testing at six weeks.
- Data were analysed using SPSS version 26, with statistical significance set at $p<0.05$.



Results

- Among 229 mothers (mean age 36.7 years) and 234 HIV-exposed infants, 21.4% were classified as high-risk.
- Of these, 13.5% initiated ART ≤4 weeks before delivery, 10.5% had unsuppressed viral load, and 8.3% seroconverted near term.
- The overall early MTCT rate was 1.8%, significantly higher among high-risk mothers (6.1%) compared with low-risk counterparts (0.6%) (p=0.014) and peaked at 9.7% among late ART initiators.

Conclusion

- Although the overall MTCT rate was low, delayed HIV diagnosis and ART initiation remain major contributors to residual perinatal transmission.
- Strengthening early HIV testing, antenatal–HIV service integration, and adherence support are essential to close PMTCT gaps and achieve eMTCT targets.



Compliance and Satisfaction with Antenatal Care: A Cross-Sectional Study in Tertiary Healthcare Facilities in Ibadan, Nigeria

Olaolu O. Oni[1], Aishat A. Adetunji[2], Bankole A. Adewumi[1], Oluwasomidoyin O. Bello[1], Oladapo O. Olayemi[1].

Affiliations

[1]Department of Obstetrics and Gynaecology, University of Ibadan/ University College Hospital, Ibadan, Nigeria

[2]Department of Nursing Science, Lead City University, Ibadan, Nigeria

Corresponding Author

Dr. Bankole A. Adewumi

Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria.

badewumi@outllook.com, 08033967253.

Introduction

- Quality antenatal care (ANC) significantly contributes to a positive pregnancy experience and is an important strategy for reducing Nigeria's high maternal morbidity and mortality rates if utilized effectively.
- The ANC compliance is shaped by socioeconomic status, cultural norms, education level, accessibility and health-system quality (Onuzulike 2019; Titaley et al. 2022).
- University College Hospital (UCH) and Adeoyo Maternity Teaching Hospital (AMTH), Ibadan see a diverse ANC population, making it suitable for assessing factors affecting ANC uptake
- The study is to justified the need to understand the level of compliance to ANC, identify the barriers to compliance and the need to understand local determinants of compliance

Objectives

The **General Objective** is to assess ANC compliance among pregnant women attending ANC at UCH and AMTH, Ibadan, Nigeria.

Specific Objectives:

- To describe the Sociodemographic profile
- To determine levels of ANC compliance and satisfaction in Ibadan, Nigeria
- To identify predictors of the compliance and satisfaction
- To assess the barriers to ANC compliance

Methodology:

- Study Design: A descriptive cross-sectional study
- Study Setting: The Antenatal Clinics of UCH and AMTH, Ibadan, Oyo State, Nigeria
- Study Population: All pregnant women attending the ANC at the two centres



- Sample Size: Using the Fisher's formula for cross sectional study with attrition of 10%, sample size was derived as 411.
- Data Collection Procedure: Structured, self-administered questionnaire (sociodemographics, Obstetrics Hx, ANC compliance patterns, Perceived barriers to ANC, service satisfaction)
- Validity was established through expert review, while reliability was assessed via a pilot study.
- Data was analysed using SPSS v25.
- Descriptive statistics and Inferential Statistics.
- Adjusted odds ratios (AOR) with 95% confidence intervals were reported for significant predictors.
- Statistical significance was set at 5%

Results

The majority (49.4%) of the respondents were aged 21–30 years, married (88.8%), and had a tertiary education (74.9%). Many (75.9%) of the respondents had poor compliance with WHO WHO-recommended timing for pregnancy registration and antenatal visits, while 70.8% were satisfied with the overall ANC services provided. Antenatal attendees at University College Hospital were more satisfied compared to those receiving ANC at Adeoyo Maternity Teaching Hospital ($p<0.001$). Factors significantly associated with ANC utilization were family support ($p<0.013$), work schedules ($p<0.013$), language barriers ($p<0.011$), proximity to health facility ($p<0.001$) and transportation costs ($p<0.028$).

Results

Summary

- UCH – 53.3%
- AMTH – 46.7%
- Majority aged 21–40 (87.7%).
- Married (88.8%).
- Tertiary education (74.9%).

Table 1: Sociodemographic Profile

	Categories	n (%)
Age	≤ 21 21 – 30 31 – 40 > 40 Mean±SD	19 (4.6) 203 (49.4) 159 (38.3) 30 (7.3) 28.6 ± 6.21
Marital Status	Single/divorced or Separated Married	46 (11.2) 365 (88.8)
Educational Status	Secondary/lower Tertiary None	92 (22.4) 308 (74.9) 11 (2.7)
Health Facility	UCH AMTH	219 (53.3) 192 (46.7)

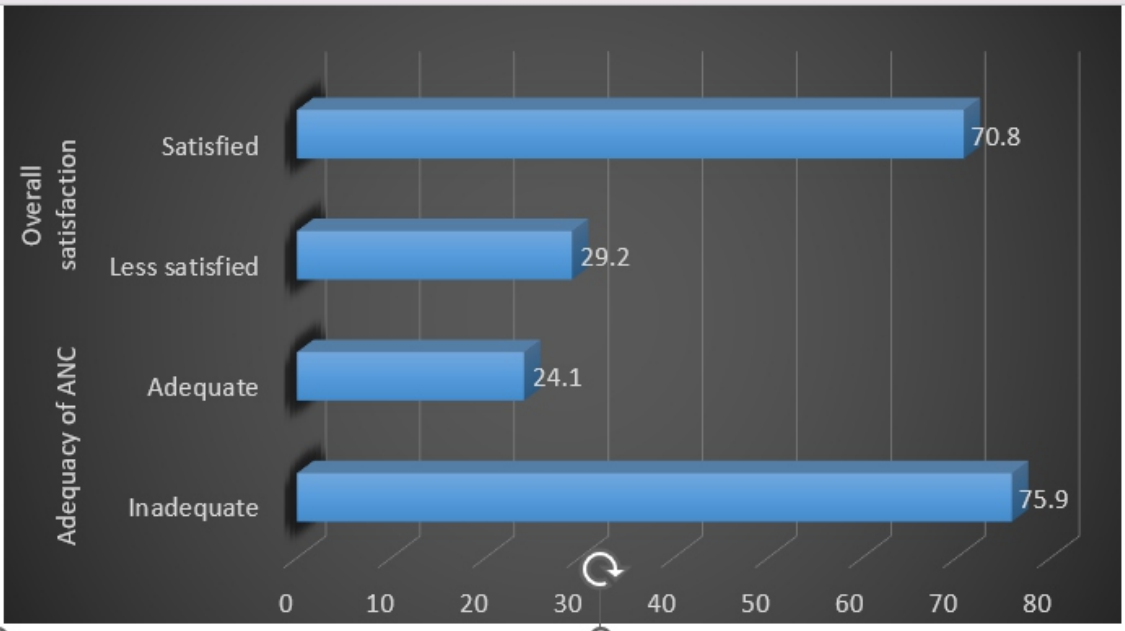

Fig 1: Percentage distribution of respondents' ANC compliance and satisfaction with services received

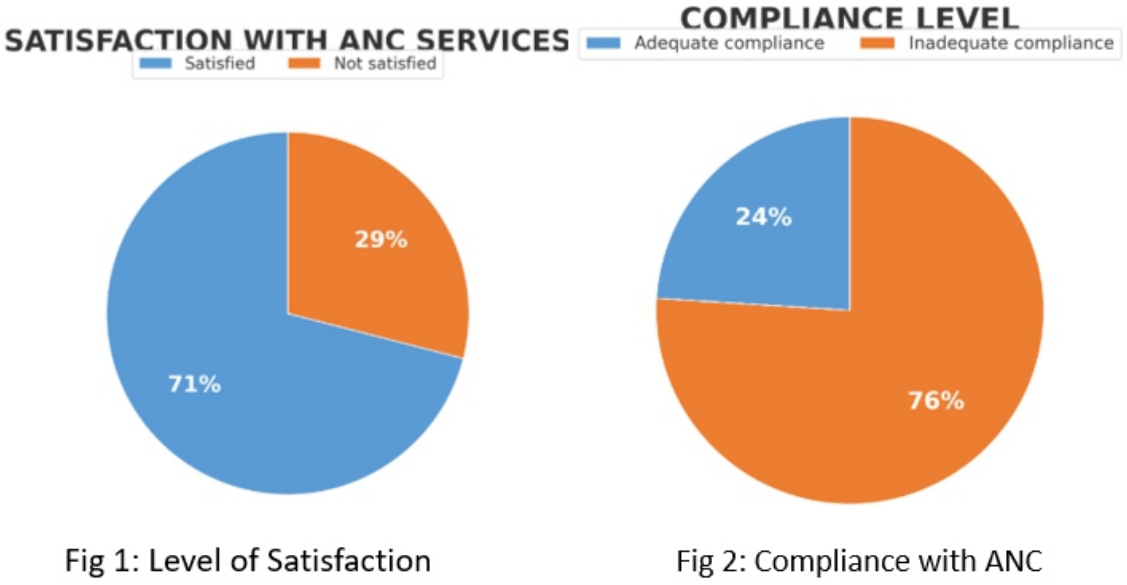

Fig 1: Level of Satisfaction

Fig 2: Compliance with ANC

Predictors of Adequate Compliance with ANC

- Age (p = 0.020)
- Parity (p = 0.001) – Nulliparity AOR 2.06 (CI 1.03-4.10)

Barriers to Compliance

- Lack of family support p-0.013 AOR – 0.07 (CI 0.997-0.632)
- Missing work for ANC *p*-0.013 AOR – 0.50 (CI 0.293-0.856)



Predictors of Satisfaction with ANC

- Tertiary level of education
- Receiving care at UCH AOR – 3.2(CI 2.044 – 4.998) (p<0.001).
- Accessibility & Service hours

Discussion

- Findings align with national/regional trends linking education and socio-economic status to maternal health service use (Adewuyi 2022; Baruah 2022)
- Cultural practices and family influence remain major determinants of ANC behaviour (Izugbara*et al.* 2019; Moyer *et al*. 2022)
- Provider attitude contributes significantly to repeat ANC attendance due to its effect on trust (Pitchforth et al. 2022; Gao *et al.* 2022)

Conclusion:

- ANC compliance at among pregnant women in Ibadan is low
- Satisfaction levels remain high, reflecting good care qualit
- Enhancing service delivery could reduce utilization disparities
- Sustained reforms needed to improve maternal outcomes

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Patient Satisfaction Following Uncomplicated Caesarean Delivery: The Ultra-Short Versus Traditional Hospital-Stay Protocol. A Randomized Controlled Trial

Oyeyemi N[1], Onwudiegwu U[2], Pughikumo DT[3], Oyeyemi AS[4]

Affiliations

[1]Department of Obstetrics & Gynaecology, Federal Medical Centre, Yenagoa, Bayelsa State.
[2]Institute of Medical Education, Bayelsa Medical University, Yenagoa, Bayelsa State.
[3]Department of Physiology, Faculty of Basic Medical Sciences, College of Health Sciences, Niger Delta University, Wilberforce Island, Bayelsa State.
[4]Department of Community Medicine, Faculty of Clinical Sciences, College of Health Sciences,
Niger Delta University, Wilberforce Island, Bayelsa State, Nigeria.

Background

- Caesarean section is currently the commonest major surgical procedure in obstetrics, and duration of admission after this procedure differs among different centres.
- There may be a need to redefine the necessary duration of hospital stay following the procedure, especially in uncomplicated cases.
- There is also a need to examine the effect of the duration of hospital stay on patient satisfaction after the procedure.

Objectives

- To determine patient satisfaction with Caesarean delivery in the ultra-short stay protocol, after uncomplicated Caesarean section.
- To determine patient satisfaction with Caesarean delivery in the traditional post-operative management protocol after uncomplicated Caesarean section.
- To compare patient satisfaction with Caesarean delivery, between the ultra-short stay and traditional post-operative management protocols, after uncomplicated Caesarean section.

Method

- A randomized controlled trial done in 3 centres (Federal Medical Centre,Yenagoa; Diete-Koki Memorial Hospital, Opolo; and the Niger Delta University Teaching Hospital, Okolobiri) in Bayelsa state, South-South Nigeria.
- Randomization was done using computer generated random numbers (unstratified balanced allocation for each centre) from WinPEPI programs, random allocation sequence generated using ETCETERA.exe version 3.26.
- A total of 179 women who just had uncomplicated Caesarean delivery were randomized into the ultra-short stay (90) and traditional (89) groups.
- The women in the ultra-short stay group commenced ambulation at 6 hours; oral intake initiated at 6 hours (regular diet at 12-24 hours); and urethral catheter discontinued 6-12 hours post-operative; and discharged home after wound inspection 36-48 hours post-operative.



- The traditional group had conventional care (ambulation, initiation of oral intake and removal of urethral catheter at 12-24 hours), and discharged home after 3-5 days. Patients' satisfaction with care was assessed at discharge using the 5-point Likert scale and scored numerically.
- Data analysis was done using the IBM SPSS statistics version 25.

Results

Both intention-to-treat analysis and per-protocol analyses were done; 6 participants dropped out of the ultra-short stay group, while 2 participants dropped out of the traditional group (having prolonged hospital stay).

Table 1: Sociodemographic characteristics of participants

Characteristic	Traditional (n = 89)	Ultra-short (n = 90)	t/χ^2	P-value
Age (years)	32.0 ± 4.6	32.2 ± 5.4	3.13	0.371*
≤ 24	7 (7.9%)	5 (5.6%)		
25 - 29	17 (19.1%)	27 (30.0%)		
30 - 34	38 (42.7%)	32 (35.6%)		
≥ 35	27 (30.3%)	26 (28.9%)		
Marital status:				
Single	6 (6.7%)	6 (6.7%)	2.40	0.301*
Married	83 (93.3%)	84 (93.3%)		
Educational status:				
	0 (0%)	2 (2.2)	7.82	0.020*
No formal	34 (38.2%)	19 (21.1%)		
Secondary	55 (61.8%)	69 (76.7%)		
Tertiary				
Religion:				
Christianity	86 (96.6%)	90 (100%)	3.09	0.079*
Islam	3 (3.4%)	0 (0%)		
Tribe:				
Ijaw	54 (60.7%)	58 (64.4%)	1.85	0.764*
Yoruba	2 (2.2%)	3 (3.3%)		
Ibo	16 (18.0%)	18 (20.0%)		
Hausa	4 (4.5%)	2 (2.2%)		
Other	13 (14.6%)	9 (10%)		

*Fisher's exact P- value, t-test is for numerical variables while chi-squared test (χ^2) is for categorical variables. P - value < 0.05 is statistically significant.



Table 2: Patient satisfaction scores with intention-to-treat analysis

Variables	Traditional (n = 89)	Ultra-short (n = 90)	t/ χ^2	P – value
General level of satisfaction	3.7 ± 0.7	4.3 ± 0.7	0.44	0.065
Satisfaction with C-section	3.6 ± 0.8	4.1 ± 0.8	0.35	0.069
Recovery room care	3.5 ± 0.7	4.0 ± 0.7	0.32	0.080
Ambulation time	3.4 ± 0.6	4.1 ± 0.7	0.45	0.060
Pain control/management	3.2 ± 0.9	3.9 ± 0.9	0.34	0.068
Time of commencement of oral intake	3.4 ± 0.7	4.2 ± 0.8	0.43	0.065
Time of commencement of regular diet	3.4 ± 0.7	4.2 ± 0.8	0.42	0.066
Time of urethral catheter removal	3.5 ± 0.7	4.2 ± 0.7	0.46	0.062
Time of wound inspection/exposure	3.4 ± 0.8	4.1 ± 0.8	0.44	0.060
Length of hospital stay	3.4 ± 0.7	4.2 ± 0.7	0.47	0.058
Overall postoperative management	3.5 ± 0.6	4.2 ± 0.7	0.47	0.060

Each variable was scored as 5, 4, 3, 2 or 1; for very satisfied, satisfied, neutral, dissatisfied or very dissatisfied with care respectively, making this variable (patient satisfaction) a numerical variable here. No participant scored 1 (very dissatisfied) in any of the quality-of-care parameters used in this study. The level of satisfaction was consistently higher in the ultra-short stay group using all the quality-of-care/perception-of-care variable scores, though this was not statistically significant between the 2 groups. Those who had the ultra-short stay post-operative management protocol were however more satisfied than those managed using the traditional protocol. In the per-protocol analysis scores were all significantly (p – value <0.001) higher in the ultra-short stay that the traditional hospital stay group. The per-protocol analysis showed that those who had the ultra-short stay postoperative management protocol were significantly more satisfied than those managed using the traditional protocol.

Table 3: Patient satisfaction scores with per protocol analysis

Variables	Traditional (n = 87)	Ultra-short (n = 84)	t/ χ^2	P - value
General level of satisfaction	3.7 ± 0.7	4.4 ± 0.6	0.47	< 0.001
Satisfaction with C-section	3.6 ± 0.8	4.2 ± 0.8	0.37	< 0.001
Recovery room care	3.5 ± 0.7	4.0 ± 0.9	0.33	< 0.001
Ambulation time	3.4 ± 0.6	4.1 ± 0.7	0.45	< 0.001
Pain control/management	3.2 ± 0.9	3.9 ± 0.9	0.36	< 0.001
Time of commencing oral intake	3.4 ± 0.7	4.2 ± 0.8	0.43	< 0.001
Time of commencing regular diet	3.4 ± 0.7	4.2 ± 0.8	0.42	< 0.001
Time of urethral catheter removal	3.5 ± 0.7	4.2 ± 0.7	0.45	< 0.001
Time of wound inspection/exposure	3.4 ± 0.8	4.1 ± 0.8	0.44	< 0.001
Length of hospital stay	3.4 ± 0.7	4.2 ± 0.7	0.51	< 0.001
Overall postoperative management	3.5 ± 0.6	4.2 ± 0.7	0.47	< 0.001

Conclusion

Shorter duration of hospital-stay (the ultra-short stay protocol) is associated with better patient satisfaction after uncomplicated Caesarean delivery.



Comparing Paper-Based and Electronic Labour Care Guide: A Study of Usability and Acceptability among Healthcare Workers in Nigerian Hospitals

Jaiyeola Oyetunji[1], Adetiloye Oniyire[1], Chibugo Okoli[1], Binyerem C. Ukaire[2], Victor Abiola Adepoju[1], Babafemi Dare[1], Endurance Bako[1], Nathaniel Ketare[3], Fatima Abdulazeez[3]; Lydia Ishaya-Audu[4].

Affiliations
[1]Jhpiego Nigeria
[2]Federal Ministry of Health and Social Welfare
[3]Federal Teaching Hospital, Birnin-Kebbi
[4]Laerdal Global Health

Corresponding Author
Jaiyeola Oyetunji
Jhpiego Nigeria
Jaiyeola.Oyetunji@jhpiego.org;
08036492936

Background
The World Health Organization Labour Care Guide (LCG) was adopted as Nigeria's official tool for monitoring labour and childbirth in April 2024. To improve documentation and clinical decision support, Jhpiego Nigeria, in collaboration with the Society of Gynaecology and Obstetrics of Nigeria (SOGON) and the Federal Ministry of Health and Social Welfare, developed and field-tested an electronic Labour Care Guide (eLCG).

Objective
To assess the feasibility, usability, and acceptability of the electronic Labour Care Guide among healthcare workers in Nigerian hospitals.

Methods:
A mixed-methods study was conducted among doctors and midwives involved in intrapartum care. Participants used both paper-based and electronic Labour Care Guides. Quantitative data were collected using structured questionnaires, while qualitative feedback was obtained through interviews. Data were analysed descriptively and thematically.

Results
Healthcare workers reported high usability and acceptability of the eLCG. Most participants found the electronic guide easy to navigate, with a clear layout and improved workflow. The eLCG was perceived to enhance documentation quality and adherence to labour management standards.

Conclusion
The electronic Labour Care Guide is a feasible and acceptable tool for labour monitoring in Nigerian hospitals and has the potential to improve the quality of intrapartum care.
enhance labour monitoring and maternal outcomes.

Acknowledgement
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Reference
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Burden of Anaemia, Effectiveness of Malaria Prevention and Treatment Strategies Among HIV-Positive Pregnant Women Attending Antenatal Clinics in Malaria-Endemic Areas of Nigeria

Sunday Oladimeji Oyerinde[1], Olutosin Alaba Awolude[12], Olubukola Adeponle Adesina[12]

Affiliations

[1]Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria
[2]Department of Obstetrics and Gynaecology, College of Medicine, University of Ibadan, Nigeria

Corresponding Author:

Sunday Oladimeji Oyerinde
Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria
Email: sunday.oyerindedimeji@gmail.com | Phone: +2348033802369

Introduction

- Anaemia remains a major contributor to maternal morbidity in Nigeria, where HIV-positive pregnant women face compounded risks due to the synergistic effects of HIV, malaria, and overlapping infections and immunosuppression.
- Despite widespread implementation of malaria prevention and treatment strategies—including IPTp, LLIN use, and prompt case management—their real-world effectiveness in this high-risk population remains uncertain and inconsistently documented.
- Generating robust evidence on how these interventions perform in HIV-positive pregnant women is critical to strengthening antenatal care, optimising malaria control, and reducing avoidable maternal and perinatal morbidity.

Objective

- To determine the burden of anaemia and evaluate the effectiveness of malaria prevention and treatment strategies among HIV-positive pregnant women in malaria-endemic areas of Nigeria.

Methodology

- A cross-sectional study was conducted among 229 HIV-positive pregnant women attending antenatal clinics in southwestern Nigeria between January and September 2020.
- Ethical approval was obtained from the University of Ibadan/University College Hospital Ethics Committee (UI/UCH EC19/0217).
- Haemoglobin concentration was assessed using micro-haematocrit centrifugation, while malaria parasitaemia was detected by rapid diagnostic testing and microscopy.
- Structured questionnaires captured sociodemographic data, ART use, insecticide-treated net (ITN) utilisation, and adherence to cotrimoxazole prophylaxis or intermittent preventive treatment in pregnancy (IPTp).
- Data were analysed using SPSS version 26, with significance set at $p<0.05$.



Results

- Anaemia (Hb <11 g/dL) was found in 40.6% of participants, and severe anaemia (Hb <8 g/dL) in 12%.
- Malaria parasitaemia prevalence was 22%.
- Consistent ITN use was reported by 60% and cotrimoxazole adherence by 48%.
- Anaemia was significantly associated with malaria infection ($p<0.01$), ITN non-use ($p<0.05$), and poor prophylaxis adherence ($p<0.05$).
- Adverse obstetric outcomes were more common among anaemic women, including haemorrhage (3.5%), preterm delivery (16.9%), and low birth weight (7.8%), all significantly higher than among non-anaemic women ($p<0.05$).

Conclusion

- Anaemia remains prevalent among HIV-positive pregnant women in malaria-endemic Nigeria, driven by suboptimal malaria prevention and prophylaxis adherence.
- Integrating malaria control, anaemia screening, and HIV care within antenatal programs is vital to reducing maternal morbidity and mortality.



Determinants of Factors Affecting Adherence to Iron and Folic Acid Supplementation among Pregnant Women in Ogbomoso, South West, Nigeria

Adebayo Duyile Adekunle,[1] Wakeel Okanlawon Muritala,[1,] Muibat Adesola Adeniran,[1] Matthew Olusegun Fijabiyi,[1] Olufemi Opeyemi Aworinde[1] Kola Musliudin. Owonikoko[1]

Affiliations

[1]Department of Obstetrics and Gynaecology, Faculty of Clinical Sciences, College of Health Sciences, Ladoke Akintola University of Technology, Ogbomoso, Nigeria. / Department of Obstetrics and Gynaecology, LAUTECH Teaching Hospital, Ogbomoso. PMB 4007, Ogbomoso – Ilorin Road, Ogbomoso, Oyo State, Nigeria.

Corresponding Author:

Wakeel Okanlawon MURITALA
Department of Obstetrics and Gynaecology, Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria.
Email: womuritala@lautech.edu.ng. Tel: +2347032045565

Introduction

Physiological changes during pregnancy, fetal growth and development increase the requirement for Iron and Folic Acid. The increased demand of these nutrients is not usually met through diet alone due to decreased bioavailability of nutrients during pregnancy.[1] Increased Iron and Folic Acid Supplementation adherence during pregnancy was associated with reduced risks of maternal anemia and newborn hemorrhagic disease and birth defects.[2] Anemia is the most common hematologic abnormality diagnosed in pregnancy.[3] It is said to be present when the blood hemoglobin value is below the reference value for the age, sex, and place of residence of the individual.[3] Anemia in pregnancy is defined by the World Health Organization (WHO) as a hemoglobin concentration of <11g/dl.[4] with value 7.9 g/dl - 10.9 g/dl, 7 g/dl - 7.9g/dl, and <7 g/dl classified as mild, moderate, and severe anemia, respectively.[4] Studies suggest that a fall in maternal hemoglobin below 11.0 g/d1 is associated with a significant rise in perinatal mortality rate.[5-7] There is usually a 2 to 3 folds increase when maternal hemoglobin levels fall below 8.0g/d1 and 8 to 10 folds increase when maternal hemoglobin falls below 5.0g/dl.[7] Prevalence of anemia in pregnancy is 58.0% in Ogbomoso, Southwest, Nigeria[6] and 76.5% in Abakaliki, Southeast, Nigeria.[7]

Folic acid-preventable spinal bifida and anencephaly (FAPSBA) are common birth defects affecting the central nervous system. Those who started folic acid use 3 months before their last menstrual period had a significantly lower risk of total birth defects, neural tube defect, cleft lip, face malformation, preterm birth, low birth weight, miscarriage, stillbirth, and neonatal mortality than those who did not take folic acid.[8]

In spite of unequivocal evidence from controlled trials in 1991 confirming the effectiveness of folic acid in prevention of spina bifida and anencephaly,[2] each year about 246000 cases of FAPSBA occur globally.[4]



Iron-Folic acid supplementation is an integral component of antenatal care aimed at preventing anemia in pregnancy and birth defects. Iron-folic acid supplementation is a cost-effective and evidence-based intervention to mitigate these risks.

Iron-Folic acid supplementation is an integral component of antenatal care aimed at preventing anemia in pregnancy and birth defects. Iron-folic acid supplementation is a cost-effective and evidence-based intervention to mitigate these risks.
Daily supplementation throughout pregnancy, beginning as early as possible after conception, is recommended in all settings.[9] Despite, its proven efficacy and wide inclusion in antenatal care programs, the use of iron and folic acid supplementation has been limited in program settings.[9]

The main issue with iron-folate supplementation during pregnancy is adherence because women frequently forget to take the supplements regularly as directed by their healthcare providers, this is probably one of the cause of the high prevalence of anemia among pregnant mothers. Adherence varies across regions and is influenced by multiple factors. The overall prevalence of compliance with Iron and Folic acid supplementation (IFAS) in pregnancy in sub-Saharan Africa was at 39.2%,[10] in Ethiopia was 41.38%.[11]

The gaps in adherence to these supplements and the factors influencing maternal willingness to uptake them are global concerns.[12] Understanding the factors impacting adherence to this supplementation is pivotal for enhancing maternal and fetal health outcomes. Non-adherence to iron-folic acid supplementation not only jeopardizes the health of pregnant women but also exerts an unnecessary burden on healthcare systems

Methodology

This study was a cross sectional hospital-based survey involving structured interviewer-administeredquestionnaire among Pregnant women attending antenatal clinics in hospitals in Ogbomoso, who gives consent to participate in the study will be included.

The sample size was calculated using the modified Leslie Fisher's formula; $n = \frac{Z^2pq}{d^2}$

where n is sample size and d is the degree of accuracy. Z is a constant = 1.96 P is the prevalence which is 0.54 (from previous studies) q=1-p = 0.46

$$n = \frac{(1.96)^2(0.54)(0.46)}{0.05^2}$$

$$=381$$

For population less than 10000, $nf = \frac{n}{1 + \frac{(n)}{N}}$

Estimated population of study area is 5000.

$$=354$$

Allowance is given for 10% non-response, thus, the total sample size is thus 390 approximated to 400.

Multistage sampling technique was used.



Stage 1: Selection of two LGAs (Ogbomosho North and Ogbomosho South)
Stage 2: List of primary, secondary and tertiary health care centres in each LGA was made.
Stage 3: Simple random sampling was used to select 1 hospital in each category across the LGA
Stage 4: Pregnant women attending their antenatal clinics will be given questionnaires.
Semi-structured interviewer-administered questionnaire with different sections, the first version was administered to twenty pregnant women at a centre in Ogbomoso not among the selected ones to ensure question clarity, format and sequence, ambiguous questions were re-phrased. The information collected through the pilot study was not included in the final analysis.

The questionnaires were coded, entered into personal passworded computer, and analyzed using IBM (International Business Machines Corporation) SPSS (Statistical Product and Service Solutions) version 26. Frequencies, percentages and mean were used to describe the data. Level of significance was at $p<0.05$ using confidence level at 95%.
The ethical clearance for the study was obtained from the Ethical Review committee of Ladoke Akintola University of Technology (LAUTECH) Teaching Hospital, Ogbomoso with ethical approval number LTH/OGB/EC/2025/595. The managements of other hospitals were approached for their support of the study.

Result
400 pregnant women participated in the study, the majority (60.0%) were aged 20–30 years, with a mean age of 28.78 ± 5.57 years. Most were married (84.8%), more than half 216(54.0%) had tertiary level of education, and 36.8% were engaged in trading (36.8%). Christianity was the predominant religion (63.0%). More than 1/3rd of respondents (41.3%) earned less than ₦50,000 monthly and lived a moderate distance from the antenatal clinic. Majority 298(74.5%) had <3 pregnancies; 323(80.8%) had no previous Miscarriages/abortion; 318(79.5%) carried <3 pregnancies beyond 7 months; 31(77.5%) had <3 living children; 207(51.8%) attended <3 antenatal clinics in pregnancy as shown in table 1

The majority (91.3%) were aware that IFA supplements should be taken during pregnancy. However, knowledge of specific benefits varied: 58.0% knew IFA prevents anemia, 56.8% knew it supports fetal development, while only 46.5% and 53.0% recognized its role in boosting maternal energy and preventing birth defects, respectively. About 63.8% correctly identified the first trimester as the appropriate time to initiate supplementation. 158(39.5%) stated Postpartum period as the recommended time to stop taking IFA tablets during pregnancy; 133(33.3%) did not know the recommended dose of Iron and Folic acid in a standard IFA tablet; 190(47.5%) stated that Iron and Folic acid supplements should be taken once a day;majority 303(75.8%) heard of IFA during pregnancy from Healthcare providers.

These findings are illustrated in Table 2
Table 3 shows the adherence of the respondents to Iron - Folic acid supplementation. The level of adherence of participants to daily intake of IFA is 70.5%, only 68.3% of respondents started IFA in the first trimester. Despite 77.0% reporting they received adequate counseling



during antenatal care, only 64.5% followed the recommended dosage. Challenges included forgetfulness (11.0%) and irritation from the tablets (12.3%).
Table 4 revealed that the number of antenatal clinic visits (x^2 = 9.966, P = 0.007), awareness of iron and folic acid supplementation in pregnancy (x^2 = 10.285, p = 0.016, awareness of when to start IFA (p < 0.001), correct knowledge of dosage (p < 0.001), benefits of intake of IFA supplementation, (like support of fetal development (x^2 = 4.693, p = 0,03), prevention of birth defects (x^2 = 8.651, p = 0.003)) and primary source of information on IFA supplementation during pregnancy were significantly associated with good adherence to IFA supplementation in Pregnancy.

Table 5 showed the Multivariate logistic regression of the factors influencing adherence to Iron Folic Acid supplementation, it indicated that attending 3–6 antenatal visits (AOR = 2.367, p = 0.025), adherence to the postpartum supplementation period (AOR = 2.619, p = 0.012), and knowledge of correct dosage (AOR = 4.157, p < 0.001) were strong predictors of good adhenrence.

Respondents that stated postpartum period as the recommended time to stop taking IFA are 3 times more likely to have good adherence than those who stated that they are not sure of the recommended time to stop taking IFA supplementation (AOR 2.619, 95% CI 1.240–5.532, *P*= 0.012). Respondents that stated 1 tablet of Iron twice daily + 1 Folic acid daily as the recommended dose of IFA are 4 times more likely to have good adherence than those who did not know the recommended dose with (AOR 4.157, 95% CI 2.027–8.528, *P*= 0.000). Respondents that believe IFA should be taken once a day and twice a day are 10 and 9 times respectively more likely to have good adherence to IFA supplementation than those who stated three times daily with (AOR 9.538, 95% CI 1.106–82.225, *P*= 0.040) and (AOR 9.238, 95% CI 1.028–83.047, *P*= 0.047) respectively.



Table 1: Socio-Demographic and Obstetrics Characteristics of Respondents

Characteristics	Frequency (n = 400)	Percentage (%)	Mean ± SD
AGE (Years)			28.78 ± 5.566
Age Group			
≤20	12	3.0	
21 – 30	240	60.0	
31 – 40	142	35.5	
≥41	6	1.5	
Marital Status			
Single	51	12.8	
Married	339	84.8	
Divorced/Separated	8	2.0	
Widowed	2	0.5	
Educational Level			
No Formal Education	22	5.5	
Primary	20	5.0	
Secondary	142	35.5	
Tertiary	216	54.0	
Occupation			
Unemployed	93	23.3	
Trader	147	36.8	
Artisan	61	15.3	
Civil Servant	55	13.8	
Professional	44	11.0	
Income Range			
<50,000	165	41.3	
50,000 – 100,000	130	32.5	
101000 – 200,000	73	18.3	
>200,000	32	8.0	
Religion			
Christian	252	63.0	
Islam	142	35.5	
Traditional	6	1.5	
Home Distance to ANC			
Near	89	22.3	
Not Far	163	40.8	
Far	105	26.3	
Very Far	43	10.8	
Number of Previous Preg			
<3	298	74.5	
≥3	102	25.5	
Number of Previous Miscarriages	323	80.8	



0	57	14.3
1	18	4.5
2	2	0.5
3		
Number of Pregnancies beyond 7 months	318	79.5
<3	82	20.5
≥3		
Number of Living Children		
<3	310	77.5
≥3	90	22.5
Number of ANC Attended		
<3	207	51.8
3 – 6	121	30.3
>6	72	18.0



Table 2: Level of Knowledge of Respondents regarding Iron and Folic acid (IFA) Tablet usage during Pregnancy

Characteristics	Yes n (%)	No n (%)	Not Sure n (%)	May Be n (%)
Iron and folic acid supplements should be taken during pregnancy	365 (91.3)	14 (3.5)	13 (3.3)	8 (2.0)
Benefits Associated with IFA Intake				
Prevention of Anemia	232 (58.0)	168 (42.0)		
Fetal development support	227 (56.8)	173 (43.2)		
Boost maternal energy	186 (46.5)	214 (53.6)		
Prevention of birth defects in newborn	212 (53.0)	188 (47.0)		
Others	14 (3.5)	386 (96.5)		
	Frequency (n)	**Percentage (%)**		
Time recommended to start taking Iron and Folic acid supplements in pregnancy				
First 3 months	255	63.8		
Second 3 months	50	12.5		
Third 3 months	11	2.8		
Not sure	84	21.0		
Recommended time to stop taking IFA tablets during pregnancy				
Last 3 months	36	9.0		
At delivery	90	22.5		
Postpartum period	158	39.5		
Not sure	116	29.0		
Recommended dose of Iron and Folic acid in a standard IFA tablet				
30-60mg Iron and 400ug Folic acid	60	15.0		
1 tablet of Iron twice dly + 1 Folic acid dly	96	24.0		
1 tablet each of Iron and Folic acid daily	111	27.8		
Not known	133	33.3		
How often should Iron and Folic acid supplements be taken during pregnancy?				
Once a day	190	47.5		
Twice a day	128	32.0		
Three times a day	50	12.5		
Primary source of information on IFA tablets during pregnancy				
Healthcare provider	303	75.8		
Family/friends	61	15.3		
Internet	30	7.5		
Others	6	1.5		



Table 3: Adherence of Respondents to Iron Folic Acid Supplementation

Characteristics	Yes n (%)	No n (%)	Not Sure n (%)	May Be n (%)
I take the Iron and Folic acid tablet on daily basis for the recommended period of time	**282 (70.5)**	69 (17.2)	45 (11.3)	4 (1.0)
I started taking Iron and Folic acid tablets from the first trimester of pregnancy	273 (68.3)	102 (25.5)	23 (5.7)	2 (0.5)
I was provided with sufficient information or counseling regarding the appropriate Iron and Folic acid supplementation during antenatal care visits	306 (77.0)	47 (11.8)	27 (6.8)	20 (5.0)
I take one dose of a tablet containing 30-60mg Iron and Folic acid	258 (64.5)	45 (11.3)	91 (22.7)	6 (1.5)
There were challenges in maintaining the recommended Iron and Folic acid supplements practice	118 (29.5)	236 (59.0	31 (7.8)	15 (3.8)

	Frequency n	Percentage (%)
If yes, specify		
Financial incapability	6	1.5
Forgetfulness	44	11.0
It irritates	49	12.3
Tiredness	13	3.3



Table 4: Factors Influencing Adherence to Iron and Folic Acid Supplementation among Participants

Characteristics	Adherence		Test Statistics	P value
	Poor n (%)	Good n (%)	X^2	
Age Group				
<20 years	8	4	1.322	0.724
20-30 years	141	99		
31-40 years	91	51		
>40 years	4	2		
Marital Status				
Single	32	19	0.182	.98
Married	206	133		
Divorced/Separated	5	3		
Widowed	1	1		
Educational Level				
No Formal Education	11	11	1.432	0.698
Primary	13	7		
Secondary	89	53		
Tertiary	131	85		
Occupation				
Unemployed	57	36	1.239	0.872
Trader	90	57		
Artisan	37	24		
Civil Servant	36	19		
Professional	24	20		
Income Range				
<50,000	105	60	2.572	0.462
50,000 – 100,000	81	49		
101000 – 200,000	42	31		
>200,000	16	16		
Religion				
Christian	144	108	4.261	0.119
Islam	96	46		
Traditional	4	2		
Home Distance to ANC				
Near	56	33	1.394	0.707
Not Far	95	68		
Far	64	41		
Very Far	29	14		
Number of Previous Preg				
<3	178	120	0.79	0.374
≥3	66	36		



Number of Previous Miscarriages				
0	198	125	1.141	0.767
1	36	21		
2	9	9		
3	1	1		
Number of Pregnancies beyond 7 months				
<3	190	128	1.021	0.312
≥3	54	28		
Number of Living Children				
<3	184	126	1.567	0.211
≥3	60	30		
Number of ANC Attended				
<3	131	76	**9.966**	**0.007**
3 – 6	61	60		
>6	52	20		
Iron and folic acid supplements should be taken during pregnancy				
Yes	**215**	**150**	**10.285**	**0.016**
No	**10**	**4**		
Not Sure	**13**	**0**		
May Be	**6**	**2**		
Benefits Associated with IFA Intake				
Prevention of Anemia				
Yes	146	86	0.866	0.352
No	98	70		
Fetal development support				
Yes	128	99	**4.693**	**0.03**
No	116	57		
Boost maternal energy				
Yes	117	69	0.529	0.467
No	127	87		
Prevention of birth defects in newborn				
Yes	115	97	**8.651**	**0.003**
No	129	59		
Others				
Yes	6	8	2.007	0.157
No	238	148		
Time recommended to start taking Iron and Folic acid supplements in pregnancy	131	124	**28.752**	**<0.001**
	38	12		
First 3 months	7	4		
Second 3 months	68	16		
Third 3 months				



Not sure				
Recommended time to stop taking IFA tablets during pregnancy	25	11	**30.467**	**<0.001**
Last 3 months	55	35		
At delivery	73	85		
Postpartum period	91	25		
Not sure				
Recommended dose of Iron and Folic acid in a standard IFA tablet				
30-60mg Iron and 400ug Folic acid	30	30	**42.962**	**<0.001**
1 tablet of Iron twice dly +1 Folic acid dly	40	56		
1 tablet each of Iron and Folic acid dly	65	46		
Not known	109	24		
How often should Iron and Folic acid supplements be taken during pregnancy?	100	90	**21.171**	**<0.001**
	80	48		
Once a day	34	16		
Twice a day				
Three times a day				
Primary source of information on IFA tablets during pregnancy				
Healthcare provider	178	125	**16.441**	**0.001**
Family/friends	50	11		
Internet	14	16		
Others	2	4		



Table 5: Predictors of level of Adherence of the respondents to IFA Supplementation during pregnancy

Characteristics	AOR	95% C.I.for EXP(B)		P value
		Lower	Upper	
Number of ANC Attended ref (>6)				
<3	1.245	0.606	2.555	0.551
3 – 6	2.367	1.117	5.017	**0.025***
Iron and folic acid supplements should be taken during pregnancy ref (May be)				
Yes	0.784	0.104	5.932	0.814
No	0.848	0.078	9.245	0.892
Not Sure	0.000	0.000		0.000
Benefits Associated with IFA Intake (ref No)				
Fetal development support				
Yes	1.374	0.797	2.369	0.253
Prevention of birth defects in newborn (ref No)				
Yes	1.482	0.842	2.609	0.173
Time recommended to start taking Iron and Folic acid supplements in pregnancy (Not sure)				
First 3 months	2.038	0.906	4.582	0.085
Second 3 months	0.677	0.239	1.920	0.464
Third 3 months	1.102	0.226	5.368	0.904
Recommended time to stop taking IFA tablets during pregnancy (Ref., Not Sure)				
Last 3 months	2.056	0.705	5.994	0.187
At delivery	1.365	0.591	3.153	0.466
Postpartum period	2.619	1.240	5.532	**0.012***
Recommended dose of Iron and Folic acid in a standard IFA tablet (ref. Not known)				
30-60mg Iron and 400ug Folic acid	1.896	0.819	4.388	0.135
1 tablet of Iron twice dly +1 Folic acid dly	4.157	2.027	8.528	**<0.001***
1 tablet each of Iron and Folic acid dly	1.405	0.659	2.998	0.379
How often should Iron and Folic acid supplements be taken during pregnancy? Ref 3x				
Once a day	9.538	1.106	82.225	**0.040***
Twice a day	9.238	1.028	83.047	**0.047***
Primary source of information on IFA tablets during pregnancy (Ref. Others)				
Healthcare provider	0.214	0.024	1.909	0.167
Family/friends	0.047	0.005	0.475	**0.010***
Internet	0.402	0.036	4.450	0.458

OR- odd ratio, CI – confidence interval



Discussion

This study assessed the factors influencing adherence to iron and folic acid (IFA) supplementation among pregnant women attending antenatal care (ANC) in Ogbomoso. The findings provide insight into the levels of knowledge, attitudes, and adherence related to IFA supplementation in pregnancy, while also identifying key socio-demographic and health-system factors including level of knowledge of IFA supplementation during pregnancy that influence adherence.

The results show that awareness of IFA supplementation during pregnancy is relatively high, this is comparable to findings from Assefa et al. in Ethiopia[1] and Tsegai et al. in Eritrea,[12] which also reported high awareness among pregnant women in similar settings. However, the depth of knowledge among respondents was variable. While over half of the participants recognized that IFA helps prevent anemia (58.0%) and supports fetal development (56.8%), fewer were aware of its role in boosting maternal energy (46.5%) or preventing birth defects (53.0%). This partial understanding of the benefits of IFA supplementation may limit motivation and adherence among some women.

Additionally, while a significant proportion of respondents (63.8%) knew that IFA should be started in the first trimester, knowledge about when to discontinue its use and the correct dosage was inadequate. Only 15% knew the standard dosage, and one-third (33.3%) admitted to not knowing the recommended dosage at all. These findings suggest that although antenatal programs may be successfully raising general awareness, they are not consistently imparting comprehensive or actionable knowledge. Similar gaps in detailed knowledge have been observed in studies from India,[13] Ethiopia[14] and southwest, Nigeria.[6]

Attitudes toward IFA supplementation in pregnancy among the participants were largely positive. The majority of respondents agreed or strongly agreed that IFA has significant health benefits (98.0%) and expressed willingness to take the tablets daily (84.8%). This positive disposition is encouraging and aligns with the findings of Saragih et al. in 2022, who reported that a favorable attitude significantly correlates with improved compliance.[4]
However, a small but notable proportion (17.6%) expressed uncertainty or concern about the safety of IFA tablets during pregnancy. Misconceptions about potential harm may be a barrier to full adherence and need to be addressed during ANC visits. Consistent health messaging and community engagement are essential in correcting these beliefs.

Adherence to IFA supplementation in this study was moderate. While 70.5% of participants reported taking IFA tablets daily as recommended, only 68.3% began supplementation in the first trimester which is below the World Health Organization's recommendation for early initiation.[15] Challenges to adherence included side effects (12.3%), forgetfulness (11.0%), tiredness (3.3%), and financial constraints (1.5%), these challenges are consistent with studies from Kenya, Tanzania, and India, where side effects and pill burden have been identified as key barriers.[20-22]



The number of antenatal visits was significantly associated with good adherence (p = 0.007) to IFA supplementation in pregnancy. Women who attended ANC three to six times were more likely to adhere to IFA recommendations. This supports the notion that repeated interaction with healthcare providers improves health behaviors, as also found by Taye et al. in Amhara, Ethiopia.[19]

Furthermore, multivariate analysis identified that correct knowledge of IFA dosage (AOR = 4.157), timing of discontinuation (AOR = 2.619), and taking IFA once or twice daily (AORs = 9.538 and 9.238 respectively) were strong predictors of good adherence. These findings reinforce the importance of both knowledge and behavior reinforcement in promoting adherence. They also underscore the value of practical, clear, and frequent messaging about how to use the supplements. Notably, women who knew the correct dosage and timing were several times more likely to practice proper supplementation. This supports WHO recommendations on early and continuous IFA education during ANC (WHO, 2012).[15]

Additionally, the study highlighted the influence of information sources. Respondents who received information from healthcare workers were significantly more likely to practice good IFA adherence compared to those who relied on family or friends. This is in line with study done in Tanzania by Mshanga and Maseta, who noted that trust in the source of information significantly affects maternal decision-making.[20]

Conclusion

This study highlights that while general awareness of IFA supplementation is high among pregnant women in Ogbomoso, detailed knowledge and actual adherence are moderate. Factors such as frequency of ANC visits, understanding of correct dosage (especially in early pregnancy and postpartum), and knowledge of benefits were significantly associated with better adherence.

Recommendations

1. Focus on improving understanding of dosage, timing, and full benefits of IFA through repeated ANC counseling.
2. Encourage pregnant women to attend ANC from the first trimester as early contact enhances compliance.
3. Mitigate common side effects through education and consider alternative formulations where necessary.
4. Involve family and peer support groups to reinforce IFA usage messages and improve reminder systems.
5. Although healthcare providers are the main source of information, integrating digital platforms and community outreach can broaden awareness and retention.
6. Policymakers should integrate IFA supplementation campaigns into broader maternal and child health initiatives.



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Association between Decision to Delivery Interval, Foetalacidaemia and Neonatal Outcome in the University of Uyo Teaching Hospital, Uyo, Nigeria

Atat B. A.[1], AbasiattaiAniekan M.[2], Inyang-Etoh Emmanuel C.[2], Abah M.G.[2]Etuknwa, U. I.[2]

Addresses:

[1]Department of Obstetrics and Gynaecology, University of Uyo Teaching Hospital, Uyo.

[2]Department of Obstetrics and Gynaecology, University of Uyo/ University of Uyo Teaching Hospital, Uyo.

Corresponding Author

Dr Abah M, G,

Department of Obstetrics and Gynaecology, University of Uyo. P.M.B 1017, Uyo, Nigeria. Email: gabriel.abah@rocketmail.com, phone: +2348067121704

Introduction

- When there is a need for immediate delivery, but the vaginal route is not feasible, an emergency caesarean section becomes the route of choice for delivery.
- To avert undesirable and adverse perinatal and maternal outcomes, it is recommended that the decision to delivery interval should not exceed 30 minutes in emergency caesarean sections
- However, the 30 minutes interval may not be feasible, and often difficult to achieve in many maternity units
- Prolonged delivery intervals may be associated with foetalacidaemia.
- The phenomenon of foetalacidaemia may be indirectly measured clinically by the APGAR scores or measured biochemically by determining the pH of the foetal umbilical cord blood.
- We sought to find the association between decision to delivery interval, foetalacidaemia and Neonatal outcome in the University of Uyo Teaching Hospital.

Objectives:

- To identify any association between Decision to Delivery Interval in emergency caesarean section, foetalacidaemia and neonatal outcome in mothers delivered by emergency caesarean section in the University of Uyo Teaching Hospital, Uyo.
- To determine the Decision to Delivery Interval at the University of Uyo Teaching Hospital
- To ascertain the degree of foetalacidaemia and its effect on neonatal outcome.
- To determine the indications for emergency caesarean sections at the University of Uyo Teaching Hospital.

Methodology:

- This was an observational study using the cross-sectional study design.
- Thirty (39) mothers scheduled for emergency caesarean sections at the University of Uyo Teaching Hospital, Uyo, were recruited for this study.



- The Decision to Delivery Intervals were determined from the date and time of the decision to perform the emergency caesarean sections to the date and time of delivery of the babies.
- The cut-off for Decision to Delivery Interval for this study was 75 minutes because the risk for foetalacidaemia had been shown to increase with intervals longer than 75 minutes.
- The umbilical cord blood of new-borns was obtained for analysis of the cord blood pH using the i-STAT blood (Abbott) gas analyser while the APGAR scores were used to predict adverse neonatal outcomes.
- The mean arterial umbilical cord blood pH is 7.24 to 7.27.
- However, the reference range for arterial umbilical cord blood pH using the I-STAT machine by Abbot is 6.50-8.20.
- An umbilical cord pH less than 6.50 (using the I-STAT machine by Abbott) will strongly correlate with foetalacidaemia.
- A 5-minute APGAR score less than 7 will correlate with adverse neonatal outcome.20
- Data analysis was done using the statistical package for social sciences (SPSS) version 29.0 software for windows.

Result:

- The shortest decision to delivery interval was 38 minutes while the longest was 165 minutes.
- The mean decision to delivery interval was 100.79±31.01 minutes
- Twenty-nine (74.4%) of the recruited participants experienced delays before emergency caesarean section while no delays were observed for 10 (25.6%) of the participants.
- Neonatal acidaemia (pH< 6.5) was found in 14 newborns (35.9%).
- The mean neonatal pH was 6.97±0.9
- The mean APGAR scores at 1 minute and 5 minutes respectively were 7.77±1.58 and 9.28±1.21
- Cephalopelvic disproportion and previous caesarean delivery (with additional factors) were the commonest indications for emergency caesarean section.
- Among the neonates observed during the study, 4 (10.3%) were admitted into the Special Care Baby unit (SCBU).
- There was only 1 case of early neonatal death (2.6%).
- The mean APGAR scores at 1 minute and 5 minutes respectively were 7.77±1.58 and 9.28±1.21
- Cephalopelvic disproportion and previous caesarean delivery (with additional factors) were the commonest indications for emergency caesarean section.
- Among the neonates observed during the study, 4 (10.3%) were admitted into the Special Care Baby unit (SCBU).
- There was only 1 case of early neonatal death (2.6%).



Conclusion:

- Although there was one case of perinatal mortality, this study found no association between a delay in the decision to delivery interval and foetalacidaemia.
- A delay in the decision to delivery interval may not cause foetalacidaemia if there is an adequate pre-delivery foeto- maternal resuscitation and a good foetal reserve.



Evaluation of the Role of sFlt-1, PlGF and sEng as Angiogenic Biomarkers in the Prediction of Pregnancy Outcome in Preeclampsia: A Scoping Review

Omoregie Irowa[1*], Philip Etabee Macdonald Bassey [2], Patience Olufemi Odusolu, [3] Uchenna Ifeanyi Nwagha[4]

Affiliations

[1]Department of Obstetrics and Gynaecology, Federal University of Health Sciences Otukpo (FUHSO), Benue State, Nigeria.
[2]Department of Community Health, Faculty of Medicine, College of Medical Sciences, University of Calabar, Calabar, Cross Rivers State, Nigeria.
[3]Department of Obstetrics and Gynaecology, University of Calabar Teaching Hospital (UCTH), Calabar, Cross Rivers State, Nigeria.
[4]Department of Obstetrics and Gynaecology, College of Medicine, University of Nigeria, Enugu Campus, Enugu State, Nigeria.

Corresponding Author

Dr. Omoregie Irowa, Department of Obstetrics and Gynaecology, Federal University of Health Sciences Otukpo (FUHSO), P.M.B 145, Otukpo, Benue State, Nigeria
Email Address: reggie_irowa@yahoo.com

Introduction

- Preeclampsia is a pregnancy specific disorder occurring in the second half of pregnancy and it is associated with significant adverse pregnancy outcome [1,2].
- Preeclampsia accounts for 2-8% of all pregnancies [3].
- Angiogenic biomarkers such as PlGF (placenta growth factor), sFlt-1 (soluble fms-like tyrosine kinase-1), sEng (soluble endoglin) and their ratios [4-7].
- These biomarkers are useful in predicting preeclampsia and adverse pregnancy outcomes[4,7- 10.]
- This scoping review aimed to systematically map existing research on the role of angiogenic biomarkers in predicting pregnancy outcomes among women with preeclampsia. It sought to identify study designs, methodologies, and knowledge gaps to inform methodological recommendations for future studies.

Methodology

- The protocol for the review was drafted using the PRISMA- ScR (Preferred Reporting Items for Systematic Review and Meta-Analysis Extension for Scoping Review) and registered with Open Science Framework (OSF) with registration number https://osf.io/8dtpj
- A comprehensive search was conducted in PubMed, Google Scholar, SpringerLink, and Web of Science between April and October 2024.
- Studies published in English from 2014 to 2024 that examined angiogenic biomarkers and pregnancy outcomes in preeclampsia were included.



- Grey literature, non-English publications, and studies on other pregnancy complications were excluded.
- Of 217 screened articles, 46 were assessed in full, and 28 met the inclusion criteria. Data were extracted using a structured tool and synthesized narratively, with findings summarized in tables.

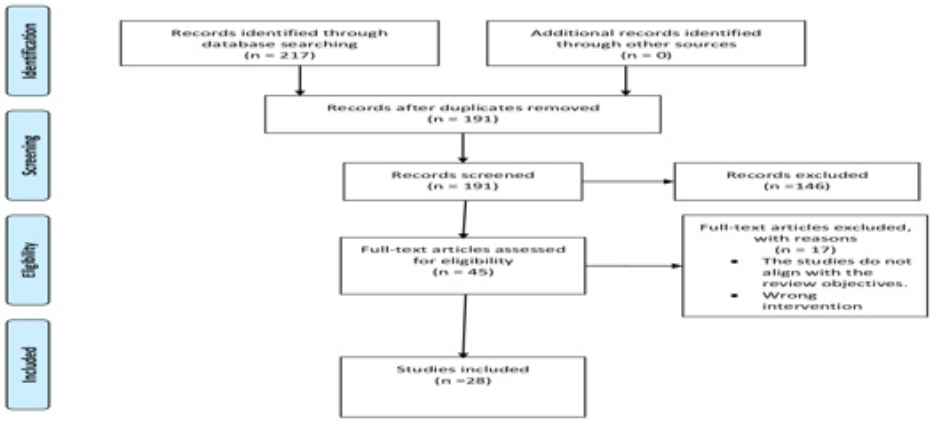

Figure 1: Scoping review flow chart on the role of angiogenic biomarkers in predicting pregnancy outcome in preeclampsia adapted from the PRISMA statement by Moher and colleagues (2009)

Table 1 Roles of angiogenic biomarkers in predicting pregnancy outcome in preeclampsia

Author	Roles of Angiogenic biomarkers
Chaiworapongsa et al., 2023[11]	Predicting adverse pregnancy outcomes
Peguero et al., 2023[12] Binder et al., 2022[13]	improve prognostic performance in combination with other methods of antepartum fetal surveillance.
Arenas et al., 2021[14] Karge et al., 2021[15]	Useful in predicting time to delivery interval in preeclamptic women
Triunfo et al., 2016[16]	Classify preeclampsia into early onset and late Onset preeclampsia.



Table 2 Gap in knowledge(limitations) from previous studies

Author	Gap in Knowledge (limitations) from previous studies
Binder et al., 2021[4]	Retrospective study design.
Reddy et al., 2022[17]	Small sample size which limits statistical power of the study
Binder et al., 2022[13]	Non-blinding of clinicians which may lead to intervention bias
Triunfo et al., 2016[16]	Non-longitudinal assessment of angiogenic biomarkers
Reddy et al., 2022[17]	Lack of normotensive control population
Mirkovic et al., 2020[18]	Single-centre study

Table 3 Recommendation for future research

Author	Recommendation for future research
Karge et al., 2021[15]	More prospective multicenter studies
Arenas et al., 2021[14]	Large sample size to improve the power of the study and external validity
Lim et al., 2021[19]	Randomized control trials to assess the implementation of angiogenic biomarkers in clinical practice.
Villalain et al., 2020[7]	Longitudinal or serial follow up of angiogenic biomarkers

Discussion

- Evidence from the review shows that angiogenic biomarkers are reliable predictors of adverse pregnancy outcomes, either alone or in combination with other forms of antepartum assessment. These findings are further corroborated by several studies[11 - 16,20].
- Literature gaps mainly arise from methodological limitations in previous studies. This has been consistently reported across multiple studies [6,13-18.]
- From this review, it is recommended that future studies should include more prospective and randomized designs with larger sample sizes and well-defined normotensive controls[7,13,1419].



Conclusion

- Angiogenic biomarkers show considerable promise for predicting pregnancy outcomes in preeclampsia.
- However, methodological limitations across existing studies hinder their clinical application.
- Future large-scale, multicenter prospective studies and randomized controlled trials are recommended to validate their clinical relevance.

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Impact of a Pre-Incision Uterotonic Pharmacological Agent on Blood Loss during Caesarean Section: A Randomised Comparative Study

Olorunfemi Oludele Owa[1,2], Toba Ajagun[3], Temitope G. Onile[3], Grace Olapeju Ogoke[3], Abidemi Oyaromade[4], Bello Alhaji Mohammed[4]

Affiliations

[1]Department of Obstetrics and Gynaecology, Federal Medical Centre, Owo, Ondo State, Nigeria

[2]Department of Pharmacology, University of Medical Sciences, Ondo, Ondo State, Nigeria

[3]Department of Obstetrics and Gynaecology, Federal Teaching Hospital, Lokoja, Kogi State, Nigeria

[4]Department of Obstetrics and Gynaecology, Federal Medical Centre, Gusau, Zamfara State

Corresponding Author

Dr. Olorunfemi Oludele Owa, Department of Obstetrics and Gynaecology, Federal Medical Centre, Owo, Ondo State.

Email: owaolorunfemi@yahoo.com, Phone: +2348037637532

Background:

- The major cause of morbidity and mortality following caesarean delivery is heamorrhage and the commonest cause of excessive bleeding at caesarean delivery is atony.
- However, additional uterotonics is occasionally needed to achieve this purpose. Its currently uncertain the effect of routine use of a combination of oxytocin and rectal misoprostol pre-incision to oxytocin alone in preventing excessive blood loss at caesarean delivery, more so in our environment where the potency of oxytocin cannot be guaranteed due to poor storage facility.

Objective:

- To assess the effect of pre-incision rectal misoprostol in reducing blood loss at caesarean delivery.

Methodology:

- A prospective randomised comparative study was conducted at Federal Medical Centre Lokoja (now FTH Lokoja) over a period of 9 months among one hundred parturient at term undergoing caesarean delivery for various indications.
- The study group (n = 50) received 10 IU bolus oxytocin and 20 IU oxytocin in 1L Normal saline infusion after delivery of the baby combined with 600µg of wet rectal misoprostol (Pre-incision) and the control group (n = 50) received 10 IU bolus and 20 IU of intravenous oxytocin infusion only after delivery of the baby (as per the hospital protocol). Spinal anaesthesia was used for all cases recruited. Study medications were administered rectally immediately after urethral catheterization after spinal anaesthesia and shortly before skin incision.



- Simple Randomization using a computer-generated random number sequence was used. The assigning of patients was done in the operating theater. The participants were blinded to the group allocation.
- The primary outcome measure was the mean intraoperative blood loss and other outcome measures included need for additional uterotonics, the drop in mean haematocrit concentration, proportion of participants who developed side effects, proportions of participant who required extra interventions.
- Data obtained were analysed using the computer software SPSS version 22 and using appropriate test with level of significance α set at 0.05.

Results:

- The mean intraoperative blood loss and postoperative blood loss was significantly lower in the study group as compared to control group: 566.00±140.72 and 54.40±27.006 vs. 742.08±184.97 and 115.32±61.26 ml (*p* value=0.001 for both comparisons).
- The perioperative fall in haematocrit is also significantly low in the study group compared to the control: (3.32±1.22 vs 5.34±1.93, *p*=0.001). The percentage of cases requiring additional uterotonics was also higher in the control group than in the study group (26% vs 8%; p= 0.017).
- Shivering and pyrexia were higher with misoprostol group.

Need for additional measures

Need for additional Measures	Group A Pre-incision Misoprostol +Oxytocin	Group B Oxytocin Only	P value
Need for additional oxytocics	4(8%)	13 (26%)	0.017
Oxytocin	4(8%)	9 (18%)	
Ergot	0	1 (2%)	
Oxytocin + Egort	0	3 (6%)	
Blood transfusion	0	3 (6%)	0.242
Need for surgical intervention. (Uterine artery ligation and B lynch)	0	2 (4%)	0495

Discussion:

- The commonest obstetric related cause of maternal mortality worldwide is postpartum haemorrhage. Its incidence in part has increased significantly as a result of increase in Caesarean delivery rate in both developed and developing countries.



- Despite routine use of Oxytocin, some parturients especially those with high risk, uterine atony and excessive bleeding with its attendant consequences may supervene in the intraoperative and or postoperative period. Hence any protocol or modality of management that assists in reducing the occurrence will in no doubt put maternal death in the downward trend.
- The present study showed pre-incision 600µg rectal misoprostol in both emergency and elective caesarean delivery after securing spinal anaesthesia was associated with significant reduction of mean intraoperative and postoperative blood loss in the study. In addition, there was less postoperative fall in haematocrit, less use of additional oxytocics.

Conclusion:

- Pre-incision rectal misoprostol combined with oxytocin bolus and infusion is more effective than Oxytocin bolus and infusion alone in reducing blood loss at caesarean operation.
- In addition, since oxytocin potency is readily destroyed if not properly stored at low temperature; a precondition that cannot be guaranteed in our environment due to erratic power supply, whereas misoprostol is heat stable and cheap, when administered prophylactically pre-incision with oxytocin during caesarean delivery, will definitely be of immensurable benefit to curtail postpartum haemorrhage.



Placenta Beliefs, Disposal Practices, and Implications for Clinicopathologic Research among Antenatal Clients in Ogun State, Nigeria

Jagun OE, Akiseku AK, Shorunmu TO, Ogunsowo KM, Ogunfuwa MA, Adenuga TO

Affiliations
Department of Obstetrics and Gynaecology, Olabisi Onabanjo University, Sagamu, Ogun State.

Corresponding Author
Dr O.E. Jagun
Department of Obstetrics and Gynaecology, Olabisi Onabanjo University, Sagamu, Ogun State.

Introduction

The placenta supports foetal development by mediating maternal–foetal exchange and producing hormones necessary for gestation. It holds significant cultural and spiritual value in many societies, with customs surrounding its disposal often reflecting beliefs about the protection of the newborn. Placenta tissue also has biomedical value. It provides accessible material for research in reproductive immunology, stem cell science, genetics, oncology, and regenerative applications.

Rumours and mistrust can significantly hinder studies, as seen in a Benin malaria-in-pregnancy trial where false claims about placenta sale for mystical purposes led to widespread fear, 30% participant dropout, and eventual halt of placenta biopsy sampling.

Objectives

This is to assess pregnant women's beliefs and knowledge about the placenta, their preferred disposal methods, and willingness to donate for research and to inform culturally sensitive maternal health education and ethically sound consent procedures in Ogun State, Nigeria.

Methodology

Study Design: This study employed a descriptive cross-sectional design using a questionnaire-based survey conducted across three purposively selected hospitals, each located in one of the three senatorial districts of Ogun State, southwest Nigeria, to ensure geographic and cultural representation.

Study Participants: Pregnant women attending antenatal care in the facilities (irrespective of the gestational age) were recruited by consecutive sampling following informed consent. A total of 451 participants were recruited and data collection was by the use of a semi-structured, interviewer-administered questionnaire.

Data Analysis: Data were entered and analysed using **IBM SPSS Statistics, version 25** (IBM Corp., Armonk, NY, USA). Descriptive statistics were calculated to summarize the socio-demographic characteristics of respondents, placenta disposal practices, opinions on placenta disposal, willingness to allow placenta for research, and knowledge of placenta function. Frequencies and percentages were used to describe categorical variables.



Results

Socio-demographic characteristics

The majority were aged 30–34 years (35.9%). Most respondents belonged to the Yoruba ethnic group (85.1%).

Place of last delivery and disposal responsibility

Most women (77.2%) reported that their last delivery took place in a government hospital, followed by private clinics (14.4%). Home delivery (2.7%) while faith-based organisations(2.2%). In almost all cases (90.7%), husband was reported as the person responsible for placenta disposal, with 0.2% reported leaving the placenta in the hospital.

Opinions and practices on placenta disposal

When asked where a placenta should ideally be disposed of, 46.8% of respondents indicated burial in the backyard and 32.6% in the forest (Table 1). Fewer respondents selected "don't know" (16.6%) or other locations such as beside rivers or cool sites (2.7%).

Willingness to allow the placenta for research

Seven and a half per cent reported they would allow part of the placenta to be taken, while 7.3% indicated willingness to donate the whole placenta. The vast majority (over 92%) were unwilling in both cases.

Knowledge of placenta functions

Nearly three-quarters (73.2%) stated they did not know any function. Among those who provided answers, 7.8% mentioned that the baby lives and feeds through it, 6.4% that it supports growth and breathing, and 4.0% that it connects the baby and mother.

Table 1: Opinions and practices on placenta disposal (N = 451)

Variable	Category	Frequency	Percent
Where the placenta should be disposed of	Buried in the backyard	211	46.8
	Buried in the forest	147	32.6
	Don't know	75	16.6
	Other (e.g., beside the river/cool site)	12	2.7
	Thrown into a pit	3	0.7
	Left in the hospital	2	0.4
	Thrown into the river	1	0.2
Where the placenta of previous children was disposed of	Buried in the backyard	183	40.6
	Don't know	159	35.3
	Buried in the forest	99	22.0
	Pit latrine	7	1.6



	Thrown into the river	2	0.4
	Left in the hospital	1	0.2

Discussion

In this multicentre survey, family-led placenta custody, with limited biomedical knowledge and low readiness to donate for research are concordant with West African and Nigerian accounts that frame the placenta as an entity tied to child's personhood and family continuity and therefore subject to ritual burial overseen by a male or senior kin. However, Nigerian work focused on placenta donation suggests that knowledge and communication quality influence acceptance, while cultural obligations for burial remain salient impediments.

Conclusion

In three specialist hospitals in Ogun State, placenta disposal remains family-controlled and oriented to burial, knowledge of placental function is limited, and willingness to donate for research is low. These features restrict in-facility tissue access and require protocols that respect household authority, provide clear information, and integrate safe custody and release.



Relationship between the Booking Status of Parturient and the Perinatal Outcome of Women Delivered in a Tertiary Health Facility in Uyo, Nigeria

Matthias Gabriel Abah,[1*] Uduak Solomon Ocheche,[2] Oranu Okechukwu Augustine,[3] Dr Etuknwa, Utibe Ifiok[3]

Affiliations

[1]Department of Obstetrics and Gynaecology, University of Uyo/University of Uyo Teaching Hospital, Uyo.

[2]Department of Obstetrics and Gynaecology, PAMO University of Health Sciences, Port Harcourt.

[3]Department of Obstetrics and Gynaecology, University of Uyo Teaching Hospital, Uyo.

Introduction/ Background

Maternal healthcare utilization remains a critical determinant of pregnancy outcomes, particularly in low- and middle-income countries. Antenatal care is one of the cornerstones of safe motherhood initiatives aimed at reducing maternal and neonatal mortality and morbidity worldwide by the detection and management of possible complications. Antenatal care also aims at preventing perinatal morbidity and mortality and a key indicator of adequate maternal healthcare is booking status which reflects the utilization, timing, and adequacy of this service. Antenatal care is the care provided by skilled health-care professionals to pregnant women and adolescent girls in order to ensure the best health conditions for both mother and baby during pregnancy. The components of ANC include: risk identification; prevention and management of pregnancy-related or concurrent diseases; and health education and health promotion. We reviewed our deliveries over 10 years to determine and difference in characteristics between the booked and unbooked and outcomes.

Objectives

- To assess the relationship between the Perinatal outcome and the booking status of women delivered in our facility
- Determine the characteristics of the booked and unbooked
- Determine any associated factors with their status and outcome.

Method

- A retrospective Descriptive study of all women delivered at the University of Uyo Teaching Hospital obstetric unit over 10 years.
- Data was extracted from the delivery register kept at the records department.
- Study population included all pregnant women who presented for delivery in the hospital from 1st January 2013 to 31st December 2022.
- Results were presented in a simple frequency distribution table. Data was analysed using SPSS 25. A multivariate logistics regression analysis was done to determine continuous variables. Also, bivariate analysis with chi-square test was done for categorical data with a level of statistical significance set at less than or equal to 0.05.



Result

- A near progressive increase in number of unbooked patients noticed in our centre over the period (Table 1)
- The mean age of participants was 30.05 ±4.77 years, with most being between 30 and 39 years(53.3%).
- The mean gestational age at delivery was 38.26±2.90 weeks. Over 90% of the participants were booked.
- Among those aged 20-29 years, 89.4% were booked and 10.6% were unbooked, while in the 40 years and above, 95.0% were booked, and 5.0% were unbooked; a statistically significant difference ($\chi 2 = 397.231$; P = 0.001).
- Table 2 displays the association between booking history and some independent variables.
- Among participants aged 20 to 29 years, the proportion of booked cases was 89.4%, while unbooked cases was 10.6%, while among respondents over the age of 40 years, the proportion of booked cases was 95.0%, while it was 5% among unbooked cases. The observed difference between was statistically significant, p=0.001.
- Among respondents whose children died, the proportion of respondents who were booked cases was 62.6%, while unbooked cases were 37.4%.
- Women aged less than 20 years were more than 20 times more likely to be unbooked, and this was statistically significant (AOR=21.727; 95% CI, 11.439-41.502, P=0.001)
- The odds of having a child with a weight less than 1,5kg increased threefold among unbooked women, and this was statistically significant (AOR=3.346, 95%CI: 2.273-4.924, P=0.001).
- The odds of having a child with a low APGAR score in the 5th minute increased by 300% in women who were unbooked, and this was statistically significant (AOR=3.611; 95% CI: 2.527-5.159, p=0.001) (Table 3).

Table 1: Patients Characteristics

Variables	Booked, n=13754	Unbooked, n=1320	Tests/ Statistics
Age of women(years)			
Mean ± SD	30.27**± 4.62**	27.76 **± 5.55**	t=18.467, df=15078
Weight of babies(Kg)			p=0.001
Mean ± SD	3.12**± 0.71**	2.69 **± 0.87**	t=20.144, df=15072
Gestational age			p=0.001
Mean ± SD	38.40**± 2.70**	36.76**± 4.20**	t=19.864, df=15078
			p=0.001
Parity			
Median/IQR	2.00(1.00-3.00)	2.00(1.00-3.00)	p=0.041**
APGAR (5minutes)			
Median IQR	9.00[8.00-9.00]	6.00[0.00-8.00]	p<0.001**
APGAR (10minutes)			
Median IQR	10.00[9.00=10.00]	9.00[5.00-10.00]	p<0.001**



Figure 1: Pattern of booked and unbooked cases 2013-2022.

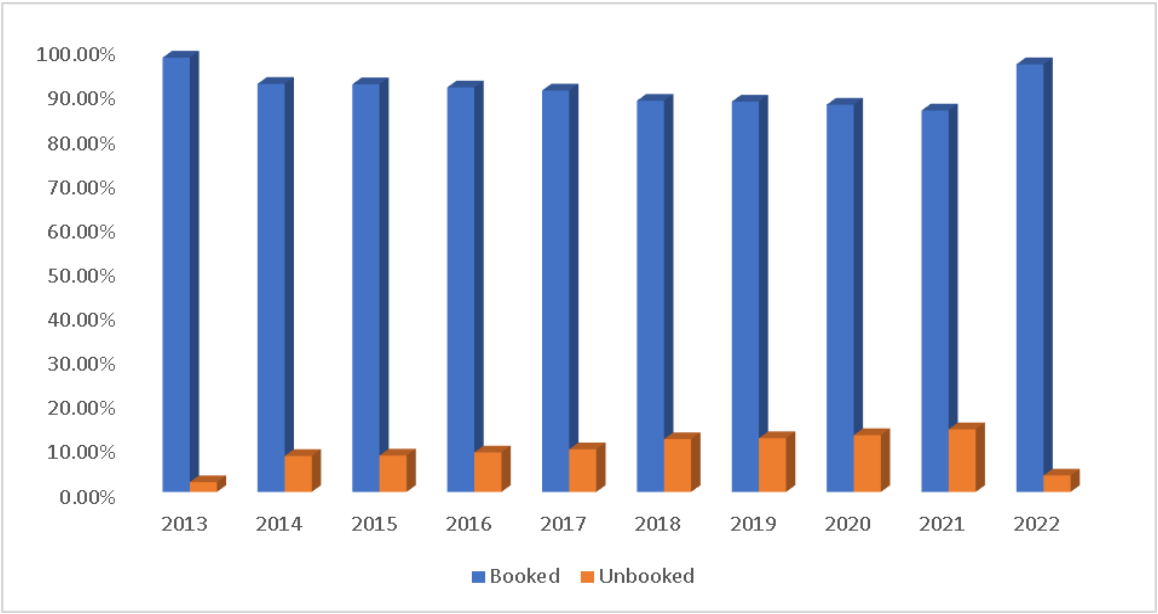

Table 2: Associations between Booking History and Independent Variables

Variables	Booked, n=13759	Unbooked, n=1321	Total	Tests/ Statistics
Age (Years)				
Mean ± SD	30.27± **4.62**	27.76 ± **5.55**	t=18.467, df=15078, p<0.001	
Less than 20years	142(59.2)	98(40.8)	240(100.0)	χ^2=397.231
20-29 years	5758(89.4)	686(10.6)	6444(100.0)	p=0.001
30-39	7515(93.5)	519(6.5)	8034(100.0)	
40 and above	344(95.0)	18(5.0)	362(100.0)	
Parity				
Median (IQR)	**2.00(1.00-3.00)**	**2.00(1.00-3.00)**	**P=0.041****	
Nulliparous	39(79.6)	10(20.4)	49(100.0)	χ^2=72.111
1-4	12786(92.1)	1101(7.9)	13887(100.0)	p=0.001
>4	844(84.8)	151(15.2)	995(100.0)	
Weight of babies				
Mean weight ± SD	**3.12± 0.71**	**2.69 ± 0.87**	**t=20.144, df=15072, p<0.001**	
<1.5kg	426(72.6)	161(27.4)	587(100.0)	χ^2=510.236
1.5-2.49kg	1172(81.0)	275(19.0)	1447(100.0)	p=0.001
2.50-3.99kg	11320(93.2)	826(6.8)	12146(100.0)	
>4kg	836(93.5)	58(6.5)	894(100.0)	
APGAR 1				
Median IQR	**9.00[8.00-9.00]**	**6.00[0.00-8.00]**	**p<0.001****	
Low	923(65.8)	479(34.2)	1402(100.0)	χ^2=1435.142
Moderate abnormal	1100(84.0)	210(16.0)	1310(100.0)	p=0.001
Reassuring	11581(95.0)	613(5.0)	121194(100.0)	
APGAR 2				
Median IQR	**10.00[9.00=10.00]**	**9.00[5.00-10.00]**	**p<0.001****	
Low	383(61.9)	236(38.1)	619((100.0)	χ^2=1016.386
Moderate abnormal	492(77.8)	140(22.2)	632(100.0)	p=0.001
Reassuring	12372(94.1)	774(5.9)	13146(100.0)	
Outcome of delivery				
Alive	13445(92.2)	1133(7.8)	14578(100.0)	χ^2=529.297,
Dead	311(62.6)	186(37.4)	497(100.0)	p=0.001

**=Mann Whitney U tests. IQR=Interquartile range



Table 3: Predictors of Unbooked Cases (Multivariate Analysis)

Variables	p-value	AOR	95% CI	
			Lower	Upper
Age (Years)				
Less than 20years	0.001	21.727	11.430	41.302
20-29 years	0.001	4.024	2.269	7.135
30-39	0.022	1.952	1.103	3.455
40 and above **(REF)**	0.001			
Parity				
Nulliparous **(REF)**	0.001			
1-4	0.859	1.091	1.103	3.455
>4	0.062	2.545	0.955	6.780
Weight of babies				
<1.5kg	0.001	3.346	2.273	4.924
1.5-2.49kg	0.001	2.920	2.054	4.151
2.50-3.99kg	0.252	1.210	0.873	1.677
>4kg **(REF)**	0.001			
APGAR 1				
Low	0.001	3.611	2.527	5.159
Moderate abnormal	0.001	2.794	2.299	3.395
Reassuring **(REF)**	0.001			
APGAR 2				
Low	0.001	2.295	1.526	3.450
Moderate abnormal	0.033	1.397	1.028	1.898
Reassuring **(REF)**	0.001			
Outcome of delivery				
Alive	0.373	0.857	0.610	1.204
Dead **(REF)**				

Conclusion

- Being unbooked was associated with significant adverse perinatal outcomes.
- There is a need for further enlightenment on the importance of antenatal booking and care for improved foeto-maternal outcomes.



Perceptions, Preferences, And Feasibility of HPV DNA Testing Vs. Pap Smear for Cervical Cancer Screening Among Health Professionals in Southwest Nigeria: A Cross-Sectional Study

Ebine F.O.[1], Owolabi E.A.[2], Aina O.O[1], Ebiekurraju T.[1], Iyela O [1], Olawoye O.O.[1], Soneye T. A.[1], Olaitan O.M.[1], Sadenekan S.A. [1], Akinyoade R.A.[1]

Affiliations

[1]University of Medical Sciences, (UNIMED), Ondo Town, Ondo State, Nigeria.
[2]Benjamin S. Carson (SNR) College of Health and Medical Sciences, Babcock University, Ilishan-Remo, Ogun State, Nigeria.

Corresponding Author:

Favour Oluwadamilola EBINE[1]
ebinefavour14@gmail.com, +2349066291084; ORCID: 0009-0001-9443-068X

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Introduction/Background

Cervical cancer continues to pose a significant public health challenge in low- and middle-income countries (LMICs), including Nigeria, despite the existence of effective screening tools such as the Pap smear and HPV DNA testing. Incidence and mortality remain high due to limited access to screening services, low awareness, weak health systems, and poor follow-up for abnormal results. Additional barriers include sociocultural misconceptions, the absence of national screening programs, and low HPV vaccination uptake.

Although Pap smear screening has contributed to reduced cervical cancer prevalence, it is limited by lower sensitivity and inconsistent follow-up in many settings. HPV DNA testing, on the other hand, offers higher sensitivity and enables longer screening intervals. However, cost constraints, laboratory requirements, and logistical challenges hinder its widespread adoption in resource-limited environments. Without expanding access to HPV DNA testing and ensuring adequate follow-up care, Nigeria risks falling short of the WHO 2030 cervical cancer elimination targets.

Justification

Cervical cancer remains one of the most preventable yet deadly malignancies affecting women globally. Over 85% of cervical cancer deaths occur in LMICs, largely due to inadequate screening and early detection. While screening tools such as Pap smears and HPV DNA tests exist, systemic, infrastructural, and socioeconomic limitations continue to impede access. This study provides evidence on perceptions, preferences, and feasibility of HPV DNA testing among health professionals in Southwest Nigeria, with the goal of informing national strategies to improve early detection, reduce late-stage presentations, and significantly lower cervical cancer burden.



Objectives

Main Objective:

To evaluate the perceptions, preferences, and feasibility of HPV DNA testing compared to Pap smear screening among health professionals in Nigeria.

Specific Objectives:

To assess health professionals' perceptions of Pap smear and HPV DNA testing.
To evaluate the feasibility of HPV DNA testing in the Nigerian context.
To identify major challenges and barriers to effective cervical cancer screening.
To determine screening preferences and whether demographic characteristics influence these preferences.

Methods

A cross-sectional survey was conducted among 100 licensed healthcare professionals in health facilities across Southwest Nigeria, spanning primary, secondary, and tertiary levels of care. Participants included doctors, nurses, midwives, medical laboratory scientists, community health officers/extension workers, and program managers.

Eligible participants had practiced for at least six months and provided informed consent. Interns, trainees, unavailable staff, and non-consenting individuals were excluded. Sampling combined convenience and proportionate selection across facility types.

Data were collected using a structured self-administered questionnaire comprising sections on sociodemographic, knowledge of screening options, perceptions, preferences, feasibility ratings, and barriers. Descriptive statistics summarized the findings, while chi-square tests assessed associations between screening preferences and demographic factors, with significance set at $p < 0.05$. Ethical approval was obtained prior to data collection.

Results

The mean age of respondents was 38.5 ± 8.4 years, and 66% were female. Professional categories included doctors (34%), nurses (26%), and medical laboratory scientists (25%).

A total of 61% supported replacing Pap smear with HPV DNA testing, 19% were unsure, and 20% opposed the transition. There was no statistically significant association between preference and gender ($p = 0.969$) or profession ($p = 0.090$), indicating broad acceptance across groups.

Feasibility ratings (lower scores indicate stronger agreement) highlighted moderate optimism for national scale-up: nationwide implementation (2.31 ± 1.35), government funding (2.19 ± 1.48), healthcare worker training (2.16 ± 1.52), HPV self-sampling in rural areas (2.66 ± 1.37), and integration within maternal health programs (2.28 ± 1.42).

Key barriers identified included inadequate laboratory infrastructure (28.4%), insufficient staff training (23.5%), patient reluctance (17.2%), supply chain gaps (17.2%), and delays in obtaining test results (12.6%).

Discussion

The findings highlight a strong professional preference for HPV DNA testing, reflecting recognition of its superior sensitivity and potential to improve cervical cancer outcomes.



Health professionals demonstrated readiness to adopt HPV DNA testing, provided systemic support is in place. Feasibility assessments further suggest that government funding, infrastructural strengthening, and targeted healthcare worker training are essential for successful implementation.

The perceived feasibility of HPV self-sampling, particularly in rural communities, underscores its promise for expanding access. Barriers such as inadequate laboratory capacity, limited technical skills, patient hesitation, and supply chain issues remain significant challenges. Nonetheless, the absence of demographic differences in preference suggests a unified professional consensus that HPV DNA testing is a more effective screening tool.

Conclusion

There is strong support among health professionals in Southwest Nigeria for transitioning from Pap smear to HPV DNA testing. Adoption, however, is constrained by cost, infrastructure limitations, and inadequate training. Government investment, improved diagnostic systems, and expanded capacity building programs are critical to facilitating nationwide scale-up. Integrating HPV DNA testing into existing maternal and reproductive health services, alongside promoting self-sampling and addressing supply chain and patient-related barriers, will be key to advancing sustainable cervical cancer prevention in Nigeria.

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Assessment of the Impact of Haart on Abnormal Cervical Smears In HIV-Infected Women in Bauchi

Balogun SA[1], Ja'afaru UH[2,3], Tiamiyu I[2], Abdullahi MK[2,3], Ismail HI[2,3], Dawud RM[2,3]

Affiliations

[1]Department of Obstetrics and Gynaecology, Yobe State University Teaching Hospital Damaturu.

[2]Department of Obstetrics and Gynaecology, Abubakar Tafawa Balewa University Teaching Hospital Bauchi.

[3]Department of Obstetrics and Gynaecology, College of Medical Sciences Abubakar Tafawa Balewa University Bauchi.

Corresponding Author:

Dr Umma Hani Ja'afaru, +2348035313389 ummahani2000@yahoo.com

Introduction/Background

Human Immunodeficiency Virus (HIV) and Human Papillomavirus (HPV) infections are major risk factors for the development of cervical premalignant lesions. Both viruses are sexually transmitted, and infection with either one increases susceptibility to the other. Women living with HIV have a higher risk of acquiring and sustaining persistent HPV infection because HIV-related immunosuppression compromises the body's ability to clear HPV. Persistent HPV infection, especially with high-risk serotypes, leads to squamous intraepithelial lesions and increases the likelihood of cervical cancer. Although Highly Active Antiretroviral Therapy (HAART) improves immune function and prolongs survival, the prolonged lifespan of HIV-positive women may increase cumulative HPV exposure. It therefore remains important to understand whether duration on HAART influences cervical cytological abnormalities.

Objective

The study aimed to determine the impact of duration of HAART use on the occurrence of abnormal cervical smears among HIV-infected women in Bauchi.

Method

A total of 78 HIV-infected women attending the ART clinic were recruited through simple random sampling. Their sociodemographic and clinical information was obtained using a structured proforma. Conventional Papanicolaou smears were collected and reported using the 2014 Bethesda System. Data were analyzed using SPSS version 24.0, and associations between HAART duration, HIV duration, and abnormal cytology were explored using appropriate statistical tests.

Results

The mean age of the participants was 40.7 ± 9.8 years. The prevalence of abnormal Pap smear results was 19.2%. Duration of HIV infection and duration of HAART use were found



to be significant independent predictors of abnormal cervical cytology. Women infected with HIV for more than 10 years were seven times more likely to have abnormal smears (OR = 7.01; 95% CI = 1.81–60.33; p = 0.047). Similarly, participants who had been on HAART for more than 10 years had an approximately eightfold increased risk of having abnormal cervical cytology (OR = 7.86; 95% CI = 1.91–67.57; p = 0.031).

Discussion

These findings highlight the persistence of HPV-related cervical abnormalities among women living with HIV despite long-term HAART use. While HAART enhances immune recovery, prolonged survival may expose women to longer cumulative periods at risk for developing persistent HPV infection and associated lesions. The increased odds after 10 years of HIV infection and HAART use suggest that chronic immunosuppression or incomplete immune reconstitution may contribute to these abnormalities.

Conclusion

Long duration of HIV infection and prolonged HAART usage are associated with increased likelihood of abnormal cervical cytology. This underscores the need for lifelong, vigilant cervical cancer screening among HIV-positive women, regardless of HAART duration, to ensure early detection and timely management of premalignant cervical lesions.



Mobile HPV Genotyping at Point of Care for Improving Reproductive Health and Cervical Cancer Control in Nigeria

Busayo Tofio[1], Moses Adewumi[1,2], Sunday Oyerinde[1,3], Kate Klein[4], Eugene Ayeni[1], Margaret Okoguale[1], Dare Aladeokin[1], Oluwatoyin Olalemi[1,5], Deborah Oke[1,6], Ridwan Najeemdeen[1], Afeez Akintayo[1], Akinyele Adisa[1,7], Olufemi J Ogunbiyi[1,8], Isaac Adewole[1,3], Mamoudou Maiga[9], Robert Murphy[12], Lifang Hou[11], Imran Morhason-Bello[1,3,10]

Affiliations

[1]HPV Consortium, College of Medicine, University of Ibadan, Ibadan, Nigeria.
[2]Department of Virology, Faculty of Basic Medical Sciences, College of Medicine, University of Ibadan.
[3]Department of Obstetrics &Gynaecology, Faculty of Clinical Sciences, University of Ibadan.
[4]Institute for Global Health, Feinberg School of Medicine, Northwestern University, Chicago, Illinois, USA
[5]Department of Family Medicine, University College Hospital, Ibadan
[6]Department of Epidemiology & Medical Statistics, Faculty of Public Health, University of Ibadan, Ibadan, Nigeria.
[7]Department of Oral Pathology, College of Medicine, University of Ibadan.
[8]Department of Pathology, College of Medicine, University of Ibadan.
[9]Department of Preventive Medicine, Feinberg School of Medicine, Northwestern University, Chicago.
[10]Institute of Advanced Medical Research and Training, College of Medicine, University of Ibadan
[11]Department of Preventive Medicine, Feinberg School of Medicine, Northwestern University, Chicago, USA.
[12]Institute for Global Health, Feinberg School of Medicine, Northwestern University, Chicago, Illinois, USA.

Corresponding Author

Busayo Tofio
HPV Consortium, College of Medicine, University of Ibadan, Ibadan, Nigeria.
Email: tofiobusayo17@gmail.com

Introduction / Background

Human papillomavirus (HPV) is among the most common viral infections affecting the reproductive and oral mucosa and is responsible for several cancers, including cervical, anal, oropharyngeal, and penile cancers (WHO, 2023). Cervical cancer remains the second most common cancer among Nigerian women, and mortality rates remain high due to late detection, inadequate access to screening, and poor linkage to care (Petersen *et al.*, 2022). HPV-related oral cancers are increasingly recognized as emerging public health concerns, yet most community programs still focus exclusively on cervical screening.

Despite the burden of disease, more than 70% of Nigerian women at risk of cervical cancer have never been screened, particularly those in rural and hard-to-reach communities (Lagos State Ministry of Health, 2022). Barriers such as distance, cost, stigma, and weak referral systems make it difficult for many women to access facility-based screening services. To



address these challenges, the HPV Consortium at the University of Ibadan introduced a Mobile Truck Clinic that brings point-of-care HPV genotyping and treatment directly to underserved communities.

Objectives

1. To assess the feasibility and acceptability of mobile point-of-care HPV screening among women in hard-to-reach communities.
2. To evaluate the potential of mobile HPV screening to improve reproductive health and reduce cervical cancer burden in Nigeria.

Method

Related articles (45) coupled with a study at Ibadan North local government were used for this study. The mobile screening model integrated community mobilisation, self-sampling, on-site HPV testing, and immediate treatment. Cervical and oral samples were collected from women in selected communities. Most participants performed self-collection, after which samples were processed on-site using the ATILA Biosystems platform, which generates HPV genotype results within approximately 65 minutes.

Women who tested positive received same-day treatment, including thermal ablation, colposcopy, or LEEP, depending on clinical eligibility. Field data were compared with national averages and findings from recent studies in Africa and Asia between 2020 and 2025 to evaluate feasibility, community acceptance, and scalability (Jatho *et al*., 2020; Hariprasad *et al*., 2025).

Results

The mobile clinic recorded a 30% cervical HPV positivity rate, aligning with Nigeria's national range of 29–32% (Petersen *et al*., 2022), and a 2.1% oral HPV positivity rate. Acceptance of self-sampling was high, with more than 90% participation, reflecting community trust and comfort with the mobile model.

The availability of same-day results enabled test-and-treat services, reducing delays and minimizing loss to follow-up, issues commonly encountered in conventional health facilities. Similar to studies from Uganda and India, the mobile clinic significantly increased screening uptake in rural communities (Jatho *et al*., 2020; Hariprasad *et al*., 2025). The integration of digital tools further supported real-time data capture and streamlined clinical decision-making (Akhtar & Ramkumar, 2023).

However, several challenges were identified. Funding remains unstable due to reliance on donors and corporate social responsibility partners (Jatho *et al*., 2020; MTN Nigeria, 2023). Data integration into national systems is limited by inconsistent internet connectivity (Akhtar & Ramkumar, 2023). Cultural beliefs; including myths linking cervical screening to infertility, continue to influence participation in some communities (Owolabi & Jegede, 2024).



Discussion

The mobile HPV screening approach demonstrates strong feasibility and acceptability among women in underserved communities. By decentralizing services and delivering them within the community, the model overcomes critical barriers such as transportation costs, stigma, and long waiting times. Same-day diagnosis and treatment reduce disease progression risks and improve linkage to care, while oral HPV testing highlights additional cancer risks that are often overlooked in low-resource settings.

For long-term sustainability, the model requires integration into national cancer control strategies, improved digital health infrastructure, continuous training of mobile health teams, and intensified community engagement to address cultural barriers.

Conclusion

Mobile HPV screening is a practical and effective strategy for early detection of cervical and oral HPV infections in Nigeria. When supported by sustainable financing, strong policies, digital integration, and robust community engagement, this model can significantly reduce HPV-related morbidity and mortality. Scaling up mobile screening nationwide will advance Nigeria's progress toward SDG 3 (Good Health and Well-Being) and SDG 5 (Gender Equality) by improving access to preventive care for women in underserved communities.

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Concordance of Cervical and Anal High-risk Human Papillomavirus Infections among sexually active women in Ibadan, Nigeria

Deborah O. Oke[1,2], Joshua O. Akinyemi[1,2,7], John O. Ogunbiyi[2,3], Lifang Hou[4], Isaac F. Adewole[2,8], Deborah Watson-Jones[5,6], Imran O. Morhason-Bello[2,7,8,]

Affiliations

[1]Department of Epidemiology & Medical Statistics, Faculty of Public Health, University of Ibadan, Ibadan, Nigeria.
[2]HPV Consortium, College of Medicine, University of Ibadan, Ibadan, Nigeria.
[3]Department of Pathology, Faculty of Basic Clinical Sciences, University of Ibadan, Ibadan, Nigeria.
[4]Department of Preventive Medicine, Feinberg School of Medicine, Northwestern University, Chicago, USA.
[5]Department of Clinical Research, Faculty of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, London, UK.
[6]Mwanza Intervention Trials Unit, National Institute of Medical Research Mwanza, Tanzania.
[7]Institute for Advanced Medical Research and Training, College of Medicine, University of Ibadan, Ibadan, Nigeria.
[8]Department of Obstetrics &Gynaecology, Faculty of Clinical Sciences, University of Ibadan.

Introduction

Human papillomavirus (HPV) remains a major public health concern globally due to its strong association with several anogenital cancers. HPV is responsible for nearly 5% of all cancer cases worldwide and is detected in approximately 99% of cervical cancers and 90% of anal cancers. Recent epidemiological reviews continue to highlight the increasing burden of HPV-associated cancers. In Nigeria, HPV prevalence varies considerably across regions, ranging from 10% to 32%. Despite the high burden of cervical and anal HPV infections, there is limited context-specific evidence on the concordance of infections across these two anatomical sites among Nigerian women. Understanding the concordance of cervical and anal high-risk HPV (hrHPV) infections is critical for clarifying HPV transmission patterns and for improving prevention strategies such as vaccination, screening, and early treatment. This study addresses this gap by examining concordance of cervical and anal hrHPV among sexually active women in Ibadan, Nigeria.

Objective(s)

1. To determine the prevalence and concordance of cervical and anal hrHPV infections among sexually active women in Ibadan, Nigeria.
2. To assess the risk factors associated with concordance of cervical and anal hrHPV among sexually active women in Ibadan, Nigeria.



Method

This study was based on data from the Sexual Behaviour and HPV Infection in Nigerians (SHINI) study conducted in Ibadan. A cross-sectional study that collected detailed information on socio-demographic characteristics, lifestyle patterns, and sexual behaviour. Data analysis was performed using STATA version 15, with statistical significance set at $p < 0.05$. The prevalence of concordance of cervical and anal hrHPV was summarized using frequencies and percentages. Associations between concordance of cervical and anal hrHPV and participant characteristics were evaluated with chi-square tests. Logistic regression models were used to identify risk factors, and both crude and adjusted odds ratios with 95% confidence intervals were reported.

Results

The prevalence of concordance of cervical and anal hrHPV was 63.1% among female sexual workers (FSWs) and 36.9% among female in the general population (FGP). The mean age of FSWs was 30.4 ± 6.5 years, while FGP had a mean age of 28.5 ± 7.3 years. Among FSWs, participants aged 18–24 years were nearly four times more likely to have concordance of cervical and anal hrHPV compared to those aged 35–45 years (COR = 3.68; 95% CI: 1.76–7.69). A similar trend was observed among the FGP, where participants aged 18–24 years were twice as likely to have concordance (COR = 2.14; 95% CI: 1.13–4.06). Additionally, FSWs who had their first sexual intercourse aged > 15years were almost twice as likely to have concordance (AOR = 1.87; 95% CI: 1.05–3.33). Smoking significantly increased the odds of concordance of cervical and anal hrHPV infection among both FSWs and FGP, with smokers having higher odds in both crude and adjusted models. Illicit drug use was also a risk factor, with drug users having almost four times the odds of concordance of cervical and anal hrHPV infection compared to non-users (AOR = 3.31; 95% CI: 1.08–10.10). No statistically significant associations were found between concordance of cervical and anal hrHPV infection and level of education, marital status, occupation, or income across the models.

Discussion

The study demonstrates that concordance of cervical and anal hrHPV is relatively common, particularly among younger women and female sex workers. This suggests possible shared risk factors and transmission routes between the cervical and anal anatomical sites. Findings related to early sexual debut, smoking, and drug use further highlight behavioural risks that may expose women to multi-site hrHPV infections.

Conclusion

There is considerable concordance between cervical and anal hrHPV infections among sexually active women in Ibadan, especially among female sex workers and younger age groups. These findings underscore the need for integrated HPV prevention strategies that encompass behavioural interventions, strengthened HPV vaccination efforts, and consistent screening across multiple anatomical sites. Such combined strategies are essential in reducing the burden of cervical and anal cancers in Nigeria.



Prospectsand Challenges of Adopting Ai-Driven Consultations for Cervical Cancer Control

Dare A. Aladeokin[1], Oluwadamilola A. Oyadeyi[1], Deborah O. Oke[1,4], Yusuf O. Bello[1], Afeez O. Akintayo[1], Moses O. Adewumi[1,5]Isaac F. Adewole[1,2], Imran O. Morhason-Bello[1,2,3],

Affiliations

1. HPV Consortium, College of Medicine, University of Ibadan, Ibadan, Nigeria.
2. Department of Obstetrics &Gynaecology, Faculty of Clinical Sciences, University of Ibadan.
3. Institute of Advanced Medical Research and Training, College of Medicine, University of Ibadan
4. Department of Epidemiology and Medical Statistics, Faculty of Public Health College of Medicine, University of Ibadan, Nigeria.
5. Department of Virology, Faculty of Basic Medical Sciences, College of Medicine, University of Ibadan, Nigeria.

PRESENTER: dare.aladeokin29@gmail.com

Introduction/Background

Cervical cancer remains a major global health concern and is the fourth most common cancer among women. The World Health Organization reported that in 2022 there were about 660,000 new cases and nearly 350,000 deaths, most of which occurred in low- and middle-income countries (WHO, 2024). Nigeria, like many countries in sub-Saharan Africa, continues to face challenges related to limited access to screening and diagnostic services, which contribute to late detection and high mortality rates.

In recent years, Artificial Intelligence (AI) has been recognised as a transformative innovation in medicine, particularly in oncology. AI technologies, such as machine learning and natural language processing, have demonstrated potential to improve screening accuracy, enhance diagnostic interpretation, and support treatment planning and patient counselling (Bharathi, 2025). These tools are increasingly being explored as solutions to long-standing problems, such as the shortage of specialists, diagnostic delays, and complex decision-making in cervical cancer management. However, while the promise of AI-driven consultations is significant, their adoption in low-resource settings remains limited due to ethical, infrastructural, and technical challenges.

Objective

The main objective of this review was to examine both the prospects and challenges of adopting AI-driven consultations for cervical cancer control. The study aimed to identify how AI technologies can strengthen patient-centred care, improve diagnostic precision, and enhance clinical decision-making in the management of cervical cancer, while also analysing the barriers that could hinder effective and ethical implementation within Nigeria's healthcare system.



AI in Cervical Cancer Management

Machine Learning	• Predicts risk, outcomes, treatment response
Deep Learning	• Image and scan interpretation (Pap smear, MRI, CT)
Natural Language Processing	• Extracts key insights from clinical notes
Expert Systems	• Provide guideline-based treatment recommendations

Stage	AI Function	Example Use
Screening & Diagnosis	Image analysis, Pap smear, colposcopy interpretation	Detects precancerous lesions
Treatment Planning	Radiomics & radiogenomics	Predicts therapy response
Decision Support	Rule-based systems, NLP	Recommends optimal treatments
Follow-up & Prognosis	Predictive ML models	Forecasts recurrence or survival

Method

This review applied a narrative synthesis approach to integrate and analyse existing literature on the use of Artificial Intelligence in cervical cancer care. Relevant peer-reviewed studies were identified using databases such as PubMed and Google Scholar, focusing on publications between 2014 and 2024. Search terms included "AI in oncology," "machine learning," "cervical cancer," "data governance," and "clinical decision support." Studies were selected if they examined the application of AI-based diagnostic tools, natural language processing systems, or clinical decision-support platforms in cervical cancer management.

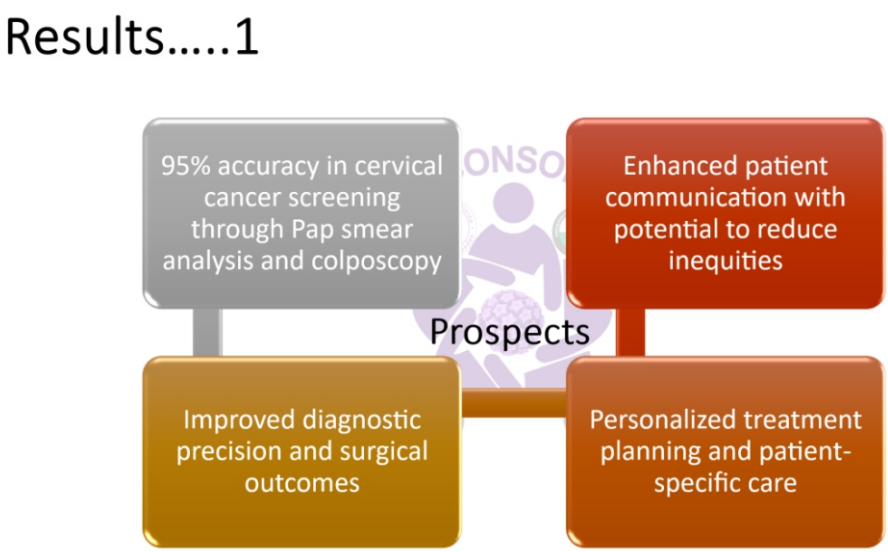


The review also focused on key themes, including patient-centred outcomes, ethical implications, and the system-level integration of AI technologies. Each article was reviewed for its methodological strength, contextual relevance, and implications for low- and middle-income countries. The final synthesis included findings from literature addressing both the potential benefits and implementation challenges of AI in cervical cancer prevention and control.

Results

The synthesis revealed that AI-driven consultations present remarkable potential for advancing cervical cancer control, particularly in settings with limited health resources. Artificial Intelligence can substantially improve screening accuracy through image-based diagnostic tools that analyse cytology and colposcopy images with precision comparable to that of experienced clinicians. These systems can automatically identify abnormal cell changes, detect precancerous lesions at an early stage, and reduce the likelihood of false negatives, thereby enabling timely diagnosis and treatment. The use of AI-based clinical decision-support systems further enhances diagnostic reliability by helping healthcare providers interpret complex data and develop personalised treatment plans. This capability not only increases efficiency but also supports consistency in clinical decision-making and improves patient outcomes.





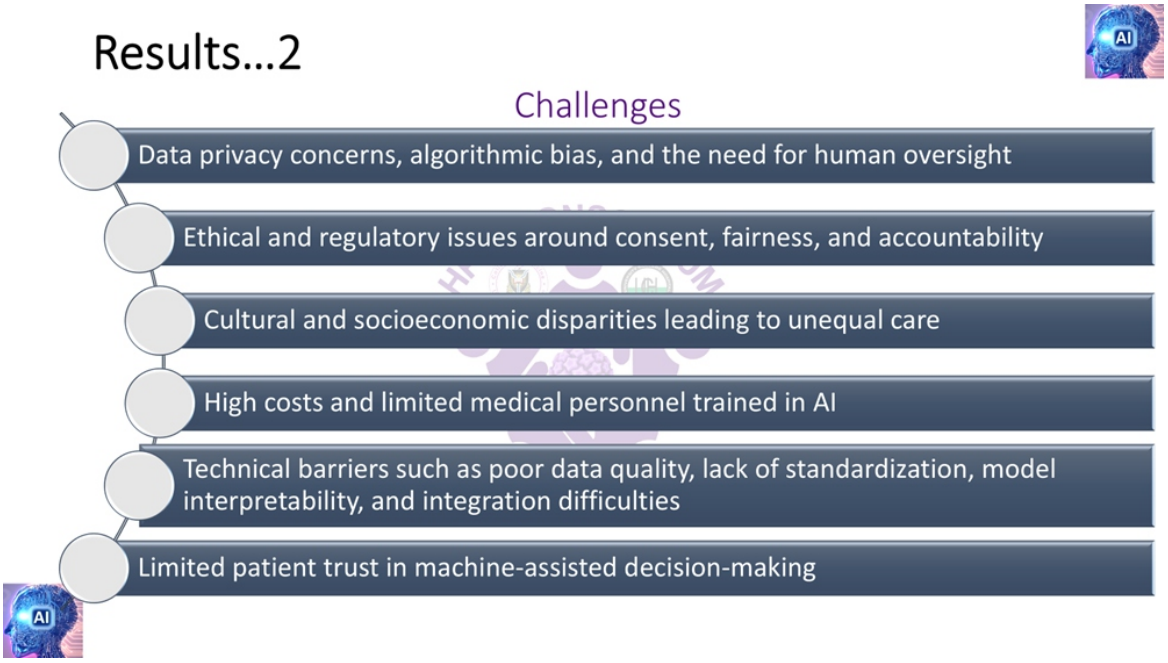


In addition to diagnostics, AI has shown considerable promise in improving communication and patient engagement. Chatbots and AI-assisted counselling platforms provide accurate, accessible information on screening schedules, preventive strategies, and treatment options. These innovations bridge communication gaps by providing real-time responses and culturally appropriate health education, empowering women to make informed health choices. When integrated into telemedicine networks, AI-driven consultations can extend the



reach of specialists beyond urban hospitals, ensuring that women in rural or underserved communities receive timely consultations and follow-up care.

Despite these positive developments, the review identified several obstacles that may limit the widespread adoption of AI in cervical cancer management. A significant challenge lies in the infrastructural deficiencies common across much of sub-Saharan Africa, including unreliable electricity supply, limited internet connectivity, and insufficient data storage capacity. These constraints undermine the sustainability of AI technologies in clinical settings. Ethical concerns also pose serious challenges, particularly issues related to data privacy, patient confidentiality, and informed consent. Because AI systems rely on large volumes of sensitive patient data, the absence of strong data protection frameworks raises the risk of misuse or unauthorised access.



Furthermore, there are ongoing concerns regarding the fairness and transparency of AI algorithms. Inadequate oversight during algorithm design may lead to bias in decision-making, resulting in unequal treatment outcomes for different social or demographic groups. The limited number of health professionals trained in AI ethics, data science, and digital governance exacerbates this problem, making it difficult to manage these technologies effectively. Lastly, the absence of clear national policies and regulatory frameworks for AI integration in healthcare continues to hinder large-scale implementation. Thus, these findings demonstrate that while AI-driven consultations offer transformative potential to improve cervical cancer screening, diagnosis, and care, their success depends on addressing structural, ethical, and capacity-related challenges that currently constrain their adoption in low- and middle-income settings.

Discussion

The findings indicate that while Artificial Intelligence holds immense potential to revolutionise cervical cancer prevention and management, its successful integration into



healthcare systems depends on addressing key ethical, infrastructural, and practical challenges. The adoption of AI in cervical cancer programmes requires deliberate planning to ensure transparency, fairness, and accountability in the development and application of technologies. Building public trust remains essential, and this can only be achieved through clear communication with both healthcare providers and patients regarding how AI systems operate, the nature of the data they use, and who is responsible for clinical decisions that rely on algorithmic input.

For AI-driven consultations to be sustainable, there must be significant investment in digital infrastructure, such as stable internet connectivity, secure data storage systems, and reliable electricity. Equally important is the development of robust data protection frameworks that safeguard patient privacy and prevent misuse of sensitive health information. Establishing ethical oversight mechanisms to monitor how algorithms are trained and used will also be crucial to avoiding bias and ensuring equitable health outcomes.
Furthermore, human capacity development is central to achieving effective implementation. Training programmes should equip healthcare professionals, data scientists, and policymakers with the knowledge to understand AI ethics, system design, and data governance. Collaboration between governments, research institutions, and private technology companies can accelerate innovation while ensuring that AI models are contextually relevant to African health systems.

Community engagement should also form a critical part of AI integration. Involving local communities in the design and evaluation of AI interventions ensures that these technologies align with cultural values, beliefs, and health priorities. Meaningful engagement helps promote public understanding, reduces scepticism, and enhances acceptance of digital health solutions. With these considerations in place, AI-driven consultations can become a valuable complement to existing healthcare systems, supporting clinicians in diagnostic and treatment processes, reducing the overall workload of medical personnel, and extending access to quality care across both urban and rural populations. When guided by ethical governance, inclusivity, and accountability, AI can be a powerful tool for advancing greater equity and progress in women's health.

Conclusion

In conclusion, AI-driven consultations represent an innovative and promising approach to strengthening cervical cancer control efforts in Nigeria and other resource-limited settings. These technologies have the potential to enhance diagnostic accuracy, improve treatment decision-making, and expand access to quality healthcare for women. Nevertheless, successful adoption depends on addressing infrastructural gaps, ethical concerns, and capacity limitations. Developing policies that ensure data privacy, promote fairness in AI design, and support workforce training will be essential. Nigeria can leverage digital innovation to advance progress toward equitable and sustainable cervical cancer control by embedding ethical governance into AI adoption strategies.



Ethical Challenges and Opportunities in Using Social Media and Artificial Intelligence for Cervical Cancer Screening in Nigeria

Oluwadamilola Adeola Oyadeyi[1], Dare Adebosola Aladeokin[1],Afeez Opeyemi Akintayo[1], Oluwatosin Esther Lawal[1],Ojone Illah[2], Daniela Manno[3], Lolade Dosunmu Adeyemi[1,4], Oluwatoyin Elizabeth Olalemi[5], Sunday Oladimeji Oyerinde[6], Isaac Folorunso Adewole[1,6], Imran Oludare Morhason-Bello[1,6.7]

Affiliations

[1]HPV Consortium, College of Medicine, University of Ibadan, Nigeria.
[2]University College London, United Kingdom.
[3]London School of Hygiene and Tropical Medicine, London, United Kingdom
[4] Federal Ministry of Health and Social Welfare, Abuja, Nigeria
[5]Department of Family and Community Medicine, College of Medicine, University of Ibadan, and University College Hospital, Ibadan Nigeria.
[6]Department of Obstetrics and Gynaecology, Faculty of Clinical Sciences, College of Medicine, University of Ibadan, and University College Hospital, Ibadan, Nigeria.
[7]Institute of Advanced Medical Research and Training, College of Medicine, University of Ibadan, Nigeria.

Introduction

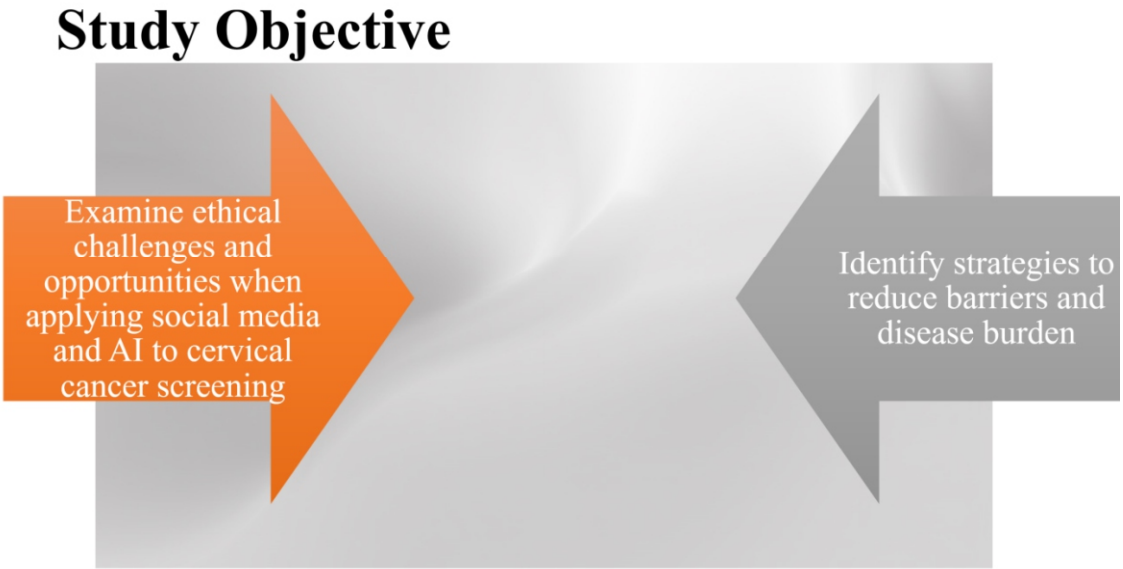
The Burden: Cervical cancer is a major contributor to HPV associated cancer morbidity and mortality in Nigeria (Okolie et al., 2025)

The Problem with Uptake: Screening uptake remains low despite the availability of screening technologies (Adebamowo et al., 2025).

Key Barriers: Low uptake is due to stigma, misinformation, and weak health infrastructure (Aleezada et al., 2025)

Social Media: Increasingly used to mobilise women for screening and health communication (Bawuah et al., 2025)

Artificial Intelligence (AI): Shows promise in triage and diagnostic accuracy (Giansati et al.,





Methodology

Study Design

Narrative synthesis approach to identify recurring ethical patterns

Reporting

PRISMA flow diagram illustrates study identification, screening, exclusion, final inclusion.

Search Strategy

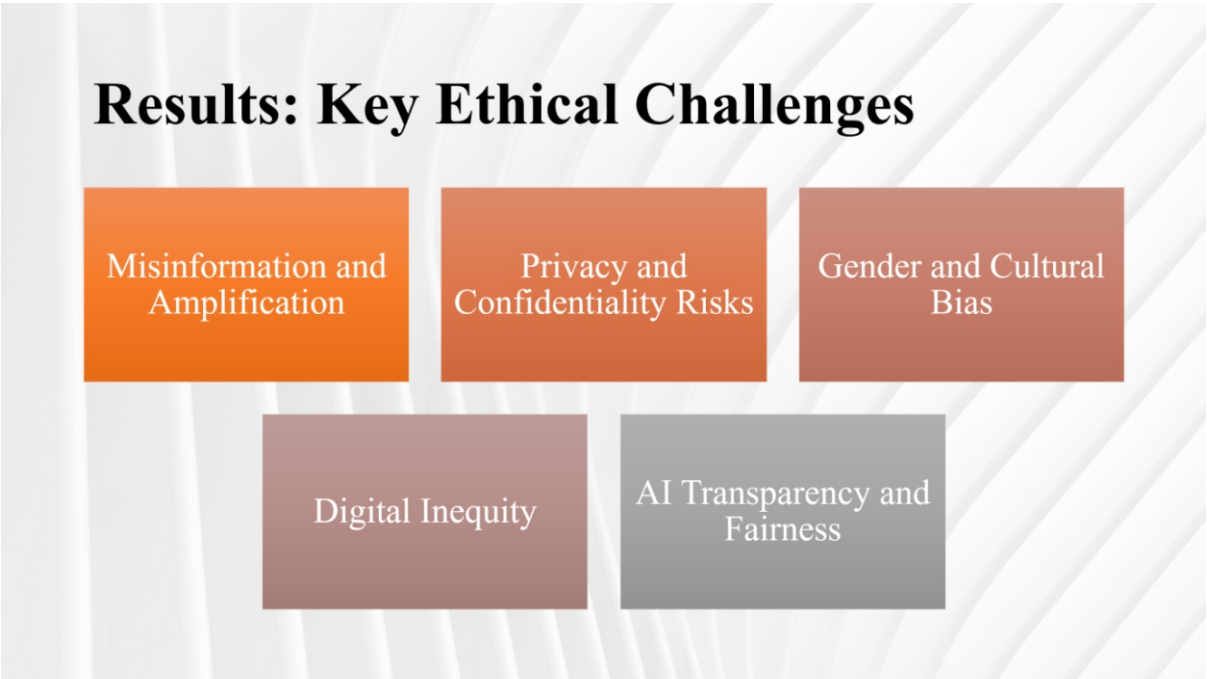
- Database: PubMed (primary source)
- Timeframe: 2014–2024
- Search Terms:
  "HPV vaccination", "social media", "health campaigns", "misinformation", "ethics", "vaccine hesitancy", "privacy", "digital health communication"
- Boolean combinations used to refine sensitivity/specificity

Selection Steps

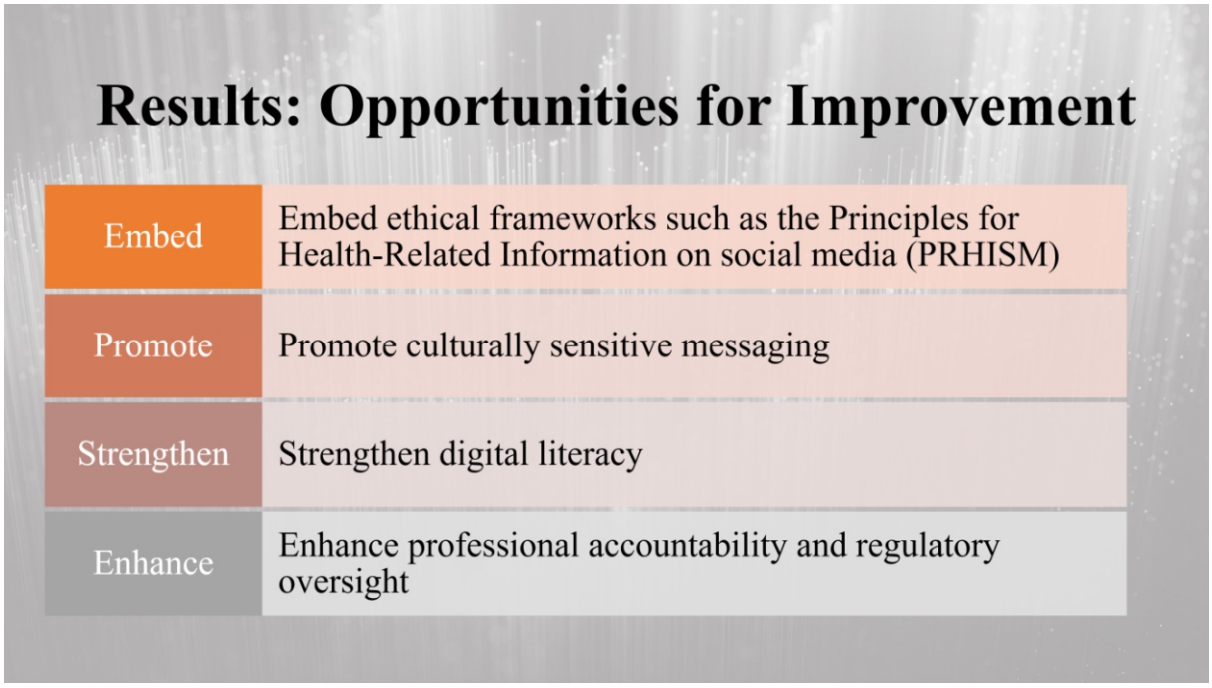
142 citations retrieved
Duplicates removed
Title & abstract screening
Full-text eligibility assessment
Final synthesis: 15 articles

Study Types

Surveys, quasi-experiments
Content analyses
Systematic reviews
Delphi studies
Expert commentaries







Conclusion

Social media and AI can expand screening. Ethical deployment of the same protects trust, dignity and fairness. It supports SDGs on health and gender equality and can reduce cervical cancer burden in Nigeria.



Pathways to Reducing the Burden of HPV-Associated Cancer in Females – Insights from the IMPROVE-HPV Project in Nigeria

Fatimah Adepoju-Olajuwon1, Oluwadamilola Oyadeyi1, Afeez Opeyemi Akintayo1, Taofeeqah Lawal1, Danniela Manno2, Abideen Salako1,3, Yahaya Bello1,4, Ahmed Rufai Garba1,4, Adeyinka Aderinto1,5, Babatunde L. Salako1,6, Isaac Adewole1,8, John Changalucha7, Deborah Watson-Jones2, Imran Morhason-Bello1,8

Affiliations

1 HPV Consortium, College of Medicine, University of Ibadan, Ibadan
2 Department of Clinical Research, London School of Hygiene and Tropical Medicine, United Kingdom
3 Nigeria Institute of Medical Research, Yaba, Lagos
4 National Primary Health Care Development Agency, Abuja
5 Department of Sociology, Faculty of Social Sciences, University of Ibadan, Ibadan
6 Department of Medicine, College of Medicine, University of Ibadan, Ibadan
7 National Institute for Medical Research, Mwanza Centre/Mwanza Intervention Trials Unit (MITU), Mwanza, Tanzania
8 Department of Obstetrics and Gynaecology, College of Medicine, University of Ibadan, Ibadan

Introduction

Cervical cancer is the 4th most common cancer and the 2nd leading cause of female cancer deaths globally (WHO, 2024). It is caused primarily by Human Papillomavirus (HPV), which is preventable through vaccination.
WHO target: 90% of girls vaccinated by age 15 by 2030
Global coverage remains low at ~21% in 2022 (WHO, 2024)
SSA continue to be behind due to many factors including hesitancy (CIDRAP, 2024)

IMPROVE-HPV Project

Understanding Vaccination Hesitancy and Evaluating Single-Dose and Gender-Neutral Vaccination for Improving Uptake of HPV Vaccines in West and East Africa.

Aim:

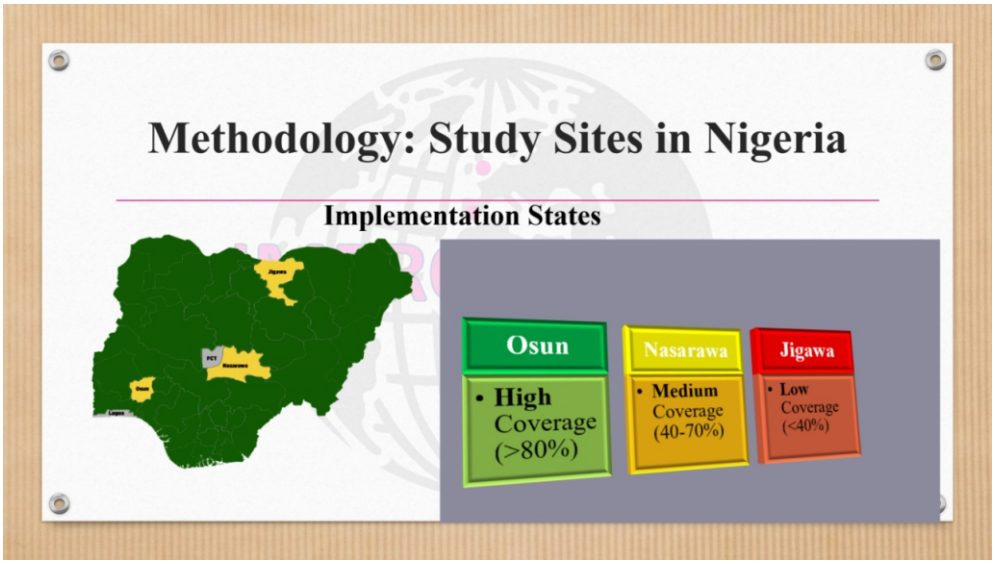
To evaluate effectiveness and uptake of novel HPV vaccination strategies and reduce hesitancy.

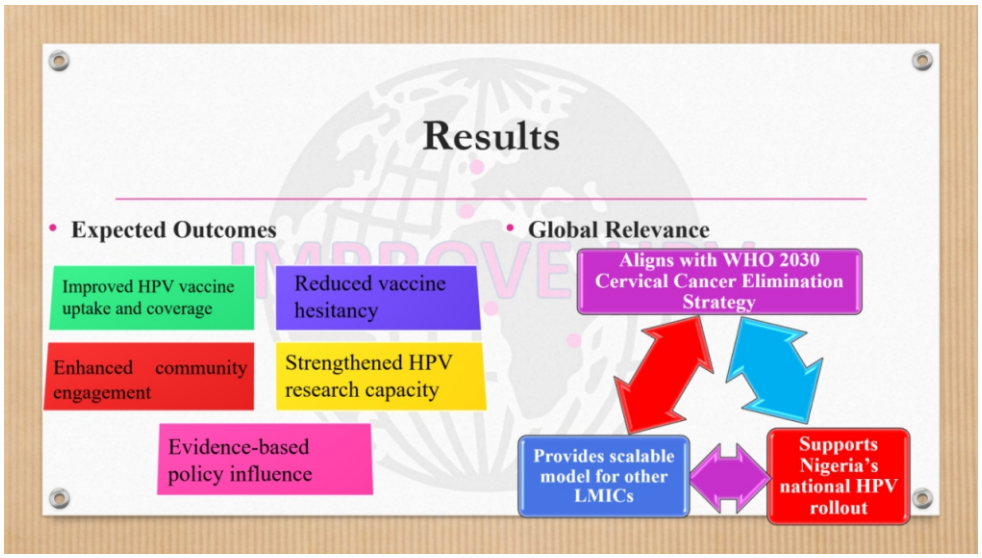
Study Objectives:

To evaluate the effectiveness and uptake of single-dose HPV vaccination strategy in selected Nigerian communities.
To identify and address the underlying drivers of HPV vaccine hesitancy and acceptability in Nigeria.
To build local research capacity in HPV vaccine delivery.



To generate evidence that informs national HPV vaccination policies and supports Nigeria's contribution to the global effort to eliminate cervical cancer by 2030.





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Patterns and Predictors of Gestational Weight Gain: Insights From A Nigerian Cohort

Adebayo Adekunle Akadri[1]; Elizabeth Oluwakemi Grillo[1]; Oluwaseyi Isaiah Odelola[2]; Olumuyiwa Olalekan Adelowo[1]; Odutola Olawale Odugbemi[1]; Omobolanle Motunrayo Akadri[3]

Affiliations

[1]Department of Obstetrics and Gynaecology, Babcock University, Ilishan-Remo, Ogun State, Nigeria

[2]Department of Obstetrics and Gynaecology, State Hospital Ijebu-Ode, Ogun State, Nigeria

[3]Ogun State Hospitals Management Board, Ogun State, Nigeria

Corresponding Author

Adebayo Adekunle Akadri

Department of Obstetrics and Gynaecology,Babcock University, Ilishan-Remo, Ogun State, Nigeria

Phone number: +2348036228155, E-mail address: bayoakadri@yahoo.com

Introduction

There appears to be a GWG range that is associated with favourable maternal and foetal outcome.[1] Evidence suggests that women who are overweight or obese prior to pregnancy have numerically lower GWG than women with normal BMI, although this reduced GWG often exceeds the recommended gestational weight gain for that population. [2,3] In addition to pre-pregnancy BMI, other factors such as ethnicity, socioeconomic status, dietary intake, parity and length of gestation have also been noted to affect gestational weight gain. [3.4]

The most widely used guideline on healthy gestational weight gain is that published by the United States Institute of Medicine (IOM).[5] This guideline prescribes gestational weight gain range based on the pre-pregnancy BMI. Optimal weight gain during pregnancy is associated with favourable maternal and foetal outcome.[1] Multiple studies confirm that adherence to the IOM recommendation helps to achieve better pregnancy outcomes. [1,6,7] However, recent evidence from a meta-analysis suggests that majority of women gain weight outside the IOM recommendations, with 23% and 47% of pregnancies with gestational weight gain below and above recommendation respectively.[7]

The complications associated with gestational weight gain outside the IOM recommendations vary depending on whether it is above or below recommendations. Some of these complications include increased risk of caesarean section, large for gestational age (LGA) babies, gestational diabetes mellitus (GDM) and pre-eclampsia. Others are increased risk of preterm birth, low birth weight, and small for gestational age (SGA) babies. [6,7]

There have been some questions regarding the universal applicability of the IOM GWG recommendations. There is limited data on gestational weight gain among women of African descent. Hence, this study was designed to investigate GWG, predictors, and pregnancy outcome among women who gave birth in a tertiary hospital in southwest Nigeria.



Materials and Methods

This prospective cohort study was carried out on all consenting women who registered for antenatal care before gestational age of 13 weeks, had regular antenatal visits, had complete antenatal records, and had their deliveries at term at the obstetric unit of Babcock University Teaching Hospital (BUTH). Recruitment of study participants occurred over a two-year period between June 2022 and May 2024. A total of 220 women were recruited during the study period.

All women had their heights and weights determined at booking. A first trimester ultrasound scan was ordered and reviewed to ensure that the estimated gestational age corresponded with that calculated from the date of the last normal menstrual period. Women also had routine antenatal booking investigations. Follow-up antenatal appointments were according to departmental protocol: 4-weekly till 28 weeks, 2-weekly till 36 weeks, and weekly till delivery. During each antenatal contact, the weight was measured and recorded. The final weight was measured when the study participant presented for labour or delivery. All new-born babies had their birth weight measured using a digital infant weighing scale within 30 minutes of birth.

A data capture sheet was used for data collection. The socio-demographic characteristics, maternal height and weight at booking were recorded. The first recorded maternal weights in second and third trimesters, and maternal weight at presentation for labour or delivery, gestational age at delivery, mode of delivery and pregnancy outcome were also recorded on the data capture sheet. Data was analyzed using the IBM-SPSS statistics for Windows version 23.0 (IBM Corp., Armonk, NY, USA).

The pre-pregnancy weight of the women was determined using the formula: Pre-pregnancy weight = weight in first trimester – 250gms.[8] The pre pregnancy BMI was calculated and the women were categorized according to WHO BMI standards.[8] The GWG during the second trimester was determined by subtracting the first recorded weight after 13 weeks from the first recorded weight after 26 weeks while the GWG during the third trimester was determined by subtracting the first recorded weight after 26 weeks from the last recorded weight in third trimester which was the weight when the parturient presented in labour. The total GWG was determined by subtracting the calculated pre-pregnancy weight from the weight when the parturient presented in labour or for delivery. According to the IOM guideline, the recommended range of weight gain throughout pregnancy for underweight women is 12.5 to18 kg, for normal weight women is 11.5 to 16 kg, for overweight women is 7 to 11.5 kg and for obese women is 5 to 9 kg. [5] The total GWG for each participant determined from this study was compared with the IOM recommended range to determine the proportion of women who had adequate, inadequate and excessive GWG.

Results

The mean age (±SD) of the study participants was 31.1(±4.8) years. Majority, 115(52.3%) were between the age range 31-40 years. Eighty-seven study participants (39.5%) were nulliparous and the median parity (IQR) was 1(0-2). Based on the pre-pregnancy BMI, only



six study participants (2.7%) were underweight, 88(40.0%) had normal BMI, 80(36.4%) were overweight while 46(20.9%) were obese. The median (95% CI) GWG in all study participants was 9.8 (8.8-10.3) Kg. The GWG range were (6.3-19.3), (9.3-13.3), (8.3-10.3) and (5.8-8.8) for underweight, normal weight, overweight and obese women respectively. In the second trimester, both women with normal BMI and overweight women had significantly higher GWG compared to obese women (P<0.001, P=0.038 respectively). Similarly, the rates of weight gain were also significantly higher in women with normal BMI and overweight women compared to obese women (P<0.001; P=0.012 respectively). In the third trimester, women with normal BMI had significantly higher GWG compared to overweight women (P=0.025). Similarly, the rate of weight gain in 3rd trimester was also significantly higher in women with normal BMI

GWG gain across different pre-pregnancy BMI categories

Trimester	All women (N=220)	Underweight (n=6)	Normal (n=88)	Overweight (n=80)	Obese (n=46)	P value (K-W test)
2nd trimester (kg)	5.0 (4.5-5.7)	6.5 (4.0-11.0)	6.5 (4.5-7.0)	5.0 (4.0-6.0)	2.0 (1.5-5.5)	<0.001*
3rd trimester (kg)	3.0 (2.5-3.5)	1.0 (1.0-8.0)	4.0 (3.0-4.5)	2.3 (2.0-3.5)	2.8 (2.0-4.5)	0.023*
Rate 2 nd trimester (g/week)	393 (346-429)	464 (286-733)	419 (346-591)	393 (357-462)	167 (133-393)	<0.001*
Rate 3rd trimester (g/week)	321 (273-364)	200 (91-889)	364 (318-417)	318 (200-350)	315 (182-500)	0.045*
Total GWG (Kg)	9.8 (8.8-10.3)	12.3 (6.3-19.3)	10.3 (9.3-13.3)	9.8 (8.3-10.3)	7.3 (5.8-8.8)	<0.001*
IOM guideline		12.5-18.0	11.5-16.0	7.0-11.5	5.0-9.0	

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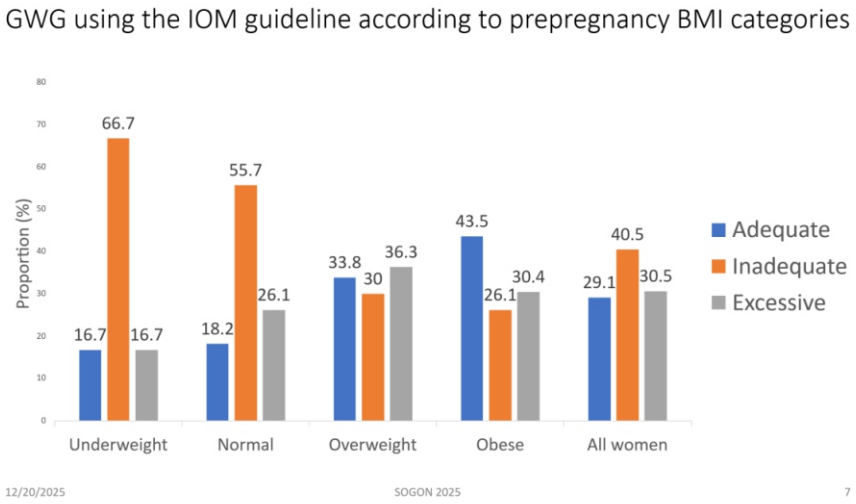
compared to overweight women (P=0.039).. Overall, the total GWG in women with normal BMI was significantly higher than the total GWG in obese women (P<0.001). Wilcoxon signed-rank test showed that the weight gain in the second trimester was significantly higher than weight gain in third trimester (Z = -6.857, P < 0.001). Similarly, the rate of weight gain was also significantly higher in the second trimester compared to third trimester (Z = -3.014, P = 0.003).

Majority of the underweight and normal weight women had inadequate GWG: 4(66.7%) and 49(55.7%) respectively. The highest proportion of overweight women 29(36.3%) had excessive GWG followed by those with adequate GWG 27(33.8%). However, the highest proportion of obese women 20 (43.5%) had adequate GWG followed by those with excessive GWG 14 (30.4%). Overall, 64(29.1%) of all study participants had adequate GWG, 89(40.5%) had inadequate GWG while 67(30.4%) had excessive GWG.

This study showed that only pre-pregnancy BMI was significantly associated with total GWG status (P=0.003). Subsequently, a multinomial logistic regression analysis was performed to determine the predictors of both inadequate GWG and excessive GWG using adequate GWG



as reference. Maternal age, parity, socioeconomic status and WHO BMI class were significant predictors of inadequate GWG. Specifically, women 30 years and above were two and half times more likely to have inadequate GWG than those aged below 30 years [OR 2.5(1.3-5.0); P=0.013]. Regarding parity, women with parity range 1-2 were four times more likely than nulliparous women to have inadequate GWG [OR 4.3(1.8-10.1); P=0.001] while women with parity range 3-4 were eight times more likely than nulliparous women to have inadequate GWG [OR 8.2(1.3-51.8); P=0.025]. Women with middle/upper socioeconomic class also had higher likelihood of having inadequate GWG than those with lower socioeconomic class [OR 14.6(2.1-99.2); P=0.006]. On the contrary, both overweight [OR 0.2(0.1-0.4); P<0.001] and obese women [OR 0.06(0.02-0.20); P<0.001] were less likely to have inadequate GWG than women with normal BMI. However, none of the variables in the regression model significantly predicted excessive GWG.



The mean birth weight of babies born to women with inadequate GWG (3.07kg) was significantly lower than that of babies born to women with adequate GWG (3.30kg) (T-test= 2.998; P=0.003).Although the mean birth weight in women with excessive GWG (3.32kg) was higher than in those with adequate GWG, this was not statistically significant (T-test=-0.310; P= 0.757). Women with inadequate GWG status were found to have a 30% reduced risk of caesarean delivery compared to women with adequate GWG [RR 0.7(0.6-0.9); P= 0.036]. Other pregnancy outcomes such as low birth weight (LBW), macrosomia, asphyxia and neonatal intensive care unit admission were not significantly influenced by gestational weight gain status.

Discussion

This study assessed gestational weight gain (GWG) and its predictors among a cohort of pregnant women in a Nigerian tertiary hospital. Our findings reveal that only about 30% of the study participants achieved adequate GWG based on IOM recommendations; 40% had inadequate GWG and about 30% had excessive GWG. The median GWG was 9.8 Kg with



higher weight gain occurring in second trimester compared to third trimester. Older maternal age, multiparity and middle/upper socioeconomic class predicted inadequate GWG, being overweight and obese were associated with reduced likelihood of inadequate GWG, while none of the variables studied predicted excessive GWG. In terms of pregnancy outcomes, women with inadequate GWG had a 30% lower risk of caesarean delivery and gave birth to significantly smaller babies compared to those with adequate GWG.

Only a third of pregnant women in this study had normal GWG. A systematic review of studies from sub-Saharan Africa revealed that majority of women have inadequate GWG unlike in high income countries where majority of women have excessive GWG.[9] The fact that 70% of women had either inadequate or excessive GWG suggests a need for better antenatal nutritional counselling in the study centre.

The total weight gain and the rate of weight gain during the second trimester were significantly higher than the findings observed in the third trimester. This confirms the widely known fact that women gain most weight during the second trimester of pregnancy. [10] The median GWG values reported in our study were only within the IOM recommended range for overweight and obese women, but lower than the recommended range in underweight women and women with normal BMI. This may suggest that the IOM recommendation may be inappropriate for the study population. There is thus the need for large longitudinal studies with a view to determining the appropriateness of IOM recommendations and perhaps establish GWG standards for the Nigerian population.

There is evidence to suggests that women who are overweight or obese prior to pregnancy have numerically lower GWG than women with normal BMI. [2,3] This agrees with the results of our study and aligns with the pattern seen in the IOM recommendation where the proposed GWG is inversely proportional to the BMI. Gestational weight gain may reflect the health status of the mother and growth of the foetus and could be influenced by several factors including genetics, ethnicity, maternal nutrition and the level of physical activity. Other factors are the presence of intercurrent infections and the duration of interpregnancy interval. [3-5] These unmeasured factors may have played a role in determining GWG in this study population. In order to improve outcomes of pregnancies, there is need for interventions aimed at optimizing GWG. Women with inadequate GWG gave birth to significantly smaller babies than those with adequate GWG. It is believed that maternal dietary intake and nutrient stores play important roles in determining foetal growth. [5]

Women with inadequate GWG had significantly reduced risk of being delivered by caesarean section compared to women with adequate GWG. A possible reason for this finding may be the relatively smaller babies associated with inadequate GWG.This may translate to a reduced risk of labour dystocia which has been reported to account for about one in every five caesarean sections in the study centre.[11]



In our study, excessive GWG did not significantly increase the risk of any of the pregnancy outcomes assessed. It is worthy of note that excessive GWG is often indicative of metabolic imbalances and underlying disease processes such as diabetes and hypertension, and these may contribute to some of the adverse pregnancy outcomes reported in some studies. These medical conditions were excluded in this study and this may be a plausible explanation for the differences in findings.

Conclusion

A substantial proportion of the study participants had suboptimal GWG (inadequate and excessive) with only a third meeting the IOM recommendations. Factors such as older maternal age, multiparity and middle/upper socioeconomic class significantly predicted inadequate GWG while pre-pregnancy overweight /obesity was protective. The lack of predictors for excessive GWG suggests the need for further research to explore the roles of additional factors such as diet, exercise, and cultural beliefs around pregnancy weight. Importantly, women with inadequate GWG gain had smaller babies than those with adequate GWG, underscoring the need for monitoring and supporting optimal GWG in the antenatal period. There is also need for targeted counselling for older, multiparous, and upper socioeconomic class women on adequate GWG.

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Antibiotic Prophylaxis Practices For Caesarean Section In Ogun State, Nigeria: A Cross-Sectional Study

Grillo E. O[a]*, Akadri A. A[a], Oluwole T[a], Igbo A. M[b], Odunola A. A[b] and Odugbemi O. O a

Affiliations

a Babcock University/ Babcock University Teaching Hospital, Ilishan-Remo, Ogun State, Nigeria.

b Federal Medical Centre, Abeokuta, Ogun State, Nigeria.

Introduction

Caesarean section is one of the commonest surgeries in obstetric practice, preventing maternal and perinatal mortality. However, it increases the risk of maternal morbidity, including infective morbidity (post-operative endometritis, Surgical site infections and urinary tract infection). With just SSIs, there is a significant three-fold increase in healthcare costs experienced as the cost of medications, radiological services, hospital visits, and hospital admissions, hence the need for effective prophylactic antibiotics. Prophylactic antibiotic use in CS has undergone considerable evolution, from indicating its need only in settings with risk of increased postpartum infection to more recently major international bodies, including the World Health Organisation (WHO) and the American College of Obstetricians and Gynaecologists (ACOG), recommending a single dose of broad-spectrum antibiotics administered within 60 minutes before skin incision. In many parts of sub-Saharan Africa, practice continues to diverge significantly from the guidelines, with studies in Nigeria having documented persistent use of multi-dose, post-incision prophylactic regimens that extend well beyond 48 hours

Objectives

- To determine the types and combinations of antibiotics most frequently prescribed;
- Assess the level of adherence to international guidelines on antibiotic prophylaxis during CS; and
- Identify the underlying reasons for deviations from evidence-based protocols.

Method

The study was a descriptive cross-sectional design of medical doctors who are actively involved in performing caesarean sections across both public and private health institutions in Ogun State. Data was collected through a structured, self-administered questionnaire developed in Google Forms and distributed on various platforms. The study spanned May – July 2025.

Results

A total of 106 doctors responded to the questionnaire during the study period, and the average age of respondents was 37.56±10.43 years, and the median age was 35years. The majority (96.2%) of respondents routinely prescribed antibiotics for CS, with ceftriaxone being the most commonly used (61.3%). Although 55.7% were aware of WHO guidelines, more than



half (50.9%) administered antibiotics just before skin incision, while only 30.2% complied with the WHO-recommended timing (within 60 minutes before incision) with almost half of respondents (49.1%) routinely continuing prophylaxis for 48 hours.
Risk factors influencing the adjustment of antibiotics include infective co-morbidities, surgical complications and medical co-morbidities, while barriers appropriate use of antibiotics according to the WHO guideline included lack of local hospital protocols, resistance to change, limited availability of recommended antibiotics, and doubts about drug potency.

Conclusion

The study highlights gaps between international guidelines and local practice. In the face of AMR, there is a need to reduce unnecessary broad-spectrum and prolonged prophylaxis in CS can therefore form part of national and facility-level AMR containment strategies, with co-benefits including reduced drug costs, fewer adverse drug events, and potential shortening of length of stay. There is a need for policy updates, establishment of a documented update of institutional protocols, and continuous training to promote evidence-based antimicrobial stewardship in CS. On the other hand, more studies may be required to assess the current practice of use of third-generation antibiotics if its beneficial without posing an added risk of AMR.



Knowledge and Preventive Practice of Anemia among Pregnant Women: A Facility-Based Cross-Sectional Study in a Tertiary Hospital in Nigeria

E.O Famutimi[1,2], P. T Ologunebi[3], B.A Esan [4], I.A Oladeji[3], O.O Bello[2], W. Lubbe[1], T. A. O. Oluwasola[5], O. Olayemi [4]

Affiliations

1. NuMIQ Research Focus Area, Faculty of Health Sciences, Potchefstroom, South Africa
2. Clinical Nursing Department, University College Hospital, Ibadan, Nigeria
3. Department of Nursing, McPherson University, Seriki Sotayo, Ogun State, Nigeria.
4. Department of Obstetrics and Gynecology, University College Hospital, Ibadan, Nigeria
5. Department of Obstetrics and Gynecology, College of Medicine, University of Ibadan; University College Hospital, Ibadan, Ibadan, Nigeria.

Background

Anaemia during pregnancy remains a major public health problem, particularly in low and middle-income countries, including Nigeria.

Despite extensive antenatal care activities, gaps between women's knowledge and effective preventive measures persist.

This study assessed the knowledge and preventive practices for anaemia among pregnant women in the antenatal clinic of Federal Medical Centre (FMC), Idi Aba, Abeokuta, Ogun State, Nigeria.

Objectives

- This study assessed the knowledge and preventive practices for anaemia among pregnant women in the antenatal clinic of Federal Medical Centre (FMC), Idi Aba, Abeokuta, Ogun State, Nigeria.

Specific objectives

1. To determine the level of knowledge of anaemia among pregnant women attending the antenatal clinic at Federal Medical Centre, Abeokuta, Ogun State, Nigeria.
2. To assess the preventive practices adopted by pregnant women against anaemia in the antenatal clinic at Federal Medical Centre, Idi Aba, Abeokuta, Ogun State, Nigeria.

Methodology

This descriptive cross-sectional study was conducted in FMC, Abeokuta, among 109 pregnant women who attended the antenatal clinic and were recruited by a simple random technique.

Data were collected using a structured, self-administered questionnaire.

Data analysis utilized Statistical Package of Social Sciences version 27.

Data was presented using descriptive statistics and chi-square analysis was used for inferential statistical testing, and the level of significance adopted was $p \leq 0.05$.



Results

- The mean age was 27.4 ± 5.5 years, with a median parity of 1 (IQR: 0-2).
- Overall, 74.3% demonstrated adequate knowledge, and 57.8% exhibited good practice.
- The level of education and employment status were significantly associated with knowledge of anemia among pregnant women.
- Level of education ($\chi^2 = 10.23$, $p = 0.006$), employment status ($\chi^2 = 4.23$, $p = 0.039$).
- Regarding practice, employment status was significantly associated with preventive practice of anemia among pregnant women ($\chi^2 = 4.15$, $p = 0.042$), but level of education was not ($\chi^2 = 4.52$, $= 2$, $p = 0.104$).

Employment status vs knowledge of anemia prevention

Employment Status	Adequate knowledge	Inadequate knowledge	X^2	df	P-value
Employed	50	10	4.23	1	0.039
Unemployed	31	18			
Total	81	28			
Employment status vs preventive practices of anaemia					
Employed	40	20	4.15	1	0.042
Unemployed	23	26			
Total	63	46			

Level of education vs Knowledge/Practice

Level of education	Adequate knowledge	Inadequate knowledge	X^2	df	P-value
Tertiary	40	5	10.23	2	0.006
Secondary	30	10			
Primary	11	13			
Total	81	28			
Education and preventive practices of anaemia					
Tertiary	30	15	4.52	2	0.104
Secondary	20	20			
Primary	13	11			
Total	63	46			

Conclusion

- Although knowledge of anemia and its prevention was generally high, translation into consistent preventive practice remains suboptimal.
- Interventions specifically targeting unemployed pregnant women to improve anemia prevention should be designed.



A Comparative Study of the Obstetric Outcome between Booked and Unbooked Mothers at the Federal Medical Centre, Abeokuta: A two-year review

Adenaya OR[1]; Ibrahim AM[2]; Ojo OO[3]; Grillo EO[4]; Ade-Onojobi AO[2]; Odelola OI[5]

Affiliations

[1]Department of Obstetrics and Gynaecology, Oba Ademola II Maternity Hospital, Ijemo, Abeokuta, Ogun State, Nigeria

[2]Department of Obstetrics &Gynaecology, Federal Medical Centre, Abeokuta, Ogun State, Nigeria

[3]Department of Obstetrics &Gynaecology, Gbagada General Hospital, Gbagada, Lagos, Nigeria

[4]Department of Obstetrics and Gynaecology, Babcock University/Babcock University Teaching Hospital, Ilishan, Remo, Ogun State, Nigeria

[5]Department of Obstetrics and Gynaecology, State Hospital, Ijebu-Ode, Ogun State, Nigeria

Corresponding Author

Olaide Rufus Adenaya

Oba Ademola II Maternity Hospital, Ijemo, Abeokuta, Ogun State, Nigeria

Tel: +2348059556367, Email: adenayaolaide@yahoo.com

Background:

Pregnancy is a physiological process but sometimes becomes complicated. Antenatal care is aimed at preventing, early detection and treatment of these complications when they occur. The study aimed to determine the prevalence of unbooked pregnancies delivered at our centre and compare their socio-demographic pattern, pregnancy outcomes and maternal/perinatal morbidity/mortality with those who booked and delivered during the same period.

Methodology:

It was a retrospective comparative study carried out among unbooked and booked mothers who delivered at our obstetric unit over a two-year period of January 2014 to December 2015. The case notes were retrieved and analyzed.

Results:

There were 2232 deliveries during the period under review. Unbooked pregnancies were 235 (10.52% of total deliveries). Unbooked women were younger compared to the booked(29.24 ±5.74 years versus 30.99 ± 4.17 years), less educated, and nine times more likely to be single (23.92% versus 2.56% respectively). Emergency caesarean section was performed in 58.72% of the unbooked mothers while 60.14% of their booked counterparts had spontaneous vaginal deliveries. Instrumental vaginal deliveries were also more common among the unbooked group. Birth asphyxia and perinatal morbidity/mortality were commoner in the unbooked group. Maternal mortality was 25 times more likely with the unbooked compared to booked mothers.



Discussion:

The prevalence of 10.52% of unbooked pregnancy in this study was smaller than the prevalence in some other centers in Nigeria, but higher than the prevalence in some few centers. The higher prevalence of unbooked pregnancy among younger single women with low socio-economic status was similar to findings in many other studies and this is because such women were less likely to have financial and social support and therefore unable to afford quality antenatal care. Emergency caesarean section and instrumental vaginal delivery, and perinatal morbidity were more common among the unbooked group because they were referred from peripheral facility, many of them, after developing complications. Higher prevalence rate of low birth weight and birth asphyxia among the unbooked women in this study compared favourably with other studies and this might be connected to the high intrauterine growth restriction, preterm labour and preeclampsia/eclampsia recorded among the unbooked women.

Conclusion:

Low socio-demographic status has direct correlation with booking status of pregnancy in our environment. Unbooked pregnancies were more associated with poor pregnancy outcomes and maternal mortality compared to the booked ones. It is recommended that affordable and quality antenatal care services be made available in every community while also educating the healthcare givers on need for early referral of high risk pregnancies.



Povidone-Iodine versus Chlorhexidine-Alcohol Skin Preparation for Prevention of Surgical Site Infection after Caesarean Delivery in a Tertiary Medical Centre, South West, Nigeria

Olufemi Damilola Dedeigbo[1], Olorunfemi Oludele Owa[1,2],
Adeyinka Joseph Aiyeyemi[1], Richard Rotimi Ehinmitan[1]

Affiliations
1. Department of Obstetrics and Gynaecology, Federal Medical Centre, Owo, Nigeria
2. Department of Pharmacology, University of Medical Sciences, Ondo, Nigeria

Corresponding Author
Dr. Olorunfemi Oludele Owa,
Department of Obstetrics and Gynaecology, Federal Medical Centre, Owo, Ondo State.
Email: oowa@unimed.edu.ng, Phone: +2348037637532

Background:
Surgical site infection is a major contributor to the increasing morbidity and mortality with caesarean section as compared to vaginal delivery. The incidence of surgical site infection following caesarean section is higher in developing countries. Caesarean delivery is a major obstetric surgery performed on women and it is with a rising rate worldwide. Prevention of surgical site infection with good skin antiseptic preparation before surgery is therefore a crucial part of care.

Objective:
To compare the effectiveness of chlorhexidine alcohol and povidone iodine in preventing surgical site infection following emergency caesarean section.

Methods:
The study is interventional, non-blinded, randomized study conducted at Federal Medical Centre, Owo, Nigeria. One hundred and eight (108) eligible women, who had emergency caesarean section were recruited into the study, fifty-four (54) in each arm. One group received chlorhexidine alcohol as the skin antiseptic before operation while the other arm received povidone iodine. Both groups were followed for 30 days and assessed for surgical site infection. Data obtained were analyzed using SPSS 21.

Results:
The mean age of women in the study was 29 years (SD 6.5) and majority of the participants were artisans constituting 58.7%. No statistical difference in the rate of skin reaction to the two skin antiseptics (P = 0.591). Even though the incidence of SSI in the povidone group was less than in the chlorhexidine group (9.4% vs. 17.6%), this finding was not statistically significant (P = 0.477). The surgical site infection rate in this study was 13.5%.



Development of Surgical Site Infections and Causative Organisms between Chlorhexidine and Povidone Iodine Groups

variable	Chlorhexidine	Povidone	X^2	P-value
	(n=51)	(n=53)		
	Freq (%)	Freq (%)		
Type of Surgical Site Infection				
Normal healing without any sign of infection	42 (82.4)	48 (90.6)	3.506	0.477
Normal healing with mild bruising or erythema	4 (7.8)	3 (5.7)		
Erythema plus other inflammation	2 (3.9)	2 (3.8)		
Deep with tissue breakdown	2 (3.9)	0 (0.0)		
Clear or haemoserous discharge	1 (2.0)	0 (0.0)		
Organisms cultured				
No culture	42 (82.4)	48 (90.6)	2.474	0.480
S. aureus	5 (9.8)	4 (7.5)		
E. coli	3 (5.9)	1 (1.9)		
Proteus mirabilis	1 (2.0)	0 (0.0)		

Discussion

The incidence of surgical site infection in this study was 13.5%. This is slightly lower than the findings of 16.4% reported by Morhassen Bello et al in Ibadan but similar to the incidence documented by Ezechi et al in Lagos. Our SSI in this study was lower than the 24% reported in a Tanzanian hospital. The surgical site infection found in this study were mostly superficial, as reported in other trials. However, there was a case of organ/space surgical site infection that required exploratory laparotomy about two weeks after the caesarean section. The commonest organism in this study was Staphylococcus Aureus, which also constituted 37% of causative microorganism. **Conclusion:** There was no statistical difference in the effect of chlorhexidine alcohol and povidone iodine antiseptic skin preparation on the rate of surgical site infections following emergency caesarean section in Federal Medical Centre, Owo, Nigeria.



Maternal and Neonatal Effects of Delayed Cord Clamping Versus Umbilical Cord Milking after Delivery in Ilorin: A Randomised Controlled Trial

Ganiyat A. Akera-Adegboyega[1], Gafar AA. Jimoh[2], Abiodun S. Adeniran[2], Shade O. Mokuolu[3], Musbau I. Abdulazeez[4], Afusat O. Olabinjo[5], Munir-deen A. Ijaiya[2], Felix A. Omolade[4], Nasir I. Orisankoko[2], Hadijat I. Aremu[1].

Affiliations

[1]Obstetrics &Gynaecology Department, Federal Medical Centre, Abeokuta, Ogun State, Nigeria.

[2]Obstetrics &Gynaecology Department, University of Ilorin Teaching Hospital/, University of Ilorin, Ilorin, Kwara State, Nigeria

[3]Paediatric and Child Health Department, University of Ilorin Teaching Hospital, Ilorin, Kwara State, Nigeria.

[4]Chemical Pathology Department, University of Ilorin Teaching Hospital, Ilorin, Kwara State, Nigeria

[5]Obstetrics &Gynaecology Department, Armed Forces Hospital, Muscat, Oman.

Presenting author:

Dr Ganiyat A. Akera-Adegboyega

Obstetrics &Gynaecology Department, Federal Medical Centre, Idi Aba, Abeokuta, Ogun State, Nigeria.

ghanak622@gmail.com/08157697396

Introduction

Anaemia remains one of the leading causes of morbidity and mortality among neonates and infants, of which iron deficiency anaemia is responsible for more than 50%.[1,2]

Placental transfusion through delayed cord clamping (DCC) or umbilical cord milking (UCM) could improve neonatal iron storage by 40-50mg/kg body weight.[3] DCC is recommended for both preterm and term neonates.[3] DCC is not routinely practised, which may be due to understaffing of our labour wards and when there is a need for active neonatal resuscitation.[4,5]

UCM could serve as an effective alternative to DCC. However, there is a paucity of studies that assess the safety and efficacy of umbilical cord milking in Nigeria

Study objective

To compare the neonatal and maternal effects of UCM at birth against the recommended DCC among term neonates at the University of Ilorin Teaching Hospital.

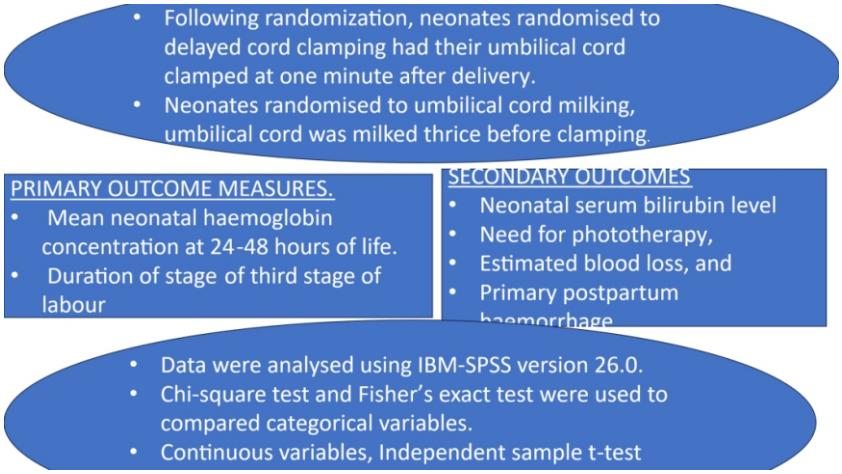
Methodology

The study was a parallel open-labelled randomised controlled trial carried out among 112 mother-neonate pairs after obtaining approval from the UITH ethical review committee **(ERC PAN/2023/08/0397).** Patients were counselled about the study, and written informed consent was taken from all participants. Inclusion criteria include: A pregnant woman who



consented herself and her baby to participate in the study, Intrapartum haemoglobin concentration ≥10g/dl, spontaneous vaginal delivery, and a live baby that cried spontaneously at birth. Umbilical cord abnormalities, patients with Rhesus-negative blood, chronic medical conditions, maternal infections (HIV), multiple gestation, and antepartum haemorrhage were excluded.

Following randomisation, neonates randomised to delayed cord clamping had their umbilical cord clamped at one minute after delivery. While for neonates randomised to umbilical cord milking, the umbilical cord was milked thrice at 20cm from its stump on the baby.



The primary outcome measures were mean neonatal haemoglobin concentration at 24-48 hours of life and duration of third stage of labour. While secondary outcome measures were Neonatal serum bilirubin level, need for phototherapy, estimated blood loss, and primary postpartum haemorrhage. The data were analysed using IBM SPSS statistics version 26.0. Data were analysed using IBM-SPSS version 26.0. Chi-square test and Fisher's exact test were used to compared categorical variables. For continuous variables, Independent sample t-test. The level of significance was set at P = ≤ 0.05 at confidence interval of 95%.

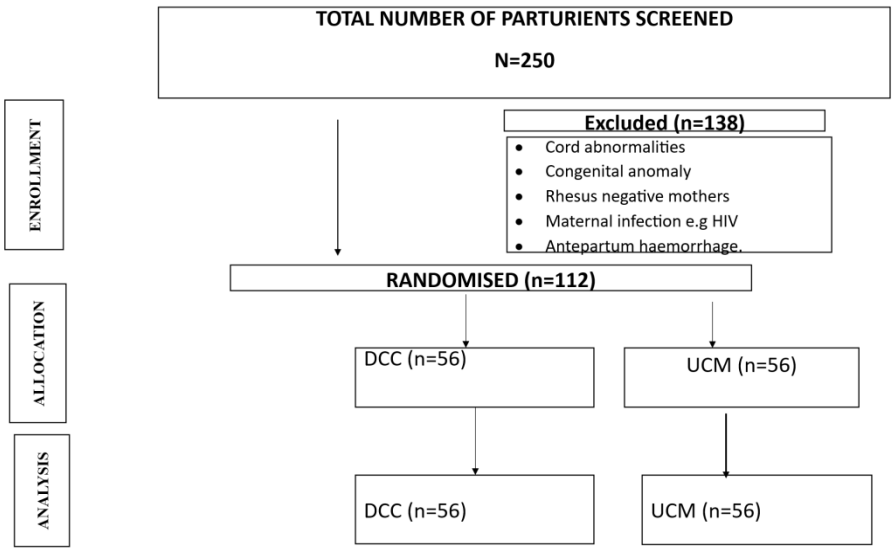


FIGURE 1: Consort Flow Chart



Results

A total of 250 pregnant women were assessed for eligibility. However, 112 mother -neonate pair were randomised into the study. The baseline sociodemographic characteristics were similar.

No statistically significant difference in the mean neonatal haemoglobin concentration [DCC (19.40 ± 1.72) vs UCM (19.01 ± 2.15), t – 1.170, p = 0.282]. There was a significantly lower mean neonatal serum bilirubin among delayed cord clamping group than umbilical cord milking group [DCC (3.11 ± 2.65) vs UCM (5.40 ± 7.05), t-5.114, p = 0.026]. There was no significant difference in the duration of the third stage of labour [DCC (8.43 ± 4.50) vs UCM (8.78 ± 4.19), t-0.189, p = 0.665] as well as the estimated blood loss (235.18 ± 90.91 vs 209.82 ± 55.94mls t-3.160, p = 0.078).

RESULTS: Table 1. Comparison of neonatal haemoglobin concentration and serum bilirubin between neonates in DCC and UCM.

Variables	Group D (%), n=56	Group U (%), n=56	Total, (112)	χ^2/f/t-test	p-value
Haemoglobin concentration(g/dl)				0.176[f]	0.674
< 13.5	0 (0.0)	0 (0.0)	0		
13.5 – 21.99	52 (92.9)	54 (96.4)	106		
≥ 22	4 (7.1)	2 (3.6)	6		
Mean ± SD	19.40 ± 1.72	19.01 ± 2.15	19.20 ± 1.95	1.170	0.282
Range	15.00 – 23.70	15.50 – 24.40	15.00 – 24.40		
Serum bilirubin (mg/dl)				8.069[f]	0.020
< 1	13 (23.6)	9 (16.1)	22		
1 – < 10	42 (76.4)	40 (71.4)	82		
≥ 10.00	0 (0.0)	7 (12.6)	7		
Mean ± SD	3.11 ± 2.65	5.40 ± 7.05	4.26 ± 5.44	5.114	0.026
Range	0.10 – 9.60	0.10 – 36.00	0.10 – 36.00		

χ^2- Chi-square, p-value, t-test, f – Fisher's exact test.

Table 2: Comparison of maternal outcomes between DCC and UCM

Variables	Group D (%), n=56	Group U (%), n=56	Total, (112)	χ^2/f/t-test	P- value
Duration of third stage of labour(minutes)				0.001[f]	1.000
< 30	56 (100.0)	56 (100.0)	112		
≥ 30	0 (0.0)	0 (0.0)	0		
Means ± SD	8.43 ± 4.50	8.78 ± 4.19	8.61 ± 4.33	0.189	0.665
Estimated blood loss(mls)				2.036[f]	0.495
< 500	54 (96.4)	56 (100.0)	110		
≥ 500	2 (3.6)	0 (0.0)	2		
Means ± SD	235.18 ± 90.91	209.82 ± 55.94	222.50 ± 76.21	3.160	0.078
Postpartum hemorrhage				2.036[f]	0.495
Yes	2 (3.6)	0 (0.0)	2		
No	54 (96.4)	56 (100.0)	110		
Need for transfusion				0.001[f]	1.000
Yes	0 (0.0)	0 (0.0)	0		
No	56 (100.0)	56 (100.0)	112		
Retained Placenta				0.001[f]	1.000
Yes	0 (0.0)	0 (0.0)	0		
No	56 (100.0)	56 (100.0)	112		

χ^2- Chi-square, p-value, t-test, f – Fisher's exact test.



Discussion

No statistically significant difference in the mean neonatal Hb concentration (p= 0.282). This is similar to previous studies by Jaiswal et al, DCC [11.39(2.6)g/dl]vs UCM [11.0(2.4)g/dl, p=0.5][6] and Panburana et al, DCC [16.9(1.6)g/dl]vs UCM [17.0(1.9)g/dl, p=0.75].[7] But this is in contrast to Alzaree study, who reported a statistically significant higher Hb concentration in participants in the umbilical cord milking group compared to those who had DCC. (P= < 0.001).[8] The Neonatal serum bilirubin level was statistically significantly higher in the UCM group compared to DCC group. (p=0.026) No significant difference in the maternal outcomes.

Conclusion

This study shows that umbilical cord milking has a comparable neonatal haemoglobin concentration with delayed cord clamping but a higher neonatal serum bilirubin. Both methods have similar maternal outcomes.

Recommendation

We recommended that Umbilical cord milking should be done in situations where delayed cord clamping is not feasible

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Leveraging Predictive Analytics to Revolutionise Maternal and Child Health Outcomes in Nigeria: A Narrative Review

E.O Famutimi[1,2], O.V Ogunsanya[3,4], M.F Ogunkuade[5], R.V Waltsleven[1], C.M Ndikom[6], O Olayemi [5]

Affiliations

[1]NuMIQ Research Focus Area, Faculty of Health Sciences, Potchefstroom, South Africa
[2]Clinical Nursing Department, University College Hospital, Ibadan, Nigeria
[3]Risk and Information Management Research Group, Queen Mary University of London
[4]Vnicom Solutions Limited, Magboro, Ogun State, Nigeria
[5]Department of Obstetrics and Gynaecology, University College Hospital, Ibadan
[6]Department of Maternal and Child Health Nursing, Faculty of Nursing, University of Ibadan

Corresponding Author:

E.O. Famutimi
NuMIQ Research Focus Area, Faculty of Health Sciences, Potchefstroom, South Africa

Introduction

- Nigeria's maternal and child health outcomes are concerning, with a maternal mortality ratio of 1,047 deaths per 100,000 live births and an under-5 mortality rate of 102 deaths per 1,000 live births (Oweibia et al. 2025; Dogbanya, 2025).
- These statistics are among the highest in the world, with Nigeria accounting for approximately 20% of global maternal deaths (Dogbanya, 2025).
- Despite concerted efforts to improve healthcare delivery, these statistics highlight the country's significant challenges in addressing maternal and child health (MCH) needs (Anyanwu et al., 2024).
- The Sustainable Development Goals (SDGs) agenda emphasizes the need for innovative solutions to accelerate progress in reducing maternal and child mortality, particularly in low- and middle-income countries (LMICs) like Nigeria (Adeyinka, 2020).
- Predictive analytics, encompassing statistical modeling, artificial intelligence (AI), and machine learning (ML), has transformed decision-making in various sectors, including healthcare (Khosravi et al., 2024).
- By harnessing the power of data, predictive analytics can identify high-risk populations, forecast health outcomes, and inform targeted interventions, thereby optimizing resource allocation and improving health outcomes (Anyanwu et al., 2024; Edoh et al.,2024).
- This narrative review aims to synthesize recent evidence on the application of predictive analytics in MCH in Nigeria, identifying opportunities, challenges, and policy pathways for implementation, with a view to informing data-driven decision-making and improving MCH outcomes



Methodology

This narrative review conducted its searches according to the SANRA (Scale for the Assessment of Narrative Review Articles) framework.

The literature was identified through searching of databases of PubMed, Scopus, Google Scholar, and SciSpace employing a combination of searches using terms such as "predictive analytics", "maternal health", "child health", "Nigeria", and artificial intelligence.

Studies published from 2020 to 2025(n=38) were included, and the findings were synthesised into thematic domains important to the MCH ecosystem in Nigeria.

Results

- Overall, six themes were generated from the narrative review as follows:
  - ➢ Predictive Analytics in Maternal and Child Health:
    - ✓ Predictive analytics can improve MCH outcomes by identifying high-risk pregnancies and forecasting health outcomes.
    - ✓ Key predictive variables include antenatal visits, maternal age, haemoglobin level, distance to facility, socioeconomic status, and skilled birth attendance
    - ✓ Early detection and prevention of neonatal sepsis, malnutrition, and vaccine dropout risk can reduce adverse outcomes.
- Implementation and Challenges:
  - ✓ Integration into national health systems is ongoing, with initiatives like the Nigeria Health Data Analytics Framework
  - ✓ Challenges include data quality, fragmentation, and predictive analytics

Conclusion/ Recommendations

- Predictive analytics has transformative potential to improve MCH outcomes in Nigeria by identifying high-risk pregnancies, forecasting health outcomes, and informing targeted interventions
- Key recommendations include strengthening data infrastructure, investing in human capital, promoting multi- stakeholder partnerships, expanding proven programs, and prioritizing ethical governance to ensure responsible AI adoption
- Through collective efforts, Nigeria can leverage predictive analysis to drive meaningful change, reducing maternal and child mortality rates, elevating health outcomes, and fostering a healthier, more prosperous society for its citizens



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A Systematic Scoping Review of the Prevalence of Female Sexual Dysfunction in Pregnancy in Sub-Saharan Africa

Opeyemi A. Adedeji[1], Rukiyat A. Abdus-salam[1,2], Olatunji O. Lawal[1,2], Jamiu A. Ogunsola[1], Stephen Salufu[1], Friday O. Ameh[1], Imran O. Morhason-Bello[1,2]

Affiliations
1University College Hospital, Ibadan,
2College of Medicine, University of Ibadan, Ibadan

Presenting Author
OPEYEMI A. ADEDEJI
University College Hospital, Ibadan

Introduction/Background

This presentation addresses a crucial yet often overlooked aspect of maternal health: Female Sexual Dysfunction (FSD) in pregnancy. Pregnancy involves significant hormonal, physiological, and psychosocial changes, all of which can profoundly impact a woman's sexual function and overall well-being. Despite FSD's potential to diminish a woman's quality of life, the condition is rarely discussed or screened for in clinical settings. Furthermore, specific evidence regarding the prevalence and associated factors of FSD among pregnant women in Sub-Saharan Africa (SSA) remains limited and highly fragmented across the available literature. This systematic review aims to bring clarity to this critical gap by synthesizing the existing data from the region.

Objective(s)

The primary objective of this systematic scoping review was twofold:

1. To comprehensively summarize the current evidence on the prevalence of Female Sexual Dysfunction (FSD) during pregnancy in Sub-Saharan Africa.
2. To identify the major determinants and correlates of FSD in this specific population, thereby highlighting key research and clinical practice gaps that require immediate attention.

Method

To achieve these objectives, we executed a systematic search across major electronic databases, including PubMed, Scopus, African Journals Online (AJOL), and Google Scholar. The search was limited to studies published between January 2013 and May 2025.

Our inclusion criteria required that eligible studies reported either the prevalence or correlates of FSD among pregnant women in SSA and utilized validated measurement tools, such as the Female Sexual Function Index (FSFI). Data pertaining to study characteristics, the reported prevalence rate, and associated sociodemographic or psychological factors were carefully extracted and synthesized using a narrative approach.



Results

Our systematic search identified and included nine studies that met the strict inclusion criteria. These studies originated from five countries within the Sub-Saharan African region: Nigeria, Ghana, Ethiopia, Kenya, and South Africa.

Key Findings on Prevalence: The reported prevalence of FSD across these nine studies was notably high, ranging from 50.7% to 74.3%. Across the trimesters, FSD prevalence was consistently reported to be highest in the third trimester of pregnancy.

Significant Correlates: The review identified several significant sociodemographic, psychological, and cultural factors associated with an increased risk of FSD in pregnancy:

- Advanced maternal age was consistently correlated with higher dysfunction rates.
- Lower educational attainment was frequently cited as a determinant.
- Poor partner communication or relationship difficulties played a significant psychological role.
- Psychological distress, including anxiety and depression, was a strong correlate.
- Cultural misconceptions or restrictive beliefs regarding sexual activity during pregnancy contributed to avoidance and dysfunction.

Discussion

The findings demonstrate a compelling consensus that FSD is highly prevalent among pregnant women in SSA, affecting well over half of the population in most studies. The pattern of increasing dysfunction as pregnancy progresses into the third trimester is consistent with increasing physical discomfort and hormonal shifts. While the identified correlates—sociodemographic factors, psychological distress, and cultural beliefs—provide valuable insight for counseling, a critical gap remains: the lack of longitudinal studies that track changes in sexual function over time, and the problem of inconsistent measurement tools across the region which hinders direct comparison and meta-analysis. Addressing FSD is fundamental to a holistic approach to maternal care.

Conclusion

In conclusion, this systematic scoping review establishes that Female Sexual Dysfunction is a significant public health issue among pregnant women in Sub-Saharan Africa, with high prevalence rates influenced by a complex interplay of sociodemographic, psychological, and cultural factors. Given the high rates reported, FSD should no longer be viewed as a marginal issue. We strongly recommend that healthcare systems in SSA prioritize integrating a standardized sexual health assessment using validated tools into routine antenatal care. Such a measure is essential for early identification, appropriate counseling, and ultimately, for improving the holistic sexual and psychological well-being of expectant mothers.

d fostering a healthier, more prosperous society for its citizens



Severity of Menopausal Symptoms and Predictors of Quality of Life Among Postmenopausal Women in Benue south, Nigeria

Omoregie Irowa[1], Innocent Achayan Otobo Ujah[1], Paul Ejeh Ogwuche[1], Mercy Ajehi Adagayi[2]

Address

[1]Department of Obstetrics and Gynaecology Federal University of Health Sciences Otukpo (FUHSO), P.M.B 145, Otukpo, Benue State, Nigeria.

[2]Department of Chemistry, Federal University of Health Sciences Otukpo (FUHSO), P.M.B 145, Otukpo, Benue State, l

Presenting Author

Omoregie Irowa

Department of Obstetrics and Gynaecology Federal University of Health Sciences Otukpo (FUHSO), P.M.B 145, Otukpo, Benue State, Nigeria

Introduction

- Menopause is a natural biological process defined by the cessation of menstruation for at least 12 consecutive months due to reduced ovarian function [1,2].
- Menopause is usually confirmed retrospectively[3,4].
- Menopause commonly occurs between the ages of 45 and 55 years with an average global age prevalence of 48.8 years [4,5].
- The clinical manifestations of menopause are poorly known and the severity depends on individuals, ethnicity and geographical factors [1,6].
- The severity of these symptoms greatly impacts on the quality of life of these women[7].

Objectives

- To assess the severity of menopausal symptoms
- To identify key predictors of quality of life (QoL) among postmenopausal women in Benue South, Nigeria

Methodology

- A cross-sectional descriptive study was conducted among postmenopausal women aged ≥45 years in four randomly selected Local Government Areas of Benue South, Nigeria
- Sample size n= Z2P(1-P)/d2, P=51.7%1 , N=767.
- A multistage sampling technique. Severity of menopausal symptoms
- Quality of life were assessed using the Menopause Rating Scale (MRS).
- Data were collected using Kobo Toolbox and analyzed with SPSS Version 20 (Armonk, NY: IBM Corporation).



- Descriptive statistics summarized participant characteristics in mean, frequencies and percentages
- Multivariate logistic regression analyses identified predictors of Quality of life.

Results

Sociodemographic Characteristics:

- Of the 767 participants, 45.0% were aged ≥60 years, and 67.9% attained menopause between ages 45–49 years.
- A significant proportion had no formal education (36.8%), were engaged in subsistence farming (51.1%), and earned less than ₦70,000 monthly (82.5%).
- Participants were mostly obese (37.5%) and grand multipara (78.9%).
- Awareness (6.4%) and utilization (4.8%) of menopausal treatment were very low, although 71.1% expressed willingness to seek care.

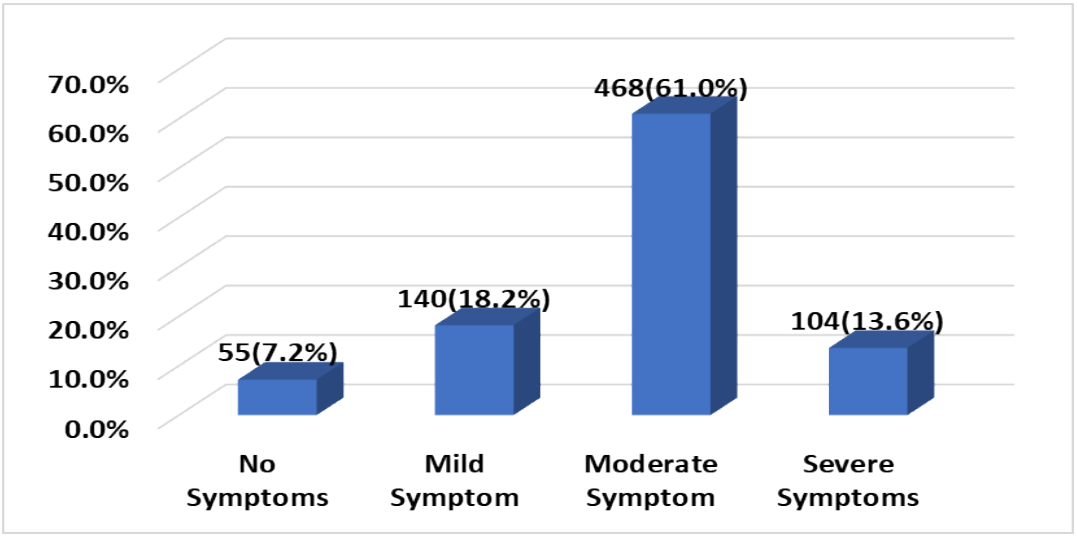

Figure 1 Severity of menopausal symptoms using the Menopause Rating Scale (MRS).

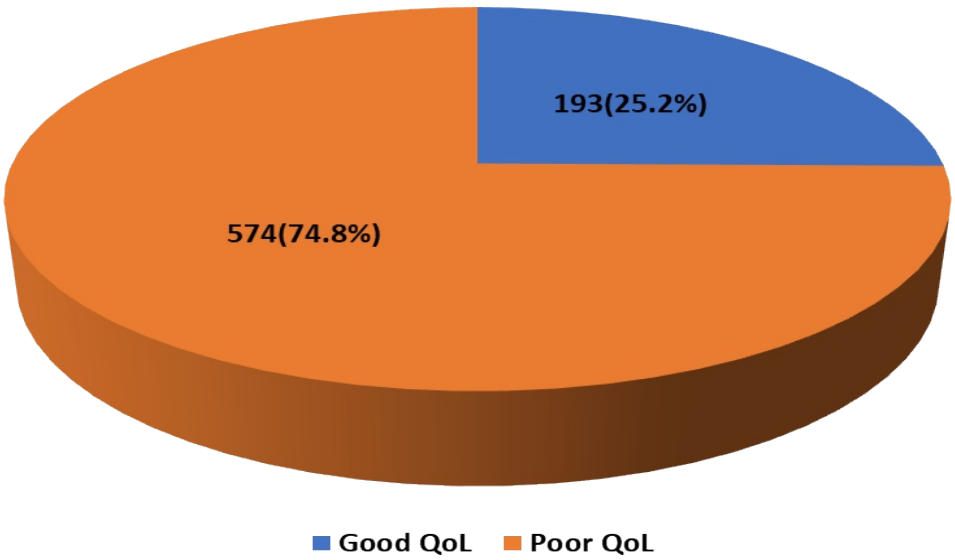

Figure 2 Quality of life among menopausal women.



On multiple logistics regression analysis, the significant predictors of quality of life included Age at menopause, Primary education level, Prior use of menopausal treatment, and Willingness to seek treatment ($p < 0.05$).

Discussion

- The severity of menopausal symptoms was mostly classified as moderate on the Menopause Rating Scale (MRS). This finding is supported by other studies 8-9 .
- A significant proportion of the study participants were categorized as having poor Quality of Life (QoL). This finding was corroborated by other researchers12-14 .
- On multiple logistic regression analysis, the age at menopause (specifically the 45–49 and 50–54 age groups), primary level of education, use of treatment for menopause, and willingness to seek treatment were the predators of the quality of life among women with menopausal symptoms. This is supported by other studies13-16.

Conclusion

- Menopausal symptoms significantly impair quality of life among women in Benue South.
- Therefore, strengthening awareness, education, and access to menopausal care is vital for improving the well-being of postmenopausal women in Nigeria.

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Is Parity a major determinant of obstetric outcome? Findings from parturients in a Southern Nigerian Tertiary Hospital

Matthias Gabriel Abah[1], Uduak Solomon Ocheche[2], Oranu Okechukwu Augustine[3], DEtuknwa, Utibe Ifiok[3]

Affiliations

1 Department of Obstetrics and Gynaecology, University of Uyo/University of Uyo Teaching Hospital, Uyo.

2 Department of Obstetrics and Gynaecology, PAMO University of Health Sciences, Port Harcourt.

3Department of Obstetrics and Gynaecology, University of Uyo Teaching Hospital, Uyo.

Presenting Author

Matthias Gabriel Abah

Department of Obstetrics and Gynaecology, University of Uyo/University of Uyo Teaching Hospital, Uyo.

Introduction

- Parity is an essential factor used in clinical practice for risk stratification.
- Antenatal clients considered high-risk categories of nulliparity and grand multiparity need monitoring to anticipate and manage potential complications
- We observed our parturients for the obstetric outcome of the various categories.

Objectives

- To compare the Obstetric parameter among nulliparous, multiparous and grand-multiparous parturients delivered at the University of Uyo Teaching Hospital.
- To compare perinatal outcome among the parous groups above

Methodology

- A 10-year retrospective analysis of labour ward register from 2013 to 2022 was carried out to compare Obstetric outcomes across parities
- The data was entered into statistical software and analyzed.
- The results are presented in simple frequency distribution tables, bar chart.
- Also, bivariate analysis with chi-square test was done for categorical data with a level of statistical significance set at less than or equal to 0.05($P<0.05$)

Results

- The mean ages of the women were 27.39±4.62 years, 29.81±4.70 years, and 33.54±4.40 years for Nulliparous, Multiparous, and Grand- multiparous women, respectively. The observed differences between the means was statistically significant ($F=25.825$; $P=0.001$)
- The proportion of nulliparous women who were booked was 39(79.6%), while 12786(92.1%) and 844(84.8%) were booked multiparous and grand multiparous



women, respectively. The observed difference was statistically significant ($\chi 2=72.11$; P=0.001).

- There were more nulliparous women in the 20-29 years age group (61.20%), while grand multiparas were more in the 30-39 years age range.

Table 1: Characteristics of participants who are nulliparous, multiparous and grand multiparous

Variables	Nulliparous n=49	Multiparity n=13887	Grand multipara n=995	Test/p-value
Age(years)				
Mean ±SD	27.39±4.62	29.81±4.70	33.54±4.40	F=302.139
				p=0.001
<35yrs	47(95.6)	11684(84.1)	564(56.7)	p=0.001**
≥35yrs	2(4.1)	2203(15.9)	431(43.3)	
Gestational age				
Mean ±SD	**37.50±4.12**	**38.31±2.86**	**37.65±3.24**	**F=25.825**
				p=0.001
Booking history				
Booked	39(79.6)	12786(92.1)	844(84.8)	$\chi^2=72.11$
Unbooked	10(20.4)	1101(7.9)	151(15.2)	p=0.001

(F tests=One way Anova, $\chi 2$=Chi square tests, **=Fishers tests)

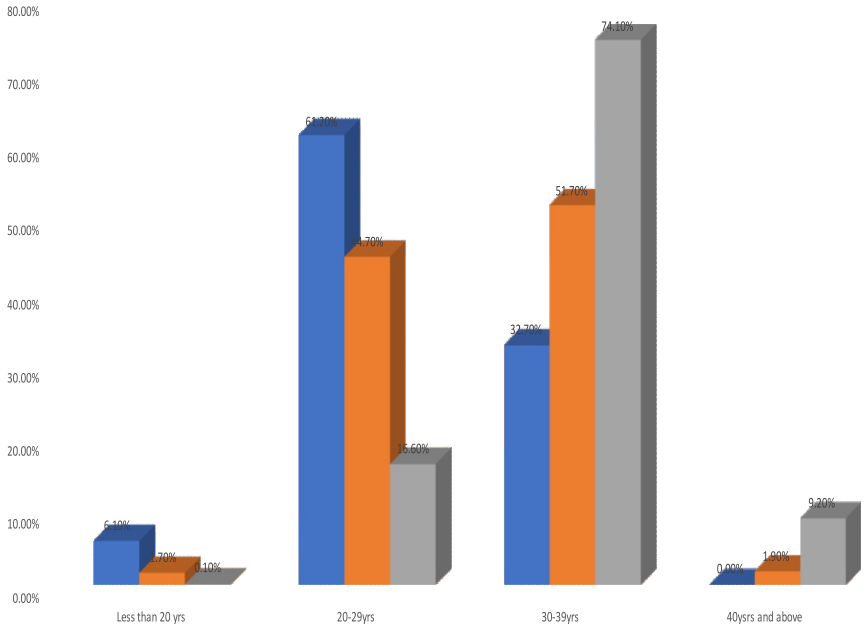

Fig 1: Age distribution based on parity of the women

- While cephalic presentation was the commonest in all groups, breech presentation was highest among nulliparous women(16.3%).Bar chart 1
- Assisted deliveries was most performed for nulliparous women, while Caesarean section was highest among grand multiparous women (41.8%) Barchart 2.
- The highest proportion of perinatal deaths relative to sample size was reported among the nulliparous group 9(18.4%). The observed difference between the groups was statistically significant($\chi 2$=72.11, df=2; P=0.001).
- Low and moderately abnormal APGAR scores were frequently seen among the nulliparous group. This was statistically significant(P<0.001)(Table 2)

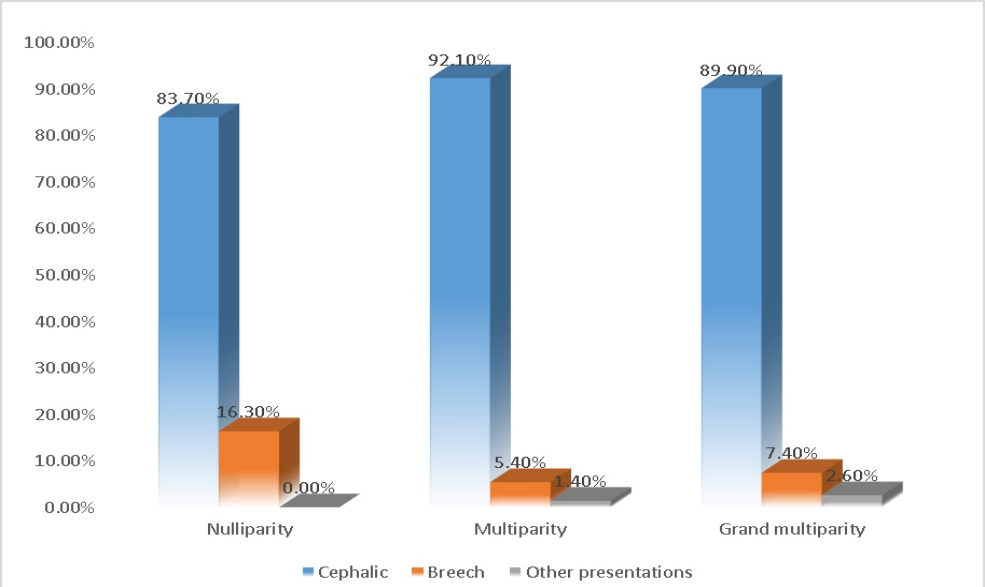

Fig 2: Presentations/Stations at delivery



Table 2: Perinatal outcome among parturients

Variables	Nulliparous n=49	Multiparity n=13887	Grand multipara n=995	Test/P-value
Outcome of Child				
Alive	40(81.6)	13469(97.0)	934(93.9)	χ^2=72.11, df=2
Dead	9(18.4)	416(3.0)	61(6.1)	p=0.001
Weight of the baby				
Mean ±SD	2.80±0.71	3.08± 0.73	2.99 ± 0.79	F=9867
				p=0.001
APGAR 5				
Low	16(32.7)	1199(8.7)	155(15.8)	p<0.001**
Moderate abnormal	5(10.2)	1195(8.7)	96(9.8)	
Reassuring	28(57.1)	11342(82.6)	730(74.4)	
APGAR 10				
Low	9(20.5)	512(3.9)	80(8.6)	p<0.001**
Moderate abnormal	2(4.5)	581(4.4)	42(4.5)	
Reassuring	33(75.0)	12201(91.8)	806(86.9)	

(F tests=One way Anova,2=Chi square tests) **=Fishers tests

Conclusion

- Extremes of Parity is a predictor of adverse outcomes. Nulliparity was associated with higher perinatal mortality and low Apgar scores
- We Recommend a more experienced Obstetrician for management of parity at extremes (nulliparous and grand-multiparous women), and contraceptive education to reduce high parity and its risks



Comparison of the Serum levels of Neutrophil Gelatinase-associated Lipocalin with Creatinine in the early diagnosis of Pregnancy-Related Acute Kidney Injury [PRAKI]

Ojekunle A, Oshodi Y.A, Awobusuyi J.O, Ayanbode S.0, Akinlusi F.M, Olumodeji M.A

Affiliations
Department of Obstetrics and Gynaecology, Lagos State University Teaching Hospital, Ikeja, Lagos

Presenting Author
OjekunleAzez Femi
Obstetrics and Gynaecology Department, Lagos State University Teaching Hospital, Ikeja, Lagos

Introduction

PRAKI is an obstetrics complication that is associated with sudden loss of kidney function at any stage of pregnancy, occurring as a coincidence during pregnancy or due to causes specific to pregnancy complications. It is a significant contributor to maternal and perinatal morbidity and mortality and near-misses with public health significance, especially in the sub-Saharan Africa. In the LMICs, PRAKI contributes 5%-20% of all AKI in the general population. In Nigeria, the prevalence of PRAKI range between 5.5% and 9.3% of AKIs in hospital settings.

A major impediment to developing effective therapeutic interventions has been the limited ability to promptly detect this condition early. Therefore, there is the need for further investigation of biomarkers that will enhance early diagnosis. Of these novel biomarkers is a promising marker known as the NGAL.

Currently, serum Creatinine is the gold standard biomarker of choice, however, it is an imperfect marker in the acute setting as it has many inherent limitations; it is affected by multiple confounding non-renal factors such as age, gender, race, and muscular mass, drug metabolism, protein intake, and hydration status. Moreover, Cr is not derived from damaged renal tubular cells and it is a marker of renal function rather than injury. The non-linear relationship between GFR and sCr means GFR may decrease by >50% from normal before a significant rise in sCr occurs. It is noteworthy that Creatinine is removed by dialysis. There is no standardized uniform references for Cr. A delay of more than 1 to 2 days between the onset of excretory dysfunction and the accumulation of Cr to a diagnostic threshold limits Cr to the retrospective detection of renal dysfunction.

NGAL is a 25kDa polypeptide having 178 amino acids covalently bound to gelatinase from human neutrophils, and predominantly found in proliferating nuclear antigen-positive proximal renal tubule cells. Generally, NGAL is expressed in low concentrations, but it increases greatly in the presence of renal epithelial injury; and markedly upregulated in early



post-ischemic conditions. Its levels correlates with the timing and severity of the renal stressor.

Aims and Objectives

Main Aim: To determine the accuracy of serum NGAL compared to sCr in early diagnosis of Praki.

Specific Objectives

1. To determine the serum level of NGAL and Cr in pregnant women with conditions at risk of AKI.
2. To compare the serum levels of NGAL with Cr in pregnant women with conditions at risk of AKI.
3. To correlate serum NGAL with serum Cr in early diagnosis of PRAKI.
4. To determine the sensitivity, specificity, negative predictive value and positive predictive value of serum NGAL compared to serum Cr in the detection of PRAKI.

Research Questions: Does serum NGAL detect the onset of AKI in at-risk pregnant subjects earlier when compared to sCr level?

The prospective longitudinal study was conducted in the Institute of Maternal and Child Health, LASUTH, Ikeja, Lagos, South-western Nigeria. The study was carried out for a period of 6months with each subjects followed up for 48hours from recruitment. The subjects were recruited by convenient consecutive sampling.

From the point of recruitment, 5ml of blood samples was obtained for the baseline [0hr] sCr and sNGAL. Subsequently, serial blood sampling was obtained at 12hr and 48hr, appropriately labelled and a portion of the sample was used to measure sCr, and the remaining portion saved for subsequent NGAL assay. The subjects whose sCr met the diagnosis of PRAKI according to the KDIGO criteria had their blood samples reserved for sNGAL analysis. The sCr concentrations was estimated using the enzymatic kinetic assay and modified Jaffe's (picric acid) reaction, while the serum NGAL analysis was done by quantitative double-Sandwich antibody ELISA technique with the commercially manufactured kit by Elabscience, 14780 Memorial Drive, Suite 105, Houston, Texas, 77079, USA, with 0.13ng/ml to 8.0ng/ml detection range. Data obtained was analyzed using SPSS version 23.

For the purpose of this study, PRAKI was defined according to the unified KDIGO classification systems as an absolute increase in sCr $\geq$ 26.5umol/L within 48hours from a known baseline.

Ethical approval was obtained from the Health Research and Ethical Committee (HREC) of the LASUTH with Reference number LREC/06/10/2218. A written informed consent was obtained from each respondent before responses were elicited. Confidentiality and privacy was fully guaranteed.



Results

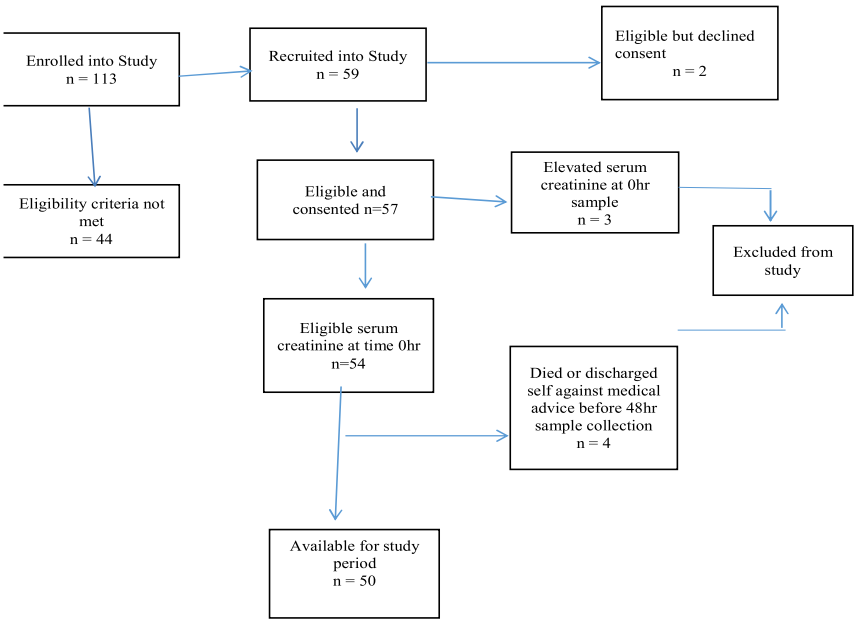

Table 1: Sociodemographic Characteristics

Variable	Frequency [n=50]	Percentage [%]
Age group [years]		
≤25	11	22.0
26-30	12	24.0
31-35	15	30.0
>35	12	24.0
Mean±SD	30.78±6.7	
Educational level		
Primary	4	8.0
Secondary	21	42.0
Tertiary	25	50.0
Occupation		
Unskilled	14	28.0
Semi-skilled	15	30.0
Skilled	21	42.0
Religion		
Christianity	37	74.0
Islam	13	26.0
Ethnic group		
Yoruba	26	52.0
Igbo	21	42.0
Hausa	2	4.0
Others	1	2.0



Table 2: Obstetrics Characteristics

Variable	Frequency (n=50)	Percentage
Booking status		
Booked	14	28.0
Unbooked	36	72.0
Gravidity		
Primigravida (1)	14	28.0
Multiparous (2-4)	29	58.0
Grand multiparous (>4)	7	14.0
Diagnosis		
DIC	4	8.0
Eclampsia	10	20.0
Heamorrhage	10	20.0
HELLP syndrome	10	20.0
Sepsis	5	10.0
Severe pre-eclampsia	8	16.0
Cardiomyopathy, ITP	3	6.0

Table 3: Median serum NGAL and creatinine.

	0hr Median(IQR)	12hr Median(IQR)	48hr Median(IQR)	p-value
Creatinine	28.25(15.5-45.1)	30.00 (14.1-49.1)	70.70(40.2-126.5)	<0.001*
NGAL	0.81(0.4-1.1)	3.50(1.8-5.8)	3.90(2.5-6.1)	<0.001*

Both serum values of NGAL and Cr had progressive rise with time, however, serum NGAL increased with significant difference within 0hr to 12hr while sCr increased with significant difference between the 12hr and the 48hr and these were statistically significant [p<0.001].

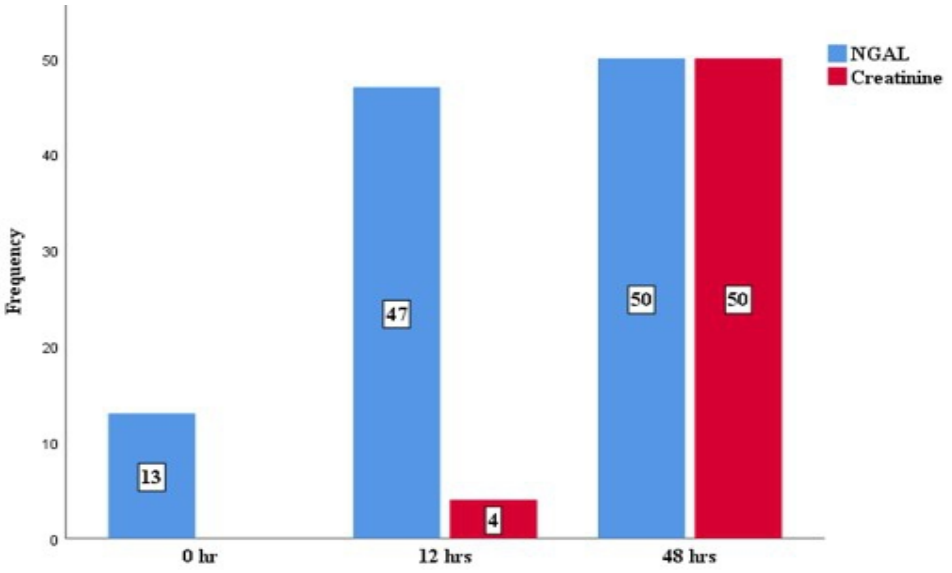

Figure 2: Prevalence of PRAKI by serum NGAL and serum Creatinine values at different time interval.

The distribution of diagnosis of PRAKI at the various time points at cut off value of >1.1ng/ml. sNGAL detected AKI range among 13 of the subjects at time 0hr of recruitment when sCr was still within reference range. At 12 hour sNGAL detected AKI in additional 34 subjects; therefore, a total of 47 by time 12 hour, while sCr detected 4.

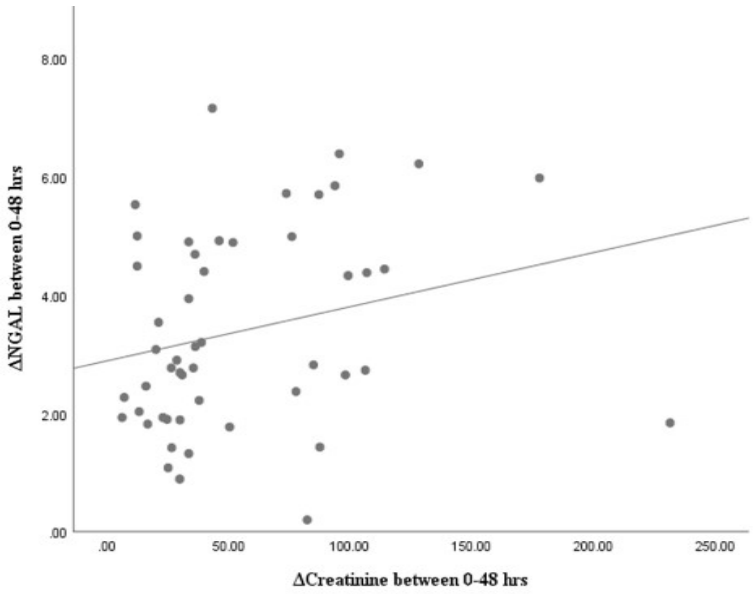

Figure 3: Correlation between rise of NGAL and creatinine between 0-48 hours among participants.



A positive correlation between the rise in sNGAL and sCr with a Spearman correlation coefficient= 0.299, and this was statistically significant [p=0.035].

	AKI status by creatinine		χ^2	p-value
	Positive	Negative		
AKI status by NGAL				
Positive	45(94.0)	1(2.0)	41.311	<0.001*
Negative	0(0.0)	4(4.0)		

Parameters	Value
True Positive	45
True Negative	4
False Positive	1
False Negative	0
Sensitivity	100.0%
Specificity	80.0%
PPV	97.8%
NPV	100.0%
Overall accuracy	98.0%

Table 4: Diagnostic accuracy of NGAL at 12hour at cut-off value of above 1.1ng/ml.

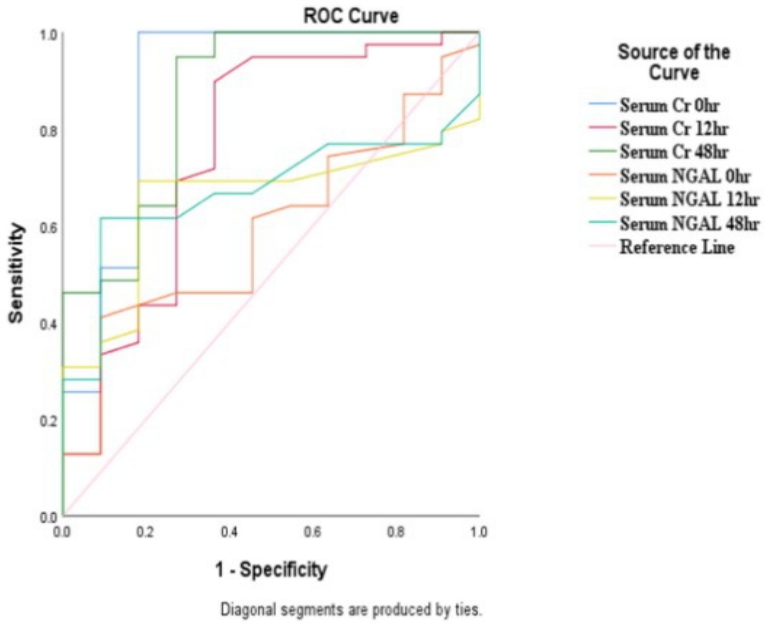

Figure 4: Receiver operating characteristics curves of NGAL and creatinine at different intervals



Table 5: Diagnostic accuracy from the Receiver operating characteristics curves

	Cut off	AUC (CI)	p-value	Sensitivity	Specificity	PPV	NPV
			Creatinine				
12hr	32.22	0.792(0.683-0.997)	**<0.001***	0.8240	0.975	0.921	0.944
48hr	41.25	0.973(0.937-0.999)	**<0.001***	1.000	0.953	0.933	0.936
			NGAL				
0hr	0.89	0.958 (0.931-0.983)	**<0.001***	1.000	0.833	0.951	0.966
12hr	2.81	0.965(0.905-0.992)	**<0.001***	1.000	0.817	0.793	0.943
48hr	3.95	0.773(0.523-0.912)	**<0.001***	1.000	0.926	0.921	0.941

Overall, NGAL had a superior early diagnostic performance compared to serum creatinine at 12hr with a higher sensitivity [100% compared to 82.4% respectively] and with a close negative predictive values [94.3% compared to 94.4% respectively]. This was statistically significant [$p<0.001$].

Conclusion

From this study, sNGAL is a better indicator of pregnancy-related acute kidney injury, in the early period of the disease compared to serum creatinine in a heterogeneous obstetrics population with clinical conditions that predispose to AKI. The early identification of high-risk PRAKI in patients may allow earlier initiation of therapies and improve patient outcome. This study demonstrate that increased serum NGAL levels at early 12hours into admission might be predictive of PRAKI development during hospitalization. Further studies are needed to support NGAL as a prognostic marker of acute kidney injury.

Recommendation

The serum NGAL measurement at baseline, and at different time points within 12hours may be used as a test pack in the early diagnosis of PRAKI.



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Assessment of PAP Smear findings among HIV infected versus HIV Non-infected women in Bauchi

Balogun SA[1], Ja'afaru UH[2,3], Tiamiyu I[2], Abdullahi MK[2,3], Richifa JS[2], Abdulrahim M[2]

Affiliations

1 Department of Obstetrics and Gynaecology, Yobe State University Teaching Hospital Damaturu.

2 Department of Obstetrics and Gynaecology, Abubakar Tafawa Balewa University Teaching Hospital Bauchi.

3 Department of Obstetrics and Gynaecology, College of Medical Sciences Abubakar Tafawa Balewa University Bauchi.

Presenting Author

Balogun Saheed Ademola

Department of Obstetrics and Gynaecology, Yobe State University Teaching Hospital Damaturu

Introduction / Background

Women living with HIV are at increased risk of HPV infection, including infection with multiple high-risk serotypes, due to impaired immune clearance. Persistent HPV infection predisposes to squamous intraepithelial lesions and cervical cancer. While previous studies have suggested higher rates of abnormal Pap smear findings in HIV-infected women compared to HIV-negative counterparts, variations exist across populations. Understanding the prevalence and pattern of cytological abnormalities in both groups is essential for guiding screening policies, especially in regions with limited resources such as Bauchi.

Objectives

The study set out to compare the prevalence and pattern of abnormal Pap smear findings among HIV-positive and HIV-negative women in Bauchi. Additionally, it aimed to identify sociodemographic and reproductive factors associated with these abnormalities in both groups.

Method

This was a comparative cross-sectional study involving 78 HIV-infected women attending the ART clinic and 78 HIV-negative women attending the gynaecology clinic. Participants were selected using simple random sampling. Information on sociodemographic, reproductive, and sexual health characteristics was obtained using a structured proforma. Conventional Pap smears were collected and reported using the 2014 Bethesda classification. Data analysis was done using SPSS version 24.0, employing Chi-square and Student's t-tests with a significance threshold of $p < 0.05$.



Results

The mean age of participants was 39.6 ± 9.9 years. The prevalence of abnormal cervical smears was 19.2% among HIV-infected women and 12.8% among HIV-negative women, a difference that was not statistically significant (p = 0.275). Among HIV-infected women, absence of formal education and early sexual debut (coitarche <15 years) were significant predictors of abnormal cytology. Among HIV-negative women, factors associated with abnormal smears included age, educational status, and social class.

The pattern of abnormal cytology revealed similar distributions in both groups:

- **ASC-US:** 26.7% (HIV-positive) vs 20.2% (HIV-negative)
- **ASC-H:** 26.7% vs 20.0%
- **LSIL:** 33.3% vs 40.0%
- **HSIL:** 6.7% vs 10.0%
- **Glandular abnormalities:** 6.7% vs 10.0%

Overall, the patterns of cytological abnormalities were comparable between the two groups.

Discussion

Although HIV-infected women are biologically more predisposed to persistent HPV infection, the study found no statistically significant difference in the prevalence or spectrum of cervical cytological abnormalities between HIV-positive and HIV-negative women. This may reflect improvements in HIV management, including widespread HAART availability, or similarities in behavioral and reproductive risk factors within the study population. Nonetheless, coitarche before age 15 emerged as an important risk factor, particularly among HIV-infected women, underscoring the influence of early sexual exposure on HPV acquisition.

Conclusion

There was no significant difference in the prevalence and pattern of abnormal cervical cytology between HIV-positive and HIV-negative women in this study. Early sexual debut was a notable predictor of abnormal smears. These findings support routine cervical cancer screening for all women—especially those living with HIV—due to the continued risk of developing cervical precancerous lesions irrespective of HIV status.



Pattern of High-Risk Human Papillomavirus at Baseline and Follow-up among Women living with HIV in Ibadan, Nigeria

Sunday O. Oyerinde[1,2], Caleb O. Idowu[1,2], Olusola Adamo[3], Dare A. Aladeokin[2], Deborah O. Oke[2], Olusola M. Ibraheem[2,4], Margaret E. Okoeguale[2], Eugene A. Ayeni[2], Adeola Fowotade[2,5] Olufemi J. Ogunbiyi[2,3], Isaac F. Adewole[1,2], Mamoudou Maiga[6], Jane Holl[7], Lifang Hou[6], Imran O. Morhason-Bello[1,2,8]

Affiliations

1. Department of Obstetrics &Gynaecology, Faculty of Clinical Sciences, University of Ibadan.
2. HPV Consortium, College of Medicine, University of Ibadan, Ibadan, Nigeria.
3. Department of Pathology, Faculty of Basic Clinical Sciences, University of Ibadan, Ibadan, Nigeria.
4. Infectious Disease Institute, College of Medicine, University of Ibadan, Ibadan, Nigeria.
5. Department of Microbiology, Faculty of Basic Clinical Sciences, University of Ibadan, Ibadan, Nigeria.
6. Department of Preventive Medicine, Feinberg School of Medicine, Northwestern University, Chicago, USA.
7. Center for Healthcare Delivery Science and Innovation, University of Chicago, Chicago, Illinois, USA.
8. Institute for Advanced Medical Research and Training, College of Medicine, University of Ibadan, Ibadan, Nigeria.

Presenting Author

Sunday O. Oyerinde
Department of Obstetrics &Gynaecology, Faculty of Clinical Sciences, University of Ibadan.
HPV Consortium, College of Medicine, University of Ibadan, Ibadan, Nigeria

Introduction

- High-risk human papillomavirus (HR-HPV) infection remains highly prevalent and persistent among women living with HIV, contributing substantially to their elevated precancer and cervical cancer risk.
- Understanding baseline and post-intervention patterns of HR-HPV positivity is essential for evaluating screening, treatment, and prevention strategies in high-burden settings.
- This study examines HR-HPV dynamics before and after intervention among women living with HIV in Ibadan, Nigeria, to inform programmatic optimisation and cervical cancer elimination efforts.

Objective

- To describe the pattern of high-risk human papillomavirus (hrHPV) results at baseline and follow-up among women living with HIV (WLWH) participating in the West



Africa Self-Sampling HPV-Based Cervical Cancer Control (WASH-CC) study in Ibadan, Nigeria.

Methods

- This prospective longitudinal study was conducted among 571 HIV- positive women attending Antiretroviral (ART) clinics, of whom 259 tested hrHPV-positive at baseline.
- Seventy-five hrHPV-positive participants completed 6-month follow-up testing using self-collected cervical samples.
- High-risk HPV genotyping was performed with the Atila Biosystems assay that involves the detection of HPV16, HPV18/45, HPV31/33/35/52/58, and HPV39/51/56/59/68.
- Intervention -Thermal ablation or loop electrosurgical excision procedure (LEEP).
- The participants were followed up at 6 months.
- Baseline prevalence was reported, while new infection or clearance or persistence was reported at follow-up visits.

Results

- The mean age of participants was 47.7±8.7 years.
- Among the 75 women with baseline and 6 months follow-up results, 25 (33.3%) achieved clearance of hrHPV, 27 (36.0%) remained positive to the same genotype, 13 (17.3%) had new infections, and 8 (10.6%) had new infections and remained positive to the initial genotype; 2(2.6%) had invalid results.
- HPV clearance was highest after thermal ablation (57.9%), followed by LEEP (45.5%), and lowest in those receiving no treatment (20.0%).
- A significant association was found between intervention type and HPV clearance ($\chi^2 = 13.27$, $p = 0.0013$).
- Persistence was most frequent in HPV31/33/35/52/58 (42.3%) and HPV39/51/56/59/68 (38.5%) groups

Conclusion

- The prevalence of non-16/18 high-risk genotypes, particularly HPV31/33/35/52/58 and HPV39/51/56/59/68, underscores the need for vaccine coverage for these genotypes.
- The higher clearance rates observed after thermal ablation and LEEP underscore the importance of early treatment for hrHPV-positive women.
- There should be a timely follow-up to identify women at high risk for cervical precancer.
- Integrating hrHPV DNA testing, self-sampling, and timely ablative or excisional therapy into routine HIV care could enhance early detection and strengthen cervical cancer prevention strategies in high-burden settings like Nigeria.



Preferences and Concerns on the methods of collecting Cervico-Vaginal samples in Ibadan, Nigeria:A Cross-sectional Study

Uduak Ima Andrew-Bassey[1,2], Yusuf Olatunji Bello[2,3], Michael Abiola Okunlola[4], Imran Oludare Morhason-Bello[2,3,4]

Affiliations

1. Pan African University Life and Earth Science Institute (including Health and Agriculture) (PAULESI), Ibadan, Oyo State, Nigeria
2. HPV Consortium, College of Medicine, University of Ibadan, Ibadan, Nigeria
3. Institute for Advanced Medical Research and Training, College of Medicine, University of Ibadan, Ibadan, Nigeria
4. Department of Obstetrics and Gynecology, University of Ibadan, Ibadan/University College Hospital, Ibadan, Oyo State, Nigeria

Presenting Author

Uduak Ima Andrew-Bassey
Pan African University Life and Earth Science Institute (including Health and Agriculture) (PAULESI), Ibadan, Oyo State, Nigeria
HPV Consortium, College of Medicine, University of Ibadan, Ibadan, Nigeria
andrewbasseyuduak@gmail.com

Introduction

- The uptake of cervical cancer screening is low despite the increasing prevalence of cervical cancer in Africa (Jallah et al., 2023; Kakotkin et al., 2023)
- HPV testing is central to modern cervical cancer prevention (WHO, 2020)
- Understanding user-centered collection preferences boosts uptake
- Part of the Preference, Attitude and Concerns on Self-sampling versus Provider Sampling for HPV Test for Cervical Cancer Screening in Ibadan (PRECISE-HPV) Study
- An exploratory mixed method study
- We compared the preferences and concerns of women on self and healthcare provider (HCP) collection of cervicovaginal samples

Methods

- Cross-sectional design using multistage random sampling technique
- Among 620 sexually active women aged 25 to 65 years in peri-urban and urban areas in Ibadan
- Eligibility Criteria: all consenting women who lived in the selected LGAs, and were willing to visit the Primary Health Centres (PHCs) at the time of data collection
- Tool: Structured questionnaire
- Analysis: Frequencies, percentages, chi-square, logistic regression using Stata 15.0
- A p-value of ≤ 0.05 was considered statistically significant for all analyses



- Ethical Consideration was obtained from the University of Ibadan and University College Hospital Ethical Review Committee (ID number: UI/EC/23/0142) and the Oyo State
  Ministry of Health (NREC Assigned Number: NHREC/OYOSHRIEC/10/11/22)

Results

Table 1: Risk factor analysis of cervical HPV self-sampling among women in Ibadan

Variables	Crude OR(95%CI)	AdjustedOR(95%CI)
Age	1.02(1.00– 1.03)	1.02(1.00– 1.04)
StudyLocation	p=0.011	p=0.142
Akinyele(Peri-urban)	1	1
IbadanNorth(Urban)	1.51(0.04– 0.49)	1.33(0.91– 1.94)
Ownatelevision	p=0.032	p=0.042
Yes	1	1
No	1.50(1.04– 2.19)	1.67(1.02– 2.74)
AwarenessofHPV	p=0.018	p=0.045
Yes	1	1
No	1.48(1.07– 2.04)	1.46(1.01– 2.12)

- 53.7% participants in the urban area preferred self- sampling compared to 56.6% in the peri-urban area that preferred HCP sampling (p=0.011)
- Participant's age, ownership of a television, and awareness of HPV were significantly associated with the preferred method of sample collection

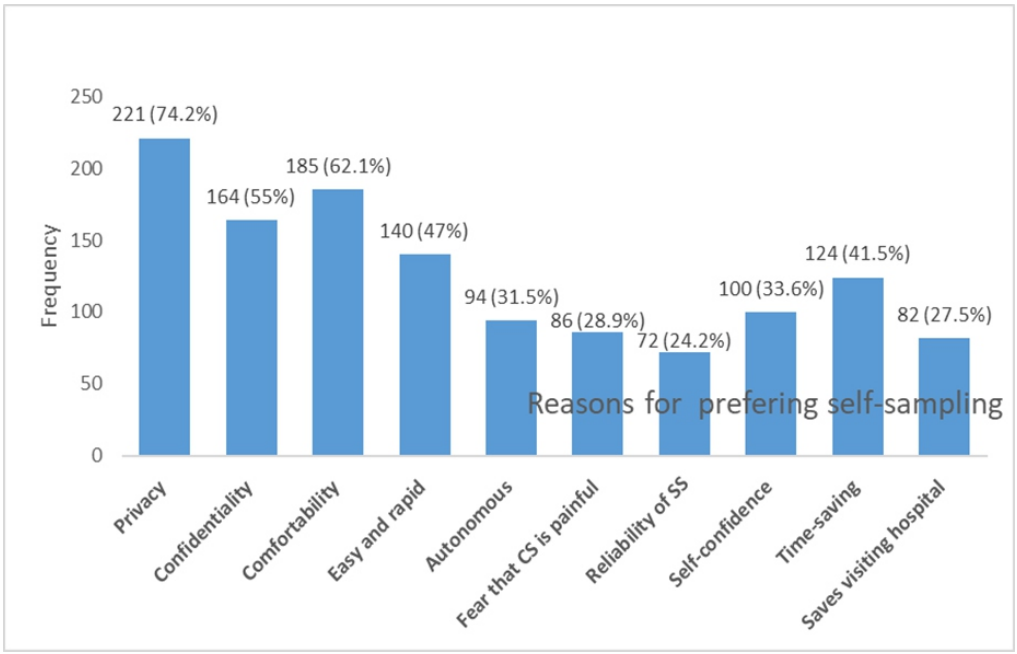

Figure 1: Reasons for preferring Self- Sampling

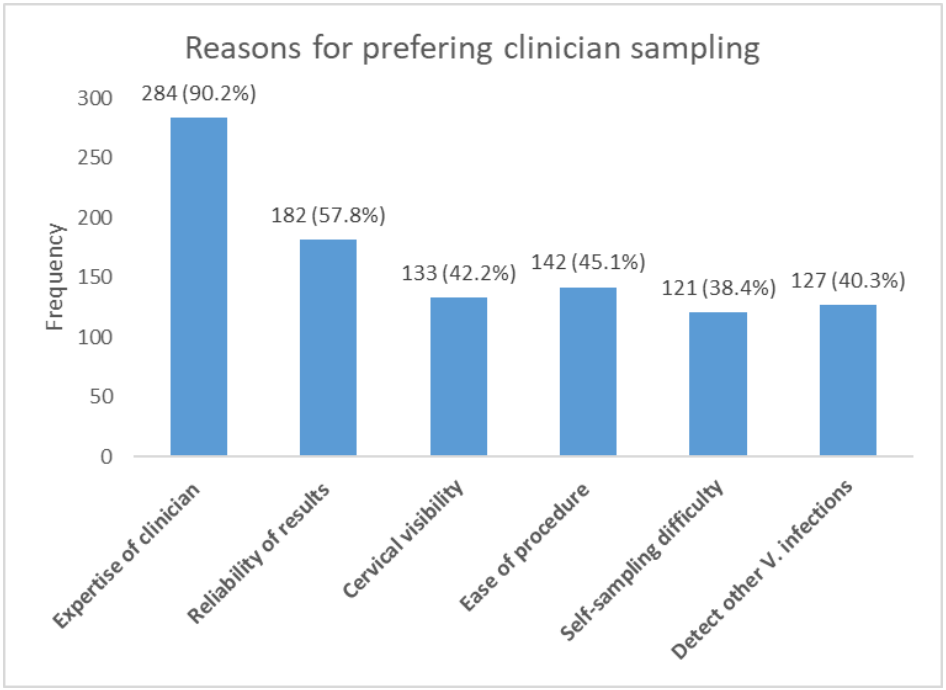

Figure 2: Reasons for preferring HCP Sampling

Conclusion

- Women's preferences for cervico-vaginal sample collection varied by community
- Urban women preferred self-sampling due to privacy, comfort, and confidentiality
- Peri-urban women preferred HCP sampling for clinician expertise and result reliability
- Findings indicate that adopting hybrid sampling strategies can boost nationwide screening coverage



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Bridging Gaps in Women's Cancer Prevention: Oral Health and Cervical HPV Screening Among HIV-Positive Women in Sub- Saharan Africa – A Negative Scoping Review

Sunday Oladimeji Oyerinde[1], Mary Adeola Oyerinde[2], Yetunde A. Afolabi[3], Prof Isaac Folorunsho Adewole[4]

Affiliations

1. Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria
2. Department of Health Education, Faculty of Public Health, College of Medicine, University of Ibadan, Ibadan, Nigeria
3. Department of Obstetrics and Gynaecology, College of Medicine, University of Ibadan, Ibadan, Nigeria.
4. Obstetrics and Gynaecology Department, Faculty of Clinical Sciences, College of Medicine, University of Ibadan, Ibadan, Oyo, Nigeria.

Presenting Author

Sunday Oladimeji Oyerinde
Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria
Email: sunday.oyerindedimeji@gmail.com | Phone: +2348033802369

Introduction

- HIV-positive women in Sub-Saharan Africa (SSA) experience a disproportionate burden of oral diseases, persistent high-risk human papillomavirus (HPV) infection, and cervical cancer—the leading cause of female cancer mortality in the region.
- While integrated HIV and cervical cancer screening programs are expanding, the role of oral health, despite its clear associations with immune status, HPV-related lesions, and overall quality of life, remains overlooked.
- Clarifying how oral health is integrated into cervical cancer screening frameworks is vital for advancing comprehensive women's health care and strengthening multisite cancer prevention strategies.
- This scoping review assessed existing evidence at this intersection to determine the extent of current research and identify critical gaps.

Objective

- To map existing evidence on the intersection between oral health and cervical HPV or cancer screening among HIV-positive women in Sub- Saharan Africa (SSA), and to identify research and service integration gaps within women's cancer prevention frameworks.



Methods

- Following the Arksey and O'Malley framework, systematic searches were conducted across PubMed, Scopus, Web of Science, African Journals Online, and grey literature for studies published between January 2000 and August 2025.
- Eligible studies involved HIV-positive women in SSA and reported oral health outcomes in the context of cervical HPV or cancer screening.
- Titles, abstracts, and full texts were screened independently by two reviewers.
- Data were charted by study design, population, outcomes, and degree of integration
- PRISMA-ScR guidelines informed reporting.

Results:

- Of 1,236 records screened, only 11 met the inclusion criteria.
- None directly examined oral health within cervical cancer screening or gynaecologic oncology prevention programs.
- The included studies primarily addressed oral manifestations of HIV or isolated cervical screening uptake, with no evidence of integrated research, programmatic collaboration, or shared service models linking oral and reproductive health

Conclusion:

- This negative scoping review highlights a major evidence and service gap at the interface of oral health, HIV, and cervical cancer prevention in SSA.
- Incorporating oral health assessments into PMTCT and cervical screening initiatives could enhance early detection, strengthen integrated prevention pathways, and improve outcomes for women living with HIV.



Perception and Uptake of Cervical Cancer Screening Services among Female Nurses in Tertiary hospitals in North-Western Nigeria

Mustapha Seleem Ayodeji[1], Ibrahim Umar Augie[1], Saidu Ibrahim Sabi[1], Mohammed Atiku Kende[2], Saadu Olatinuke Saadatu[3]

Affiliations

1. Department of Obstetrics and Gynaecology, FTH/FUBK B/Kebbi
2. DepartmentofPublicHealth, CollegeofHealth Sciences, Federal University, Birnin Kebbi Nigeria.
3. Department of Nursing, FTH, Birnin Kebbi, Nigeria

Presenting Author

Mustapha Seleem Ayodeji
Department of Obstetrics.andGynaecology, FTH/FUBK B/kebbi

Introduction

- Carcinoma of the cervix is one of the most common causes of cancer-related death among women especially in Sub-Saharan African
- This can be avoided by conducting timely and routine screenings.
- The assumption is that the options for cervical cancer screening are known to nurses and should serve as role models for using these services, but studies have shown that this is not always the case.



Objectives

- The study evaluated the perception and uptake of cervical cancer screening services among nurses in tertiary hospitals in kebbi state, Nigeria.

Methodology

- It was a cross-sectional study conducted among female nurses in the three tertiary hospitals (Federal Teaching Hospital, Sir Yahaya Memorial Hospital, and Kebbi Medical Centre) in kebbi state.
- Data were collected between November and December 2022, using self-structured questionnaire.
- SPSS version 26 was used to analyze the data that was generated.
- A p-value of ≤ 0.05 was regarded as significant.

Results

- A total of 270 nurses participated in the study
- 168 of the participants (62.2%) had adequate awareness of the cervical cancer screening methods
- 158 respondents (58.9%) had a positive perception toward cervical cancer screening.
- The majority of the nurses, 72%, had never had a cervical cancer screening done
- 89% would be willing to have one if there was a chance.
- The reasons given for not using screening services include fear of the results (65.9%), fear of the pain (56.3%), and lack of time (44.4%)
- There was significant association between the number of years of professional experience and the uptake of cervical cancer screening services with a p value of 0.003.

Conclusion

- The nurse's rate of uptake was found to be very low despite having adequate knowledge about cervical cancer and cervical cancer screening services.
- In order to encourage nurses to present for screening, it is advised that hospital managements implement frequent screening programs for health workers.



HPV Vaccination in sub-Saharan Africa: Understanding Hesitancy, Evaluating New Strategies, and Lessons in Fast-tracking Cervical Cancer elimination

Oluwadamilola Oyadeyi[1], Afeez Akintayo[1] , Fatimoh Adepoju Olajuwon[1] , Taofeeqah Lawal [1] , Daniela Manno[2] , Abideen Salako[1,3], Yahaya Bello[1,4], Ahmed Rufai Garba[1,4], Adeyinka Aderinto[1,5], Babatunde L Salako[1,6], Isaac Adewole[1,6], John Changalucha[7], Deborah Watson-Jones[1,7], Imram Moharson-Bello [1,6]

Affiliations

[1]HPV Consortium, College of Medicine, University of Ibadan, Ibadan
[2]Department of Clinical Research, London School of Hygiene and Tropical Medicine
[3]Nigeria Institute of Medical Research, Yaba, Lagos
[4]National Primary Health Care Development Agency, Abuja
[5]Department of Sociology, Faculty of Social Sciences, University of Ibadan, Ibadan
[6]Department of Obstetrics and Gynaecology, College of Medicine, University of Ibadan,
[7]National Institute for Medical Research, Mwanza Centre/Mwanza Intervention Trials

Presenting Author

Oluwadamilola Oyadeyi
HPV Consortium, College of Medicine, University of Ibadan, Ibadan

Introduction

Cervical cancer remains a significant public health concern and continues to be one of the leading causes of cancer-related deaths among women in sub-Saharan Africa. The high mortality rate is primarily driven by limited access to screening services, weak health systems, and persistent vaccine hesitancy, which undermine prevention efforts (Durojaye et al., 2024; Burayu et al., 2025). Although the human papillomavirus (HPV) vaccine has been proven to be highly effective in preventing cervical cancer, vaccination coverage across the region remains unacceptably low. This gap is attributed to a combination of factors, including financial constraints, inadequate infrastructure, and delays in national rollout and policy implementation (Han et al., 2025; Manga et al., 2025).

In response to this challenge, the World Health Organization (WHO) introduced a global strategy aimed at eliminating cervical cancer as a public health problem. This strategy seeks to ensure that 90% of girls are fully vaccinated against HPV by 2030. However, most countries in sub-Saharan Africa remain off-track to meet this target (Chidebe et al., 2025). A key obstacle is the persistence of vaccine hesitancy, which is often fuelled by misinformation, socio-cultural and religious beliefs, and lingering doubts about vaccine safety and necessity.
The persistence of these challenges poses a serious threat to the region's ability to achieve the Sustainable Development Goals (SDGs), particularly SDG 3 (Good Health and Well-being) and SDG 5 (Gender Equality). Thus, overcoming vaccine hesitancy and strengthening immunisation systems are essential for accelerating progress towards cervical cancer elimination. Understanding the underlying behavioural, structural, and systemic drivers of vaccine hesitancy is a necessary step toward designing effective and contextually appropriate



interventions. Likewise, evaluating emerging strategies such as school-based vaccination, gender-neutral programmes, and community-driven advocacy can offer valuable insights into how sub-Saharan African countries can fast-track HPV vaccine acceptance and coverage to move closer to the WHO 2030 elimination goals.

Objective(s)

The main objective of this study was to examine HPV vaccination hesitancy and assess innovative strategies being implemented across sub-Saharan Africa to increase vaccine uptake and accelerate cervical cancer elimination.

Method

A narrative synthesis approach was employed to gather and interpret existing evidence on HPV vaccination uptake, hesitancy, and implementation strategies across sub-Saharan Africa. This approach was chosen because it allows systematic collection and qualitative interpretation of findings across diverse study designs, enabling a comprehensive understanding of both behavioural and policy-related factors influencing vaccine acceptance.
Peer-reviewed studies published between 2010 and 2025 were retrieved primarily from the PubMed database. The search used a combination of keywords and Boolean operators to ensure accuracy and relevance. Search terms included *"HPV vaccination," "hesitancy," "policy barriers," "gender-neutral vaccination," "sub-Saharan Africa,"* and *"cervical cancer elimination."* These terms were selected to capture the full scope of existing research on HPV vaccine uptake, determinants of hesitancy, and programmatic innovations in the African context.

The selection process involved several steps, starting with titles and abstracts screening to remove duplicates and exclude studies not directly related to HPV vaccination or cervical cancer prevention. After which, the full texts of potentially relevant articles were reviewed to confirm their alignment with the World Health Organization (WHO) cervical cancer elimination framework, particularly its 90–70–90 targets. Studies were included if they (1) examined HPV vaccine hesitancy, (2) assessed socio-cultural or religious factors affecting uptake, or (3) evaluated policy, cost, or system-level barriers to vaccine delivery.
Data extraction was guided by a structured framework focusing on three main thematic areas: (1) determinants of vaccine hesitancy, (2) health system readiness and delivery capacity, and (3) innovative implementation strategies aimed at improving vaccine coverage. Each study's findings were coded and summarised under these themes. The synthesised evidence was then analysed to identify recurring barriers, emerging opportunities, and lessons learned from national and regional HPV vaccination programmes across sub-Saharan Africa.

Results

Emerging Strategies: The synthesis revealed that several promising strategies are being implemented across sub-Saharan Africa to increase HPV vaccine coverage and accelerate progress toward cervical cancer elimination. School-based vaccination programmes have emerged as one of the most effective delivery models, enabling large-scale access for eligible girls and minimising missed immunisation opportunities (Manga et al., 2025). These



programmes benefit from established school infrastructure and provide an efficient mechanism for reaching adolescents within structured environments.
In addition to school-based delivery, community-led advocacy and faith-based engagement have played vital roles in countering misinformation and strengthening public confidence in vaccination campaigns. Such approaches are particularly effective in rural settings, where local leaders and religious figures often influence health-related decisions. By framing vaccination as a community health responsibility rather than an individual choice, these initiatives have increased awareness and acceptance.

A further innovative strategy has been the introduction of gender-neutral vaccination policies, which extend immunisation to boys as well as girls. This approach not only reduces overall HPV transmission but also helps normalise vaccination as a general public health intervention, thereby mitigating gender-related stigma. Single-dose vaccination schedules, as recently endorsed by the WHO, have also demonstrated strong potential for improving adherence by simplifying logistics and reducing the cost burden associated with multi-dose regimens. Also, regional collaborations among governments, global health agencies, and non-governmental organisations have enhanced supply chain efficiency, improved coordination, and ensured a more consistent vaccine supply. Collectively, these efforts demonstrate a growing regional commitment to adopting context-appropriate solutions for improving vaccine access.

Key Barriers Identified: Despite these advances, the review highlighted several persistent challenges that continue to constrain HPV vaccination uptake in the region. Vaccine hesitancy remains one of the most significant barriers, often driven by misinformation, cultural misconceptions, and distrust toward Western-manufactured vaccines. In many settings, rumours linking the vaccine to infertility or moral concerns about adolescent sexual behaviour have fuelled parental resistance. Opposition from some religious groups and the absence of consistent health education further compound these issues, slowing progress toward widespread acceptance.
Financial and structural constraints also threaten programme sustainability. Many low-income countries rely heavily on donor funding, which limits long-term planning and jeopardises continuity once external support declines. At the system level, weak cold-chain infrastructure, shortages of trained personnel, and fragmented data management systems continue to undermine effective vaccine delivery. These gaps not only affect vaccine quality and monitoring but also reduce the capacity to track coverage and identify missed populations.
In addition, policy inconsistencies and variable government commitment have slowed the institutionalisation of HPV vaccination into national immunisation schedules. Limited male involvement in vaccination campaigns has also reduced opportunities to foster shared responsibility for HPV prevention. These challenges underscore the need for holistic and well-coordinated strategies that combine behavioural, structural, and policy interventions to strengthen vaccine uptake and sustain progress toward cervical cancer elimination in sub-Saharan Africa.



Discussion

The findings emphasise that while HPV vaccination remains a central pillar of cervical cancer prevention, realising its full potential in sub-Saharan Africa requires deliberate efforts to address vaccine hesitancy and strengthen delivery systems. Achieving the World Health Organization's (WHO) 2030 elimination targets depends on creating an enabling environment in which communities are informed, empowered, and confident in the benefits of vaccination. Building public trust requires transparent, consistent communication about vaccine safety, long-term efficacy, and the broader health benefits of HPV prevention. When communities understand the protective value of vaccination not only for individuals but also for families and society, they are more likely to participate actively in immunisationprogrammes.

Culturally tailored health education remains critical to this process. Leveraging existing community structures—such as schools, women's groups, and faith-based organisations—provides effective platforms for addressing misconceptions and countering misinformation (Chidebe et al., 2025). Evidence from several African contexts suggests that engaging respected local figures, including teachers, traditional leaders, and religious clerics, can help translate scientific messages into locally meaningful narratives that promote acceptance. This culturally grounded approach is critical in rural and conservative settings where myths surrounding fertility and morality continue to fuel hesitancy.

Similarly, the sustainability of vaccination programmes depends on long-term investment in health system strengthening. Enhancing cold-chain infrastructure, modernising data and record-keeping systems, and ensuring continuous training for healthcare workers are vital steps to improving both service quality and coverage. Health workers play a crucial role as trusted intermediaries, and empowering them with accurate information and empathetic communication skills can significantly influence parental decisions to vaccinate.

To sustain progress, governments must also prioritise multi-sectoral partnerships with international agencies, civil society, and the private sector. Such collaborations are essential to scale successful initiatives, such as school-based vaccination, community outreach models, and the recently endorsed single-dose strategy. Furthermore, co-designing interventions with parents, adolescents, and opinion leaders will enhance community ownership and foster behavioural change that endures beyond external funding cycles. Hence, integrating these strategies within national immunisation frameworks will not only accelerate HPV vaccine uptake but also strengthen broader public health systems. A coordinated, inclusive, and ethically grounded approach anchored in trust, education, and infrastructure offers the best pathway toward eliminating cervical cancer as a public health problem in sub-Saharan Africa.

Conclusion

In conclusion, HPV vaccination remains one of the most effective tools for preventing cervical cancer and promoting women's health across sub-Saharan Africa. However, achieving elimination goals requires more than vaccine availability; it demands coordinated efforts to overcome hesitancy, improve health infrastructure, and sustain political and financial commitment. Countries in the region can accelerate progress toward cervical cancer



elimination by integrating context-sensitive communication strategies, expanding school-based and gender-neutral vaccination initiatives, and ensuring equitable access. Strengthening community trust, policy commitment, and inter-sectoral collaboration will be central to achieving the WHO 90–70–90 targets and contributing to the broader vision of health equity and gender equality in Africa.



Preferences for HPV Screening and Treatment Among Women Living with HIV in Ibadan, Oyo State

Olusola M. Ibraheem[1], Deborah O. Oke[1,9], Oluwatosin E. Lawal[1], Ayobami C. Faluyi[1], Sunday O. Oyerinde[1,2], Caleb O. Idowu[1,2], Rukayat O. Adekunle[1], Olayemi K. Ariyo[1], Olumide O. Adewuyi[3], Endurance E. Olajide[3], Adeola Fowotade[1,4], Moses O. Adewumi[1,5], Olufemi J. Ogunbiyi[1,6], Isaac F. Adewole[1,2], Imran O. Morhason-Bello[1,2], Mamoudou Maiga[7], Jane Holl[8], Lifang Hou[7]

Affiliations

[1]HPV Consortium, College of Medicine, University of Ibadan, Nigeria.
[2]Department of Obstetrics and Gynaecology, Faculty of Clinical Sciences, College of Medicine, University of Ibadan, and University College Hospital, Ibadan, Nigeria.
[3]Department of Public Health Nursing, University College Hospital, Ibadan, Nigeria.
[4]Department of Microbiology, Faculty of Basic Clinical Sciences, University of Ibadan, Ibadan, Nigeria.
[5]Department of Virology, Faculty of Basic Medical Sciences, University of Ibadan, Ibadan, Nigeria.
[6]Department of Pathology, Faculty of Basic Clinical Sciences, University of Ibadan, Ibadan, Nigeria.
[7]Department of Preventive Medicine, Feinberg School of Medicine, Northwestern University, Chicago, USA.
[8]Department of Neurology, University of Chicago, Chicago, USA.
[9]Department of Epidemiology and Medical Statistics, Faculty of Public Health College of Medicine, University of Ibadan, Nigeria.

Presenting Author

Oluwasola M Ibraheem
HPV Consortium, College of Medicine, University of Ibadan, Nigeria

Introduction

- Human Papilloma Virus (HPV) is a prevalent Sexually Transmitted Infections (STIs)
- Women Living with HIV (WLWHIV) are more susceptible to the virus due to weakened immune system (Swase, Ilemobayo, Maduabuchi, 2025)
- Screening remains low in Sub Saharan Africa (Emagneneh at al, 2025)
- Understanding the preferences of WLWHIV for screening and treatment, would be beneficial to develop interventions

Objectives

- To understand the preferences of women living with HIV (WLWHIV) for screening and treatment
- To explore the choice of HPV screening and treatment among WLWHIV



Methods

- Data from West Africa Self Sampling HPV-Based Cervical Cancer Control Programme for WLWHIV (WASH-CC)
- Nine Focus Group Discussions (FGD) conducted among WLWHIV (2), nurses (1), Community Health Workers (CHW)(1), doctors (2), laboratory personnel (1), and community and religious leaders (1), and policy makers (1)
- Number invited and number required to conduct FGD
- Deductive approach was used for thematic content analysis

Results

Table 1: Occupation of the participants

Population	Number of Participants	Mean age (SD)
Policy makers	7	54.2±5.3
Nurses	5	46.2±4.6
WLWHA (2 FGD sessions)	15	36.1±15.7
Lab scientists	6	48.5±4.0
Gynaecologist	7	48.3±4.8
Community & religious leaders	10	47.0±11.7
Community health workers	9	49.7±10.6
Pathologist	5	41.7

Level of awareness

- Participants were aware that HPV is a cause of Cervical Cancer (CC) in women.
- That HPV and CC is something dangerous which can lead to death if any of these diseases spread in the body
- It can easily be controlled if detected earlier (Community and religious leaders)

Preference for places where samples can be taken in the community

- It can be taken anywhere in the clinic or in the community as long as privacy can be maintained (A Policy maker)

Preference for mode of collection of results varied from

- If they can drop their samples and then go and we give them the result possibly online, we call them, it would be fine (Community Health Workers)
- One of the best things is that whoever that does any test in the lab, will somehow anticipate to get the result whether positive or negative… I think it depends on our counselling that we really make them to… if we strengthen that counselling…It is essential. … So it depends, if you can just strengthen that while we are telling them when they want to go and do that one, it will be of good benefit. So that when they are coming they will so much want to know what will be in that result either good or the second one (Community Health Workers)



Preference for how a positive test must be disclosed in person and reminders via text messages or calls suggested for follow-up

- If the result is out, you tell them madam your result is out, please come for it. Do you know their coming will be for two things. Number one to tell them the result even possibly for number two for post-counselling and three for treatment. So you have to call them to come back. They cannot for any reason wait for one and a half hours even if you give them the whole world, they will not wait for one and a half hours. (Community Health Worker)

Participants requested detailed information about treatment, staging, treatment options and follow-up calls during the treatment phase.

- There should be a healthcare worker too to be reminding them that your next treatment is this period because if she is getting better she may not come for her follow up treatment. That way she'll be interested in coming to the facility because of their care (Policy Makers)

Conclusion

- Most participants desire for HPV screening, treatment, and services as a method of cervical cancer screening
- They want the procedure to be convenient, accessible, and patient friendly • They shared their preferences on the place for cervical cancer screening, methods of sample collection, approach to disclose result and information about treatment
- Policymakers and health care providers should consider these preferences to improve the uptake of cervical cancer screening and treatment



Climate Change and Reproductive Health: Emerging Challenges and Opportunities for Family Planning

E.O Famutimi[1,2], T.D Odetola[3], A.S Olutoye[4], A.O Olajide[5], D.O.O Shonibare[6], P.C Chukwuere[7], O Olayemi [4]

Affiliations

1. NuMIQ Research Focus Area, Faculty of Health Sciences, Potchefstroom, South Africa
2. Clinical Nursing Department, University College Hospital, Ibadan, Nigeria
3. Department of Community Health Nursing, Faculty of Nursing, University of Ibadan, Ibadan, Nigeria
4. Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria
5. Department of Maternal and Child Health Nursing, Faculty of Nursing Sciences, Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria
6. Department of Maternal and Child Health Nursing, Faculty of Nursing, McPherson University, Seriki Sotayo, Ogun State, Nigeria
7. Lifestyle Diseases, Faculty of Health Sciences, North-West University, Mahikeng, South Africa

Presenting Author

Ademola Samuel OLUTOYE

Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria

Introduction

- Climate change is recognized as a major global health challenge, with farreaching implications for human health (Zhao et al. 2022).
- Climate change exacerbates reproductive health (RH) disparities, threatening the well-being of vulnerable populations worldwide (Arunda et al., 2024).
- Women's RH is notably sensitive to climate-related stressors, including extremes of temperature, air pollution, and natural disasters (Habibi, et al. 2024).
- This review aims to provide a comprehensive synthesis of current evidence on the impact of climate change on RH, maternal, and child health, and to highlight the need for integrated solutions to address these pressing global health challenges.

Methods

- A narrative review
- Published literature on the effects of climate change on RH was carried out.
- A global literature search: PubMed, Scopus, Web of Science, and ScienceDirect
- keywords: "climate change," "reproductive health," "fertility," maternal health," family planning," "adaptation," and "resilience.
- The search encompassed peer-reviewed articles and institutional reports from 2020 to 2025.



- Forty-eight English language publications were eligible for this review.
- The data were extracted and synthesised by a thematic analysis approach.

Results

- Direct Effects of Climate Change on Reproductive Health
  - ✓ Exposure to extremes of temperature:
  - ✓ disrupt menstrual cycles
  - ✓ reduce fertility and increase the risk of miscarriage and preterm birth. (Muralidharan et al. 2025; McElroy et al 2022)
- Air Pollution: Increased exposure to particulate matter and other pollutants is associated with reduced fertility, increased risks of miscarriage, preterm birth, and low birth weight (Ward et al. 2024; Sarizadeh et al 2020).
- Chemical Exposures are associated with endocrine disruption and may be exacerbated by climate change
- affect reproductive health and fetal development(Pettoello-Mantovani et al. 2023)
- Indirect Effects of Climate Change on Reproductive Health
  - ✓ Natural Disasters:Extreme weather events such as floods, hurricanes, and wildfires can disrupt access to reproductive health services
  - ✓ increase the risk of gender-based violence, and exacerbate existing health inequalities (Anna et. al 2025 & Women Deliver 2021)
  - ✓ Socioeconomic Factors:
  - ✓ Climate change can exacerbate poverty, displacement, and food insecurity, which in turn can negatively impact reproductive health outcomes. (Anna et. al 2025 & Women Deliver 2021)
- Public Health and Social Implications
  - ✓ Vulnerable Populations: Women of lower socioeconomic status and those living in disaster-prone areas are particularly vulnerable to the adverse effects of climate change on reproductive health (Papadiochou et al. 2024)
- Policy and Interventions**:**
  - ✓ There is an urgent need for public health interventions and policies to mitigate environmental exposures that negatively impact reproductive health.
  - ✓ Future research should focus on longitudinal and interventional studies to establish causal relationships and inform effective public health strategies(Amadi et al.2025).

Discussion

- The review highlights the complex and multifaceted impact of climate change on reproductive health.
- Both direct and indirect pathways contribute to adverse outcomes,
- Vulnerable populations are disproportionately affected.
- The review indicates the importance of a holistic approach to addressing the reproductive health implications of climate change, including targeted interventions, policy development, and further research



Conclusion

- Climate change poses an increasing but underappreciated risk to reproductive health and family planning due to insufficient resources.
- Incorporating RH into climate-resilient health plans is key to achieving equitable and sustainable solutions.
- Policymakers and implementers must draw reproductive-health agendas into climate adaptive and mitigative frameworks, with primacy placed upon gender equality, rights, and access of the most vulnerable.

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The symbiotic approach to strengthening the health workforce through onsite multidisciplinary, simulation-based CEMONC training and mentorship: Evidence of improved service delivery across 15 facilities in Nigeria high burden states (Kano, Katsina, and Kebbi)

Okoli[1], Jaiyeola Oyetunji[1], Chioma Oduenyi[1] Oris Ikiddeh[1], Comfort Okpe[1], Mohamad Umaru[2], Adetiloye Oniyire[1]

Affiliations
[1]Jhpiego, Abuja, Nigeria.
[2]State Ministry of Health, Katsina

Presenting Author
Elizabeth Chukwu, Jhpiego, Abuja, Nigeria

Introduction

- The Federal Ministry of Health (FMOH) through the Sector Wide Approach (SWAp) Unit in collaboration with Jhpiego conducted a nationwide health facility assessment of Comprehensive Emergency Obstetric and Newborn Care (CEmONC) services (August - October 2024) across 774 local government areas (LGAs) (1 State designated CEmONC facility per LGA).
- Evaluated availability of (Infrastructure, Equipment, Essential drugs, HRH, Emergency referrals etc) and utilization of life-saving procedures and developed bills of quantities (BoQs) for infrastructure upgrades (laying the groundwork for targeted investments in maternal and newborn health). In addition, assessed the knowledge and skills of health care providers across 771 facilities.
- Critical gaps identified in emergency obstetric and neonatal care competencies, informing tailored capacity-building interventions to improve service delivery and reduce preventable deaths

Objective

- To strengthen the health workforce capacity through onsite multidisciplinary training and clinical
- To provide evidence of Improved Service Delivery across the 15 supported Facilities in Nigeria's High-Burden States (Kano, Katsina and Kebbi)

Methodology: Onsite Competency Training

- Advocacy visit to HCH and SMoH team (Including Health facility selection)
- Identification and on-boarding of state-based Consultants (15 Ob-Gyn, 15-Neonatology, 3Anaesthesia and 3-Hematologist)
- Pretraining health facility visits and identification of trainees which includes Medical doctors Nurse/Midwives, Lab technicians drawn across various units (ANC, /Maternity L&D/Postnatal, Pediatrics, Theatre/ laboratory)

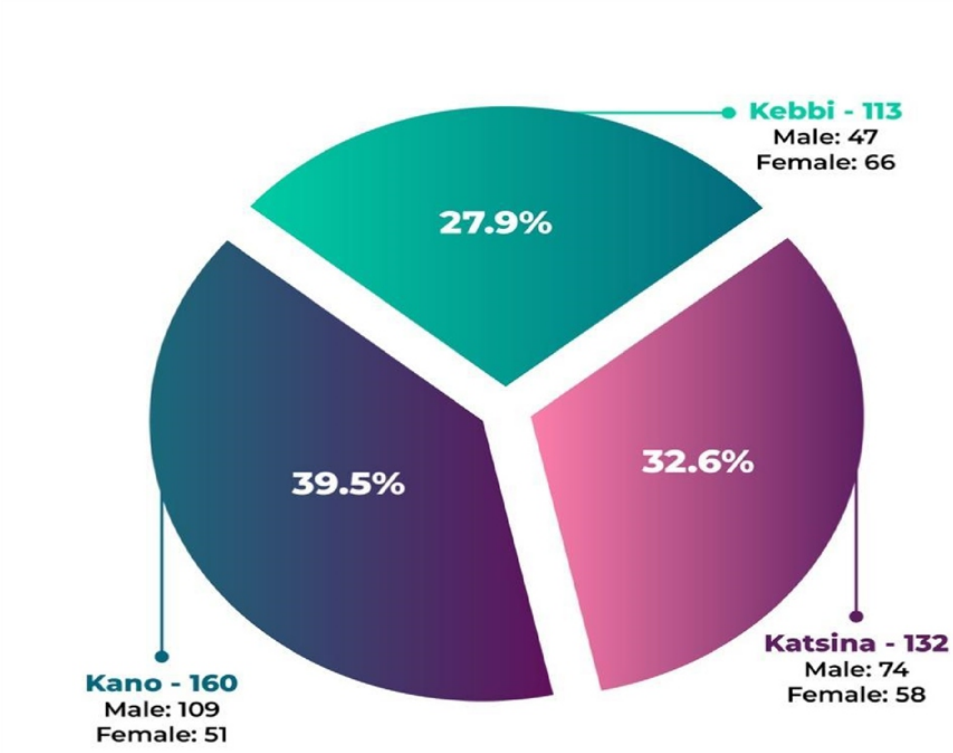


Methodology: Onsite Competency Training

- Three (3) days standardization workshop to review and finalize training curriculum and skills standardization
- Fourteen (14-days) multidisciplinary onsite training deploying high-frequency (LDHF) model across 15 facilities (5 per state) in Kano, Katsina, and Kebbi
- Each facility was trained by four specialists covering 7–12 providers per session. Obstetrician-Gynaecologist (Ob-Gyn):6 days; Neonatology: 4 days anaesthesia: 2 days; Blood transfusion: 2 days
- Training combined theoretical instruction, simulation-based exercises, video-guided modules, hands-on clinical practice and ongoing mentorship

Results: Onsite CEmONC capacity strengthening (June 2025)

- Only 41 (5.3%) of the 771 health facilities had performed all 9 life-saving CEmONC signal functions in the last 4 weeks prior to the assessment (set of critical obstetric and neonatal interventions for preventing death of women and newborns with complications during pregnancy and childbirth).
- Significant health care provider competency gaps, particularly for care of newborns
- 405 Health workers (HWs) trained across kano, Katsina and Kebbi states
- 57% Male, 43% Female in 15 General hospitals





3 States

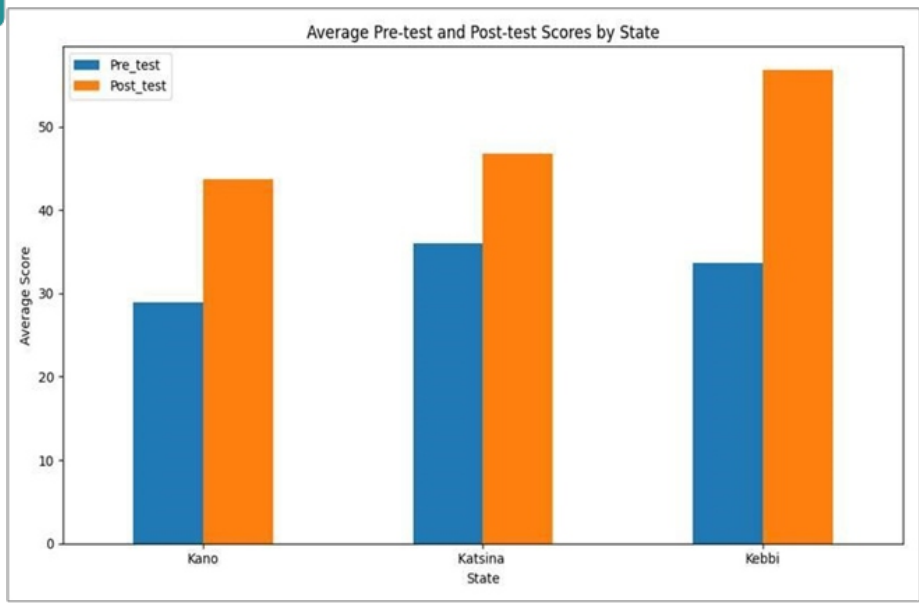


KANO	KATSINA	KEBBI
Bebeji	Baure	Bunza
Bichi	Dutsinma	Gwandu
Danbatta	Ingawa	Shanga
Gaya	Rimi	Aliero
Sheik,	Mani	Koko

15 General Hospitals

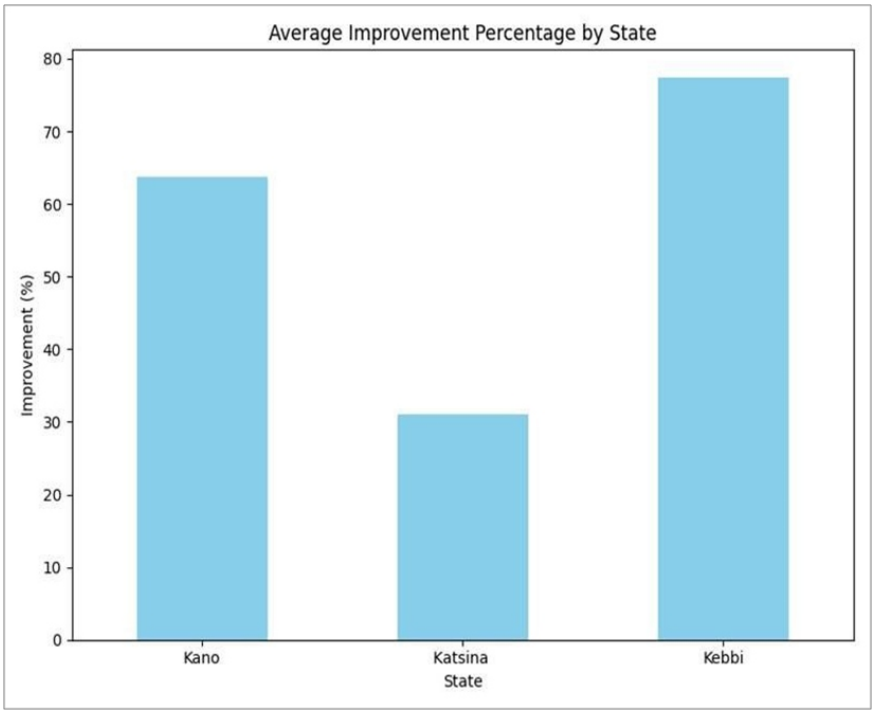
8

Newborn care

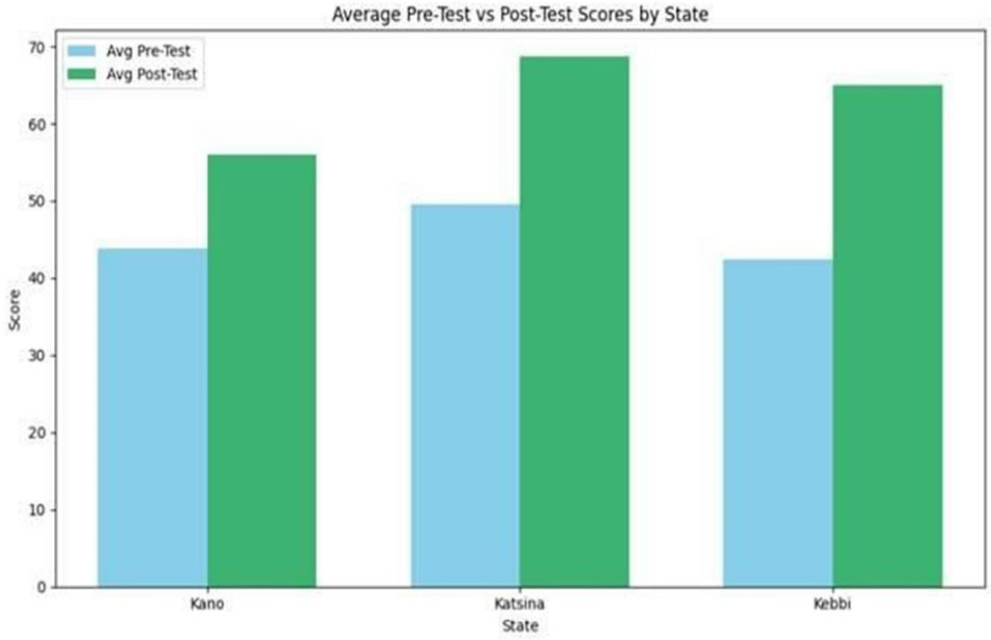


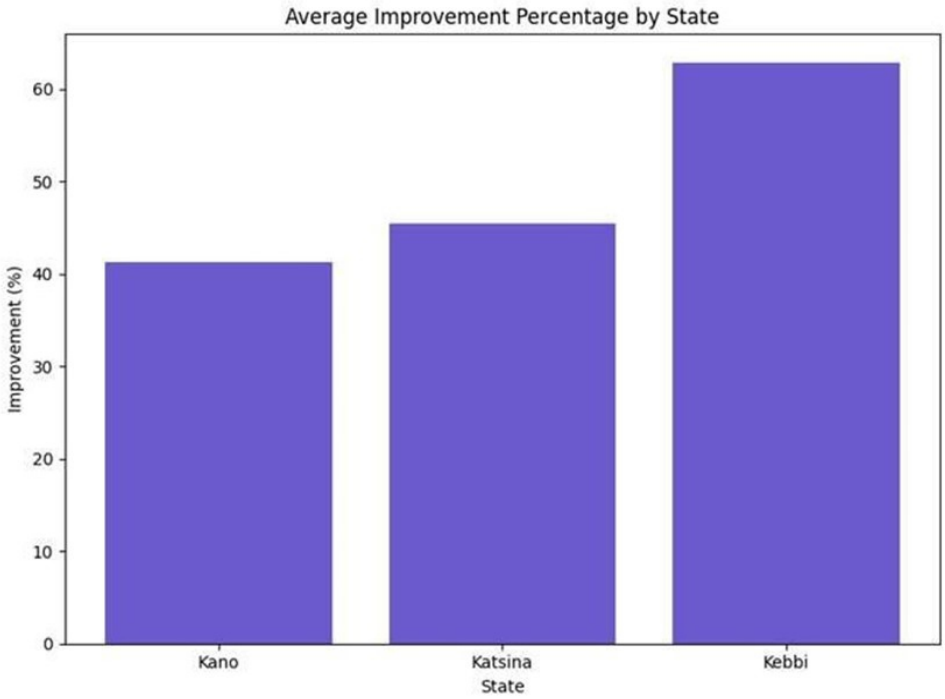


- 31% -77% Improvements in Provider Knowledge of Comprehensive Newborn Care before and after Mentorship ranged between 41.2% -62.8% Improvements in Provider Knowledge in Helping mother Survive Pre-eclampsia/Eclampsia (PE/E) Clinical care before and after Mentorship

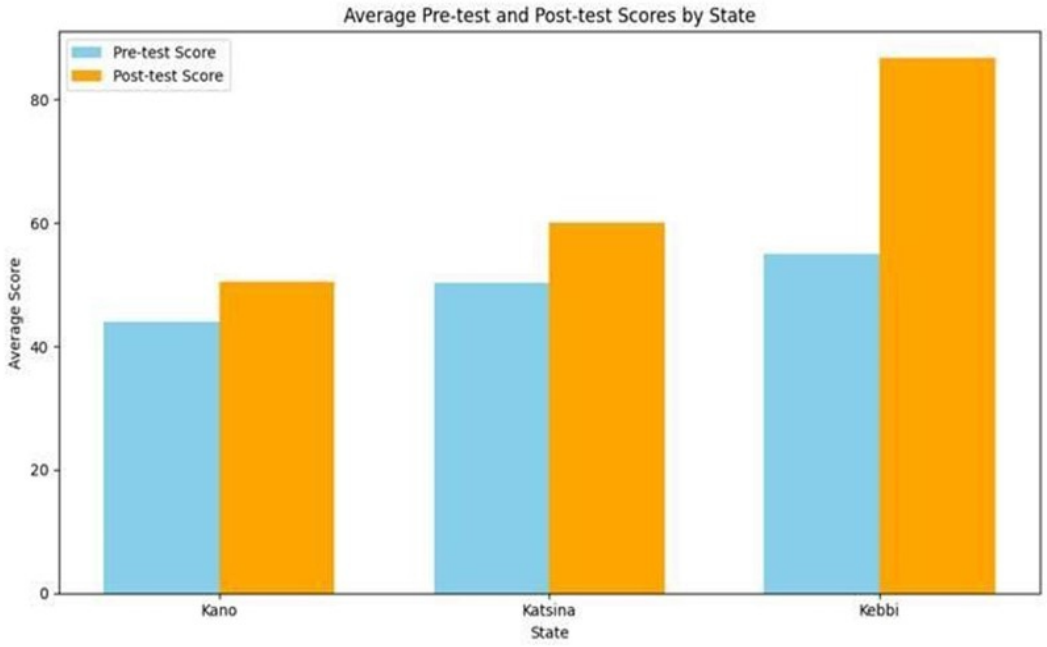


Kebbi State showed the highest average improvement in knowledge scores after mentorship (77.36%), followed by Kano (63.77%) and Katsina(30.97%).

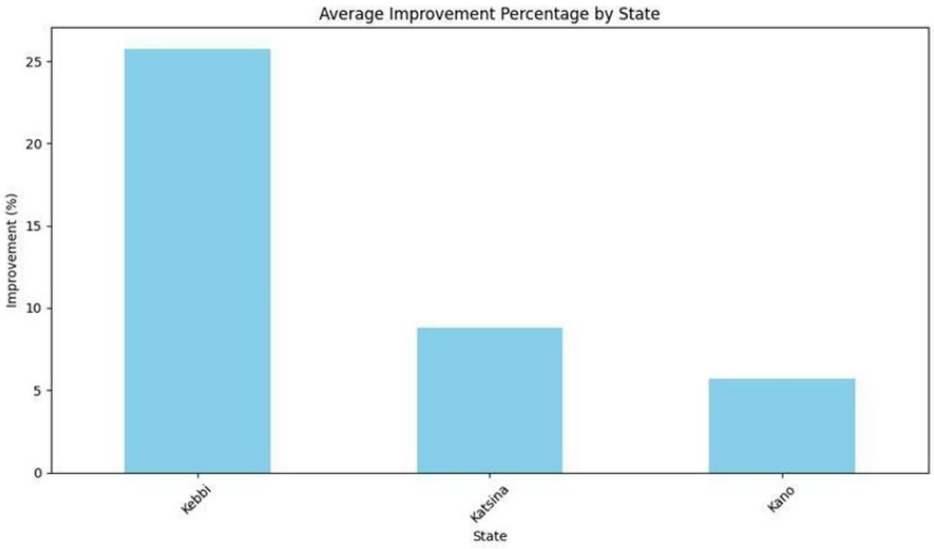




- Kebbi providers had the highest relative improvement (62.8%) in knowledge despite having the lowest starting score (42.4%). Katsina providers had the highest post-test average knowledge score (68.7%) with a 45.4%
- Average percent improvement in knowledge. Kano providers had an average of 41.2% increase in knowledge, underscoring consistent progress across all states.
- 8.9% -24.2% Improvements in Provider Knowledge in Safe Caesarean Section care before and after Mentorship

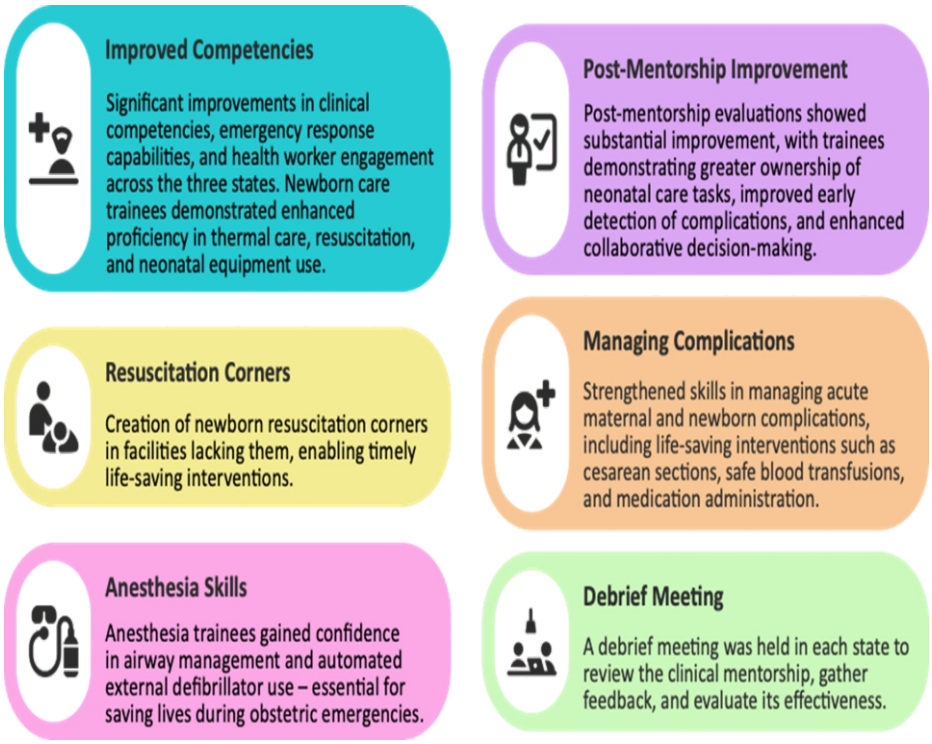


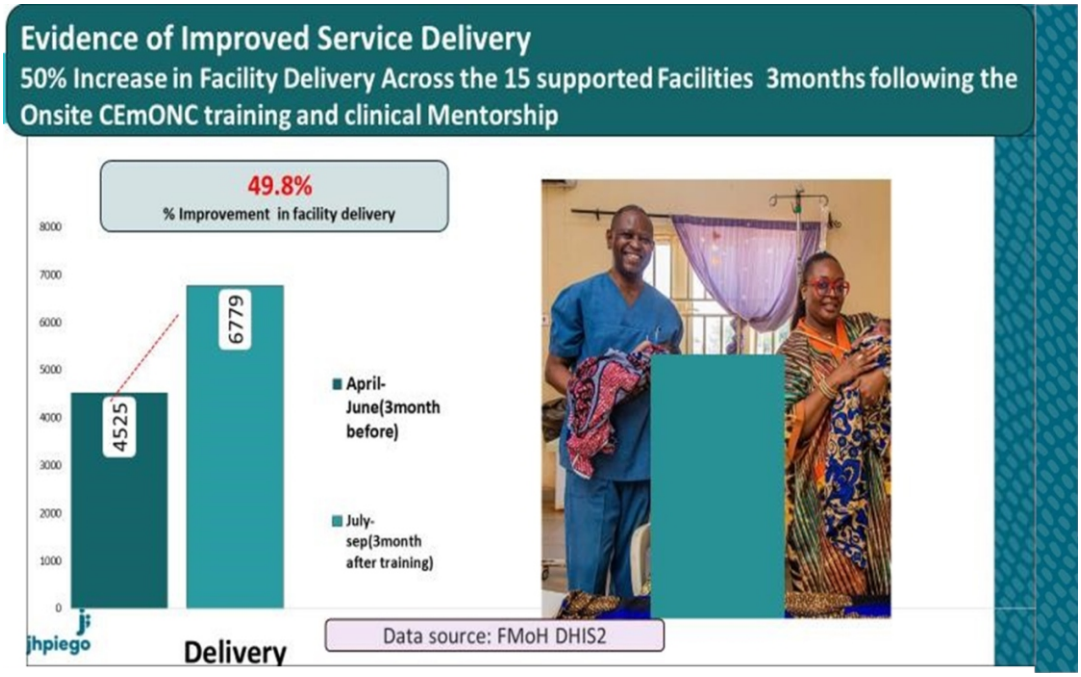




- Kebbi State providers showed the highest average improvement (24.21%) in knowledge scores, indicating strong knowledge gains and effective engagement during mentorship. Katsina State providers followed with an average improvement of 12.81% in knowledge scores, reflecting moderate but meaningful progress.
- Providers had an average improvement of 8.89% in knowledge scores, demonstrating gains and need for deeper reinforcement.
- Kebbi had the highest average percentage knowledge gain (43.84%), closely followed by Katsina (40.94%) and Kano State (40.63%) demonstrating the mentorship intervention was impactful

Outcomes of Clinical Mentorship





Key Lessons from the Symbiotic Approach

- Training the health care workers in their facility through the 14 days Onsite CEmoNC training (LDHF) and Post-training clinical mentorship helped the health workers to gain more confidence in their clinical skills with resultant marked improvement in service uptake at the facility as evidenced from the service statistics obtained FMoH DHIS2
- The onsite training provided opportunities for the state-based consultants (OBGYNs, Neonatologist, Anesthesia and Hematologist) to interact first-hand with the GH health providers and understand their service delivery context and this increased their responsiveness to provide support
- At the state-level debrief meeting, issues on referrals pathways and Poor Inter-Facility Communication was reviewed and action plans developed
- The presence of the consultants at the HFs added to the temporary staff strength , helped to reduce workload, improved technical skills on the use of abandoned equipment due to lack of knowledge for obstetrics and newborn emergencies.
- Community sensitization during the hematology practical sessions for voluntary blood donation played a twin role of increased awareness and building of community members confidence regarding facility service readiness to handle MNH emergencies
- Reduction in referred cases increased facility service utilization

Conclusion

- The Simulation-driven, multidisciplinary onsite training and mentorship strengthened provider competence, improved MNH knowledge, and enhanced service delivery
- The LDHF model is a scalable, context-adapted approach to improving maternal and newborn outcomes in low-resource, high-burden settings.



Methodology: Onsite Competency Training

- Three (3) days standardization workshop to review and finalize training curriculum and skills standardization
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- Training combined theoretical instruction, simulation-based exercises, video-guided modules, hands-on clinical practice and ongoing mentorship

Results: Onsite CEmONC capacity strengthening (June 2025)

- Only 41 (5.3%) of the 771 health facilities had performed all 9 life-saving CEmONC signal functions in the last 4 weeks prior to the assessment (set of critical obstetric and neonatal interventions for preventing death of women and newborns with complications during pregnancy and childbirth).
- Significant health care provider competency gaps, particularly for care of newborns
- 405 Health workers (HWs) trained across kano, Katsina and Kebbi states
- 57% Male, 43% Female in 15 General hospitals



Famiy Panning Gains through integration: Lessons from combining Demand Generation and Capacity building on Hormonal Intra-Uterine Device (H-IUD) scale up in Nigeria

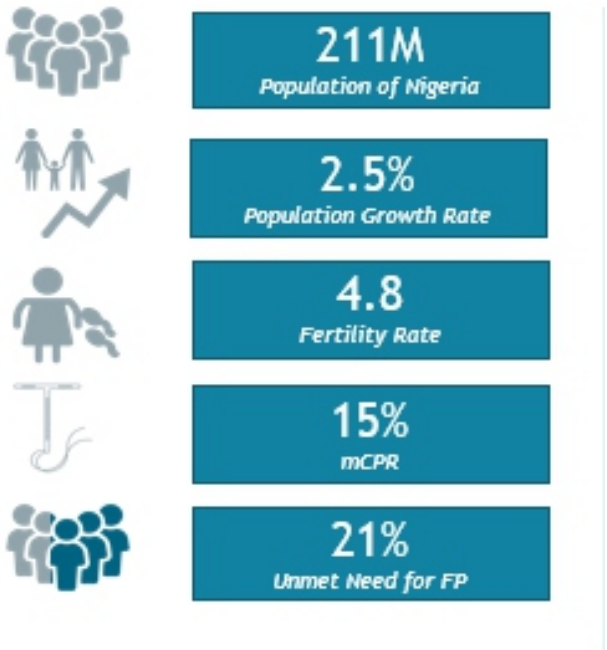
Zainab Saidu, Ijeoma Okongwu, Ogochukwu Anyanwu, Kingsley Godfrey, Lawrence Anyanwu, Opeyemi Abudiore, Olufunke Fasawe

Affiliations
CLINTON Health Access Initiative (CHAI)

Presenting Author
Ayomide Aleji,
CLINTON Health Access Initiative (CHAI)

Background

Nigeria has a population 211 million people, a population growth rate of 2.5%, fertility rate of 4.8, modern contraceptive rate of 15%, and an unmet need for Family Planning (FP). Family planning is a proven, cost-effective mechanism for reducing maternal mortality.
Nigeria has worked to introduce and increase access to modern contraceptives. This has led to an increase in mCPR from 12% in 2018 to 15% in 2024 for all methods. The unmet need for FP however remains high and the country is currently not on track to meet its FP 2030 goal of an mCPR of 27%. All this reiterates the need for more efforts to optimize FP uptake





Objective

Hormonal Intrauterine Device (H-IUD) was introduced in 2020 to expand the FP method mix; however, uptake has remained suboptimal. Some factors noted to affect H-IUD uptake include poor demand generation, inequitable distribution of trained providers, commodity shortages, poor data reporting.

CHAI implemented an integrated H-IUD capacity strengthening and demand generation project in selected states (Enugu, Niger, Gombe and the Federal Capital Territory (FCT) in a bid to literacy on the advantages of H-IUD and increase the numbers of facilities with HCWs skilled to provide H-IUD service and ultimately improve access.

Methodology

CHAI collaborated with the respective state governments in 2024 to conduct a Facility Readiness Assessment across the focal states and identified eligible HCWs across 98 health facilities for the scale-up of H-IUD service provision. Existing state-based H-IUD trainers were engaged to conduct a 3-day H-IUD cascade training of HCWs across selected facilities. CHAI collaborated with the Health Promotion Division of the SMOHs to integrate demand-generation activities with capacity-building on H-IUD, using the national H-IUD-specific Social and Behavior Change materials.

Following completion of the training, 18 clinical mentors were engaged to conduct a 6-week clinical mentoring for trained HCWs with 4 touchpoints aimed at further strengthening HCWs' skills in providing H-IUD services. 91 health facilities were equipped H-IUD insertion equipment including autoclaves, examination couches, galipots, cusco speculums, uterine sounds etc. and consumables required for service provision while also ensuring availability of government funded FP commodities in the facilities with trained HCWs. CHAI also supported routine monthly H-IUD data review and validation meetings post mentoring to strengthen data reporting, accuracy, and reliability.

Results

- Increased skills, knowledge, and capacity of 221 HCWs (7 doctors, 25 midwives, 24 nurses, 100 nurse-midwives, and 65 community health practitioners) to provide quality H-IUD services.
- Post-training assessments showed significant knowledge and skill improvements (81% and 78% respectively), with 93% of HCWs demonstrating competency in H-IUD provision.
- 230 health educators, mobilizers and community volunteers were sensitized on key messaging and community awareness creation for H-IUD, enhancing local capacity for sustained community mobilization and demand generation.
- Demand generation activities reached 2,500 community members, resulting in 762 H-IUD insertions during the training period and 3,247 insertions overall, an 86% increase across sites.



Conclusion

Integrating HCW capacity building with community-based demand generation effectively increases H-IUD uptake. Strengthening collaboration with the Health Promotion Division of SMOHs is instrumental in ensuring robust H-IUD demand generation, leveraging existing community structures such as community volunteers/mobilizers. Also, equipping HCWs with adequate knowledge and skills is key to increasing uptake of all FP methods, as HCWs' bias is mostly due to inadequate knowledge and skills to provide certain services.

Most importantly, strengthened collaborations, tailored communication, and provider confidence are critical for expanding equitable FP access and sustaining method choice in Nigeria.



Pattern and Outcome of Surgeries among Geriatric Patients presenting with Gynaecological Malignancies at the University College Hospital, Ibadan

Oguntola J A[1], Adesina O A[1,2], Ajani A A[2,3]

Affiliations

1. Department of Obstetrics and Gynaecology, University College Hospital, Ibadan
2. College of Medicine, University of Ibadan, IBADAN
3. Department of Pathology, University College Hospital, Ibadan

Presenting Author

Oguntola Jonathan Adewale
Dept of Obstetrics and Gynaecology, University College Hospital, Ibadan

Introduction

- Gynaecological malignancies contribute to the global burden of diseases and are major causes of cancer related deaths worldwide
- Age is a major risk factor in the development of gynaecological cancers.
- Surgery is widely accepted modality for the management of gynaecological cancers
- However, the outcome of in older people maybe poor because of co-morbidity and frailty
- The objectives were to describe the pattern and short-term outcomes of surgeries among geriatric patients presenting with gynecological malignancies at the University College Hospital, Ibadan over 5years (January 2016 to December 2020).

Methodology

- This was a retrospective study of geriatric patients with gynaecological cancers.
- These patients were managed by surgical modality over a period of 5 years (January 2016 to December 2020).
- Data obtained from study were inputted into a standardized Proforma adapted for the study.

Results

- This retrospective study revealed 17.2% of all gynaecological malignancy cases managed by surgery were in geriatric patients.
- They are mostly in the age ranges of 65-69 years (68.8%).
- Most were ≥ 15 years post-menopausal (56.2%) and although 53.1% had no comorbidity.
- The prominent co-morbidity was hypertension (73.3%).
- TAH and BSO was the commonest surgery (47%), while general anaesthesia was the commonest technique (78.1%).
- Consultants mostly led (84.4%), and midline incision was mostly used (96.9%).
- Blood loss >1000ml was seen in 46.9% while 68.2% needed transfusion.



- Most (87.5%) had no intra-operative complication with haemorrhage the most common intra-operative complication (75%).
- There was no immediate post-operative mortality.
- Ovarian carcinoma was the most common gynaecological cancer (31.2%).
- Wertheim hysterectomy had the longest duration and the highest incidence of blood loss.
- The six-month post-operative review of the patient showed that 69% of the patients were still alive majority of them had chemotherapy.

Conclusion

- This study showed that outcome of management using surgery was good.
- This could be made possible with comprehensive geriatric assessment (CGA) and quality pre-operative selection and optimization, quality intra-operative and post-operative care.
- Therefore, age should not be a limiting factor in application of surgery for management of gynaecological cancers in geriatrics.



Verbal and social autopsy findings from a sub-national digitised sample registration system to inform decision-making in Lagos State, Nigeria

Aduragbemi Banke-Thomas[1], Bosede Afolabi[2], Adeyemi Okunowo[2], Adedoyin Ogunyemi[2], Brenda Isikekpei[3]

Affiliations

[1]Faculty of Epidemiology and Population Health, London School of Hygiene & Tropical Medicine, London, United Kingdom

[2]Departmentof Obstetrics and Gynaecology. College of Medicine, University of Lagos, Lagos, Nigeria

[3]Department of Community Health and Primary Care, College of Medicine, University of Lagos, Lagos, Nigeria

Corresponding Author

Aduragbemi Banke-Thomas

Address: London School of Hygiene & Tropical Medicine, Keppel St, London WC1E 7HT

Telephone: +2348023466087

Email: aduragbemi.banke-thomas@lshtm.ac.uk

Introduction

Maternal mortality and stillbirths remain critical global health challenges, with Nigeria accounting for nearly 30% of the 700 daily maternal deaths and reporting over 184,000 stillbirths in 2023

National-level estimates of MMR and SBR, while valuable for global tracking, often mask significant sub-national disparities, and reliable state or LGA-level data on these indicators remain scarce

The Sample Registration System (SRS) provides a practical, proven method for generating granular maternal and perinatal health estimates through continuous surveillance of representative population samples

Objective:

To determine maternal mortality ratios (MMR) and stillbirth rates (SBR) at state and LGA levels in Lagos State and identify the medical, social, and contextual factors contributing to maternal deaths and stillbirths using verbal and social autopsy

Methodology

- A Descriptive cross sectional household survey using a mixed method of data collection (Quantitative & Qualitative)
- Retrospective Mar ‘23 – Feb ’25 and Prospective Mar ’24 – Feb ‘25
- Sample size was determined using the formula below from the DHS
- A two-stage cluster sampling design. 1st stage, 1,911 EAs (Paper & digital maps) 2nd stage, all households within each sampled EA were enumerated.



- Mapping and listing of 127,039 households in all 20 LGAs
- Pregnant women, maternal deaths or stillbirths
- Adapted standardized tools (WHO 2022 VA, JHU/IIP Social Autopsy)
- Use of KoboToolbox for data collection
- Data analysis: Cause of Death was coded using InterVA 5 on R v.4.3.2 & Physician review/ Thematic analysis for qualitative data
- Ethical approval - LUTH HREC: ADM/DCST/HREC/APP/5660 and LSMH/6211/1/92
- Written informed consent was obtained from all participants

Results

Results (1) – Sociodemographic characteristics of women who died – Retrospective phase

Variables	n = 61, Freq (%)
Age group (years)	
<20	2 (3.3)
20 - 24	10 (16.4)
25 – 29	9 (14.8)
30 – 34	14 (23.0)
35 - 39	14 (23.0)
40 – 44	10 (16.4)
>45	2 (3.3)
Mean ± SD	***32.4±7.8***

Variables	n = 61, Freq (%)
Marital status	
Single	5 (8.2)
Cohabiting	4 (6.6)
Married	51 (83.6)
Widowed	1 (1.6)
Place of death	
Home	9 (14.8)
En route to facility	6 (9.8)
Maternity Home	2 (3.3)
Private hospital	19 (31.1)
Public hospital	24 (39.3)
Religious house	1 (1.6)

Results (2) - Retrospective phase



5,020 pregnant women



7,217 births



61 maternal deaths



291 stillbirths

MMR: 833 per 100,000 live births

SBR: 38.1 per 1,000 total births



Results (3) – Retrospective phase

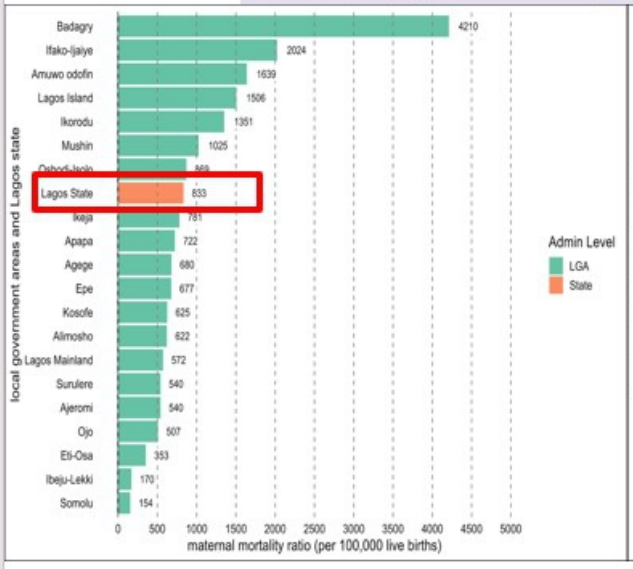


Figure 1. MMR estimates across the 20 local government areas and the state (**833 per 100,000 LB; 95%CI: 832–834**)

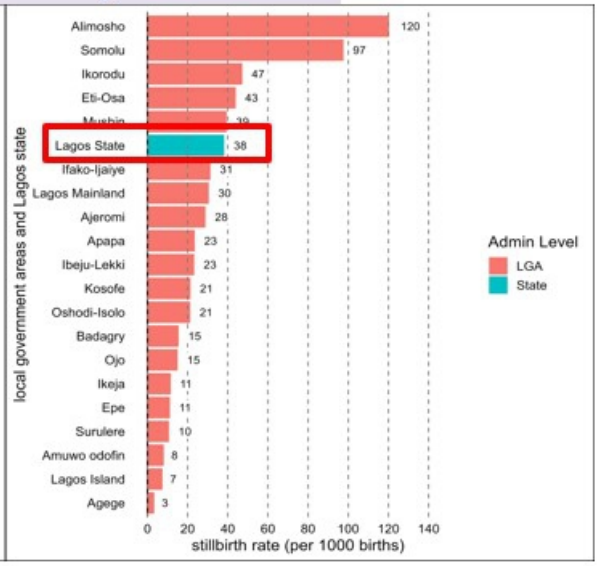


Figure 2. SBR estimates across the 20 local government areas and the state (**38.1 per 1,000 TB (95% CI: 38.1–38.4)**

Result (4) – Retrospective phase

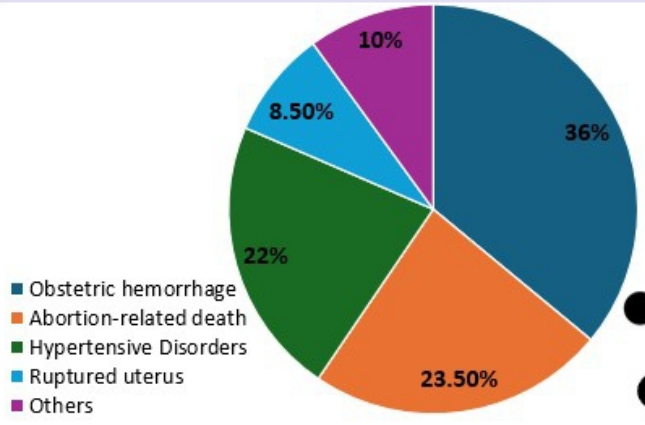


Fig 3 Causes of maternal deaths (Retrospective phase)

Prospective phase

5,020 pregnant women followed-up

1,005 births

7 maternal deaths

40 stillbirths

MMR: 791 per 100,000 live births

SBR: 44 per 1,000 total births



Results (5) **Summary of Social autopsy findings**

Delay in *decision to seek care*

- Failure to recognize danger signs
- Lack of decision-making power
- Lack of money to pay for treatment and transportation
- Fear of ill-treatment at health facility
- Reluctance of the mother or family to seek care because of cultural constraints
- Family opted for TBAs

Delay in *arrival at facility*

- Distance from home to healthcare facility
- Lack of roads
- Lack of emergency transportation
- Poor referral system

Delay in *provision of care*

- Lack of skilled providers
- Lack of medical supplies (blood, oxygen)
- Weak referral system
- Bureaucracy
- Demand for payment before treatment

Conclusion

- Maternal mortality and stillbirths in Lagos State remain alarmingly high, with stark disparities highlighting inequities in access to timely, high-quality care across different regions
- Community-based surveillance offers critical, actionable data that can inform targeted investments and integrated strategies to improve maternal and perinatal outcomes at subnational levels



Association between Maternal Malaria Prevention and the Occurrence of Malaria Parasites Among Mothers and Their Newborns at the University of Medical Sciences Teaching Hospital, Akure

Theresa Azonima Irinyenikan[1,2], Emmanuel Olaseinde Bello [3,4], Bamidele Jimoh Folarin [1,2], Rosena Olubanke Oluwafemi [3,4], Ismaila Sani [5]

Affiliations

1.Department of Obstetrics and Gynaecology, Faculty of Clinical Sciences, University of Medical Sciences, Ondo, Ondo State, Nigeria.
2.Department of Obstetrics and Gynaecology, University of Medical Sciences Teaching Hospital, Akure, Ondo State, Nigeria.
3.Department of Paediatrics and Child Health, Faculty of Clinical Sciences, University of Medical Sciences, Ondo, Ondo State, Nigeria.
4.Department of Paediatrics and Child Health, University of Medical Sciences Teaching Hospital, Akure, Ondo State, Nigeria.
5.Research Doctor with the World Health Organization at the University of Medical Sciences Teaching Hospital, Akure, Ondo State, Nigeria.

Corresponding Author:

Theresa Azonima Irinyenikan,
Department of Obstetrics and Gynaecology, Faculty of Clinical Sciences, University of Medical Sciences Ondo & University of Medical Sciences Teaching Hospital, Akure.
Email: tirinyenikan2017@gmail.com Phone: 08035239487

Background

- Malaria in pregnancy is a public health problem in tropical countries where it is associated with adverse pregnancy outcomes.
- According to the World Health Organization (WHO) 2018 report, the number of pregnant women who were at risk of malaria infection was about 25 million [1].
- Vector control is paramount in preventing malaria infection and it often includes indoor residual spraying (IRS) of houses and the distribution of long-lasting insecticide-treated bed nets (LLINs) [2].
- LLINs works by preventing new infection through self-protection and prevention from person to person [3].
- In order to prevent malaria in pregnancy, the World Health Organization guidelines recommend a three-pronged approach which include preventive measures, curative measures and management of cases [3].
- This recommendation entails the use of Insecticide-Treated Nets (ITN) early in pregnancy and a minimum of two treatment doses of Sulphadoxine-Pyrimethamine (SP) as Intermittent Preventive Treatment in Pregnancy (IPTp) [3]
- As a result of the adverse outcomes associated with malaria in pregnancy, several strategies of preventing malaria infection during pregnancy have been rolled out [3].



- However, despite all these strategies, the prevalence of malaria infection during pregnancy has persistently been on the increase [4].

Objectives

- This study was aimed at assessing the occurrence of malaria parasites in the mothers and their newborns when established preventive measures such as insecticide treated nets, residual indoor spraying and intermittent preventive treatment are used.

Methodology

- Study Area: The study was carried out at the Department of Obstetrics and Gynaecology as well as the Newborn unit of the University of Medical Sciences Teaching hospital in Akure, Ondo State, Nigeria from the 1st of July to the 31st of December 2024.
- Study design: The study used cross-sectional descriptive survey design to select the pregnant women who participated in the study from the antenatal clinic and the antenatal ward of the hospital.
- The calculated samples to be taken (216) were shared between the mothers and their babies given us 108 samples each.
- The blood samples were collected and assessed for the presence and density of malaria parasites using their thick films
- Information about the participants socio-demographic characteristics, use of malaria prevention methods, Obstetrics and clinical characteristics of the mothers and their newborns were obtained from their clinical records and the data obtained analyzed using SPSS Windows 25.
- Relevant statistical analysis was done and a multi-variable logistic regression was used to predict the main method of prevention with lower risk of occurrence of malaria parasites in the newborns.
- Significant value was set at $P<0.05$

Results

- The participants were mostly primigravidae who had more than four antenatal visits and also had good knowledge of the use of the long- lasting insecticide treated nets.
- However, only 42 (38.9%) actually slept under the nets.
- Many had the opportunity of having intermittent preventive treatment during pregnancy, 97 (89.8%).
- Among the women, 50 (46.3%) had malaria parasites while 86 (79.8%) of the newborns had malaria parasites.
- Out of the 50 mothers who had malaria parasites, 30 (60.0%) did not sleep under an insecticide treated net, this was statistically significant [X2=0.826, P=0.048]
- and 22 (44.0%) did not apply indoor residual spraying which was found to be statistically significant in contributing to the presence of the parasites [X2= 0.925, P=0.009].



- 53 (61.6%) of the newborns with malaria parasites were delivered by mothers who did not sleep under the insecticide treated nets, this was also statistically significant [X2=0.828, P=0.047].
- Also 37(43.0%) of these neonates were delivered by the mothers who did not apply indoor residual spraying which was also statistically significant [X2=0.838, P=0,042].
- The use of intermittent preventive treatment was found to significantly reduce the presence of malaria parasites in the mothers [X2=0.563, P=0.036] and the newborns [X2=0.847, P=0.037]

Discussion

- The use of insecticide treated nets, indoor spraying and intermittent preventive treatment significantly reduced the presence and the density of the parasites in the mother and the newborns which are all in keeping with other studies [5,6].
- However, it was still noticed that some of the women who used either the insecticide treated nets or residual indoor spraying or intermittent preventive treatment still had some parasites present in their blood and same transmitted to their babies through the placental.
- This showed that these methods can reduce malaria incidence but generally have little impact on malaria prevalence
- This may suggest considering the combination of these methods to further address this public health problem.

Conclusion

- This study showed that the use of insecticide treated nets, residual spraying or the use of intermittent preventive treatment during pregnancy can significantly reduce the presence and the density of malaria parasites in the mother and the neonates.
- Therefore, to have effective reduction in the prevalence of malaria parasites in the mothers and their newborns, a combination of all preventive methods is advocated.

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Machine Learning Prediction of Out-of-Facility Delivery in Nigeria: A Population-Based Analysis

Otobo I. Ujah[1*], Chinedu G. Obikili[2]

Affiliations

[1] Department of Obstetrics &Gynaecology, Federal University of Health Sciences, Otukpo (FUHSO), Nigeria

[2] Solina Centre for International Development and Research (SCIDaR), Abuja, Nigeria

Corresponding Author

Dr. Otobo I. Ujah

Department of Obstetrics &Gynaecology, Federal University of Health Sciences, Otukpo (FUHSO), Nigeria

Email: otoboujah@yahoo.com, Mobile: +234 806 887 1487

Introduction

- SDG 3.1 Target: Reduce global maternal mortality to <70 deaths per 100,000 live births by 2030
- Minimal improvement since the SDG era despite earlier gains
- Globally, nearly 300,000 maternal deaths
    - Global MMR ≈ 223 per 100,000 live birth

- Sub-Saharan Africa:
  – Accounts for 70% of global maternal deaths
  – Regional MMR: 545 per 100,000
- Nigeria contributes ~28.5% of global maternal deaths,
    - MMR 1,047 per 100,000

Rationale and Objectives

- 30-36% of births in SSA and South Asia occur without a skilled birth attendant
- Non-institutional delivery = missed opportunities for addressing complications
- Machine learning increasingly used to predict perinatal outcomes
- Evidence in Nigeria limited, despite high maternal mortality
- Rationale for Study:
    - Need for predictive models that combine multilevel characteristics
    - Hypothesis: ML algorithms outperform classical statistical models in predicting non-institutional delivery

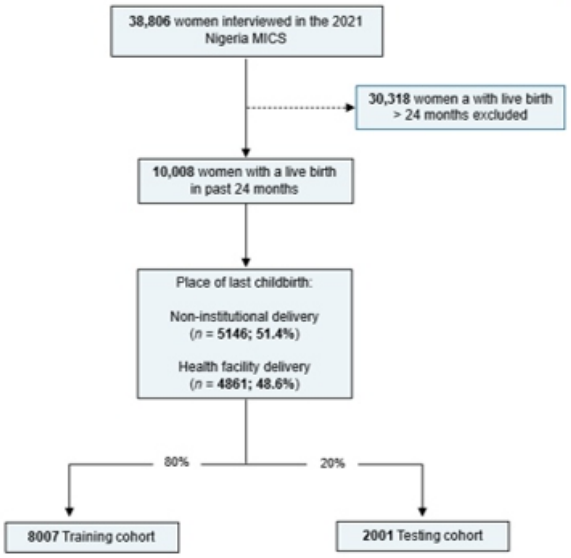


Methodology

- Secondary, cross-sectional analysis of MICS data

MICS
GENERATING EVIDENCE TO DELIVER FOR CHILDREN

- Round 6 MICS (2021) from Nigeria
- Sampled women 15-49 years of age
  - Women with recent live births (< 2 years)



Machine Learning Approach

- **Outcome:** Non-institutional delivery = birth outside a health facility
- **Model Inputs**: 21 predictors selected from prior evidence and conceptual relevance
- **Data Processing & Feature Selection**
  - Dataset split: **65% training, 15% validation, 20% testing**
  - Boruta Random Forest algorithm used to identify the most relevant predictors

6

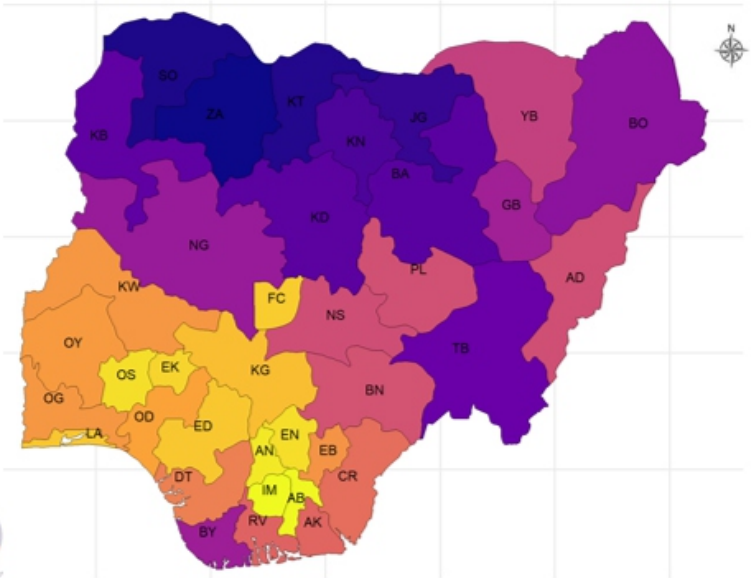


Machine Learning Approach

- **Model Development & Evaluation**
  - Six supervised ML models tested: Logistic Regression, KNN, Decision Tree, Random Forest, SVM, XGBoost
  - 10-fold repeated cross-validation with hyperparameter tuning
  - Performance metrics: Accuracy, Sensitivity, Specificity, F1-Score, AUROC
- **Software & Statistical Notes**
  - Analyses conducted in R (v4.4.1) using specialized ML packages
  - Categorical variables summarized with frequencies; comparisons via Chi-square tests

7

Results



52.1% of deliveries occurred outside a health facility

Prevalence (%)

80
60
40
20

Figure 1. Map showing the prevalence of non-institutional births by state, in Nigeria, with dark blue signifying the highest prevalence and yellow signifying the lowest

8



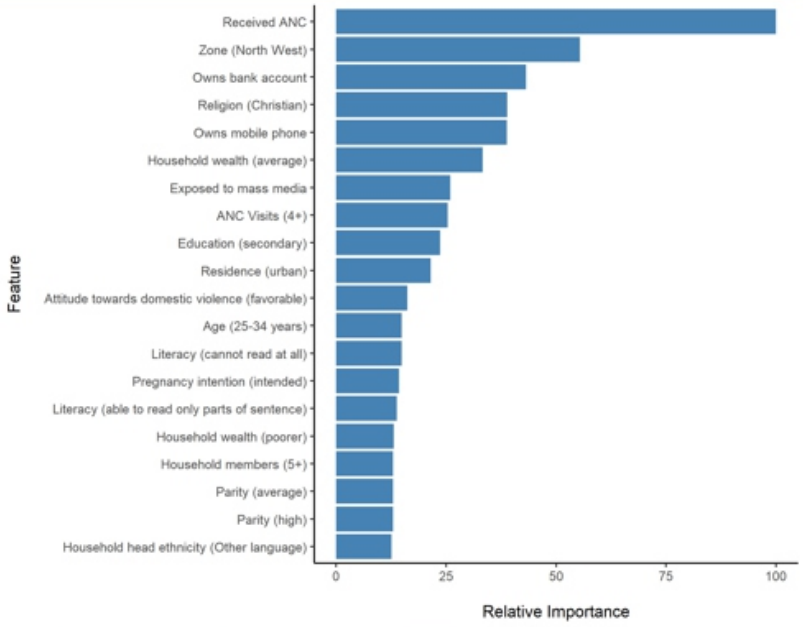
Comparison of 6 ML models to predict non-institutional delivery in the test set

ML Algorithm	No. of features	Hyperparameter final value	AUROC (95% CI)	Accuracy (95% CI)	Sensitivity	Specificity	PPV	NPV
KNN	20	k = 17	0.889 (0.875-0.903)	0.801	0.787	0.818	**0.848**	0.749
LR	20	NA	0.891 (0.877-0.905)	0.816	0.818	0.813	0.833	0.798
SVM	20	C = 1	0.888 (0.873-0.902)	0.819	0.806	**0.824**	0.801	0.813
DT	20	Complexity parameter = 0.02	0.777 (0.755-0.791)	0.754	**0.830**	0.699	0.664	**0.851**
RF	20	Mtry* = 4	**0.893 (0.879-0.907)**	**0.814**	0.818	0.808	0.827	0.799
XGBoost	20	Ntrees = 150, Interaction depth = 2, Shrinkage = 0.3, n.minobsinnode = 1	**0.893 (0.879-0.907)**	0.812	0.818	0.804	0.822	0.800

The best score achieved for a given metric is shown in bold
Abbreviations: DT, Decision-tree Classifier; kNN, k Nearest Neighbors; RF, Random Forest Classifier; SVM, Support Vector Machine Classifier; XGBoost, Extreme Gradient Boosting Classifier. NA, not applicable Machine Classifier; XGBoost, Extreme Gradient Boosting Classifier.

9

Variable Importance Scores for the Top 20 Predictors



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Conclusion

1. Substantial proportion of women still delivering outside health facility
2. RF model highlights modifiable and structural determinants, offering a powerful tool to inform targeted interventions
3. AI/ML tools in valuable in identifying women at risk of home delivery

11



Anaemia in Pregnancy among Women in South-Western Nigeria. Do Diets Count?

Ayodeji S. Adeyanju[1,2], Olaolu Oni[1,2], Adeola Rukiyat Abdus-salam[1,2]

Affiliations

1: Department of Obstetrics and Gynaecology, University College Hospital, Ibadan

2: Department of Obstetrics and Gynaecology, College of Medicine, University of Ibadan

Corresponding Author

Dr. S.A. Adeyanju

Department of Obstetrics and Gynaecology, University College Hospital, Ibadan

Email: adeayok1@yahoo.com GSM: +2347037992746

Introduction

Anaemia in pregnancy is a major public health concern associated with increased risks of preterm birth, low birth weight, and maternal morbidity and mortality. Nutritional iron-deficiency anaemia is the most common form globally. In Nigeria, despite long-standing antenatal supplementation programmes, anaemia remains persistently prevalent, suggesting the influence of multiple contributing factors.

The role of dietary patterns—particularly micronutrient-rich foods—in determining haematological outcomes during pregnancy is not fully understood. This study examines whether diets significantly contribute to anaemia status among women in the third trimester of pregnancy in Ibadan.

Problem Statement

Anaemia in pregnancy remains highly prevalent in Nigeria, persisting even among women who receive routine antenatal supplements. The specific relationship between dietary habits and haematocrit levels during pregnancy is unclear and requires systematic evaluation.

Objective

To evaluate the influence of dietary intake on haematocrit levels among pregnant women in their third trimester by:

1. Determining PCV levels in late pregnancy.
2. Assessing intake of micronutrient-rich foods.
3. Examining correlations between dietary patterns and haematocrit.

Methodology

Study Design and Setting: A cross-sectional study conducted at University College Hospital (UCH) and Adeoyo Maternity Teaching Hospital, Ibadan.

Sample size: 307 third-trimester pregnant women receiving antenatal care.

Data Collection:

- Tool: interviewer-administered questionnaire.
- PCV values extracted from hospital laboratory records.
- Dietary scoring based on validated literature.



Data Analysis: SPSS version 25 was used for analysis, with statistical significance set at $p < 0.05$.

Results

Socio-Demographic Characteristics

- Mean age: **30.49 ± 5.03 years**
- Middle-income class: **53.7%**
- Tertiary education: **77%**
- Previous delivery: **72.2%**

Anaemia Prevalence

- At booking: **42.9%**
- Third trimester: **37.7%**
- Change not statistically significant (**p = 0.43**)

Diet Quality and Anaemia Status

- Poor consumers: **40.2%**anaemic
- Good consumers: **32.8%**anaemic
- **No significant association** between overall dietary quality and anaemia (**p = 0.31**)

Significant Predictors of PCV

Positive Predictors (Improved PCV)

- **Banana:** $\beta = +0.862$, $p = 0.018$
- **Waterleaf:** $\beta = +1.277$, $p = 0.037$

Negative Predictors (Lower PCV)

- **Tomatoes:** $\beta = -1.148$, $p = 0.046$
- **Milk:** $\beta = -0.719$, $p = 0.046$

Non-significant Food Groups

No significant effect was found from:

- Protein foods (beef, chicken, fish, egg, beans)
- Cereals and grains
- Tubers and roots
- Oils and fats

Overall finding:

Diet alone did **not** significantly alter haematocrit values.

Discussion

The absence of a strong relationship between dietary patterns and anaemia status highlights the complexity of nutrition research in pregnancy. Confounders—such as haematinic supplementation, iron absorption variability, underlying malabsorption disorders, and bioavailability differences—may dilute the direct dietary effect.

The significant positive contribution of bananas and waterleaf aligns with evidence that certain fruits and vegetables enhance iron absorption due to vitamin C and phytonutrient content. Conversely, tomatoes and milk showing negative associations may relate to competitive absorption interactions or dietary combinations that reduce iron uptake.



Conclusion

Anaemia remains common among women in the third trimester of pregnancy in south-western Nigeria. Although fruit and vegetable intake showed some beneficial associations with haematocrit, diet alone was insufficient to significantly influence anaemia outcomes in this population.

A comprehensive approach—incorporating supplementation, dietary education, and further investigation of absorption factors—is required to reduce anaemia prevalence.

Recommendations

1. Conduct well-controlled interventional dietary trials to better assess causal links between nutrition and PCV.
2. Strengthen antenatal counseling on nutrient-dense foods that enhance iron absorption.
3. Improve monitoring of haematinic supplementation compliance.
4. Explore factors affecting iron absorption, including gastrointestinal health and concurrent dietary inhibitors.

Acknowledgment

The authors acknowledge MBBS Group B, 2019 Class, Department of Obstetrics and Gynaecology, Faculty of Clinical Sciences, College of Medicine, University of Ibadan, for their contributions and support.



Pattern of Presentation and Management of Women with Pelvic Organ Prolapse at the University College Hospital, Ibadan

Rukiyat A. Abdus-salam[1, 2], Opeyemi A. Adedeji[1], Olatunji O. Lawal[1, 2], Jamiu A. Ogunsola[1], Stephen Salufu[1], Friday O. Ameh[1], Imran O. Morhason-Bello[1, 2]

Affiliations

[1]Department of Obstetrics and Gynaecology, University College Hospital, Ibadan,
[2]Department of Obstetrics and Gynaecology, College of Medicine, University of Ibadan, Ibadan

Corresponding Author:

Opeyemi A. Adedeji
[1]Department of Obstetrics and Gynaecology, University College Hospital, Ibadan
Phone Number: 07030121152, Email: oadedeji14@gmail.com

Introduction/Background

Our addresses **Pelvic Organ Prolapse (POP)**, a condition that remains a significant, though often underreported, cause of morbidity, particularly among women in low-resource settings like ours. POP detrimentally affects a woman's quality of life, physical comfort, and sexual function. Despite its substantial prevalence and impact, there is a distinct lack of comprehensive local data detailing the typical pattern of presentation and subsequent management outcomes here in Nigeria. Understanding these local patterns is crucial for optimizing our clinical guidelines and allocating resources effectively.

Objective(s)

The primary objective of this retrospective review was to systematically describe the key characteristics of patients presenting with Pelvic Organ Prolapse at the University College Hospital (UCH), Ibadan. Specifically, we aimed to delineate three aspects:

1. The sociodemographic characteristics of the affected women.
2. The clinical presentation and severity of their prolapse.
3. The management outcomes associated with the surgical and non-surgical interventions provided at our institution.

Method

This study employed a retrospective review design. We analyzed the clinical records of 24 women who were managed for Pelvic Organ Prolapse at UCH between January 2022 and September 2025.

Data collection focused on key parameters, including patient age, parity (number of births), specific clinical features reported, and the various treatment modalities utilized. The retrieved data were subsequently summarized and presented using descriptive statistics, primarily focusing on frequencies and percentages to characterize the study population and outcomes.



Results

Our review of the 24 managed women yielded several distinct findings regarding the pattern of POP at our center:

Sociodemographic:

- The mean age range was wide, spanning 35 to 82 years. However, the condition was predominantly seen in the older age group, with 65.3% of the women being 60 years or older. Notably, 21.5% were still premenopausal at the time of presentation.
- A majority were grand multiparous (58.3%), underscoring the role of high parity as a significant risk factor.
- Most women were engaged as traders (62.5%), and ethnically, they were largely of Yoruba descent (79.2%).
- Regarding delivery history, 70.8% had hospital-supervised vaginal deliveries, but a substantial proportion (37.5%) reported a history of prolonged labor.

Clinical Presentation:

- The mean duration of symptoms before presentation was quite long, averaging 5.5 years, suggesting significant delays in seeking care.
- Universally, all women (100%) presented with the chief complaint of a vaginal mass.
- Other associated symptoms were less common, including back pain (20.8%) and dyspareunia (4.2%).
- Anatomically, anterior and apical prolapse were the most common compartments involved, both observed in 58.3% of cases.
- In terms of severity, Grade 3 prolapse predominated (62.5%), which correlates with the late presentation.
- Regarding prevention, only a small fraction (8.3%) reported routinely practicing pelvic floor exercises.

Management Outcomes:

- Surgical management was the mainstay of treatment for most women. The most frequently performed procedures were anterior colporrhaphy (58.3%), followed by vaginal hysterectomy (45.8%). Colpocleisis was performed in a smaller group (8.3%).
- Crucially, at the time of follow-up, no cases of recurrence were reported among the treated women.

Discussion

Our findings confirm that POP at UCH, Ibadan, is predominantly a disease of older, postmenopausal, grand multiparous women, consistent with literature from other low-resource settings. The high proportion of Grade 3 prolapse and the long mean symptom duration of 5.5 years are particularly concerning, highlighting the issue of late presentation. The high rate of prolonged labor recorded suggests that obstetric trauma remains a significant contributing factor, even in hospital-supervised deliveries. The successful management outcomes, characterized by zero recurrence post-surgery, validate the efficacy of the current surgical protocols practiced at UCH. However, the near-absence of routine pelvic floor exercise practice indicates a major public health and educational gap that needs immediate attention.



Conclusion

In conclusion, Pelvic Organ Prolapse in our population is typically seen in the older, postmenopausal woman, characterized by late presentation and common involvement of the anterior vaginal compartment. While our surgical interventions yield excellent, non-recurrent outcomes, the prevalent morbidity resulting from delayed diagnosis can be mitigated. We strongly recommend immediate interventions aimed at strengthening routine pelvic floor exercise promotion, facilitating earlier diagnosis through targeted community health programs, and ensuring prompt surgical intervention to significantly limit morbidity and further improve the quality of life for women in our community.



Understanding Maternal Outcomes Following Referral for Preeclampsia /Eclampsia in Kano State, Nigeria

Chukwunonso Nwaokorie[1], Eric Aigbogun[1], Segun Oladipo[1], Chinedu Obikili[1], Kabiru Ibrahim[1], Fauwzia Sanusi[1], Uchenna Igbokwe[1]

Affiliation

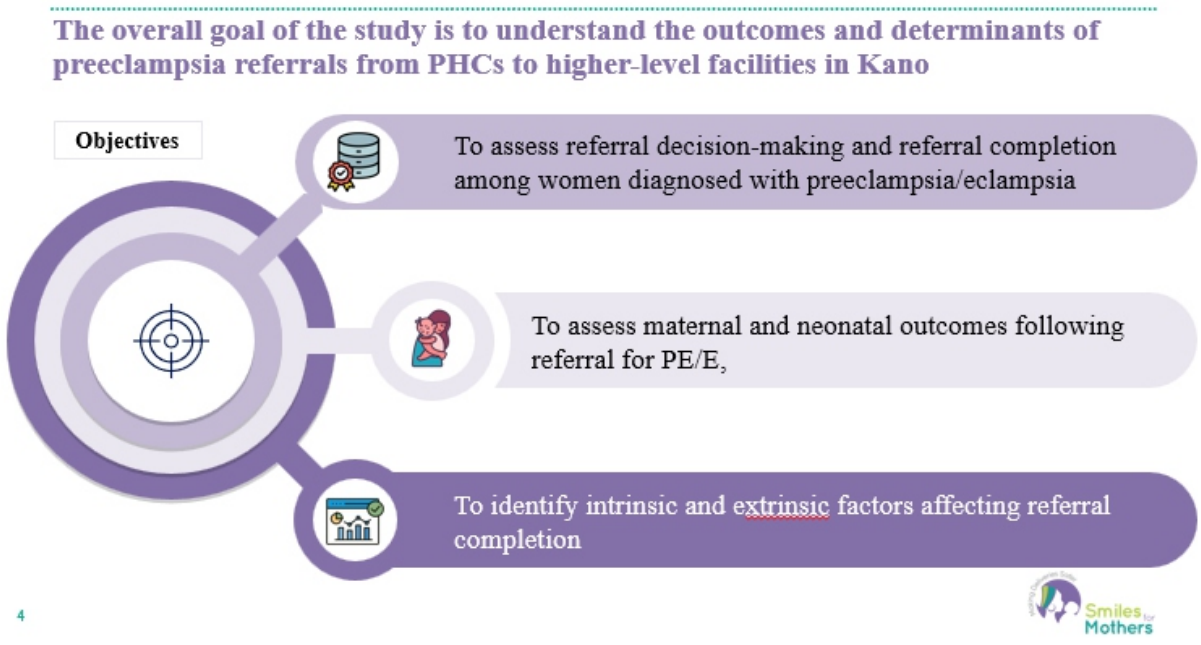
[1]Solina Center for International Development and Research

Corresponding Author

Segun Oladipo
Solina Center for International Development and Research
8 Libreville Crescent, off Aminu Kano Crescent, Wuse 2, Abuja
+2347068542770, segun.oladipo@solinagroup.com

Background:

- Nigeria accounts for 28.6% of global maternal deaths, with Kano State reflecting this crisis through a high maternal mortality ratio of 937 per 100,000 live births. Preeclampsia and eclampsia remain the leading causes of these deaths
- A phase I research was conducted to examine factors that affect the health of pregnant women with preeclampsia and eclampsia, as well as their babies, in Kano State
- It identified five main challenges: poor referral and transfer processes, weak record-keeping, limited access to healthcare, poor tracking of patient outcomes and lack of follow-up care
- Building on these findings, This ongoing phase II of the research aims to evaluate the outcomes of the women diagnosed with preeclampsia after they are referred from primary health centres to higher-level of care





Methodology

Details ahead

Study Design

- **Prospective cohort research**
- **Qualitative survey**
  - Kobo integrated questionnaire

Study population/sample

- All pregnant women visiting the participating facilities with the sample comprising those diagnosed with PE/E

Duration

- Feb 2025 – Feb 2026

Data Collection and Management

- Data collected through three steps (PHC OIC – Field officer – Research Consultant

Sample size

Number of LGAs	**8**
Number of PHCs	**20**
Number of SHFs	**7**
Number of THFs	**1**
Number of Pregnant women enrolled	**74**

Data Cleaning and Analysis

- Coding and analysis of validated data utilizing excel spreadsheet and visualized on an excel dashboard
- Quantitative and qualitative analysis will be done using appropriate tools

Source: Team Analysis

Data collection and management is carried out in three steps



PHC level enrolment by OICs and HCWs

- Obtain informed consent and recruit pregnant women with preeclampsia/ eclampsia
- Fill ***SECTION A*** of the questionnaire and submit to the field officer



Phone call follow-up by the Field Officer

- Cross-check section A
- Make follow up call to gather additional information for ***SECTION B***
- Submit Section A and B to the Research consultant



Physical follow-up by the Research Consultant

- Cross-check sections A & B
- Follow up the woman at the facility she was referred to and fill ***SECTION C*** from case notes and informal interviews of HCWs
- Submit completed survey

Smiles Mothers



Results: Key demographic characteristics of the study participants *(%)*

This study is being conducted in eight (8) Local Government Areas (LGAs) in Kano State: representing a diverse group of pregnant women with 74 participants enrolled so far, across different age groups, parity, and educational levels.

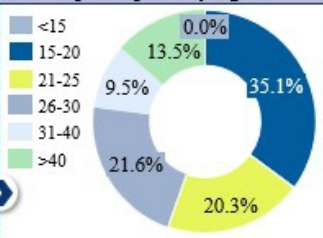
Total Participants

74

Total number of participants

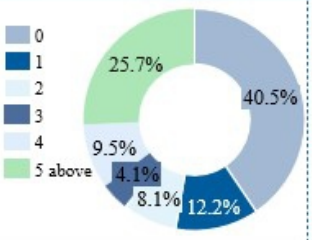
Pre-eclampsia prevalence = 4%

Distribution of participants by Age



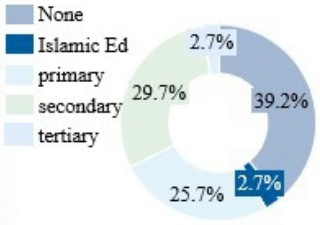
- Majority of the women are within the age range of 15 – 20 years (35.1)

Distribution of participants by Parity



- Majority of the women are nulliparous (40.5%)

Distribution of participants by Educational Level



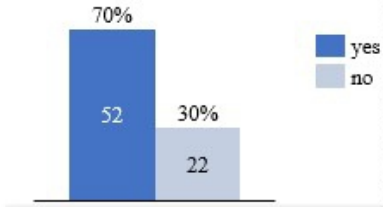
- Significant proportion of the participants had no formal education (39.2%)

Additional findings included that Most participants were married (97.2%), identified as Hausa (93.0%) and Muslim (88.7%), lived in monogamous households (60.6%), and were primarily housewives (76.1%) with husbands engaged in business (64.3%)

Source: Team Analysis

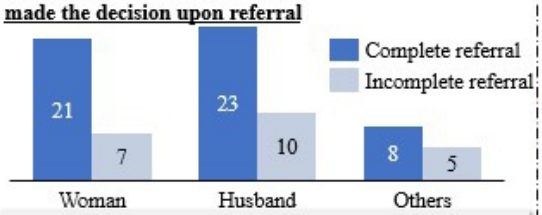
Results: Referral outcomes and maternal/child outcomes

Referral completion



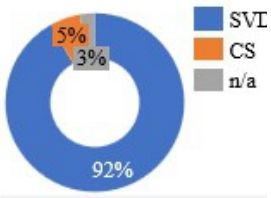
- There were 22 incomplete referrals out of which **19** delivered at home

Comparison of referral completion based on who made the decision upon referral



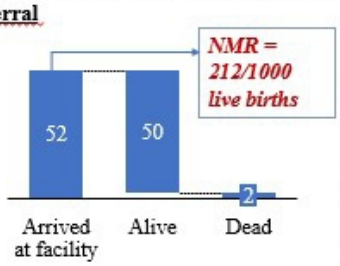
- Referral completion was 44.2% when the man made the decision (2% higher than when the woman decided)

Mode of delivery

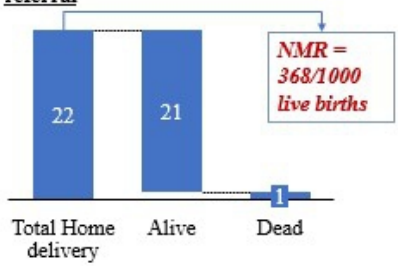


- SVD was the predominant mode of delivery (92%)

Maternal/child outcomes for completed referral



Maternal/child outcomes for incomplete referral



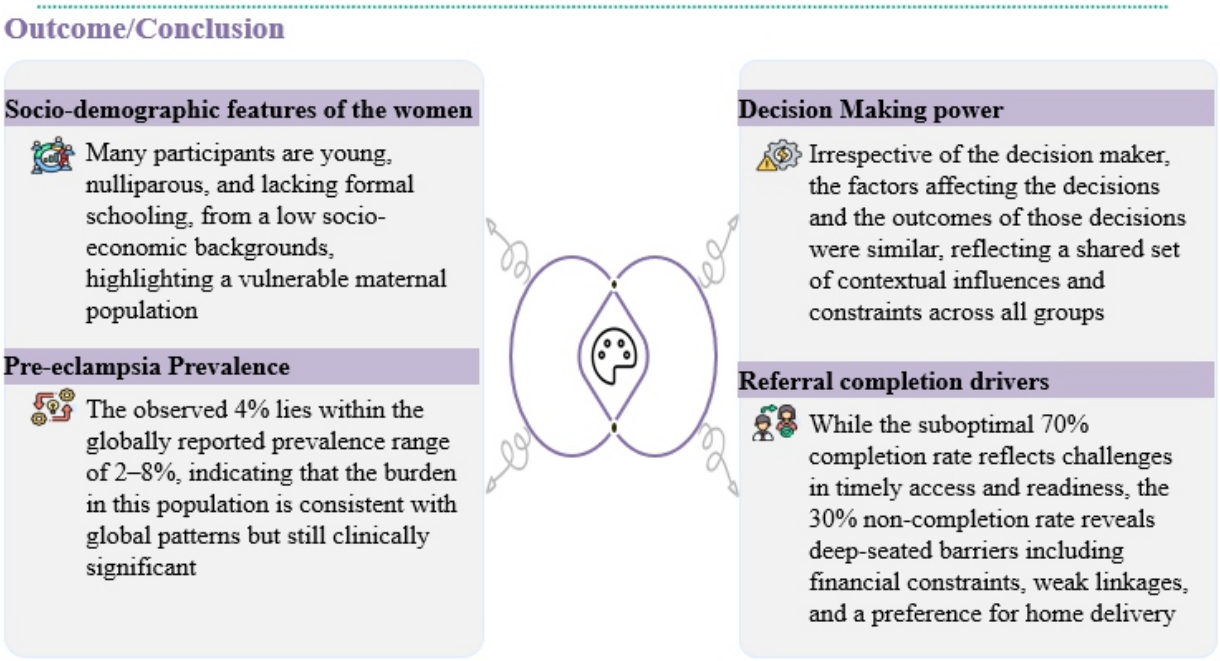
Preliminary **qualitative analysis** revealed that some of the reasons for non completion of referral include

- Financial constraint
- Distance
- Poor referral linkages
- Lack of trust for HCFs

Discussion:

While maternal survival was high in both groups, neonatal outcomes were markedly poorer for home deliveries, underscoring the critical role of facility-based management of PE/E. Persistent referral bottlenecks and socio-demographic vulnerability—young, low-literacy, low-income women—continue to hinder timely care.





Conclusion:

Early findings reveal significant gaps in referral completion and very high neonatal mortality among home deliveries. Addressing financial, logistical, and trust-related barriers, while strengthening referral linkages, will be central to improving outcomes for women with PE/E in Kano State.

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Hierarchical Assessment of Urban–Rural Lifestyle Disparities, Transactional Sex Engagement, and Prevalence of high-risk HPV infection in Ibadan, Nigeria

Afeez Opeyemi Akintayo[1], Yusuf O. Bello[1], Oluwadamilola Adeola Oyadeyi[1], Ridwanullah Najeemdeen[1], Adekunle Daniel[1,2], Akinyele Adisa[1,3], Isaac Adewole[1,4], Deborah Watson-Jones[5], Imran Morhason-Bello[1,4,6]

Affiliations

1. HPV Consortium, College of Medicine, University of Ibadan, Nigeria.
2. Department of Otorhinolaryngology, College of Medicine, University of Ibadan, Ibadan, Nigeria.
3. Department of Oral Pathology/Oral Medicine, College of Medicine, University of Ibadan, Ibadan, Nigeria.
4. Department of Obstetrics and Gynaecology, Faculty of Clinical Sciences, College of Medicine, University of Ibadan, and University College Hospital, Ibadan, Nigeria.
5. Department of Clinical Research, London School of Hygiene and Tropical Medicine, United Kingdom
6. Institute of Advanced Medical Research and Training, College of Medicine, University of Ibadan, Nigeria
7. PRESENTER:afeezakintayo84@gmail.com

Background

High-risk human papillomavirus (hrHPV) infection is the primary causal agent for cervical cancer, which remains a leading cause of cancer-related morbidity and mortality among women in low- and middle-income countries. Globally, the sub-Saharan Africa region bears the highest prevalence (24 %) of HPV infection [WHO, 2022]. Epidemiologic studies indicate that the risk of contracting genital HPV infection and cervical cancer is influenced by risky sexual activity and smoking [Bowden. et al., 2023]. While HPV-associated cancers are well studied, limited evidence exists on how engagement in transactional sex influences exposure to high-risk HPV (hrHPV) infection and how these determinants differ by settlement. Few studies have applied a hierarchical framework to explore the combined effects of socioeconomic, lifestyle, and behavioural factors on these disparities.

Objective(s)

The main objective of this study was to hierarchically examine the combined effects of socioeconomic, lifestyle, and behavioural factors on urban-rural disparities in transactional sex. It also used the same approach to explore the factors responsible for urban-rural disparities in hrHPV.

Method

A cross-sectional study design was employed using secondary data from the Sexual Behaviour and HPV Infections in Ibadan, Nigeria (SHINI) study which assessed HPV infection and sexual health behaviours among sexually active adults aged 18–45 years in urban and rural communities. The dataset included sociodemographic, lifestyle (tobacco,



alcohol, drug use), and sexual behaviour variables. Anal, cervical, vulvar, and oral samples collected by trained nurses were tested for hrHPV using validated molecular methods. Hierarchical logistic regression examined the contribution of distal, intermediate, and proximal factors to transactional sex and hrHPV infection at a 5% significance level.

Results

The data of 626 male and female participants, of whom 320 were from urban settings, and 306 from rural settings were analyzed. In total, 6% of urban population, and 5% of rural population, had ever engaged in transactional sex. Regardless of the settlement, the overall prevalence of transactional sex among the participants was 5.3%. Comparing the prevalence of high-risk HPV (hrHPV) between urban and rural settings, 45% of urban population, and 44% of rural population, were positive to any hrHPV. Irrespective of the settlement type, prevalence of hrHPV was significantly higher among female (65.84%) compare to male (34.16%) participants. Transactional sex was more likely among unskilled workers (aOR = 2.47; 95% CI: 0.50–12.34), those with multiple partners (aOR = 5.38; 95% CI: 1.84–15.74), and tobacco users (aOR = 3.42; 95% CI: 1.07–10.97). The odds of hrHPV infection among those engaging in transactional sex were not significant (aOR = 1.32; 95% CI: 0.66–2.67).

Discussion

The findings reveal a similarity in the prevalence of transactional sex and burden of hrHPV infection among rural and urban populations. The similarity in transactional sex prevalence between urban and rural settings may reflect shared economic pressures and livelihood challenges. In comparison, the odds of transactional sex in urban areas were a bit higher than in rural areas initially. It then decreased drastically after adjustment for sociodemographic, sexual behaviour, and lifestyle factors. The observed significant association between occupation and income, and engagement in transactional sex, emphasises the role of employment and economic vulnerability in shaping sexual behaviours.

Conclusion

In conclusion, the study suggests that socioeconomic and lifestyle factors, rather than settlement type alone, play a central role in shaping disparities in transactional sex and high-risk HPV infection. These findings indicate that interventions must move beyond urban–rural distinctions and instead address the underlying social and behavioural conditions that place women at risk. Strengthening community-based education, improving access to screening and vaccination, and implementing integrated HPV prevention strategies across both urban and rural settings will be necessary for reducing the burden of cervical cancer in low-resource settings.



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Beyond the Clinic: Exploring the Role of Medical Writing for Obstetricians and Gynaecologists

Azuka ChinweokwuEzeike

Affiliation
D-ACEMedicalConsulting&CommunicationsServices,Abuja/StJudeWomen'sClinic, Abuja.Nigeria

CorrespondingAuthor
AzukaChinweokwuEzeike
PhoneNumber:+2348066520991, E-mail:h.hephzibah@yahoo.co.uk

Introduction

- Medical writing is a field dedicated to communicating scientific and medical information to appropriate target audiences to achieve specific objectives.
- It is well developed in the USA and UK but is poorly understood and often overlooked by clinicians in Africa.
- Medical writing plays a major role in health promotion and in the communication of health information to the public.
- In addition, it is critical for the continuing medical education of health professionals. This is a concept-based presentation.

Objectives

1. To introduce obstetricians and gynaecologists to the vital field of medical communication.
2. To explore the scope of medical writing for obstetricians and gynaecologists.
3. To highlight the roles obstetricians and gynaecologists can play in improving reproductive health outcomes through medical writing.

Overarching Aim

The overarching aim of medical writing is to bridge the gap between scientific research and the audience, whether healthcare professionals, policy makers, or the general public.

Scope of Medical Writing for Obstetricians and Gynaecologists

- Consumer health and patient education
- Continuing medical education (CME)
- Regulatory writing
- Marketing and public relations
- Medical journalism
- Grantsmanship

Medical Writing Roles for Obstetricians and Gynaecologists

Obstetricians and gynaecologists can play roles as writers, reviewers, project managers, educators, etc., in any of these:



- Health websites
- Continuing medical education (CME) providers
- Hospitals and health organizations
- Pharma companies / Contract research organizations (CROs)
- Medical device companies
- Health-related non-profit organizations
- Medical communications agencies
- Professional bodies

Roles of Obstetricians and Gynaecologists in Medical Writing Across Different Sectors

Sector	How Obstetricians Contribute	Examples of Writing Tasks
Health Websites	Provide expert-reviewed, patient-friendly reproductive health content.	Articles on pregnancy, childbirth, fertility, contraception, menstrual health, menopause.
Continuing Medical Education (CME) Providers	Develop training materials and educational content for healthcare professionals.	Slide decks, course modules, case-based learning, CME assessments.
Hospitals and Health Organizations	Create internal and external communication materials to improve patient care and health education.	Clinical protocols, SOPs, patient information leaflets, antenatal class materials.
Pharma Companies / Contract Research Organizations (CROs)	Offer clinical expertise to support drug development and regulatory documentation.	Clinical trial protocols, investigator brochures, safety reports, informed consent forms.
Medical Device Companies	Translate clinical knowledge into clear documentation for women's health devices.	User manuals, device training materials, clinical evaluation reports.
Health-Related Non-Profit Organizations	Support advocacy, program development, and community health communication.	Policy briefs, grant proposals, community education toolkits, campaign content.
Medical Communications Agencies	Provide expert insight for high-quality scientific and educational content.	Manuscripts, slide decks, medical affairs documents, digital health content.
Professional Bodies	Strengthen professional standards, scientific communication, and event-related reporting.	Clinical guidelines, position statements, consensus documents, **conference coverage** (conference summaries, daily highlights, post-event reports



EXPECTED OUTCOMES

Medical writing enables obstetricians and gynaecologists to communicate health information to a wider audience beyond the clinic.

Benefits occur at three levels:

1. Hospitals / Health Organizations
2. Health System
3. Individuals

Hospitals / Health Organizations

- Including health content on websites in lay language increases visibility and trust, e.g., Cleveland Clinic.
- Creates opportunities to monetise website content.

Health System

- Updated and educated health professionals.
- Strengthened health system.

Benefits for Individuals

- Career progression and promotion opportunities.
- Increased professional visibility.
- Ability to impact health beyond the clinic.
- Additional sources of income.
- Remote work opportunities.

Conclusion

- The healthcare space is evolving. Patients have moved online, and learning has become more digital. Enhancing reproductive health outcomes requires that obstetricians and gynaecologists explore their roles in improving health outcomes beyond the clinic through medical writing.
- It is recommended that medical writing be incorporated into undergraduate and postgraduate training for clinicians, and that clinicians develop the appropriate skill set to function effectively in this field.

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Pregnancy Outcomes of Internally Displaced Women at a Tertiary Hospital in North-Central Nigeria: A Five-Year Review

Gilbert Uwadia[1], Fatima Muhammad[2], Lola Ameyan[2], Olatunde Amode[2], Femi Abraham[2], Cynthia Kukoyi[2], Zainab Saidu[2], Lilian Mutea[2], Olufunke Fasawe[2]

Affiliations:
1. National Primary Healthcare Development Agency (NPHCDA)
2. Clinton Health Access Initiative

Corresponding Author:
Olatunde Amode
Clinton Health Access Initiative
+2348035972167, oamode@clintonhealthaccess.org)

Introduction

- Internally displaced persons (IDPs) are people forced to flee their homes as a result of conflict, violence, violations of human rights, or natural or human-made disasters, to other locations within their country.
- These people are often sheltered in temporary settlements called IDP camps.
- About 75.9 million people were living in internal displacement globally as of the end of 2023, of which 46% are in Sub-Saharan Africa.
- In Nigeria, there are 3.646 million IDPs across 14 states, including Benue State, where about half of them are sheltered, mainly women and children.
- Despite the large number of IDP women, there is little local evidence describing their pregnancy and childbirth outcomes at referral centres.

Objective

- The study aims to review the maternal and foetal outcomes of pregnant internally displaced women who delivered at Benue State University Teaching Hospital (BSUTH) in Makurdi, Nigeria.

Methodology

- This was a five-year retrospective, descriptive study involving 359 internally displaced women who delivered at the BSUTH, which is a referral centre for managing IDP women with high-risk pregnancies and obstetric complications.
- Data on maternal socio-demographics, obstetric history, and maternal and fetal outcomes were collected.
- Descriptive statistics were used to analyze the data, with categorical variables presented as frequencies and percentages and continuous variables as means and standard deviations.



Results

- The average age was 26.4 ± 6.1 years. Most women (62.4%) had 2-4 children, and 93.9% were married. The majority were farmers (73.0%), and 95.8% had singleton pregnancies.
- A large proportion (86.4%) of women were unbooked for antenatal care. Vaginal delivery was the mode of delivery in 49.6% of the cases, with caesarean section accounting for 46.5%.
- Anemia was the most common co-morbidity (81.2%). Postpartum complications affected 9.7% of the women, with postpartum hemorrhage being the most frequent complication (51.4%).
- The maternal mortality ratio (MMR) was 0.6% or 707 per 100,000 live births
- Regarding fetal outcomes, pre-term deliveries occurred in 29.8% of the cases, 74.7% of the cases were live births, and 24.3% were stillbirths.
- Low birth weight was observed in 29.4% of neonates, and neonatal complications occurred in 24.0% of neonates, with respiratory distress being the most common (45.6%).

Discussion

Most participants were young and multiparous, similar to patterns seen in other displaced populations. Their predominantly rural background and farming occupations highlight the economic disruption caused by displacement. Antenatal care attendance was very low (13.6%), far below national figures, largely due to insecurity, poor access, and financial limitations. Anaemia was extremely common (81.2%), higher than rates among undisplaced women, likely driven by poor nutrition and infections such as malaria. Caesarean section rates were high (46.5%) because many women presented with complications. Postpartum haemorrhage occurred in 5%, influenced by anaemia and multiparity, and many required blood transfusion. The maternal mortality ratio was 707 per 100,000 live births, lower than national estimates, possibly due to government and donor support that improved access to care. However, preterm birth, stillbirth, and low birth weight rates were high, reflecting poor antenatal care and maternal vulnerabilities.

Conclusion

- Pregnancy outcomes among internally displaced women are poor, with high rates of caesarean section, preterm delivery, stillbirth, and postpartum complications.
- We recommend that antenatal care services should be strengthened within IDP camps.
- The government and non-governmental organizations need to assist in equipping the health facilities in IDP populations with the necessary infrastructure and personnel to manage obstetric emergencies.



Media as a Collaborative Public Health Actor in Improving Understanding of Causes and Driving Action to Reduce Maternal Mortality in West Africa: An Appraisal of Media Reportage on Maternal Deaths from 2015 to date

Kiran Roy[1], Noimot Balogun[2], Aduragbemi Banke-Thomas[1]

Affiliations

[1]Faculty of Epidemiology and Population Health, London School of Hygiene & Tropical Medicine, London, United Kingdom

[2]Faculty of Communication and Media Studies, University of Lagos, Lagos, Nigeria

Corresponding Author

Aduragbemi Banke-Thomas

Address: London School of Hygiene & Tropical Medicine, Keppel St, London WC1E 7HT

Telephone: +2348023466087

Email: aduragbemi.banke-thomas@lshtm.ac.uk

Introduction

Maternal mortality is a serious public health issue, with countries in West Africa facing some of the highest global burden. Media reportage can significantly influence public health policy.

Country	MMR	Maternal deaths	Lifetime risk of maternal death	WHO Classification
Nigeria	993	75000	1 in 25	Very High
Liberia	628	1100	1 in 40	Very High
The Gambia	354	290	1 in 72	High
Sierra Leone	354	920	1 in 74	High
Ghana	234	2100	1 in 133	High
Sub-Saharan Africa	454	182000	1 in 55	-
World	197	260000	1 in 272	-

Footnote: Data in table is based on the Trends in maternal mortality 2000 to 2023: Estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division



Objectives

We sought to conduct a media content analysis of electronic media in the five Anglophone West African countries (The Gambia, Ghana, Nigeria, Liberia, and Sierra Leone) to understand:

What is reported about maternal death?

How is maternal death reported?



Methodology



Four to five widely read online newspapers from each country, and two of their most popular blogs, were selected.



For each news source, searched for relevant articles, retrieving only those that included detailed maternal deaths by obstetric causes.



Quantitative and qualitative data analysis using Three Delay Model (for content) and Principles of AHCJ (for quality of reports).



Article Retrieval

Insights from Media Coverage

Total Articles: 46

A total of **46 detailed articles** were retrieved, with 29 from online newspapers and 16 from popular blogs.

Source Distribution

Reports comprised of:
29 newspaper articles (61%)
16 blogs (35%)

Publication Trends

Most articles were published in **2023**, with a significant majority (76%) originating from **Nigeria.**

Country	Unique Reports	Total Reports
Nigeria	31	35
The Gambia	3	4
Ghana	2	2
Sierra Leone	2	2
Liberia	3	3

Reporting Content

Delays and Issues Highlighted

Delay	# articles containing theme	Themes within Delay Type
I	6	Thought of travelling great distances, riskiness/ affordability of travel, high hospital fees, social norms/influences, poor reputation of hospitals
II	12	Bad road infrastructure, distance to functional facilities, police delays, lack of safe transportation, unsufficient available ambulance/funds for ambulance fuel
III	38	Long wait time due to staff shortages/unavailability of skilled HCPs, alleged negligence and malpractice, care contingent on payment (e.g. wrong currency, delays in payment notification system), etc.; lack of medication/supplies, infrastructural issues (e.g. using phones for light)



Reporting Style

Quality standards	Results
Recognition of nuance	71% included >1 voice, with spouses being most prevalent (41%) and HCPs in 23%. Relatives mainly described events leading up to death and/or blamed healthcare system; HCWs mainly denied misconduct
Show respect	87% articles showed respect (i.e. no graphic images, no derogatory words, etc.)
Avoid sensational language	30% articles used sensational language, 98% avoided unecessary details. Example: author described death of woman *"like a musical track put on repeat"*
Seek out independent experts	2 articles consulted independent experts
Advocacy vs. reporting	All articles distinguished between fact/opinion, authors did not take sides
Be original	10 sets of articles reporting the same maternal death. Most varied in perspective, but some were the same and made no attribution to original.

Conclusion

Media reports offer novel insights to strengthen efforts to reduce maternal mortality.

Implications for policy and practice

- analysis of media aligns with epidemiological trends
- media provide additional insights to MPDSR efforts
- high proportion of Phase III issues suggests improvements needed in health workforce/infrastructure, such as training, minimizing financial and geographic barriers, improve obstetric referral systems, cultural reorientation of police
- improvement in quality media reports on detailed obstetric deaths, mandated refresher courses for journalists and bloggers

Future Research

- expand geographic and linguistic scope of media analysis
- expand to pregnancy-related deaths (i.e. GBV, murder for baby, rituals, road traffic accidents, etc.)



Utilisation of Maternal Health Services; A Mixed Methods Study of Women AttendingAntenatal Care at Primary Health Centres in Abuja, Fct, Nigeria

Azuka Chinweokwu Ezeike[1], Duro Clement Dolapo[2], Elkenah Chubike Ndie[3]

Affiliations
1D-ACEMedicalConsulting&CommunicationsServices,Abuja/StJudeWomen'sClinic, Abuja.Nigeria
2DepartmentofCommunityMedicineandPublicHealth,NileUniversityofNigeria,Abuja, Nigeria
3Departmentof NursingScience,NationalOpenUniversityofNigeria (NOUN),Abuja,Nigeria

Corresponding Author
AzukaChinweokwuEzeike
D-ACEMedicalConsulting&CommunicationsServices,Abuja/StJudeWomen'sClinic, Abuja.Nigeria
PhoneNumber:+2348066520991, E-mail:h.hephzibah@yahoo.co.uk

Introduction

- Access to the full range of maternal health services significantly reduces maternal and newborn morbidity and mortality.
- However, optimal antenatal, intrapartum, and postnatal care remains a privilege that some women in developing countries do not have.
- Poor utilization of these essential services contributes to the persistently poor maternal health indices in these regions.
- Assessing the level of service utilization and the factors influencing it is critical for improving access and outcomes.
- This was based on the Andersen Model of Health Service Utilization.

Objectives

- To determine the level of utilization of antenatal, intrapartum, and postpartum care services in Primary Health Care facilities in Abuja, FCT.
- To identify the factors influencing access to maternal health services.

Methodology

Study Design

Convergent-parallel mixed methods
Quantitative: Cross-sectional
Qualitative: Focus Group Discussions
This work was drawn from a wider research study that assessed the perception and utilization of maternal health services in Abuja, FCT."

Study Population

Study population: Women of childbearing age
Target population: Pregnant women attending care at PHCs



Sample Size and Setting
370 women across 12 health centres in 3 Area Councils in Abuja, FCT
58 women participated in the Focus Group Discussions

Data Analysis
Quantitative: SPSS
Qualitative: Thematic analysis

Results

Quantitative Results

Sample and Demographics
N = 365 (with complete entries); mean age 29.5 ± 4.6 years . Most were employed (66.7 percent) and earned below minimum wage (62.9 percent).
Pregnancy confirmed: 58.9% via test, 6% via test/ultrasound, 35.1% symptoms only
69% lived ≤30 min from PHC; 99.5% paid out-of-pocket

Source of Health Information and Decision-Making
Sources: TV 71%, Social media 60%, Radio 40%
Decision-making: 90% self-involved

Maternal Health Service Utilization
ANC attendance: 95.6% (≥4 visits: 82.5%)
Institutional delivery: 80%
Postnatal care: 28.2%

Key Associations
Education and employment → ANC, delivery, postnatal care ($p < 0.05$)
Age, ethnicity, religion, income → no significant effect

Barriers
Long wait times: 53%
Poor roads: 42%

Qualitative Findings
Considered under three thematic areas:

Factors Influencing Facility Choice
Quality of care, staff behaviour, proximity, cost, services

Barriers at PHCs
Delays, insufficient staff/exam couches, poor infrastructure

Suggestions for Improvement
More staff, living quarters for midwives
Comfortable seating, more exam couches
24-hour electricity, ultrasound and lab services



Table 1: Maternal Health Service Utilisation

Variable	**Category**	**Frequency (%)**
Trimester at Booking	First Second Third	38(10.4) 302(82.7) 25(6.9)
ANC in the Last pregnancy	Health Facility Maternity Home Church None	349(95.6) 7(1.9) 1(0.3) 8(2.2)
Number of Antenatal Visits in the Last Pregnancy(n=349)	4 or more Less than 4	301(82.5) 48(13.7)
Place of last delivery	Health Facility Maternity Home Church Home	292(80) 20(5.5) 1(0.3) 52(14.2)
Received Postnatal care	Yes No	103(28.2) 262(71.8)
Response to illness in pregnancy	Ignore Visit the Health Facility Buy drugs from the Pharmacy Visit the Church/Mosque for prayers	 27(7.4) 298(81.6) 39(10.7) 1(0.3)
Ever had health check before Pregnancy	No Yes	87(76.2) 278(23.8)

Table 2: Association of Socio-Demographic Variables with Maternal Health Utilisation

Variable	Antenatal Care		χ^2 (P-Value) Fisher exact p	Place of Delivery		χ^2 /Fisher exact (P-Value)	Postnatal Care		$\chi^{2/}$ Fisher exact (P-Value)
	Yes	No		Health Facility	Others		Yes	No	
AGE									
<25	47 (97.9)	1(2.1)	2.106 (0.349)	36(75)	12(25)	1.0672	16(33.3)	32(66.7)	0.914
25-34	247(94.6)	14(5.4)	0.504	212(81.2)	49(18.8)	(0.587)	73(28)	188(72)	(0.633)
≥35	55(98.2)	1(1.8)		44(78.6)	12(21.4)		14(25)	42(75)	
ETHNICITY									
Igbo	57(98.3)	1(1.7)	1.977 (0.577)	45(77.6)	13(22.4)	2.517	17(29.3)	41(70.7)	0.820
Yoruba	32(94.1)	2(5.9)	0.650	30(88.2)	4(11.8)	(0.472)	8(23.5)	26(76.5)	(0.845)
Hausa	42(97.7)	1(2.3)		32(77.4)	11(22.6)		14(32.6)	29(67.4)	
Others	218(94.8)	12(5.2)		185(80.4)	45(19.6)		64(27.8)	166(72.2)	
RELIGION									
Christianity	241(94.5)	14(5.5)	2.472 (0.116)	208(81.6)	47(18.4)	1.301	66(25.9)	189(74.1)	2.281
Islam	108(98.2)	2(1.8)	0.164	84(76.4)	26(23.6)	(0.254)	37(33.6)	73(66.4)	(0.131)
EDUCATION*									
None	11(91.7)	1(8.3)	10.603 (0.014)	6(50)	6(50)	16.113	2(16.7)	10(83.3)	10.636
Primary	19(82.6)	4(17.4)	0.028*	16(69.6)	7(30.4)	(0.001)	3(13.0)	20(87.5)	(0.014*)
Secondary	206(96.7)	7(3.3)		165(77.5)	48(22.5)	<0.001*	53(24.9)	160(75.1)	
Tertiary	113(96.6)	4(3.4)		105(89.7)	12(10.3)		45(38.5)	72(61.5)	
EMPLOYMENT STATUS*									
Employed	272(97.1)	8(2.9)	6.684 (0.010)	231(82.5)	49(17.5)	4.697	88(31.4)	192(68.6)	6.114
Unemployed	77(90.6)	8(9.4)	0.016*	61(71.8)	24(28.2)	(0.030*)	15(17.6)	70(82.4)	(0.013*)
OCCUPATION									
Professional	11 (100)	0 (0)	3.941 (0.139)	11 (100)	0 (0)	4.435	6 (54.5)	5 (45.5)	9.023

Skilled	241 (96.8)	8 (3.2)	0.182	202 (81.1)	47 (18.9)	(0.109)	77 (30.9)	172 (69.1)	(0.001*)
Unskilled	97 (92.4)	8 (7.6)		79 (75.2)	26 (24.8)		20 (19.0)	85 (81.0)	
SPOUSE'S OCCUPATION									
Professional	18 (100)	0 (0)	0.868 (0.648)	17 (94.4)	1 (5.6)	8.436	5 (27.8)	13 (72.2)	5.492
Skilled	310 (95.4)	15 (4.6)	1.000	262 (80.6)	63 (19.4)	(0.015)	87 (26.8)	238 (73.2)	(0.064)
Unskilled	21 (95.5)	1 (4.5)		13 (59.1)	9 (40.9)	0.017*	11 (50.0)	11 (50.0)	
PARITY									
1	147 (98.0)	3 (2.0)	4.450 (0.108)	120 (80.0)	30 (20.0)	9.756	47 (31.3)	103 (68.7)	3.698
2-4	185 (94.4)	11 (5.6)		162 (82.7)	34 (17.3)	(0.008*)	54 (27.6)	142 (72.4)	(0.157)
≥5	17 (89.5)	2 (10.5)		10 (52.6)	9 (47.4)		2 (10.5)	17 (89.5)	
MEANS OF TRANSPORT									
Private vehicle	27 (100)	0 (0)	3.147 (0.370)	21 (77.8)	6 (22.2)	6.201	8 (29.6)	19 (70.4)	12.502
Public vehicle	27 (100)	0 (0)	0.553	23 (85.2)	4 (14.8)	(0.102)	11 (40.7)	16 (59.3)	(0.006*)
Motorcycle/Tricycle	218 (95.2)	11 (4.8)		190 (83.0)	39 (7.0)		73 (31.9)	156 (68.1)	
Trekking	77 (93.9)	5 (6.1)		58 (70.7)	24 (29.3)		11 (13.4)	71 (86.6)	
WATCH TELEVISION									
Yes	249 (97.6)	6 (2.4)	8.324 (0.004)	211 (82.7)	44 (17.3)	3.985	76 (29.8)	179 (70.2)	1.049
No	100 (90.9)	10 (9.1)	0.009*	81 (73.6)	29 (26.4)	(0.046*)	27 (24.5)	83 (75.5)	(0.306)
USE SOCIAL MEDIA									
Yes	207 (96.3)	8 (3.7)	0.548 (0.459)	181 (84.2)	34 (15.8)	5.730	68 (31.6)	147 (68.4)	3.001
No	142 (94.7)	8 (5.3)		111 (74.0)	39 (26.0)	(0.017*)	35 (23.3)	115 (76.7)	(0.083)

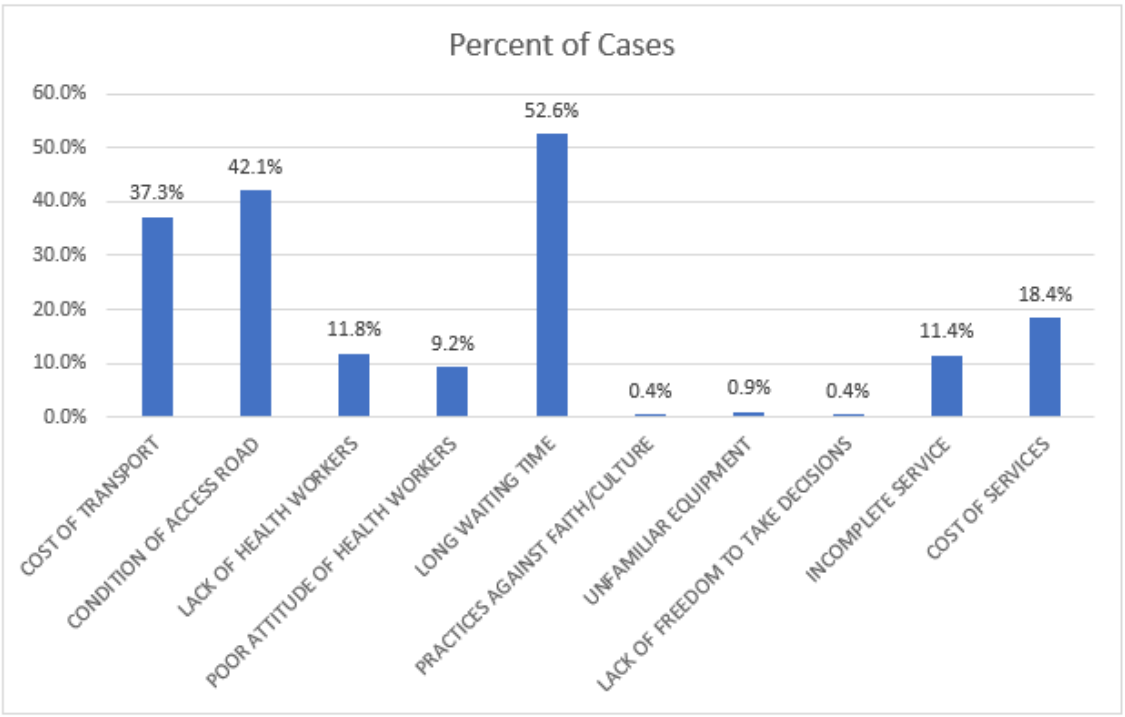

Figure 1-Barriers to Receiving Maternal Health Care at PHC's



Discussion

Maternal health service utilization: During their most recent pregnancy, 95.6% of participants received antenatal care, 80% had facility-based deliveries, and 28.2% utilized postnatal care, all higher than the 2024 NDHS-reported rates of 63%, 43%, and 43%, respectively.

Findings are consistent with studies in Nigeria, Ghana, and Ethiopia (Igyuse et al., 2020; Kifle et al., 2017; Nuamah et al., 2019).

Timing of ANC registration: The majority (89.6%) of the patients registered for antenatal care after the first trimester, which agrees with findings by Okoror et al., 2020. Lower figures were reported by Owigho and Isara, 2022; Ehiemere, 2017; and Fasiku et al., 2018.

Frequency of ANC visits: Most participants (82.5%) had up to four visits, consistent with Nuamah et al., 2019. Lower figures were reported in Kano (Sayyadi et al., 2021). NDHS 2024 reported 52%.

Facility-based delivery: Eighty percent of patients had their most recent delivery at a health facility, similar to findings in Ghana and Enugu State, but much lower rates were reported in community-based studies in Benue (42%) and Edo (46.6%) (Igyuse et al., 2020; Nuamah et al., 2019; Okonofua et al., 2018; Okpala et al., 2019).

Postnatal care (PNC): Utilization was low at 28.2%, below the 43% reported in the 2024 National Demographic and Health Survey. Atnafu et al., 2020; Fasiku et al., 2018; and Nuamah et al., 2019 reported similar figures.

Education and employment significantly influenced maternal health service utilization ($p < 0.05$), in agreement with Fasiku et al., 2018 and Igyuse et al., 2020.

Barriers to care: Lengthy wait times (52.6%), poor access roads (42.1%), inadequate staffing, unreliable electricity, and insufficient examination couches. Cost and negative health worker behaviour were also reported by other studies (Owigho and Isara, 2022; Akeju et al., 2016; Dapaah and Nachinaab, 2019).

Conclusion

Maternal healthcare utilization at the PHCs was high for antenatal care and institutional delivery but low for postnatal care uptake. Barriers, including staff shortages, limited equipment, long wait times, and poor roads, hindered optimal service delivery. Mothers' decisions were influenced by quality of care, staff behaviour, proximity, and cost, with education and employment positively affecting utilization.

It is recommended that infrastructure at PHCs be strengthened, with additional staff, reliable electricity, and essential equipment, while postnatal care should be enhanced through health education. Quality of care should also be maintained through regular staff training and appraisal.



Innovative Strategy for improving uptake of Cervical Cancer Screening among vulnerable Population: Lessons from the Ibadan Mobile Truck Clinic (MTC) Experience

Ridwanullah Najeemdeen[1], Deborah O. Oke[1,11], Sunday Oyerinde[1,2], Kate Klein[1], Busayo Tofio[1], Eugene Ayeni[1], Margaret Okoeguale[1], Moses O. Adewumi[1,3], Oluwatoyin E. Olalemi[1,4], Olusola M. Ibraheem[1], Adekunle Daniel[1,5], Akinyele Adisa[1,6], Muhideen Olatunji[7], Oluwasesan Olusola[2], Olufemi J Ogunbiyi[8], Isaac F. Adewole[1,2], Mamoudou Maiga[9], Robert Murphy[10], Imran O. Morhason-Bello[1,2], Lifang Hou[9]

Affiliations

1. HPV Consortium, College of Medicine, University of Ibadan, Nigeria.
2. Department of Obstetrics and Gynaecology, Faculty of Clinical Sciences, College of Medicine, University of Ibadan, and University College Hospital, Ibadan, Nigeria.
3. Department of Virology, Faculty of Basic Medical Sciences, University of Ibadan, Ibadan, Nigeria.
4. Department of Family Medicine, University College Hospital, Ibadan, Nigeria.
5. Department of Otorhinolaryngology, College of Medicine, University of Ibadan, Ibadan, Nigeria.
6. Department of Oral Pathology/Oral Medicine, College of Medicine, University of Ibadan, Ibadan, Nigeria.
7. Oyo State Primary Health Care Board, State Secretariat, Agodi, Ibadan.
8. Department of Pathology, Faculty of Basic Clinical Sciences, University of Ibadan, Ibadan, Nigeria.
9. Department of Preventive Medicine, Feinberg School of Medicine, Northwestern University, Chicago, USA.
10. Institute for Global Health, Feinberg School of Medicine, Northwestern University, Chicago, USA.
11. Department of Epidemiology and Medical Statistics, Faculty of Public Health College of Medicine, University of Ibadan, Nigeria.

Objective: This study evaluated the Ibadan MTC in Oyo State as an innovative reproductive health strategy for cervical cancer prevention. The assessment focused on the MTC contribution to reducing barriers to CC screening in LMICs.

Methodology: The MTC is partnership with Oyo State Primary Health Care Board and was deployed across hard to reach urban, and peri-urban/rural communities in Oyo state. Women were sensitized through the primary health care and invited to attend. Cervical and oral swabs were collected from consented participants in the MTC by health professionals and processed on-site using diagnostic equipment, enabling same-day results and treatment. Interviewed questionnaires were administered and participants' feedback analyzed to explore uptake of services and perceptions of MTC delivery.

Result: MTC recorded high community participation and support confirming feasibility and acceptability of mobile health interventions. On-site processing of cervical and oral swabs



facilitated rapid results, which improved early detection and prevention of HPV-associated cancers. In the shared experience of women appreciated convenience, privacy, and accessibility of the service, while health workers emphasized its value in reaching underserved populations. Despite challenges such as operational costs and time, the initiative demonstrated potential to significantly reduce the burden of Human Papillomavirus associated cancer.

Conclusion: The experience shows mobile clinics are an effective health innovation, increasing access to cervical cancer screening, reducing inequalities, and improving health outcomes. This innovation offers valuable lessons for scaling up strategies that reduce the burden of cervical cancers and advance reproductive health.

Ibadan Mobile Truck Clinic represents an innovative approach to expanding cervical cancer prevention in underserved communities and this study evaluates its role in improving access, acceptability and early detection of HPV-related diseases. This is an ongoing implementation project that involves screening for cervical cancer, oral health and other non-communicable diseases inside mobile trucks. The MTC is in partnership with Oyo State Primary Health Care Board and was deployed across hard to reach urban, and peri-urban/rural communities in Oyo state.

The MTC project is being implemented in four local government areas – Ibadan North, Ibadan Northeast, Kajola and Iseyin in Oyo State. Women were sensitized through the primary health care and invited to attend. Women aged 30-65 years had HPV based self-sampling while men and women had oral health examination, screening for hypertension and diabetes mellitus.

MTC has recorded high community participation and support confirming feasibility and acceptability. On-site processing of cervical and oral swabs facilitated rapid results, which improved early detection and prevention of HPV-associated cancers. Women appreciated convenience, privacy, accessibility of the service and health workers emphasized value in reaching underserved populations.

We have successfully screened over 600 participants for HPV-associated cancer (cervical cancer) in Ibadan out of these participants, more than 70 have been tested positive and given adequate treatment inside MTC. Also, more than 500 participants were screened for diabetes and hypertension. In addition to these, we have conducted urinalysis and blood glucose check on more than 500 participants. Their vitals were also checked during this screening procedure.

The initiative demonstrated potential to significantly reduce the burden of Human Papillomavirus associated cancer. The MTC showed that it is feasible and possible to offer equitable access to specialized care through innovative approaches. There is overwhelming support for implementation of MTC as a platform to offer health screening for hard-to-reach population, sustainability remains a challenge for its implementation in Nigeria.

In conclusion, the experience shows mobile clinic is an effective health innovation, increasing access to cervical cancer screening, reducing inequalities, and improving health outcomes. This innovation offers valuable lessons for scaling up strategies that reduce the burden of cervical cancers and advance reproductive health.



Correlation of Anthropometric Parameters with Serum Progesterone Levels for the Prediction of Ovulation in Infertile Women in Ile-Ife, Nigeria

Akaninyene Eseme Ubom[1,2], Olumide Stephen Akinsomisoye[1],Muritala Abiola Asafa[1], Kelechi Nelson Adindu[3], Omobolanle Suliyat Ahmed[1], Tomiwa Akande[1], Grace Fatima[4] Okenwa[4]

Affiliations

[1]Department of Physiological Sciences, Faculty of Basic Medical Sciences, College of Health Sciences, Obafemi Awolowo University, Ile-Ife, Nigeria

[2]Department of Obstetrics and Gynaecology, Faculty of Clinical Sciences, PAMO University of Medical Sciences, Port Harcourt, Nigeria

[3]School of Allied and Public Health, University of Chester, England

[4]Department of Obstetrics, Gynaecology and Perinatology, Obafemi Awolowo University Teaching Hospitals Complex Ile-Ife

Introduction

- Infertility is the failure of a co-habiting couple to achieve spontaneous pregnancy following ≥ 12 months of regular and adequate unprotected coitus.
- It affects 48.5 million couples i.e. 8-12 % of reproductive-aged partners, worldwide.
- Sub-Saharan Africa (SSA) and South Asia bear the highest burden of infertility globally.
- In Nigeria, infertility rates of between 23.9 % in Northern Nigeria and 48.1 % in South-West Nigeria have been documented.
- Baseline infertility investigations cost an estimated €200-600, a significant expense in low-resource settings. No Health insurance coverage for infertility evaluation.
- The ASRM recommends a cost-effective manner, from diagnostic modalities that are least invasive.
- Three baseline infertility investigations are recommended, evidence of ovulation, tubal patency test and semen analysis.
- Currently, the only clinical, non-invasive and free-cost adjunct that suggests and ovulation is regularity of menstrual cycles.
- Maternal anthropometric parameters such as high body mass index (BMI) and high waist-hip ratio (WHR) have been associated with anovulation and infertility.
- However, critical anthropometry values to clinically predict ovulation have not been established.

Objectives

- The aim of this study was to correlate the anthropometric parameters of body mass index, cormic index, waist-height ratio, waist-hip ratio, neck circumference and triceps skin fold thickness with serum levels of luteinizing hormone (LH) and progesterone as predictors of ovulation in infertile women in Ile-Ife, Nigeria.



Methodology

Study population: Reproductive age women (18-44 years) attending the Gynaecologic Clinic of Obafemi Awolowo University Teaching Hospitals Complex (OAUTHC), Ile-Ife, Nigeria.

Study design: A case-control study

Ethical clearance (ERC/2024/04/11) was obtained.
Consented women (60) into 3 equal groups of 20, Group I infertile and anovulatory, II Infertile and ovulatory, III fertile Women as Control. Height, weight and BMI were measured. The waist circumference (WC) and hip circumference (HC) were measured.
The waist-hip ratio was determined by dividing the WC by the HC and the waist-height ratio by dividing the WC with the standing height.
The cormic index (CI) was calculated with the formula: (sitting height/standing height) x 100.
Day 3 Serum LH and FSH were measured alongside day 21 Progesterone.
Statistical significance was determined at a p value < 0.05.

Results

Mid-luteal P4 had a significant moderate negative correlation with WHtR (r= -0.346, p= 0.008). Cormic index correlated significantly with WHtR (r= 0.265, p= 0.049). A CI of ≤ 43.6 was the best predictor of ovulation with an Area Under the Curve (AUC) of 0.659 (95% CI: 0.511-0.806), with sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) of 78.8%, 57.1%, 75.7%, and 61.9%, respectively. A WHR of ≤ 0.83 was the second most accurate predictor of ovulation with an AUC of 0.559 (95% CI: 0.404-0.714), with sensitivity, specificity, PPV and NPV, respectively, of 77.8%, 31.8%, 65.1% and 46.7%.

Table 1: Baseline Hormone Levels of the Women

Group	Day 3 LH (mIU/ml)	Day 21 Progesterone (ng/ml)
Median (IQR)	4.90 (2.40-9.65)	15.45 (3.57-22.18)
I (Anovulatory Infertile Women)	7.91 (3.48-14.35)	2.20 (0.23-3.90)
II (Ovulatory Infertile Women)	4.70 (3.05-5.00)	18.42 ± 5.23
III (Fertile Controls)	3.59 (1.22-9.85)	22.25 (15.70-28.35)



Table 2: Correlation of Anthropometric Parameters with Day 3 Luteinizing Hormone Levels

Anthropometric parameter	Pearson correlation coefficient, *r*	*p* value	Interpretation
BMI	0.035	0.806	Weak positive correlation
Cormic index	0.047	0.749	Weak positive correlation
WHR	-0.029	0.834	Weak negative correlation
WHeR	0.023	0.871	Weak positive correlation
Neck circumference	-0.029	0.836	Weak negative correlation
Triceps skinfold thickness	0.028	0.842	Weak positive correlation

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Table 3: Correlation of Anthropometric Parameters with Mid-Luteal Progesterone Levels

Anthropometry	Pearson correlation coefficient, *r*	*p* value	Interpretation
BMI	-0.434	**0.001***	Significant moderate negative correlation
Cormic index	0.186	0.178	Weak positive correlation
WHR	-0.009	0.946	Weak negative correlation
WHeR	-0.346	**0.008***	Significant moderate negative correlation
Neck circumference	-0.241	0.068	Weak negative correlation
Triceps skinfold thickness	-0.060	0.657	Weak negative correlation

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Table 4: Critical Values of Anthropometric Parameters for Predicting Ovulation

Parameter	AUC (95% CI)	Optimal cut-off	Sensitivity (%)	Specificity (%)	PPV (%)	NPV (%)
Cormic index	0.659 (0.511-0.806)	≤ 43.60	**78.8**	**57.1**	**75.7**	**61.9**
Waist-hip ratio	0.559 (0.404-0.714)	≤ 0.83	77.8	31.8	65.1	46.7
Triceps skinfold thickness (cm)	0.533 (0.382-0.684)	≤ 6.80	71.4	36.4	65.0	44.4
Neck circumference (cm)	0.383 (0.229-0.538)	≤ 32.30	66.7	27.3	60.0	33.3
Waist-height ratio	0.372 (0.224-0.520)	≤ 0.49	66.7	22.7	58.5	29.4
BMI (kg/m²)	0.326 (0.186-0.467)	≤ 24.0	52.8	31.8	55.9	29.2

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Discussion

Of the six anthropometric parameters assessed in this study, CI was the most accurate predictor of ovulation, with an AUC of 0.7, and moderate sensitivity and PPV of 78.8% and 75.7%, respectively. Waist-hip ratio was the second most accurate predictor of ovulation, with an AUC of 0.6, moderate sensitivity of 77.8%, and PPV of 65.1%. Within the limits of available literature search, the association between CI and ovulation noted in this study has not been previously reported. Furthermore, CI had a significant positive correlation with WHtR, while WHtR had a significant moderate negative correlation with mid-luteal P4 level in this study. Waist-height ratio was higher in anovulatory infertile women compared to both ovulatory infertile women and fertile controls. Similarly, anovulatory infertile women had a slightly higher WHR than their fertile counterparts. Whereas BMI measures general obesity, WHR and WHtR are specific for abdominal obesity, a significant risk factor for insulin resistance and anovulation. Waist-hip ratio and WHtR are, therefore, considered superior to BMI for predicting central adiposity and anovulation [The significant correlation of WHtR with both P4 and CI, and the highest sensitivity and overall model quality scores of WHR and CI for the prediction of ovulation in this study, underscore the potential of CI being used either alone, or in combination with WHR and WHtR, for the prediction of ovulation. This potential has to be further assessed with highly powered, larger studies, as some authors have recommended that a minimum sample of 300 produces the highest accuracy for evaluating the sensitivity and specificity of a screening test/tool for population-wide use.



Conclusion

- The study findings demonstrate the potential of cormic index being used alone, or in combination with waist-hip ratio and waist-height ratio, to predict ovulation amongst infertile women.
- This potential, however, requires further investigation with larger, highly powered studies, with a more heterogenous study population.
- The study findings will find significant clinical usefulness by reducing need for more invasive and costly evaluation of infertility.

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A 5-Year Review of Hysterectomy at the Olabisi Onabanjo University Teaching Hospital, Sagamu, South-West Nigeria

Adenuga Taiwo Olamilekan[1], Jagun Olusoji Edward[1], Ogunsowo Kehinde Moradeyo[1]

Affiliation
[1]Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun-State.

Corresponding Author
Dr Adenuga Taiwo Olamilekan,
Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun-State
Telephone:08068723494, Email: fowithtaiwo@yahoo.com

Introduction
Hysterectomy is said to have been done when the uterus with or without the adnexal structures are surgical removed. This could be done through the laparoscopic, vaginal or abdominal route. It is a common gynecological surgery performed on women in the peri and postmenopausal period. The prevalence worldwide is 17.2%. In Nigeria, the prevalence is between 14.6% - 18.18%. However, the procedure could be associated with intraoperative and postoperative complications, some of which are hemorrhage, wound infection, urological complications, vault prolapse, among many others.

Objective(s)
The aim is to review the incidence, indications, types, and complications of hysterectomy performed at Olabisi Onabanjo University Teaching Hospital (OOUTH), Sagamu, over a five-year period (2020–2024).

Method
This was a retrospective descriptive study of hysterectomy performed in OOUTH, Sagamu from January 1st, 2020 to December 31st 2024. Every patient that had hysterectomy was included.

Results
During the period, there were 823 gynaecological surgeries. Ninety-five patients had hysterectomy accounting for 11.5% which is close to the prevalence of hysterectomy in Nigeria that ranges between 14.6-18.18%. Most of the patients fall within the age group of ≥45 years (84.8%). Majority (56.6%) of the patients were para 4 and above. Uterine fibroid accounted for majority (58.7%) of the cases. Abdominal hysterectomy accounted for 97.8% while 2.2% had vaginal hysterectomy, there was no laparoscopic hysterectomy.



Table 1 Age and parity

Age	**No. (%)**
25-29	0(0)
30-34	1(2.2)
35-39	0(0)
40-44	6(13)
≥45	39(84.8)
Parity	
0	4(8.7)
1	5(10.9)
2	4(8.7)
3	7(15.2)
4	13(28.3)
≥5	13(28.3)

Table 2 Occupation

Occupation	**No. (%)**
Trader	26(56.5)
Civil servant	3(6.5)
Farmer	0(0)
Teacher	4(8.7)
Clergy	2(4.3)
Retired	3(6.5)
Businesswoman	2(4.3)
Tailor	2(4.3)
Caterer	2(4.3)
Admin officer	2(4.3)

Table 3 Route for Hysterectomy

Route	**No. (%)**
Abdominal	45(97.8)
Vaginal	1(2.2)
Laparoscopic	0(0)

Table 4 Indications for Hysterectomy

Indications	**No. (%)**
DUB	0(0)
Cervical dysplasia/neoplasm	5(10.8)
Fibroid	27(58.7)
Ovarian cyst/malignancy	3(6.5)
Adenomyosis	0(0)
Endometrial hyperplasia/Malignancy/Polyp	9(19.6)
UV prolapse	1(2.2)



Endometriosis	0(0)
Leiomyosarcoma	1(2.2)

Table 5 Types of Hysterectomy

Type	**No. (%)**
Total	43(93.5)
Sub-total	2(4.3)
Radical	1(2.2)

Table 6 Complications

Complications	**No. (%)**
Ureteric/Bladder Injury	2(4.3)
Anemia	18(39.1)
Wound sepsis	1(2.2)
Pyrexia	0(0)
Burst abdomen	0(0)
Anesthetic complication	0(0)
Prolonged stay	2(4.3)
Hemorrhage	4(8.7)
Death	1(2.2)
Nil complication	22(47.8)

Table 7

Type of oophorectomy	**No. (%)**
Unilateral	3(6.5)
Bilateral	42(91.3)
No oophorectomy	1(2.2)

Discussion

In this study, the prevalence rate of hysterectomy was 11.5%. This is close to the range of 14.6-18.18% that was reported by Iwoh Amah RS et al in 2024 to be the prevalence of hysterectomy in Nigeria. According to Ukah C.E et al, Uterine fibroid accounted for the majority of the reasons for hysterectomy. This study also showed that Uterine fibroid is the commonest reason for the procedure (58.7%).

The abdominal route was used for 97.8% of the cases and the vaginal route was used for 2.2% with the indication for the vaginal route being utero-vaginal prolapse.

The commonest complication was post-operative Anemia with a cut off of packed cell volume less than 30% used. Some patients however had more than one complication.

Conclusion

The indications for, and surgical outcome following hysterectomy are comparable to that from other public hospitals across the country. Training still needs to be done to prevent some of the common complications associated with this surgical procedure.



Feasibility of Clinic-Based Biofeedback and Digital Home Program for Pelvic Floor Disorders in Nigerian Women

Babafemi Daniyan[1], Fatimat Akinlusi[2], Gift Tom-George[1], Sumayya Adamu[1], Amos Olajide[2], Fashanu-Yekini Adenike[2], Jessica McKinney[3], Laura Keyser[4]

Affiliations
[1]University of Abuja Teaching Hospital
[2]Lagos University Teaching Hospital
[3]Andrews University
[4]University of California, San Francisco

Presenting Author:
Babafemi Daniyan +2348033803982 babafemidaniyan@yahoo.com

Background

Pelvic floor disorders (PFDs), including urinary incontinence (UI), fecal incontinence, and pelvic organ prolapse, affect up to one in three women globally and have significant physical, psychosocial, and economic impacts.[1,2] In Nigeria and other low-and-middle-income countries, care-seeking and treatment for PFDs is limited by sociocultural stigma, low awareness, and constrained access to specialized health services.[3] Pelvic floor muscle training (PFMT) and health education represent established first-line treatment for PFDs; however, access to skilled clinicians who can effectively instruct and supervise care is limited. The Leva® Pelvic Health System is a motion-based intravaginal biofeedback device cleared by the U.S. Food and Drug Administration for treatment of UI, FI, and for pelvic floor muscle strengthening. For this study, the system was adapted for supervised, clinic-based use, complemented by a digital home program to support education and PFMT practice.

Objective

To assess feasibility, acceptability, and preliminary efficacy of a clinic-based, technology-enabled PFMT intervention combining Leva® biofeedback and a digital home program for Nigerian women with PFDs.

Methods

A prospective, single-cohort, feasibility study was conducted at two tertiary hospitals in Nigeria. Sixty women ≥18 years with UI, FI, or early-stage POP participated in a 12-week intervention that included seven clinic-based biofeedback sessions and daily digital educational content. Feasibility outcomes included recruitment, retention, clinic attendance, adherence to home exercises, and qualitative feedback from participant and clinician interviews. Clinical outcomes included the International Consultation on Incontinence Questionnaire Short Form (ICIQ-UI SF), Australian Pelvic Floor Questionnaire (APFQ), and pelvic floor muscle strength (Modified Oxford Scale). Safety was monitored throughout.



Results

Sixty women enrolled; 97% (58/60) completed the 12-week program. Adherence to clinic sessions and the digital home program was high. Participants reported that the intervention was motivating, easy to follow, and improved their understanding of pelvic floor function (Table 1).

Significant improvements were observed in symptom severity reported on ICIQ-UI SF and APFQ ($p<0.001$) and in pelvic floor muscle strength ($p=0.01$). Global improvement ratings indicated that 93% reported "much better" or "better," 95% were "completely" or "somewhat satisfied," and mean perceived improvement was 77%. Table 2 illustrates efficacy outcomes according to UI or POP indication. No serious device-related adverse events occurred.

Discussion

Findings from this feasibility study indicate that a clinic-based, technology-enabled model for conservative PFD care can be effectively implemented in Nigerian tertiary hospitals. High retention and strong engagement with both supervised sessions and the digital home program suggest that women were willing and able to participate in a structured PFMT intervention when provided within an accessible clinical framework. Improvements in symptom severity and pelvic floor muscle strength were consistent with expected responses to PFMT and align with prior research on supervised care.[4]

Participant and clinician feedback highlighted several features that facilitated feasibility, including the clarity of biofeedback-guided instruction, the structured progression of supervised sessions, and the availability of digital educational content between visits. These elements appeared to support accurate PFMT technique, reinforce adherence, and promote understanding of pelvic floor function. The study also identified considerations relevant to future implementation, such as the need for efficient clinic workflows, standardized device reprocessing procedures, and continued refinement of patient-facing materials to ensure accessibility across literacy and technology levels. Brief next steps include broader implementation research, product optimization and development of shared-use clinic protocols, and further adaptation of digital content to support broader scale-up.

Table 1. Key Feasibility Outcomes

Feasibility Domain	Key Findings
Acceptability	High patient satisfaction; providers enthusiastic; participants valued real-time feedback for correct PFMT
Demand	Full recruitment (n=60) achieved within 16 weeks; minimal loss to follow-up (2 withdrew due to pregnancy). No missed clinic visits; high home program adherence.
Implementation	Successfully delivered at both sites with minimal technical issues. Providers integrated intervention into workflow. Minor barriers included device connectivity and English-only app content.



Table 2. Efficacy Endpoints by Pelvic Organ Prolapse and Urinary Incontinence Subgroups

	Pelvic Organ Prolapse			Urinary Incontinence		
Measure	**Baseline**	**12-Weeks**	**p-value**	**Baseline**	**12-Weeks**	**p-value**
APFQ Total Score, Mean (SD)	7.07 (3.48)	4.24 (2.17)	**0.01**	5.8 (4.5)	3.7 (3.0)	**0.01**
APFQ Bladder Subscale	0.85 (0.79)	0.63 (0.59)	0.5	2.28 (1.42)	1.27 (1.06)	**<0.001**
APFQ Prolapse Subscale	3.61 (1.40)	2.42 (1.65)	**0.03**	0.41 (0.95)	0.20 (0.76)	0.15
ICIQ-UI SF Score, Mean (SD)	3.24 (4.53)	0.31 (1.01)	0.043	9.6 (5.0)	5.5 (5.6)	**<0.001**
Global Rating of Improvement, n (%)	**Much better** 7 (44%)			**Much better** 23 (58%)		
	Better 6 (38%)			**Better** 16 (40%)		
Global Rating of Satisfaction, n (%)	**Completely** 6 (38%)			**Completely** 26 (65%)		
	Somewhat 8 (50%)			**Somewhat** 12 (33%)		
Estimated % Improvement, Mean (SD)	66 (25)			82 (19)		

Conclusion

This study demonstrates that a clinic-based, technology-enabled approach to delivering conservative pelvic floor care is both acceptable and practical within Nigerian tertiary care settings. The adapted use-model, combining supervised biofeedback-guided PFMT with a structured digital home program, was associated with high engagement, strong retention, and meaningful improvements in symptom severity and pelvic floor muscle function. These findings support the potential for this model to address longstanding gaps in access to first-line PFD care and provide a foundation for further research and product development.

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Assessing the utility of the Period ImPact and Pain Assessment (PIPPA) Screening Tool in the Triage of Women with Menstrual Morbidities to an Endometriosis Ultrasound in Benin City, Nigeria

Menakaya UA[1], Isikhuemen ME[2], Onoh V[3], Parker MA[4], Ntoimo L[5], Okonofua FE[6]

Affiliations

1 JUNIC Specialist Imaging and Women's Centre and Dept of Obstetrics and Gynaecology, North Canberra Hospital, Canberra Australia and Centre for Reproductive Health Innovation, CERHI Benin City Nigeria
2 Department of obstetrics and gynaecology, University of Benin teaching hospital and Centre for Reproductive health innovation CERHI Benin City, Nigeria
3 Centre for Reproductive health innovation, CERHI Benin City Nigeria
4 NICM Health Research Institute, Western Sydney University Australia
5 Centre for Reproductive health innovation, CERHI Benin City Nigeria
6 Women's Health and Action Research Center and Centre for Reproductive Health Innovation, CERHI Benin City Nigeria

Presenting author:

Isikhuemen M.E,
Department of obstetrics and gynaecology, University of Benin teaching hospital and Centre for Reproductive health innovation CERHI Benin City, Nigeria,
maradona4real2002@yahoo.com

Introduction

Endometriosis is a menstrual cycle dependent chronic inflammatory condition characterized by significant delays in diagnosis.
Early identification of menstrual morbidities with referral for prompt assessment with ultrasound could improve diagnostic delays.

Objective

To assess the utility of the Period ImPact and Pain Assessment (PIPPA) tool in the identification and triage of women with significant menstrual morbidities to an endometriosis ultrasound.

Methodology

A survey was conducted among female undergraduates at the University of Benin, Nigeria using a questionnaire adapted from the Menstrual disorder of teenagers (MDOT) questionnaire.
The degree of menstrual morbidities was generated using the Period Impact and Pain Assessment (PIPPA) screening tool for menstrual morbidity.
Respondents with PIPPA score 3 - 5 had significant menstrual morbidity, PIPPA Score 1-2 had minimal and PIPPA score 0 had no menstrual morbidity.
Data were analyzed with univariate and multinomial logistic regression.



Results

A total of 407 respondents completed the questionnaires and 330 (81%) were included in the final analysis.

The mean age at menarche was 12.8 years and the median length of menstrual cycle was 28 days.

Severe pain and worst pain were reported by 33.3% of the study respondents, 24.7% experienced school absences related to periods and 27.5 % reported interference of periods with lifestyle during all cycles

Using the PIPPA screening tool for menstrual morbidity, 53 (16.1%) reported no menstrual morbidity, 246 (74.6%) reported minimal menstrual morbidity and 31 (9.4%) showed significant menstrual morbidity.

Results of multinomial logistic regression showed that women who report bloating, lower back pain, aching outside the vagina, family member with period problems and fatigue during menstruation were at greater odds of significant menstrual morbidity.

By contrast, those experiencing diarrhea/constipation, and stabbing pelvic pain at least once experienced minimal menstrual morbidity.

Conclusion

The PIPPA screening tool could be useful in a resource restricted setting to assess degree of menstrual morbidity and inform intervention priorities like early referral to specialized ultrasound for endometriosis.

However, further studies are needed to assess how sonologic features of endometriosis in respondents with significant menstrual morbidity compare to those with minimal morbidity.



Improving Postpartum Contraceptive Use by Organised Antenatal Counselling and Checklist Intervention: A Quality Improvement Audit in Alive Medical Centre, Osogbo

Taiwo Adewumi Oluwaseun[1], Abiodun Olagunju[1], Oluwakemi Esther Taiwo[2], Adedolapo Alo[1], Ayodele K Alo[3]

Affiliations

[1]AliveMedicalCentre, Osogbo, Osun State.
[2]DepartmentofPublicHealth, GlasgowCaledonian University, UK
Broomfield Hospital, Chelmsfold, Essex, United Kingdom.

Corresponding Author:

Dr. TaiwoAdewumiOluwaseun,
AliveMedicalCentre, Osogbo, Osun State.
+2348066672064, doluwaseuntaiwo@gmail.com

Introduction

Structured antenatal and postpartum counselling has been shown to markedly improve uptake and knowledge of contraception. Evidence shows that specific counselling increases the adoption of immediate postpartum family planning and combined antenatal and postnatal education with reminder systems significantly enhances the uptake of modern contraceptives in the first six months following birth. High-quality counselling, and systematic integration into ANC, delivery, and postnatal services have been identified as driving better maternal outcomes.

Objectives

1. To identify the baseline postpartum use of contraceptive among women who give birth at Alive Medical Centre and identify gaps in counselling and documentation.
2. To introduce and assess the impact of structured antenatal counselling augmented with a checklist-based reminder system to improve postpartum use of contraceptive and patient knowledge about family planning options.
3. To improve the integration of postpartum family planning into antenatal routine care through improved compliance of staff, accountability, and frequent documentation to sustain quality improvement in maternal health outcomes

Methods

The study was done between 2022 to 2023. A 12-month retrospective audit was conducted among 300 women who had delivered at Alive Medical Centre. Medical records confirmed the rate of women who started contraception by six weeks after giving birth. Following the initial audit, two interventions were instituted: formal antenatal counselling on postpartum family planning during each antenatal clinic attendance, and a checklist system to ensure counselling, discussion, and documentation of contraceptive methods.
The re-audit was conducted six months after the implantation of the audit now among 115 women.

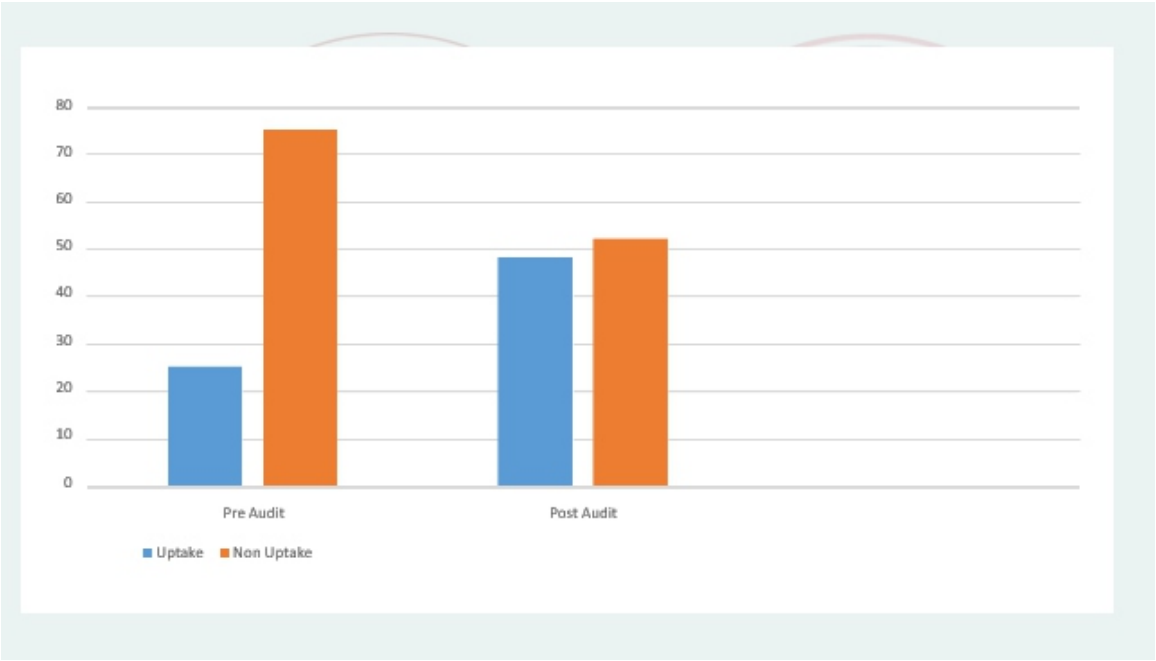


Results

During the first audit, 25% of women started contraception within six weeks of delivery. After the intervention, the uptake improved to 48% during the review period. Compliance among staff with the use of the checklist and counselling was about 78% and this was due to the turnout of Medical Doctors. This was however, an improvement compared to the 51% before the audit.

The patient feedback also indicated improved understanding and confidence in decision-making for contraceptives.

Table 1 Pattern of Contraceptive failure



Discussion

The audit showed that structured antenatal counselling coupled with a checklist-based reminder system can usefully enhance postpartum contraceptive uptake. An increase from 25 percent to 48 percent after the intervention illustrates that timely, standardized counselling enhances women's preparedness to make informed decisions before discharge. Staff compliance with the checklist reached 78 percent, which, although influenced by variable medical staff turnout, still represented a notable improvement from 51 percent at baseline. This shows that simple workflow tools can enhance accountability, reduce missed counselling opportunities, and support consistent documentation. Patient feedback confirmed better understanding and increased confidence in choosing suitable methods, underpinning the value of repeated, proactive discussions during pregnancy. The project also showed that integrating postpartum family planning into routine antenatal care is feasible and acceptable. Sustaining gains will require ongoing staff engagement, periodic refresher training, and regular audit cycles to ensure continued adherence and long-term improvement in maternal health outcomes.



Conclusion

Evidence-based structured, regular antenatal counselling coupled with a reminder system based on checklists enhanced uptake of postpartum contraception significantly. Incorporating the integration of family planning discussion into routine antenatal care and systematic documentation to ensure accountability as part of postpartum family planning quality improvement is critical.

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A Review of Uptake of Contraceptives in Olabisi Onabanjo University Teaching Hospital, Sagamu

Ogunfuwa MA[1], Jagun OE[1], Akiseku AK[1]

Affiliation
[1]Dept of obstetrics and Gynaecology, Olabisi Onabanjo University Sagamu, Ogun state.

Corresponding/Presenting Author:
Ogunfuwa MA,
Dept of obstetrics and Gynaecology, Olabisi Onabanjo University Sagamu, Ogun state.
08057277456, abiola1437@gmail.com

Introduction

Contraceptive is seen globally as a significant public health intervention and its acceptance is rising, however, this is not the case in many African countries. Contraceptives utilization has been shown to improve women reproductive health and also improve child survival by optimizing child spacing and lengthening birth intervals. Reduced utilization of modern contraceptive, a major cause of high fertility in Nigeria has been attributed to social factors such as non-availability and poor access to contraceptive commodities, non-consenting partners, fear of side effects, and religious considerations. In countries with high fertility rate and low contraceptive prevalence rate, it is important to determine the prevalence at regular intervals for continuous monitoring of the acceptance and utilization so as to ensure appropriate interventions.

Objectives

This is to determine the prevalence and the pattern of utilization of contraceptives among women of reproductive age group who attended the family planning clinic in OOUTH, Sagamu from January 2018 to December 2022.

Methodology

Study Design: This is a retrospective cross-sectional study. Data were obtained from the family planning record unit, and central record unit of the hospital. The data obtained from family planning record unit were recorded in pro forma.

Study Participants: The clients in reproductive age group (15-49 years) that attended the family planning clinic in OOUTH for contraceptives uptake from January 2018 and December 2022 and whose folders were retrieved were included in the study.

Data Analysis: Data were entered and analysed with the Statistical Package for Social Sciences, version 25. Descriptive statistics were calculated to summarize the socio-demographic characteristics of clients, contraceptive prevalence rate, utilization rate of each contraceptive method and clients that discontinued particular contraceptives due to the side



effects. The association between yearly patterns of uptake of the types of contraceptive methods: hormonal and non-hormonal were determined using P-value and Chi-square.

Results

Socio-demographic characteristics: The majority of the clients were aged 25 and 34 years (54.32%). The modal parity was para 3 (31.81%). Almost all of them were married (95.76%) and most clients were Christians (62.8%) .

Contraceptive prevalence rate: Six thousand, five hundred and seventy-three women within the reproductive age group (15-49years) attended the antenatal and gynaecological out-patient clinics during the study period. A total number of 619 clients each utilized at least a form of contraceptive method during the 5-year study period however, 613 clients' folders were retrieved. This gives a contraceptive prevalence rate of 9.33% in OOUTH, Sagamu during the study period.

Utilization rate of each contraceptive: A total of 691 contraceptives were utilized during the study period by 613 clients. The contraceptives utilized during the study period include oral contraceptive, injectable contraceptive, intrauterine contraceptive device, male condom, implant, and bilateral tubal ligation. Intrauterine contraceptive device was the most commonly utilized at a rate of 56.30%. Implant (20.69%), injectable (19.68%), male condom (1.45%), oral contraceptives (1.3%) and the least utilized was bilateral tubal ligation (BTL) 0.58%.

Clients that discontinued particular contraceptives due to the side effects: About 11.91% of the clients discontinued particular contraceptives and switched to another. Implants and injectable were mostly discontinued (6.20%), due to weight gain, irregular bleeding per vagina and delay in fertility return. Intrauterine devices were least discontinued (1.31%) due to menorrhagia.

The association between yearly pattern of uptake of the types of contraceptive methods: hormonal and non-hormonal: A significant decrease was observed in the yearly pattern of uptake of hormonal contraceptive methods (oral pills, injectables and implants) as compared to non hormonal methods (IUCD, BTL, and male condom) ($P<0.05$).

Discussion

The lower contraceptive prevalence rate in this study has been attributed to shut down of outpatients' clinics during COVID 19 pandemic that fell within the study period. Another study in Ogun State that worked on contraceptive use in Sagamu, also attributed the low prevalence to social factors such as religious considerations, non-consenting partners and fear of side effects of contraceptives. This is in keeping with similar study in rural areas in North Central region of Nigeria, unlike urban areas like Lagos with high contraceptive prevalence rate.



Conclusion

Intrauterine contraceptive devices were mostly utilized in Sagamu, indicating an increase in the awareness of long-acting reversible contraceptive methods. However, the contraceptive prevalence rate was low due to the shutdown of family planning clinic during COVID 19 pandemics which fell within the study period. Also, the decrease in the uptake of hormonal contraceptives was as a result of the side effects experienced by the clients. Therefore, more efforts are required to provide credible facts and information about the benefits of contraceptives and also to alleviate the fear of the side effects.



Perception of Male Staff of University of Ibadan towards HPV Vaccination for their Children

Opeyemi Ilori, Alex Netufo, Ayomide Fatola, Sylvia Aputazie, Chioma Ezebialu, Adesewa Ojuade, Inioluwa John, Olaoluwaposi Ogunlana, Sophia Okeke, Chinonye Igwe, Olamide Jayeoba, Irfan Jimoh, Timothy Oluwasola.

Affiliations
Faculty of Clinical Sciences, College of Medicine, University of Ibadan, Ibadan, Nigeria

Correspondinguthor:
Opeyemi Ilori
Faculty of Clinical Sciences, College of Medicine, University of Ibadan, Ibadan, Nigeria
Email: opeyemiilori9@gmail.com, Telephone: 08128085691

Introduction

Cervical cancer is one of the leading causes of cancer-related mortality among women in Nigeria and is primarily caused by persistent infection with high-risk human papillomavirus (HPV). Prophylactic HPV vaccination is highly effective in preventing HPV infection and subsequent cervical cancer. Despite this, uptake of the vaccine in Nigeria remains suboptimal. In the Nigerian sociocultural context, fathers often play a significant role in health-related decisions for their children. Understanding their perception of HPV vaccination is therefore critical to improving vaccine acceptance and coverage.

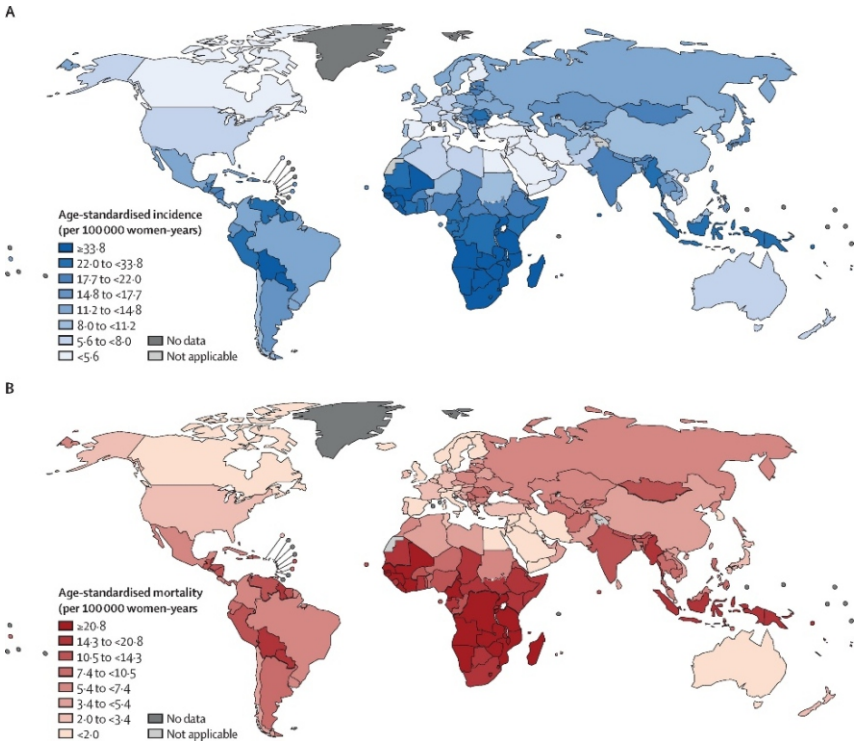

Fig 1: Global incidences and age standardized mortality of cervical cancer

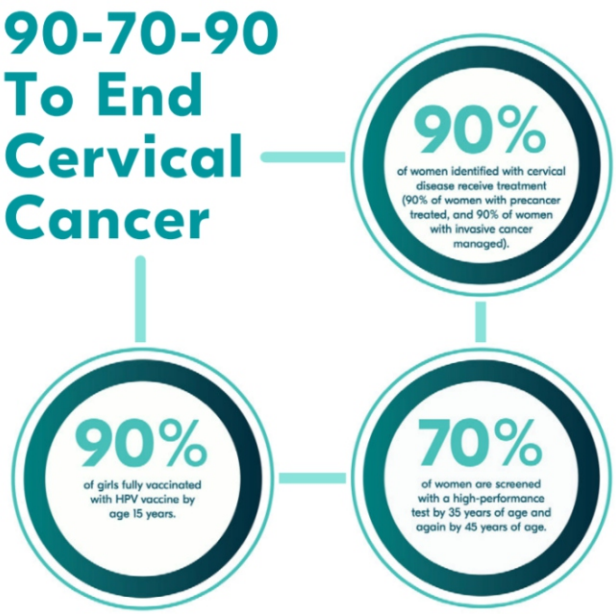

Figure 2: 90-70-90 model to end cervical cancer

Objectives

To assess the knowledge, perceptions, and attitudes of male staff of the University of Ibadan towards HPV vaccination for their children.

Methodology

This was a descriptive cross-sectional study utilizing both quantitative and qualitative methods. The study population comprised male academic and non-academic staff from 13 faculties of the University of Ibadan. Staff of the College of Medicine, as well as those on leave or sabbatical, were excluded. Data were collected using a structured, self-administered questionnaire containing both closed- and open-ended questions. Collected data were analysed descriptively.

Results

A total of 231 male staff participated in the study, with an academic to non-academic staff ratio of 1:1.2. The age range of respondents was 25–69 years, with approximately 21% aged between 50 and 54 years. Most participants had attained at least a tertiary level of education. While general awareness of cervical cancer was relatively high, knowledge of HPV vaccination and its role in prevention varied among respondents, with several expressing reservations related to safety, necessity, and cost.

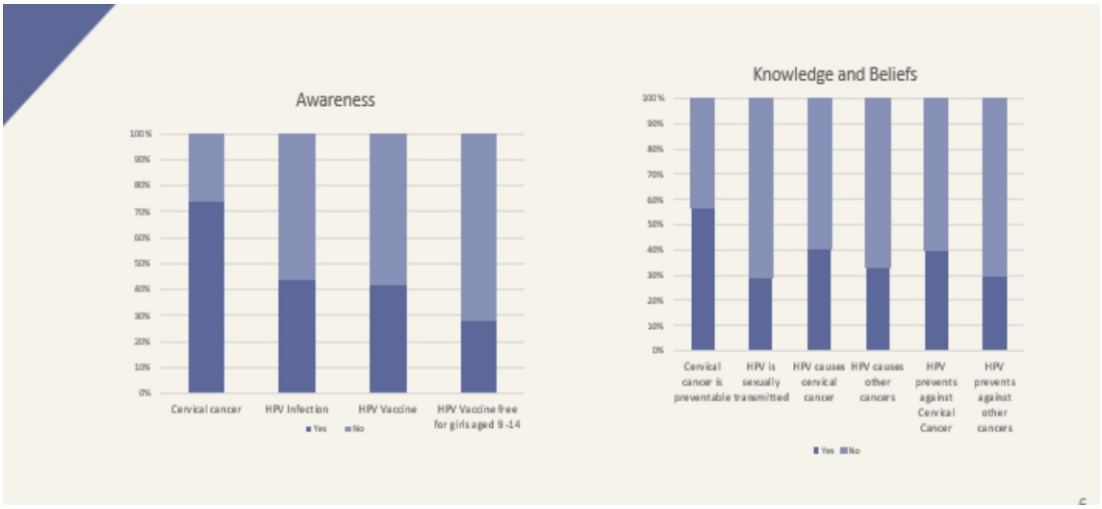

Figure 3: Awareness and knowledge/beliefs about cervical cancers

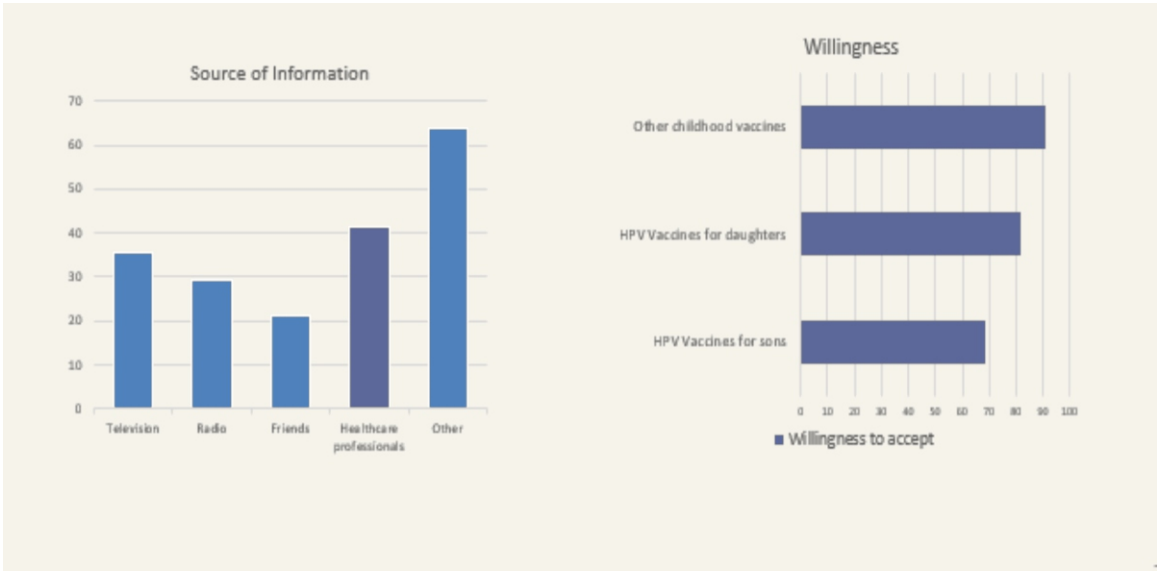

Figure 4: Source of information and willingness about HPV vaccination

Conclusion

The study demonstrates that despite high educational attainment, significant gaps remain in knowledge and perception of HPV vaccination among male staff of the University of Ibadan. Addressing these gaps through targeted awareness campaigns and inclusion of fathers in vaccination advocacy programmes may enhance HPV vaccine uptake and contribute to cervical cancer prevention in Nigeria.



Addressing HPV Vaccine Gaps in a Tertiary Institution: A Step Toward Cervical Cancer Control in Nigeria

Onaopemipo Akinola-Fowotade[1], Temitayo O. Oluwole[2], Olubukola Omobowale[3], Adeola Fowotade[4]

Affiliations

[1]Benjamin S. Carson College of Health and Medical Sciences, Babcock University, Ogun State, Nigeria

[2]Department of Medical Microbiology, Babcock University, Iliana, Oguns State, Nigeria

[3]Department of Community Medicine, Collegeof Medicine, University of Ibadan, Nigeria

[4]Department of Medical Microbiology and Parasitology, College of Medicine, University of Ibadan, Nigeria

Corresponding Author:

Onaopemipo Akinola-Fowotade

Fifth Year Medical Student

Benjamin S. Carson College of Health and Medical Sciences,Babcock University, Ogun State, Nigeria

Email: onaopemipofowotade@gmail.com | Phone: +234-8108671326

Introduction

Cervical cancer remains a major public health concern in Nigeria, with human papillomavirus (HPV) infection identified as the principal etiological factor. Prophylactic HPV vaccination offers effective protection against HPV-related diseases. Medical students, as future healthcare professionals, are pivotal in influencing public perception and uptake of preventive health services, including HPV vaccination.

Objective

To assess the knowledge and practices related to HPV vaccination among female medical students in a tertiary institution in Nigeria.

Methodology

This descriptive cross-sectional study involved 100 consenting female medical students at Babcock University, Ilishan-Remo, Ogun State, Nigeria. Data were collected using a structured questionnaire. Knowledge of HPV and cervical cancer was assessed using a five-point Likert scale, while preventive practices and vaccine promotion were evaluated through multiple-choice questions. Knowledge scores were categorized into poor, fair, and good levels.

Results

Seventy percent of respondents demonstrated good knowledge of HPV and its associated diseases, while 30% had fair knowledge. Despite this, only 35% had received the HPV vaccine. Statistical analysis showed a significant association between HPV knowledge and



willingness to recommend vaccination to family and friends (p=0.002). However, no significant association was found between knowledge level and personal vaccine uptake (OR=2.19, 95% CI=0.83–5.79; p=0.17).



Fig1: Knowledge of HPV and associated diseases

Table 1: Practice of HPV prevention and vaccine promotion

Questions	Frequency	Percentage (%)
Have you received the HPV vaccine?		
Yes	35	35.0
No	65	65.0
Maybe	0	0
Would you consider getting vaccinated against HPV in the future?		
Yes	74	74.0
No	14	14.0
Maybe	12	12.0
Are you open to discussing HPV vaccination with your healthcare provider?		
Yes	82	82.0
No	3	3.0
Maybe	15	15.0
Would you recommend HPV vaccination to your friends or family members?		
Yes	87	87.0
No	4	4.0
Maybe	9	9.0
Would you consider getting vaccinated against HPV if it were offered to you for free?		
Yes	83	83.0
No	6	6.0
Maybe	11	11.0
Have you received any education on HPV and HPV vaccine prior to this survey?		
Yes	75	75.0
No	21	21.0
Maybe	4	4.0
Total	**100**	**100.0**



Table 2: Association of HPV Knowledge with prevention and vaccine promotion practices

Practice of HPV prevention		HPV knowledge		Total	x^2	OR (95% CI)	*p* value
		Adequate (%)	Inadequate (%)				
Would you recommend HPV vaccine to your friends or family members?	Yes	66 (94.2)	21 (70.0)	87 (87.0)	10.986	NA	0.0002*
	No	2 (2.9)	2 (6.7)	4 (4.0)			
	Maybe	2 (2.9)	7 (23.3)	9 (9.0)			
Have you received HPV vaccine?	Yes	28 (40.0)	7 (23.3)	35 (35.0)	1.884	2.190 (0.83-5.79)	0.17
	No	42 (60.0)	23 (76.7)	65 (65.0)			

HPV=Human papillomavirus; x^2-Chisquare; OR=Odd ratio; CI=Confidence interval; NA=Not applicable; *=Statistically significant

Discussion

The high level of knowledge observed among respondents aligns with findings from similar studies among medical students in Nigeria and other sub-Saharan African countries. Nevertheless, the persistently low vaccine uptake highlights a significant gap between awareness and preventive action. Barriers such as cost, accessibility, and perceived risk may contribute to this discrepancy.

Conclusion and Recommendations

While knowledge of HPV and cervical cancer was high among female medical students, HPV vaccine uptake remains low. Targeted interventions focusing on improving vaccine accessibility, affordability, and risk perception are recommended. Integrating HPV vaccination advocacy into medical training curricula may further enhance future vaccine promotion efforts.

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Perception and Misconception of Uterine Fibroid among Pregnant and Non-Pregnant Women Attending a Tertiary Hospital in Ibadan

Abdus-salam R[12], Lawal O[12], Bello Y[3], Oke O[3], Lawal T[3], Ayeni E[3], Morhason-Bello I[123]

Affiliations

[1]Department of Obstetrics and Gynaecology, Faculty of Clinical Sciences, College of Medicine, University of Ibadan, Ibadan, Nigeria

[2]Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria

[3]HPV Consortium, Institute for Advanced Medical Research and Training, College of Medicine, University of Ibadan, Ibadan, Nigeria

Corresponding Author:

Adeola Abdus-salam,

Department of Obstetrics and Gynaecology, Faculty of Clinical Sciences, College of Medicine, University of Ibadan, Ibadan, Nigeria

Email: deolaabdussalam@gmail.com phone number: 08036492782

Introduction

- Uterine fibroid is a benign tumour of the uterine smooth muscle. It is a common gynaecological presentation among women worldwide.

  El Andaloussi et al 2017
- Uterine fibroids symptoms, include menorrhagia, abdominal or pelvic pain, reproductive issues, impacting on the overall quality of life of the affected individuals. More common in Negroes, 3–9 times more than in Caucasians.Occurs after menarche and the majority would undergo atrophy at menopause.

  Adegbesan-Omilabu et al, 2014
- Aetio-pathogenesis remains unknown. Risk factors include estrogen, progesterone, growth, angiogenesis and genetic factors, race, nulliparity, obesity, and early menarche.[6] Uterine fibroids affect 20% to 30% of women over 35 and 50% over 50.

  Andele et al 2025
- The burden of uterine fibroids is determined by the prevalence, clinical presentation; individual or collective perceptions, health-seeking behaviour, sociocultural factors and health-promoting practices of women facing this condition.

  Aghogho et al, 2023
- In Nigeria and Sub-Saharan Africa, women with uterine fibroids tend to present to the hospital with large tumours (uterus greater than 20-week size gestation) which contribute to increased morbidity and mortality.

  Seffa et al, 2023; Igboeli et al, 2019

Objectives

1. To assess the perception of uterine fibroids among pregnant and non-pregnant women in Ibadan.
2. To identify common misconceptions about uterine fibroids among the study population.



Materials and Methods

- This study was extracted from the Uterine Fibroids in African Women (FIBAW) study, a cross-sectional study among reproductive age women.
- Data was collected from 380 consenting pregnant and non-pregnant women using pre-tested interviewer-administered structured questionnaire.
- Participants' perception was assessed by beliefs about severity of fibroid, health impact, effects on reproduction and treatment options. Participants were classified into having good or poor perception using Median composite perception score.
- Misconception is the belief that fibroids are spiritual problem, cancerous and can cause death, herbal or spiritual treatments are the best option, or appeasing the goddess of water is necessary for treatment. Associations between perception, misconceptions and participants' characteristics were examined using Chi-square or Fisher's exact tests.
- Factors associated with good perception and misconceptions were analyzed using logistic regression
- Level of significance set at $p<0.05$.

Results

The socio-demographic characteristics of participants are summarized in Table 1. Overall, perception of uterine fibroids was poor, with pregnant and non-pregnant women exhibiting varying levels of understanding (Figure 1). Misconceptions were common across both groups (Figure 2). Factors significantly associated with good perception and misconceptions are presented in Table 2.

RESULTS: Table 1-Socidemographic characteristics

Variables	Frequency	Percentage
Age1		
18 – 24 years	46	11.4
25 – 34 years	205	50.6
35 – 44 years	132	32.5
≥ 45 years	22	5.5
Occupation		
None/unemployed	34	8.4
Unskilled	70	17.2
Skilled	169	41.6
Professional	133	32.8
Education[1]		
Secondary and below	82	20.3
Tertiary	323	79.75
Marital Status		
Single	61	15.0
Married	343	84.5
Divorced/Separated	2	0.5
Parity[3]		
Nulliparous	133	36.7
1 – 2	159	43.9
≥ 3	70	19.3



Perception and Misconception about Uterine Fibroid

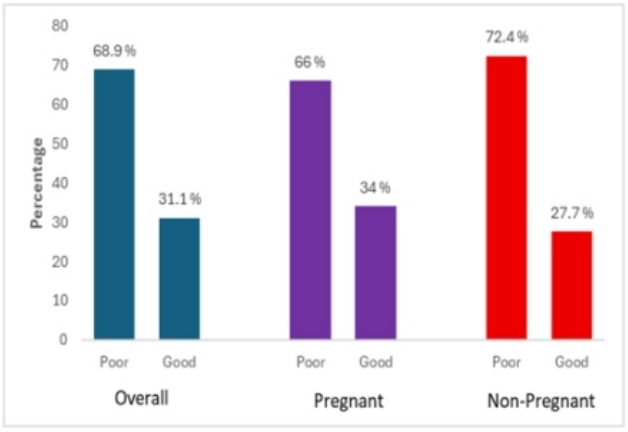

Figure 1: Perception of uterine fibroid among pregnant and non-pregnant women

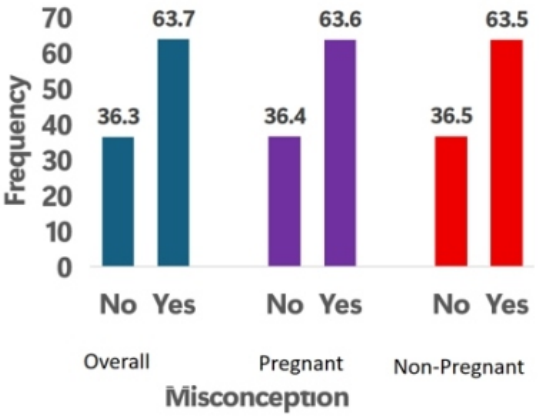

Figure 2: Misconception about uterine fibroid among pregnant and non-pregnant women

Table 2.....: Factors associated with good perception and misconceptions of uterine fibroids among women

Variables	Perception of Uterine Fibroid		Misconceptions	
	cOR (95% CI)	aOR (95% CI)	cRR (95% CI)	aRR (95% CI)
Pregnancy	p = 0.187	p = 0.586	p = 0.983	p = 0.971
No	1	1	1	1
Yes	1.35 (0.87 – 2.09)	1.19 (64-2.20)	1.00 (0.86 – 1.17)	1.00 (0.83 – 1.20)
Age	p = 0.372	p = 0.422	p < 0.001	p = 0.023
18 – 24 years	1	1	1	1
25 – 34 years	2.09 (0.91-4.79)	1.49 (0.54-4.14)	0.74 (0.63 – 0.87)	0.79 (0.64 – 0.97)
35 – 44 years	2.03 (0.86-4.77)	0.90 (0.29-2.79)	0.65 (0.54 – 0.80)	0.69 (0.53 – 0.90)
≥ 45 years	1.98 (0.61-6.47)	0.93 (1.84-4.69)	0.85 (0.64 – 1.13)	0.87 (0.60 – 1.25)
Occupation	p = 0.018	p = 0.621	p < 0.001	p = 0.081
None/unemployed	1	1	1	1
Unskilled	1.03 (0.37-2.83)	0.83 (0.20-3.35)	1.21 (0.09 – 1.66)	1.24 (0.90 – 1.72)
Skilled	1.13 (0.45-2.84)	1.11 (0.31-3.92)	1.14 (0.85 – 1.55)	1.12 (0.84 – 1.51)
Professional	2.25 (0.89-5.65)	1.39 (0.39-5.00)	0.79 (0.56 – 1.10)	0.91 (0.65 – 1.27)
Education	p = 0.061	p = 0.459	p < 0.001	p = 0.013
Secondary & below	1	1	1	1
Tertiary	1.78 (0.97-3.26)	1.3 (0.62-2.86)	0.70 (0.61 – 0.81)	0.81 (0.68 – 0.96)
Marital Status	p = 0.564	p = 0.610	p = 0.943	p = 0.592
Single	1	1	1	1
Married	1.34 (0.71-2.53)	0.78 (0.28-2.19)	1.00 (0.81 – 1.23)	1.09 (0.82 – 1.45)
Divorced/Separated	2.87 (0.17-48.74)	3.18 (0.13-80.97)	0.78 (0.19 – 3.18)	0.66 (0.20 – 2.24)
Religion	p = 0.066	p = 0.168	p < 0.001	p = 0.357
Christianity	1	1	1	1
Islam	0.64 (0.39-1.03)	0.66 (0.36-1.19)	1.25 (1.08 – 1.46)	1.05 (0.89 – 1.24)
Others	1	1	1.71 (1.54 – 1.90)	1.28 (0.91 – 1.79)



Table 2: Factors associated with good perception and misconceptions of uterine fibroids among women

Ethnicity	p < 0.001	p < 0.001	p = 0.001	p = 0.057
Yoruba	1	1	1	1
Others	2.98 (1.69-5.25)	3.21 (1.62-6.37)	0.68 (0.51 – 0.91)	0.76 (0.57 – 1.01)
Miscarriage	p = 0.176	p = 0.187	p = 0.044	p = 0.013
No	1	1	1	1
Yes	1.39 (0.86-2.28)	1.48 (0.83-2.65)	0.82 (0.67 – 0.99)	0.78 (0.64 – 0.95)
Parity	p = 0.019	p = 0.037	p = 0.963	p = 0.816
Nulliparous	1	1	1	1
1 – 2	1.06 (0.63-1.80)	1.00 (0.53-1.91)	0.99 (0.83 – 1.17)	1.00 (0.85 – 1.19)
≥ 3	2.28 (1.22-4.24)		0.97 (0.78 – 1.21)	1.07 (0.86 – 1.33)
Knowledge levels of fibroid symptoms	p < 0.001	p = 0.017	p = 0.002	p = 0.052
Low	1	1	1	1
Moderate	1.73 (0.93-3.19)	1.59 (0.77-3.30)	0.91 (0.78 – 1.07)	1.01 (0.85 – 1.20)
Good	3.48 (1.86-6.52)	2.91 (1.35-6.29)	0.68 (0.55 – 0.84)	0.78 (0.62 – 0.99)
Knowledge levels of fibroid risk factors	p < 0.001	p = 0.017	p = 0.037	p = 0.690
Low	1	1	1	1
Moderate	2.64 (1.47-4.72)	2.12 (1.08-4.17)	0.95 (0.79 – 1.14)	0.98 (0.80 – 1.21)
Good	2.86 (1.69-4.82)	2.32 (1.25-4.29)	0.78 (0.65 – 0.94)	0.92 (0.76 – 1.11)

Conclusion

Perception of uterine fibroids among women attending a tertiary hospital in Ibadan is poor, and misconceptions remain widespread. These misconceptions adversely affect health-seeking behaviour, timely presentation, and treatment decisions. Individual and group-based health education initiatives are strongly recommended to improve awareness, correct misconceptions, and promote early medical care.



Prevalence and Pattern of Abnormal Cervical Cytology: A Comparison between Hormonal Contraceptive Users and Non-Users in the University of Port Harcourt Teaching Hospital

Dr Ebienju Walter Olaka[1], Dr Okezie Ugwa[2]. Prof Ngozi Orazulike[3], Prof Goddy Bassey[4], Prof Boma Athanasius[5]

Affiliations

1. Department of Obstetrics and Gynaecology, University of Port Harcourt Teaching Hospital
2. Department of Anatomical Pathology, University of Port Harcourt Teaching Hospital
3. Department of Obstetrics and Gynaecology, University of Port Harcourt Teaching Hospital
4. Department of Obstetrics and Gynaecology, University of Port Harcourt Teaching Hospital
5. Department of Anatomical Pathology, Rivers State University Teaching Hospital

Corresponding Author:

Dr Ebienju Walter Olaka
Department of Obstetrics and Gynaecology, University of Port Harcourt Teaching Hospital
08068691656, ebienjuolaka@yahoo.com

Introduction

Cervical cancer is the second most common malignancy affecting women in Nigeria. Its premalignant lesions can be identified using cervical cytology techniques such as the Papanicolaou smear. Although hormonal contraceptives are widely used, concerns persist regarding their potential association with cervical neoplasia. Generating local evidence is essential to guide counselling and clinical practice.

Objectives

1. To determine and compare the prevalence of abnormal cervical cytology among hormonal contraceptive users and non-users.
2. To compare the pattern of cervical cytological abnormalities between both groups.
3. To assess the relationship between age, parity, duration of use, and abnormal cervical cytology among hormonal contraceptive users.

Methodology

This cross-sectional analytic study was conducted in the Family Planning and Gynaecology Clinics of the University of Port Harcourt Teaching Hospital. Consenting clients using hormonal and non-hormonal contraceptives were recruited. Cervical smears were collected and analysed using the 2014 Bethesda Classification system. Socio-demographic and cytological data were analysed using SPSS version 23.0, and results were presented descriptively.

Results

The prevalence of abnormal cervical cytology among both hormonal contraceptive users and non-users was 2%. Low-grade and high-grade squamous intraepithelial lesions were the most



frequently observed abnormalities. There was no statistically significant difference in cervical cytological abnormalities between the two groups. No significant relationship was found between age, parity, duration of hormonal contraceptive use, and abnormal cervical cytology.

Comparison of the pattern of abnormal cervical cytology among hormonal contraceptive users and non-users in UPTH

	Hormonal Contraceptive		
Abnormal cervical cytology	Users N = 100 n (%)	Non users N = 100 n (%)	Total N = 200 n (%)
ASCUS	0 (0.0)	0 (0.0)	0 (0.0)
HSIL	0 (0.0)	1 (1.0)	1 (0.5)
LSIL	1 (1.0)	0 (0.0)	1 (0.5)
Inflammatory	1 (1.0)	1 (1.0)	2 (1.0)
NILM	92 (92.0)	89 (89.0)	181 (90.5)
Unsatisfactory	6 (6.0)	9 (9.0)	15 (7.5)
Total	100 (100.0)	100 (100.0)	200 (100.0)

Conclusion

This study demonstrates a low prevalence of abnormal cervical cytology among clients attending UPTH, with no association between hormonal contraceptive use and cervical abnormalities. These findings challenge prevailing misconceptions and underscore the importance of evidence-based counselling for family planning clients. Further research is recommended to explore potential causal relationships.

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Determinants of Preterm Birth in Women Admitted with features of Threatened Preterm Labour at the University of Ilorin Teaching Hospital

[1]Otuyo, A.,[2]Salawu, H.A, [1,3,] Raji, H.O,

Affiliations

[1]Department of Obstetrics and Gynaecology, University of Ilorin Teaching Hospital, Ilorin, Kwara State, Nigeria

[2]Department of Obstetrics and Gynaecology, Kwara State Specialist Hospital, Sobi, Alagbado, Ilorin

[3]Department of Obstetrics and Gynaecology, University of Ilorin, Ilorin

Corresponding Author:

Otuyo Aishat.

Department of Obstetrics and Gynaecology, University of Ilorin Teaching Hospital, Ilorin, Kwara State.

07032744505, [1*]aishaotuyo@yahoo.com

Introduction

Preterm birth is the delivery that occurs after the age of viability but before 37weeks of gestation and a significant contributor to perinatal morbidity and mortality.[1,2] On the other hand, a clinical diagnosis of preterm labour is made if there are regular contractions and concomitant cervical change. Preterm birth is a serious obstetric problem and complicates about 5-18% of pregnancies annually, worldwide[1] andit is the largest direct cause of mortality in children aged <5 years, associated with serious morbidity in the survivors.[1]

Preterm birth can occur spontaneously or it can be iatrogenic, with over 75% occurring spontaneously.[1] The aetiopathogenesis of spontaneous preterm birth is poorly understood, but evidence suggests that it involves a complex system with multiple potential causes involved in its aetiology. Multiple pregnancies are associated with increased incidence of preterm delivery (50% of twins and up to 90% of triplets are delivered prematurely).[3] Other non-modifiable risk factors include: risks such shortened cervix (less than 25 mm before 28 weeks' gestation) and a previous history of preterm delivery. Women with a prior preterm delivery have a 1.5- to two-fold increased risk of a recurrent preterm birth. Race is another risk factor; the rate of preterm delivery differs greatly between black and white women,Behavioural risk factors include: low maternal pre-pregnancy body mass index (19.8 kg/m^2 or less), maternal smoking, substance abuse, and a short pregnancy interval (less than 18 months between pregnancies)[3].If preterm birth is preceded by spontaneous preterm labour, clinical signs and symptoms (such as contractions, increased pressure or discharge) strongly suggest imminent delivery.[2,3]These clinical signs and symptoms, together with the findings of a digital vaginal examination (such as changes in cervical consistency, effacement or dilation) are often sufficient to make a diagnosis of preterm labour. However, many women with symptoms of preterm labour even in the presence of cervical effacement and dilatation will not have a preterm delivery.[2] In many instances, pregnant women with features of



preterm labour are typically referred to hospitals with facilities for corticosteroids and uterine relaxants. However, following the diagnosis of preterm labour, up to 90% or 95% of women will not deliver within two weeks, and approximately 50% of women will carry their pregnancy until the term before delivery[4]. WHO further classified pre-term delivery into 22–27 weeks (extremely preterm), 28–31 weeks (very preterm), and 32–36 weeks (moderately preterm) .[5]

Objective

To identify determinants of preterm birth (PTB) in women admitted with threatened preterm labour at UITH between 1st January, 2022 to 31st December, 2023.

Method

The study was carried out in the obstetrics and gynaecology department of the University of Ilorin Teaching Hospital Ilorin, Nigeria, a referral hospital that serves Kwara, parts of Osun, Oyo, Ondo, Ekiti and Niger states. The study is a retrospective descriptive study involving all women admitted with features of threatened preterm labour, from 1st January, 2022 to 31st December, 2023. Information from the case-records was obtained and entered into the study proforma. A total of 91 case files of patients who had threatened preterm labour during the study period were reviewed were assessed. Admission and follow-up notes were reviewed together with investigation results, vital signs charts and delivery/discharge records. Women with iatrogenic preterm birth were excluded from the study.

The main outcomes measures were: predisposing factors to threatened preterm labour, tocolysis use, prolongation of pregnancy, PTB within 1 week of initial presentation and eventual cessation of contractions and delivery at >/=37 weeks). Data were analysed using IBM-SPSS, 28.0. The results were expressed as percentages and means with standard deviation.



Result

Table 1: Socio-demographic variables

Variables	Frequency	Percentage
Age groups		
< 30	16	33.3
30 – 35	28	58.4
> 35	4	8.3
Mean ± SD	30 ± 3.41	
Range	26 – 38	
Level of education		
No formal education	4	8.3
Primary	4	8.3
Secondary	8	16.7
Tertiary	32	66.7
Ethnicity		
Hausa	4	8.3
Igbo	8	16.7
Yoruba	32	66.7
Others	4	8.3
Religion		
Islam	24	50.0
Christianiy	24	50.0

Table 1 indicates the sociodemographic profile of women diagnosed with preterm labour. The mean age for the women in the study was 30 ±3.41 years, majority (58.4%) of the women were between 30-35 years, followed by (33.3%) of them that were less than 30 years, the age range was between 26 and 38 years.

Christianity and Islamic religion shared equal proportions of the study group which was at 50% each.

Majority of the women had tertiary level of education and this constituted 66.7% of the study participants.

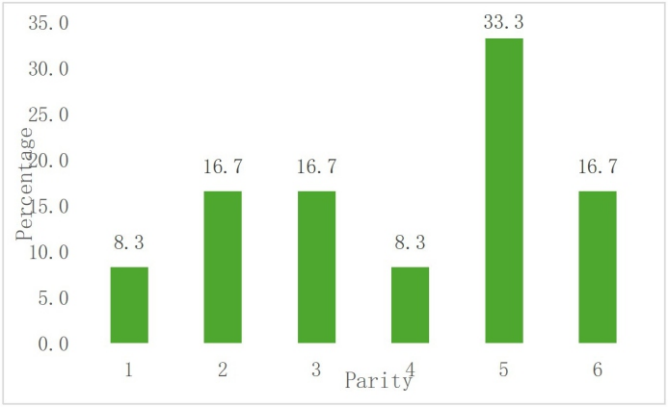

Figure 1: Presentation of study participants by parity



Majority of the women were grandmultiparous and that accounted for 50% of the study population, while women with 2 and 3 parous experiences represented 16.7% each. Primiparity and women with 4 prior parous experiences represented 8.3% each.

Table 2: Identified risk factors of respondents

Variables	Frequency	Percentage
Previous preterm birth		
No	32	66.7
Yes	16	33.3
Number of foetuses		
1	44	91.7
2	0	0.0
3	4	8.3
Polyhydramnios		
No	44	91.7
Yes	4	8.3
Other risk factors		
CI	4	8.3
Fibroid	12	25.0
Gastro enteritis	4	8.3
Malaria	8	16.7
PPROM	4	8.3
UTI	4	8.3
Others	12	25.0
Hypertension		
No	40	83.3
Yes	8	16.7
APH		
No	48	100.0
Yes	0	0.0

From table 2, the commonest risk factor as a single entity was previous preterm birth which was present in 33.3% of participants. Infective morbidity, such as malaria, urinary tract infection and gastroenteritis also amounted to 33.3% with malaria constituting the commonest cause of infection at 16.7% of participants. Presence of uterine fibroids was also one the common risk factors for PTB and was present in 25.0% of participants. Other risk factors such as anaemia, multiple gestation, polyhydramnios and hypertensive disorders constituted 25% of the study participants. Some of the participants had multiple risk factors.



Table 3: Outcome of pregnancy in the participants

Preterm delivery		
No	40	83.3
Yes	8	16.7
Continuation of pregnancy		
No	4	8.3
Yes	44	91.7
Variables	**Frequency**	**Percentage**
Tocolysis		
No	8	16.7
Yes	40	83.3
$MgSO_4$		
No	36	75.5
Yes	12	25.5

The incidence of preterm birth from this study is 16.7%. 91.7% of women with preterm contractions had prolongation of pregnancy beyond 1week and 8.3% of the women had progression to PTB during the index admission. 83.3% of the women had cessation of contractions and eventual term delivery. 16.7% of those who had prolongation of pregnancy beyond the index admission eventually had a preterm delivery between 35^{+0}weeks to 36^{+6} weeks.

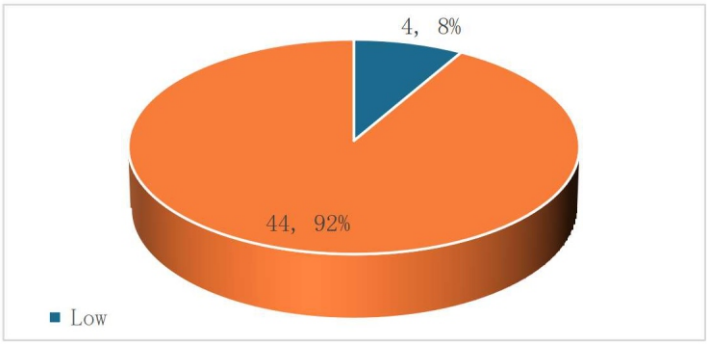

Figure 2: Presentation of respondents by birth weight

Discussion

This study further proves that the rate of PTB is significantly high in Nigeria. It reveals an incidence rate of 16.7%, which is similar to the findings in a study done at LUTH with a prevalence of 16.8% [6]. Our centre is also a large referral centre with a bias for receiving complicated pregnancies that may lead to preterm deliveries.

This study identified previous preterm birth as the single most common determinant of preterm birth, present in one- third of participants. This finding is similar to what was found as the strongest predictor of preterm birth is a previous study for preterm birth or late miscarriage where it was shown that previous preterm births were associated with a 32% chance of a recurrent preterm birth[7]. This strong association observed also aligns with global evidence that prior preterm delivery is one of the most consistent predictors of recurrence.



Studies in both high-income and low-income settings report recurrence rates ranging from 15–50%, depending on maternal and obstetric factors [8-10].

Infective morbidities, particularly malaria, were equally prevalent, while uterine fibroids, anaemia, multiple gestation, polyhydramnios, and hypertensive disorders also contributed significantly. Despite these risk factors, the majority of women with threatened preterm labour experienced prolongation of pregnancy and ultimately achieved term delivery, underscoring the potential effectiveness of timely interventions.

The role of infection, particularly malaria in endemic regions, is well documented. Malaria contributes to uteroplacental insufficiency, anaemia, and inflammatory responses that precipitate uterine contractions [11]. Urinary tract infections and gastroenteritis have similarly been implicated in triggering preterm labour through systemic inflammatory pathways [6,7,11].
The finding that 91.7% of women with threatened preterm labour had pregnancy prolongation beyond one week and that 83.3% ultimately delivered at term emphasises that hospital-based management strategies including bed rest, hydration, tocolysis, and corticosteroid administration may be effective in preventing immediate progression to preterm birth. However, the 16.7% who later delivered preterm between 35+0 and 36+6 weeks highlighted the need for continued surveillance even after initial stabilization.

Conclusion

Administration of tocolysis appeared to be effective in achieving prolongation of pregnancy for at least 1 week.

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The Impact of Decision-Delivery Interval on Feto-Maternal Outcomes of Women Presenting with Abruptio-Placentae in Northern Nigeria

Calvin Chama[1], Obinna Ezugwu[1], Ismail Tiamiyu[1], Ikechukwu Ugwu[1], Shehu Gumau[1], Hauwa Kwanda[1], Emmanuel Agbogo[2].

Affiliations

1: Department of Obstetrics and Gynaecology, Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, Bauchi State.

2: Department of Obstetrics and Gynaecology, Federal University of Health Sciences Teaching Hospital, Azare, Bauchi State.

Corresponding Author:

Professor Calvin Chama,

Department of Obstetrics and Gynaecology.

Abubakar Tafawa Balewa University Teaching Hospital, Bauchi

+2348035044243, Cchama1960@gmail.com

Introduction

Antepartum haemorrhage remains a leading cause of maternal and perinatal morbidity and mortality. Abruptio-placentae, the premature separation of a normally sited placenta, is the second most common cause of antepartum haemorrhage after placenta praevia. In Northern Nigeria, it accounts for a substantial proportion of severe maternal morbidity. Prompt resuscitation and timely delivery are essential to improving outcomes in affected women.

Objective

To assess the impact of decision–delivery interval on feto-maternal outcomes in women presenting with abruption-placentae.

Methodology

This prospective observational study was conducted among women diagnosed with abruption-placentae at Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, and Federal University Teaching Hospital, Azare, Bauchi State. Socio-demographic characteristics, clinical presentation, co-morbidities, and complications were documented. Following the decision on mode of delivery, the time to actual delivery was recorded. Mothers and neonates were followed up to assess outcomes. Data were analysed using SPSS version 25.

Results

During the study period, 95 cases of abruption-placentae were identified out of 2,460 deliveries, representing an incidence of 3.9%. Hypertensive disorders of pregnancy were the most common co-morbid conditions. Women delivered within 30 minutes of decision experienced the least maternal complications. Increasing delays were associated with higher rates of postpartum blood transfusion, acute kidney injury, disseminated intravascular



coagulation, and maternal death. Neonatal outcomes were optimal among deliveries occurring within 30 minutes, with minimal need for special care unit admission.

Discussion

This study demonstrates a clear relationship between prolonged decision–delivery interval and adverse feto-maternal outcomes in abruption-placentae. Delays beyond 30 minutes were associated with increasing maternal morbidity and mortality. Neonatal outcomes similarly worsened with prolonged delays, including higher rates of stillbirth and early neonatal death. These findings highlight the importance of rapid decision-making and efficient emergency obstetric response systems.

Conclusion

Increased decision–delivery interval in abruption-placentae is associated with significantly higher feto-maternal morbidity and mortality. Strengthening emergency obstetric care services and reducing institutional delays are essential strategies for improving outcomes in Northern Nigeria.



Determinants of Factors Affecting Adherence to Iron and Folic Acid Supplementation among Pregnant Women in Ogbomoso, South West, Nigeria

Wakeel Okanlawon Muritala,[1] Adebayo Duyile Adekunle,[1]Muibat Adesola Adeniran,[1] Matthew Olusegun Fijabiyi,[1] Olufemi Opeyemi Aworinde[1], Kola Musliudin. Owonikoko[1]

Affiliations

[1]Department of Obstetrics and Gynaecology, Faculty of Clinical Sciences, College of Health Sciences, Ladoke Akintola University of Technology, Ogbomoso, Nigeria. / Department of Obstetrics and Gynaecology, LAUTECH Teaching Hospital, Ogbomoso. PMB 4007, Ogbomoso – Ilorin Road, Ogbomoso, Oyo State, Nigeria.

Corresponding Author:

Wakeel Okanlawon MURITALA,
Department of Obstetrics and Gynaecology, Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria,
Email: womuritala@lautech.edu.ng. Tel: +2347032045565

Introduction

Physiological changes during pregnancy increase maternal requirements for iron and folic acid, which are often not met through diet alone. Adequate supplementation reduces the risk of maternal anaemia, neural tube defects, and adverse perinatal outcomes. Despite long-standing recommendations, gaps in adherence to IFA supplementation persist globally. Understanding determinants of adherence is essential for improving maternal and neonatal health outcomes.

Methodology

This cross-sectional study was conducted among 400 pregnant women attending antenatal clinics in Ogbomoso, Oyo State. Participants were recruited using a multistage sampling technique. Data collection employed a structured interviewer-administered questionnaire covering sociodemographic variables, obstetric history, and knowledge, attitude, and practices related to IFA supplementation. Data were analysed using chi-square tests and logistic regression.

Results

Most respondents were aged 20–30 years, married, and had tertiary education. Awareness of IFA supplementation was high (91.3%), with healthcare providers being the main source of information. However, knowledge of correct dosage and duration of use was suboptimal. Adherence to daily intake was 70.5%, with forgetfulness and tablet-related irritation being common barriers. Number of antenatal visits and correct knowledge of dosage were significantly associated with adherence.



Discussion

Findings from this study demonstrate that while awareness of IFA supplementation is high, gaps remain in detailed knowledge and consistent adherence. Similar trends have been reported in studies from other African and Asian settings. Knowledge of dosage and timing, reinforced through frequent antenatal contacts, appears critical in improving adherence.

Conclusion

Adherence to iron and folic acid supplementation among pregnant women in Ogbomoso was moderate. Improved antenatal counselling, early initiation of ANC, and reinforcement of correct dosage and duration are recommended to enhance adherence.

Recommendations

Antenatal education should emphasise correct dosage, timing, and benefits of IFA supplementation. Early ANC booking and repeated counselling should be encouraged. Strategies to mitigate side effects and reminder systems, including digital platforms and community support, may further improve adherence.



Perception of Discharge on Day of Delivery Among Women of African Descent

Emuze C.E, Isikhuemen M.E, Anyanwu C, Kubeyinje W, Anari C, Ugbele A, Mokwogwu N, AB Ande

Affiliation
Department of Obstetrics and Gynaecology, University of Benin Teaching Hospital, Benin City, Nigeria

Presenter:
Dr Emuze Eghosa Charles, 07060596905, emuzecharles@gmail.com

Introduction

Childbirth is a natural physiological process, and when uncomplicated, extended hospital stay after delivery may not be medically justified. Early postpartum discharge has potential benefits, including reduced healthcare costs and improved patient comfort. However, women's perceptions and concerns, particularly regarding postpartum complications, must be carefully considered in implementing such policies.

Methodology

This prospective descriptive study was conducted among 304 consenting women attending the antenatal clinic at the University of Benin Teaching Hospital. Ethical approval was obtained prior to commencement of the study. Data were collected using a structured questionnaire assessing respondents' views on discharge on the day of delivery.

Results

The mean age of respondents was 27 years. Approximately one-third (34%) believed that discharge on the day of delivery was beneficial for women and their babies, and a similar proportion indicated willingness to accept same-day discharge. Among those in favour, 54.9% felt confident that they would be physically well enough for discharge. The predominant reasons for rejecting same-day discharge were fear of postpartum bleeding and concerns about not feeling adequately recovered.

Conclusion

Although a significant minority of women favoured discharge on the day of delivery, the majority had reservations related to safety and wellbeing. Postpartum discharge decisions should therefore be individualized, patient-centred, and based on clinical safety to ensure a positive childbirth experience.



Government-Led Partnerships for Improving Maternal Health Outcomes: Scaling Frontline Health Worker Competence in Nigeria

Gilbert Uwadia[1], Fatima Muhammad[2], Lola Ameyan[2], Olatunde Amode[2], Femi Abraham[2], Cynthia Kukoyi[2], Zainab Saidu[2], Lilian Mutea[2], Olufunke Fasawe[2]

Affiliations:
1. National Primary Healthcare Development Agency (NPHCDA)
2. Clinton Health Access Initiative

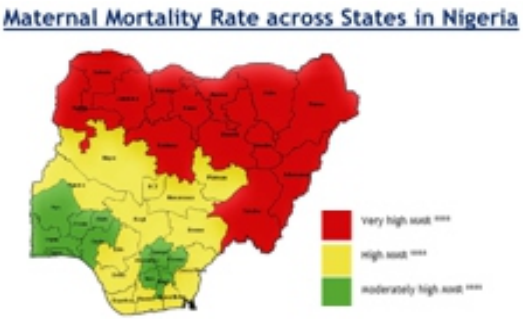
Corresponding Author:
Olatunde Amode
Clinton Health Access Initiative
+2348035972167, oamode@clintonhealthaccess.org)2

Introduction

Nigeria contributes the highest number of maternal deaths globally, with an estimated 75,000 maternal deaths annually. Strengthening the competence of frontline health workers is critical to reducing preventable maternal and newborn mortality. However, capacity building efforts have historically been fragmented, partner□driven, and poorly aligned with national strategies.

Problem synthesis

- Sub-optimal maternal and newborn health outcomes
- Lack and disproportionate distribution of FLHWs able to provide high quality and safe MNH services.
- Lack of established capacity building framework to regularly improve knowledge and competence of FLHWs





Objectives

To describe the design, implementation, and outcomes of a coordinated government□led maternal and newborn health training initiative aimed at improving frontline health worker competence and partner alignment.

Specific objectives

1. Improve the clinical competence of frontline health workers
2. Strengthen partner alignment with national strategy
3. Directly support the Government of Nigeria's target of training 120,000 frontline health care workers

Hypothesis

A government-led, co-financed partnership model will ensure efficiency and scalability of maternal and newborn innovations

Methodology

The initiative adopted a government□led partnership model with joint planning and co□financing between federal, state, and implementing partners. Training utilized harmonized MNH curricula and assessment tools. A six□day cascade training was delivered by master trainers at state and local government levels. Pre□ and post□training knowledge tests and objective structured clinical examinations were conducted in AMTSL, postpartum haemorrhage management, uterine atony, and retained placenta management.



Location: Niger and Plateau states

Scope: 42 LGAs; Niger-25 and Plateau- 17

Target population: Skilled Birth Attendants from PHCs



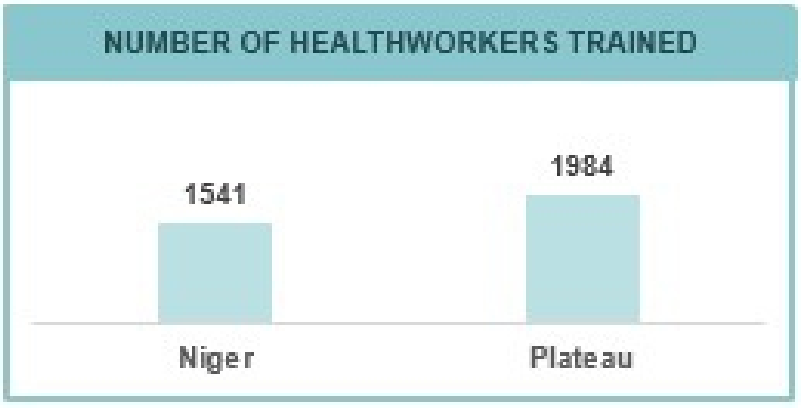
Implementation

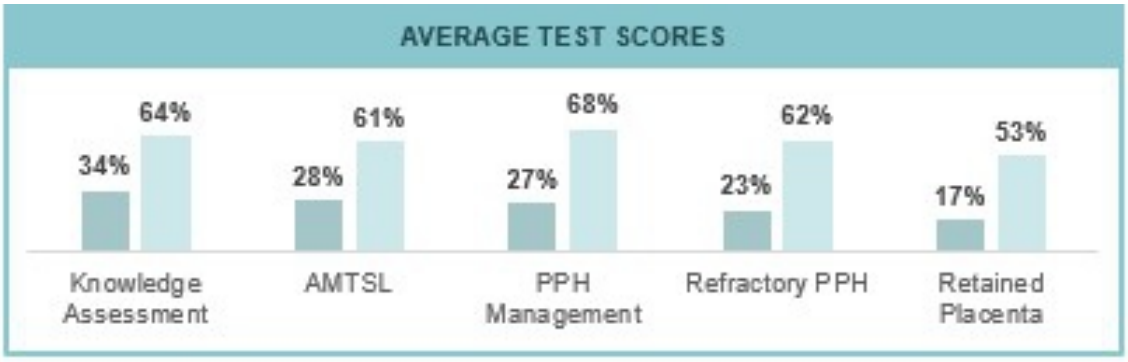
Training Design

- 6-day, non-residential cascade training.
- Integrated MNH curriculum for FLHWs.
- Training facilitated by Master trainers from State and LGAs.
- Knowledge and Competency assessment conducted pre-training and post-training.
- Skilled assessment (Objective Structured Clinical Examination) conducted Active Management of Third stage of Labor(AMTSL), PPH Management, Management of Uterine atony and Management of Retained Placenta

Results

A total of 3,525 frontline health workers were trained. Overall competency increased from a baseline average of 24% to 61% post-training. Competency in active management of the third stage of labour improved from 28% to 61%, postpartum haemorrhage management from 27% to 68%, refractory PPH management from 23% to 62%, and retained placenta management from 17% to 53%.







OVERALL COMPETENCY IMPROVED FROM AN AVERAGE OF 24% TO 61%		
Clinical Skill	**Pre-Training**	**Post-Training**
AMTSL	28%	61%
PPH Management	27%	68%
Refractory PPH	23%	62%
Retained Placenta	17%	53%

Conclusion

This initiative demonstrates that a unified, government led and co financed training framework can significantly improve frontline health worker competence at scale. Sustaining gains will require institutionalized mentorship, periodic skills reinforcement, and integration with routine supervision systems to translate training outcomes into long term reductions in maternal and newborn mortality.



Knowledge, Willingness to Practice, and Actual Practice of Pelvic Floor Muscle Exercises Among Pregnant Women in Ibadan: A Cross-Sectional Study

Adeyanju S. Ayodeji[1,2], O.O Lawal1,2, Olaoye Esther[1], Omotunde Olamide[1], Uche-Orji Christabel[1], Mbajiorgu Chidiomimi[1], Opabode Mujeeb[1], Sulaimon Saheed[1], Olatunde Eniola[1], Olayiwola Excellence[1]

Affiliations

[1] College of Medicine, University of Ibadan, Nigeria

[2] University College Hospital, Ibadan, Nigeria

Corresponding and presenting author

Dr. S. A. Adeyanju.

Department of Obstetrics and Gynaecology, College of Medicine, University of Ibadan Nigeria

Email: adeayok1@yahoo.com, GSM: +2347037992746

Introduction

Pelvic floor muscle exercises (PFME) are targeted routines designed to strengthen muscles responsible for the support of pelvic organs and the maintenance of continence. They also play an important role in ensuring lumbopelvic stability and mobility, both of which are critical during pregnancy and childbirth.

Pelvic floor disorders are common, with a 40–50% risk during pregnancy and a 25–50% lifetime risk among the general population. Evidence suggests that PFME may be both preventive and corrective for pelvic floor dysfunction, yet utilization during pregnancy is variable.

This study, therefore, examined the knowledge, willingness, and actual practice of PFME among pregnant women attending antenatal clinics in two major maternity centres in Ibadan—UCH and AMTH.

Methods

Study Design and Setting: A descriptive cross-sectional study was conducted among pregnant women receiving antenatal care at University College Hospital (UCH) and Adeoyo Maternity Teaching Hospital (AMTH), Ibadan.

Study Population and Sample Size: A total of 316 consenting pregnant women were recruited using a systematic sampling approach.

Data Collection: Data were collected with a validated interviewer-administered questionnaire assessing socio-demographics, awareness and knowledge of PFME, willingness to participate in PFME and actual practice of PFME.



Data Analysis: Data were entered and analyzed using SPSS version 25. Statistical significance was predetermined at $p < 0.05$.

Results

Socio-Demographic Characteristics

- Mean age: 30.05 ± 5.34 years
- Yoruba ethnicity: 92.0%
- Tertiary education: 57.7%
- Self-employed: 59.0%
- Multiparous (≥1 previous pregnancy): 60.1%

General Exercise Practices

- Awareness that pregnant women may exercise: 77.3%
- Engaged in exercise before pregnancy: 50.5%
- Most common pre-pregnancy exercise: Jogging

Awareness and Knowledge of PFME

- Overall awareness of PFME: 38.5%
- Main information source: social media (42.4%)
- Knowledge of Kegel exercise:
  - Heard of it: 25.1%
  - Understanding of what it entails: 23.3%
- Bridging exercise recognition:
  - Heard of it: 23.6%
  - Correct knowledge: 15.7%
- Most familiar PFME: pillow exercise (33.5%)

Willingness to Practice PFME

- Willing to practice:
  - Kegel exercise: 77.1%
  - Bridging exercise: 77.3%
  - Pillow exercise: 75.7%

Actual Practice

Despite high willingness:

- Kegel practice: 16.8%
- Bridging practice: 12.8%
- Pillow exercise practice: not reported as practiced frequently

Discussion

This study demonstrates a substantial gap between participants' willingness to practice pelvic floor muscle exercises and their actual practice. Although awareness of general exercise in pregnancy was high, specific knowledge of PFME was low. This discrepancy suggests the absence of structured antenatal education on pelvic floor health in the participating facilities.



Social media, emerging as the leading source of information, reflects the changing landscape of health information access, but also indicates that clinic-based health education has room for improvement.

Low actual practice despite high willingness may be linked to:

- limited understanding of correct PFME techniques
- absence of routine PFME demonstrations during antenatal visits
- lack of reinforcement by healthcare workers
- cultural or contextual misconceptions about exercise during pregnancy

These findings mirror global literature emphasizing the need for PFME integration into routine antenatal care to prevent pelvic floor dysfunction and promote postpartum recovery.

Conclusion

Knowledge of PFME among pregnant women in Ibadan was poor, despite a high level of willingness to engage in such exercises. Actual practice was markedly low, highlighting a missed opportunity in antenatal health promotion.

Recommendations

1. Pelvic floor muscle exercise education should be integrated into routine antenatal classes.
2. Healthcare providers should receive training to demonstrate and reinforce PFME techniques.
3. Development of visual aids, instructional videos, and pamphlets to guide pregnant women.
4. Inclusion of PFME counseling during early pregnancy visits to improve long-term compliance.



Sexual Health and Function after Vesico-Vaginal Fistula Repair in Sub-Saharan Africa: A Scoping Review

Opeyemi A. Adedeji[1], Rukiyat A. Abdus-salam[1, 2], Jamiu A. Ogunsola[1], Olatunji O. Lawal[1, 2], Stephen Salufu[1], Friday O. Ameh[1], Imran O. Morhason-Bello[1, 2]

Affiliations
[1]University College Hospital, Ibadan,
[2]College of Medicine, University of Ibadan, Ibadan

Corresponding Author:
Opeyemi A. Adedeji,
University College Hospital, Ibadan.
Phone Number: 07030121152, Email: oadedeji14@gmail.com

Introduction/Background

This presentation addresses the crucial, yet often neglected, aspect of recovery for women treated for Vesico-Vaginal Fistula (VVF): their sexual health and function. VVF remains a devastating consequence of maternal morbidity in Sub-Saharan Africa (SSA), inflicting not only physical trauma but also profound social isolation and the disruption of intimate relationships.

While surgical repair is highly effective at restoring urinary continence for many women, the recovery of comprehensive sexual function and full psychosocial reintegration is frequently incomplete. Despite successful surgical outcomes, many women struggle with their sexual identity and partnership dynamics post-repair. Therefore, understanding the true nature of post-repair sexual outcomes is absolutely vital for developing holistic rehabilitation programs and informing public health policy.

Objective(s)

The primary objective of this scoping review was to systematically synthesize the existing evidence on sexual health and function outcomes following VVF repair across Sub-Saharan Africa. Furthermore, we aimed to delineate the specific research gaps and identify clear clinical implications to guide improvements in post-repair care.

Method

We conducted a systematic scoping review using established databases, including PubMed, Embase, Scopus, and African Journals Online (AJOL). Our search terms focused on the intersection of "vesico-vaginal fistula," "sexual function," and "sub-Saharan Africa." We included English-language articles published up to October 2025.

Inclusion Criteria: Eligible studies were those that specifically reported sexual or reproductive health outcomes following fistula repair in the SSA region. Data extraction followed the rigorous PRISMA-ScR (Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews) framework.



Results

Our comprehensive search identified 48 articles, from which eight met the final inclusion criteria. These studies originated from five SSA countries: Nigeria (2), Uganda (2), Malawi (1), Ethiopia (2), and Guinea (1).

Study Type Breakdown:

Six of the included studies were quantitative.
One was purely qualitative.
One utilized a mixed-methods approach.

Key Findings on Sexual Activity: The reported rates of women resuming sexual activity within the first 12 months post-repair showed wide variability, ranging from 45% to 70%. This suggests that while a majority do resume intimacy, a significant proportion does not, highlighting ongoing issues.

Common Issues Identified: The most frequently reported challenges related to sexual health included a constellation of symptoms: low libido, dyspareunia (painful intercourse), vaginal stenosis (narrowing of the vagina), and the persistent presence of psychological distress and social stigma.

Research Gaps: A critical finding of our review was the severe lack of standardization in assessment:
Only two of the eight studies employed validated sexual function assessment tools.
None of the studies evaluated the impact or efficacy of any structured psychosocial or sexual rehabilitation programs.

Discussion

The findings clearly indicate that while VVF repair successfully restores continence for many, sexual recovery remains suboptimal in a high number of women across SSA. The physical barriers, such as vaginal stenosis, are compounded by psychological distress and lack of partner support, which often prevent full recovery. The overwhelming reliance on non-validated measures in the existing research severely limits our ability to accurately gauge the true extent of the problem and hinders the development of evidence-based interventions. The absence of studies evaluating structured rehabilitation programs represents a major clinical and research gap.

Conclusion

In conclusion, sexual recovery after Vesico-Vaginal Fistula repair in Sub-Saharan Africa is frequently incomplete and is hindered by limited, standardized assessment practices and a profound lack of psychosocial support. The evidence clearly mandates a shift in clinical focus. We strongly recommend the integration of standardized sexual counseling, partner education, and formal multidisciplinary psychosocial rehabilitation into routine post-repair care. This comprehensive approach is essential for facilitating full recovery and significantly improving the long-term quality of life for women who have undergone VVF repair.



Introduction of Point-of-Care Ultrasound in Primary Healthcare in Edo State, Nigeria: Achievements, Barriers, and Implementation Realities

Chidinma Anya[1*],Ehigha Enabudoso[1], Fiebor Awarute[2], Osayomore Idemudia[2] and Cyril Oshiomhole[3]

Affiliations

[1]Department of Obstetrics & Gynecology, University of Benin Teaching Hospital/ University of Benin, Benin, Edo State,
Nigeria
[2]Edo State Primary Health Care Development Agency, Benin, Edo State, Nigeria
[3]Ministry of Health, Edo State, Nigeria

Corresponding Author:

Chidinma Anya, Department of Obstetrics & Gynecology, University of Benin Teaching Hospital, Benin City, Nigeria
08038715906 / chidexanya@gmail.com

Background:

Imagine a disaster of finding major placenta previa during delivery in a rural setting without a facility to man-age? This would have been averted with a prior obstetric imaging. Antenatal care without imaging is like "groping in the dark". Unfortunately, in low- and middle-income countries (LMICs), this is obtainable. Due to limited access to ultrasound equipment and/ trained personnel, these often delay the detection of high-risk pregnancy conditions until delivery.

The integration of point-of-care ultrasound into antenatal care (ANC) is critical for improving maternal-fetal outcomes. Implementation of the task-shifting strategy following requisite training and quality assurance is an option in the deployment of this technology.

Objectives

- To determine feasibility of POCUS in PHCs in Edo state
- To explore the achievements and barriers of implementation of Obstetric Point-Of-Care Ultrasound Scan (POCUS) in Primary Healthcare Centers (PHCs) in Edo state.
- To conduct a post-training assessment of utilization of POCUS, service providers and their experiences following deployment as well as, providing needed feedback to help modify utilization of the service, improve service delivery, and inform policy development.

Methodology

- This was an exploratory qualitative study conducted in Edo state PHCs, with some elements of implementation research design involving PHC providers that had undergone a 3weeks accredited basic obstetric ultrasound training.
- Two PHC workers (a nurse and medical officer) were selected across the 18 local government areas (LGA) of the state for training.



- Purposive sampling was used to select one participant from each of the eighteen LGAs of the state for the study, four months following the training and deployment of the machines to their stations
- In-depth interviews were conducted to obtain the experiences of the participants regarding the service delivery of POCUS

Result:

- Of the eighteen respondents, 17 had commenced service delivery of POCUS. One was yet to commence work as the PHC was being renovated.
- A total of 622 obstetric scans were done within 4months of the introduction of POCUS at the PHC facilities.
- Four key themes emerged from the interviews: (1) Obstetric ultrasound skills gained; (2) Increase in maternity services utilization at the PHC and improved management of pregnant women; (3) Providers' perception of clients' experiences, and (4) Challenges.

TABLE 1: SOCIODERMOGRAPHIC DISTRIBUTION OF PARTICIPANTS

Variable	Frequency (n=18)	Percent
Age (in years)		
21-30	2	11.1
31-40	10	55.5
41-50	4	22.3
51-60	2	11.1
Mean Age ± SD = 38.8 ± 8.2		
Total	18	
Gender		
Male	16	88.9
Female	2	11.1
Total	18	
Profession		
Doctor	16	88.9
Nurse/Midwife	2	11.1
Duration of clinical practice (in years)		
<10	11	61.1
10-20	5	27.8
>20	2	11.1

Theme 1: Training experience and Obstetric Ultrasound skills gained

- The participants demonstrated satisfaction with the training experience and competence in basic obstetric ultrasound skills gained from the training.

"During the training, I was able to acquire the skills to accurately get the gestational age, the expected date of delivery, abnormal presentation, placenta location, and all of that, which are actually the basic skills required for the point of care, and they've actually been of great help since then."

"Before the training, I had very little experience with scanning. This training allowed me to learn significantly and perfect my scanning skills."

Theme 2: Improved management of pregnant women

- An important aspect that came up was the benefits of the skills gained, as it concerned the quality of care provided to clients. Most of the responses provided insight into



patient experiences as improved, and the health care providers are further empowered to deliver timely interventions and referrals where necessary.

"Scanning has actually made us more certain about the nature of our clients' pregnancies. It has made us more certain of the interventions we may need to provide for them through the course of antenatal care and the delivery."

Theme 3: Providers' perception of Clients' experiences

- The healthcare providers reported that clients have demonstrated satisfaction and elation since the provision of scanning services in the PHCs. Remarkably, the pregnant women are saved the long distances they had to travel to get ultrasound services, especially during emergencies.

"It has improved our antenatal patronage; patients have been coming because of the scan, because it is cheap. A lot of patients are coming, more have registered for antenatal compared to before, and when they are coming next time, some of them even bring their friends over for us to scan."

Theme 4: Challenges

- *While reporting positive experiences, the participant had challenges with the implementation of POCUS in the PHCs in the following areas; Power/equipment challenges and increased work load*

Discussion:

The study confirms feasibility of POCUS in Edo state PHCs using task shifting of training PHC health workers. This is the first reported in Nigeria and West Africa to successfully empower PHC workers with basic Obstetric scan skills for POCUS on such a large scale involving 17 out of 18 LGA.

The commencement of POCUS occurred within four weeks post training and this was feasible because scanning machines were deployed to PHC facilities immediately after training, along with the enthusiasm of the trainees. There was general acceptance both by the patients and trainees. This was a reality due to the funding and collaboration of the world bank, Edo state government and the Fetal diagnostic and ultrasound centre.

Conclusion:

- The introduction of point-of-care obstetric ultrasound scan in PHC facilities in Edo state is a reality and is currently ongoing.
- Implementation has resulted in increased and satisfactory antenatal service utilization in Edo State PHCs.
- The trainees reported positive experiences amidst power outages and increased workload challenges
- There is need for monitoring and evaluation for quality assurance to ensure sustainability. A longitudinal follow-up of the performance to assess and evaluate the impact of POCUS on the health care system is presently being considered as a more objective measure of the success of this intervention.



Clinical Risk Management in Obstetric Practice as an Effective Tool for Mitigating Maternal and Perinatal Morbidity and Mortality in Nigeria

Mkpe Abbey[1], Paul L Kua[1], Ngozi J. Kwosah[1], F Horsefal[1], T Kasso[3],Esther Nonye-Enyidah[1], KE Okagua[1],RS Iwo-Amah [1],AG Mba[1], US Ocheche[4], BO Altraide[1], L. Sapira-Ordu[1],P Awoyesuku P[1],DH John[1], S Eli [1], Innimgba N. [4] M Jaja[3].

Affiliations

[1]Department of obstetrics and gynaecology, Rivers State University Teaching Hospital, RSUTH, Port Harcourt, Rivers State.

[2] Department of obstetrics and gynaecology Olabisi Onabanjo UniversityTeaching hospital, Ogun State, Nigeria.

[3]Dept. of O&G University of Port Harcourt Teaching Hospital, Port Harcourt, Rivers State, Nigeria.

[4]PAMO University of Medical Sciences. Port Harcourt, Rivers State, Nigeria.

Corresponding Author:

Mkpe Abbey.

Department of obstetrics and gynaecology, Rivers State University Teaching Hospital, RSUTH, Port Harcourt, Rivers State.

07083362421. mkpeabbey@gmail.com. RSUTH

Introduction

Risk management is the systematic identification and mitigation of hazards that may result in harm. In obstetric practice, effective risk management is essential due to the unpredictable nature of pregnancy and childbirth. Historically, risk management in many Nigerian maternity units has been limited to post□event reviews, with poor implementation of corrective actions.

Aim

To introduce evidence□based clinical risk management into obstetric practice in Nigeria with the ultimate goal of reducing maternal and perinatal morbidity and mortality.

Methodology

A literature review on clinical risk management in obstetric practice was undertaken. A structured risk assessment of obstetric services at RSUTH was conducted using Failure Mode and Effects Analysis (FMEA) to identify potential failures and their consequences. Root cause analysis was applied to all maternal deaths recorded at RSUTH from January to October 2025.

Results

Risk management steps identified included risk identification, analysis, treatment, control, and organisational learning. FMEA facilitated creation of an incident□trigger list encompassing maternal, fetal/neonatal, and organisational incidents. Root cause analysis



revealed nine maternal deaths, mostly among unbooked women, with hypertensive disorders accounting for the majority. Key gaps included poor referral systems, lack of evidence□based management, inadequate theatre equipment, and limited blood availability.

Discussion

Findings demonstrate that many maternal deaths were preventable and related to system failures rather than individual clinical errors. Proactive clinical risk management allows early identification of hazards, structured response planning, and continuous quality improvement.

Conclusion

Clinical risk management in obstetric practice is long overdue in Nigeria. Its systematic introduction offers a viable pathway to reducing maternal and perinatal morbidity and mortality and may form the foundation for a future National Patient Safety Agency.

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Perception of Maternal Health Services among Women attending Antenatal Care in Primary Health Centre, Abuja FCT, Nigeria: A Mixed-Methods Study.

Azuka ChinwokwuEzeike[1], DuroClementDolapo[2], ElkenahChubikeNdie[3]

Affiliations

[1]D-ACEMedicalConsulting&CommunicationsServices,Abuja/StJudeWomen'sClinic, Abuja.Nigeria

[2]DepartmentofCommunityMedicineandPublicHealth,NileUniversityofNigeria,Abuja, Nigeria

[3]Departmentof NursingScience,NationalOpenUniversityofNigeria (NOUN),Abuja,Nigeria

Corresponding Author

AzukaChinweokwuEzeike

D-ACEMedicalConsulting&CommunicationsServices,Abuja/StJudeWomen'sClinic, Abuja.Nigeria

PhoneNumber:+2348066520991, E-mail:h.hephzibah@yahoo.co.uk

Introduction

• Pregnant women's perception of primary health care influences their healthcare utilization.

• Health-seeking behaviour determines how the population interacts with the healthcare system.

• Perception shapes health-seeking behaviour and affects choices regarding care.

• Understanding pregnant women's perception of the primary health care setting is essential for providing socially acceptable, patient-centered maternal health services.

• This study was based on the Health Belief Model.

Objectives

• To assess the perception of antenatal care services among pregnant women attending antenatal care at Primary Health Care facilities in Abuja.

• To evaluate the level of acceptance of the Primary Health Care setting by mothers attending antenatal care at Primary Health Care centres in Abuja.

Methodology

Study Design

- Convergent-parallel mixed methods design
- Quantitative: Cross-sectional
- Qualitative: Focus Group Discussions
- This work was drawn from a wider research study that assessed the perception and utilization of maternal health services in Abuja, FCT.

Study Population

- Study population: Women of childbearing age in Abuja, FCT
- Target population: Pregnant women attending care at PHCs in Abuja, FCT



Sample Size and Setting

- 370 women across 12 health centres in 3 Area Councils in Abuja, FCT
- 58 women participated in nine Focus Group Discussions

Data Analysis

- Quantitative: SPSS
- Qualitative: Thematic analysis

Quantitative Results

- Sociodemographic Profile: N = 365 (with complete entries); Majority aged 25–34 (71.5 percent), in the 3rd trimester (82.5 percent), and had secondary education (58.4 percent).
  Most were employed (66.7 percent) and earned below minimum wage (62.9 percent).
- Perception of Antenatal Care: Utility of ANC: Majority strongly agreed that ANC, good diet, regular visits, and using only prescribed drugs are essential.
  88.2 percent had a positive overall perception of ANC services.
  Quality of ANC: Waiting time was the most negatively perceived aspect; interaction with health workers was the most positively perceived.
- Acceptance of PHC Setting: 80 percent were willing to return for ANC in future pregnancies.94.3 percent were satisfied or very satisfied with the PHC setting.Only 13.2 percent enrolled for ANC elsewhere.
- Factors Associated with Acceptance: Education ($p = 0.005$) and employment ($p = 0.04$) significantly predicted acceptance of PHC services.

Qualitative Findings

Three thematic areas:

- Perceived Benefits of Antenatal Care: ANC seen as essential for monitoring mother and baby, identifying risks early, and receiving guidance and clarifications.
  Women valued familiarity with PHC staff and peer support from other pregnant women.
- Preferred Facility for ANC: Most preferred health facilities due to availability of skilled staff and better management of complications.
  PHCs preferred for affordability, accessibility, and the perceived caring attitude of staff.
  Some preferred general hospitals for better equipment (e.g., oxygen).
- Reasons for Choosing Their PHC: Good quality of care (based on recommendations).
  Proximity to home, affordability, and easy access even at night.
  Trust in staff and previous positive outcomes.



Table 1: Perception of the Utility and Quality of Antenatal Care Services

VARIABLE	LIKERT SCALE				
Perception of the Utility of Antenatal care	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
• ANC in a Health Facility	2(5)	1(3)	103(28.2)	103(28.2)	259(71)
• Optimal diet during Pregnancy	1(0.3)	0	2(0.5)	110(30.1)	252(69)
• Regular ANC attendance	1(0.3)	2(0.5)	0	106(29)	256(70.1)
• Using only prescribed medication	0	0	3(0.8)	106(29)	256(70.1)
Perception of the Quality of Antenatal Services					
	Very Poor	**Poor**	**Fair**	**Good**	**Very Good**
• Retrieval of folder	0	4(1.1)	6(1.6)	123(33.7)	232(63,6)
• Health education	12(0.5)	3(0.8)	12(3.3)	119(32.6)	229(62.7)
• BP/Weight check	0	0	6(1.6)	130(35.6)	229(62.7)
• Interaction during consultation	2(0.5)	1(0.3)	9(2.5)	120(32.9)	233(63.8)
• Examination	0	0	6(1.6)	138(37.8)	221(60.5)
• Involvement in decision making	2(0.5)	4(1.1)	21(5.8)	149(40.8)	189(51.8)
• Laboratory services	1(0.3)	5(1.4)	20(5.5)	185(50.7)	154(42.2)
• Waiting time	11(3.0)	30(8.2)	58(15.9)	161(44.1)	105(28.8)
• Cost of services	2(0.5)	8(2.2)	34(9.3)	196(53.7)	125(34.2)
• General attitude of Health workers	2(0.5)	3(0.8)	15(4.1)	177(48.5)	188(46)
• Cleanliness of the Environment	5(1.4)	14(3.8)	29(7.9)	173(47.4)	144(39.5)
Overall Perception of Quality of Antenatal Care Services					
• Good					
• Fair/Poor	322(88.2) 43(11.8)				



Table 2 -Acceptance of The Primary Health Care Setting

Variable	Category	Frequency (%)
Satisfaction with PHC	Very unsatisfied	1(0.3)
	Unsatisfied	1(0.3)
	Neutral	19(5.2)
	Satisfied	170(46.6)
	Very Satisfied	174(47.7)
Registered for ANC Elsewhere	Yes	48(13.2)
	No	317(86.8)
Intention to register for ANC at the PHC next pregnancy	Yes	292(80.0)
	No	7(1.9)
	Undecided	66(18.1)
Reason for Choosing PHC	Near to home	118(32.3)
	Cheaper	36(9.9)
	Faster service delivery	19(5.2)
	Better Care	175(47.9)
	Spouse's/Family	17(4.7)
Place of Last Delivery	Health Facility	333(912)
	Maternity Home	6(1.6)
	Church/Mosque	1(0.3)
	Home	25(6.8)
Health Facility for Delivery(n=333)	Same PHC	310(84.9)
	Private Hospital	7(19)
	General Hospital	14(3.8)
	Tertiary Hospital	2(0.5)
Overall Level of Acceptance of the PHC	Good	344(94.2)
	Poor	21(5.8)



Discussion

- Most respondents had a good perception of antenatal care, with the majority selecting "strongly agree."
- Up to 88.2 percent of participants also had a good perception of the quality of care.
- These findings are similar to those reported by Sayyadi et al. in Kano, though Owigho et al. in Delta documented lower figures (Sayyadi et al., 2021; Owigho and Isara, 2022).
- Waiting time was the most negatively perceived aspect, consistent with findings by Ansu-Mensah et al. across Sub-Saharan Africa (Ansu-Mensah et al., 2020).
- Overall satisfaction with the PHC setting was high: 46.6 percent were satisfied, and 47.7 percent were very satisfied.
- Acceptance of the PHC environment was equally strong (94.2 percent), aligning with reports by Sayyadi et al. and Okoror et al. (Sayyadi et al., 2021; Okoror et al., 2020).
- The PHC setting was acceptable to most respondents, largely due to perceived better quality of care (47.9 percent).
- Other reasons for choosing PHC facilities included proximity (32.3 percent) and low cost (9.9 percent), similar to findings by Okonofua et al. in Benin (Okonofua et al., 2018).
- This favourable perception may be linked to the facilities being managed under the Basic Health Care Provision Fund (BHCPF), which could result in better resourcing.
- Acceptance of the PHC environment was significantly associated with positive perceptions of care, supported by 80 percent of respondents indicating they would return in future pregnancies.
- Only 13.2 percent booked antenatal care elsewhere, suggesting strong PHC acceptance.
- This contrasts with findings from Akeju et al. in Ondo State, which showed women often used multiple healthcare providers (Akeju et al., 2016).

Conclusion

Most women had a positive perception of antenatal care and high acceptance of the PHC setting, influenced by perceived quality, accessibility, and affordability. However, waiting time was a major concern. Education and employment significantly predicted PHC acceptance.

It is recommended that the perceived needs of PHC users be regularly assessed and that services be adjusted accordingly based on these findings. In addition, PHC capacity should be strengthened with targeted strategies to reduce waiting times and enhance overall service delivery.



Audit of Obstetric and Perinatal Outcomes of Teenage Pregnancy at UNIOSUN Teaching Hospital, Osogbo -5-year review

Oyelami O.S, Fasanu O.A, Awodele K.

Affiliation
Department of Obstetrics and Gynaecology, UNIOSUN Teaching Hospital, Osogbo, Osun State, Nigeria

Corresponding Author
Oyelami Olusegun.
Department of Obstetrics and Gynaecology, UNIOSUN Teaching Hospital, Osogbo, Osun State, Nigeria
Email: oyelamisegun9@gmail.com, Phone number:07066177659

Introduction

Teenage pregnancy remains a significant contributor to maternal and perinatal morbidity and mortality, particularly in low- and middle-income countries. The 2018 Nigeria Demographic and Health Survey reported an adolescent birth rate of 106 per 1,000 women aged 15–19 years. Ongoing debate persists as to whether adverse outcomes are primarily due to biological immaturity or inequitable access to quality maternal healthcare. This study provides local data from Osogbo to address this gap.

Significance of the Study

This study provides five-year institutional data to inform policy and service improvement. It identifies high-risk maternal and neonatal complications requiring targeted interventions, supports the development of adolescent-friendly antenatal and delivery services, and establishes a baseline for periodic re-audit and quality improvement.

Objectives

1. To determine the prevalence of teenage pregnancy at UNIOSUN Teaching Hospital.
2. To compare sociodemographic characteristics between teenage and adult mothers.
3. To compare maternal outcomes between both groups.
4. To compare perinatal outcomes between both groups.

Methodology

This was a retrospective case–control study conducted at UNIOSUN Teaching Hospital, Osogbo, between January 2017 and December 2021. Cases were teenage mothers aged below 20 years who delivered at gestational age ≥28 weeks. Controls were the next woman aged 20–34 years who delivered after each case. Women aged ≥35 years, those with chronic medical illnesses, and grand multiparous women were excluded. Data were analysed using SPSS version 23.



Results

Teenage pregnancy accounted for 1.08% of deliveries. A significantly higher proportion of teenage mothers were unbooked compared with controls. Maternal complications such as anaemia, cephalopelvic disproportion, obstructed labour, and caesarean delivery were significantly higher among teenagers. Neonatal outcomes including low birth weight, birth asphyxia, preterm birth, and SCBU admission were also more frequent in the teenage group.

Conclusion

Teenage pregnancy at UNIOSUN Teaching Hospital is associated with significantly worse obstetric and perinatal outcomes compared with adult pregnancies. These findings underscore the need for targeted interventions addressing early antenatal booking, nutrition, education, and adolescent-friendly maternal health services.

Recommendations

Establishment of adolescent-friendly antenatal and delivery services, strengthening community-based sexual education and contraception access, promotion of early antenatal booking, provision of nutritional supplementation and anaemia prevention programmes, and periodic re-audit every five years.



Prevalence and Unmet Need for Postpartum Contraception Among Women in Rivers State, Nigeria

Felix Chikaike Clement Wekere[1,2], Emilia A. Udofia [3], Cosmos E. Enyindah[4], Gift A.F Clement-Wekere[5]

Affiliations

[1]Department of Community Medicine, College of Medical Sciences, Rivers State University, Port Harcourt, Rivers State, Nigeria.

[2] Department of Obstetrics and Gynaecology, Rivers State University Teaching Hospital, Rivers State, Nigeria.

[3] Department of Community Health, College of Health Sciences, University of Ghana, Korle Bu, Accra, Ghana.

[4] Department of Obstetrics and Gynaecology, University of Port Harcourt, Rivers State, Nigeria.

[5]Department of Paediatrics and Child Health, University of Port Harcourt Teaching Hospital, Rivers State, Nigeria

PresentingAuthor /Correspondence:

Dr Felix C.C.Wekere

Email: fccwekere @yahoo.com/ felix.wekere@ust.edu.ng, Phone: +234 8035492898

Background

Globally, the unmet need for contraception has been a cardinal indicator for monitoring the progress of family planning programs [1] and recently appears more critical to family planning programs [2]. It refers to the proportion of women who desire to postpone or limit childbirth but are not on any method of contraception. Over 225 million women have an unmet need for family planning resulting in over 53 million unwanted and /or unintended pregnancies,16 million unsafe abortions and more than 78,000 maternal mortalities annually [3-5]. During postpartum period, about 96% of women in low -and middle-income countries desire to prevent pregnancy for 24 months; however, 70% of them have an unmet need for modern contraception. [6] World Health Organisation (WHO), has identified postpartum women as a key group with high rate of unmet need for contraception. Addressing unmet need for modern contraception among postpartum women has the potential to improve maternal health Aim- To determine the prevalence and unmet need for postpartum contraception among women in Rivers State.

Methodology

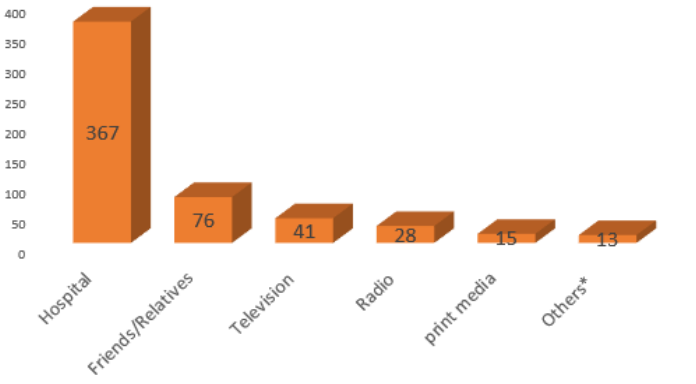
A descriptive cross-sectional study carried out in Rivers State, among 540 postpartum women recruited using multi-stage sampling method. Quantitative data were collected using interviewer-administered questionnaire, over 2 months. Descriptive and inferential statistics were derived using Statistical Product and Service Solutions (SPSS) version 26.0 (Armonk, NY). Ethical approval was obtained from the University of Port Harcourt and Rivers State



University Teaching Hospital (RSUTH) Research and Ethics Committees with approval numbers UPH/CEREMAD/REC/MM78/041 and RSUTH/REC/2023295 respectively.

Results

Postpartum contraceptive (PPC) prevalence was 10.9% (95% CI 10.87 - 10.93). Unmet need for PPC in Rivers State was 89.1% (95% CI 89.07 -89.13) with unmet need for spacing 66.5% and limiting 22.6%. The commonest method of modern contraception used by postpartum women was Implanon accounting for 35.6%, followed by depot medroxyprogesterone acetate (Depo-Provera) 11(18.6%) and Jadelle 9(15.3%). The least accepted method was levonorgestrel intrauterine system (LNG IUS) 1(0.2%). Hospital was the most common source of information on postpartum contraception (PPC) 367 (68%), followed by friends/relatives 76 (14.1%).



Sources of information on postpartum contraception among postpartum women in Rivers State.

Discussion

The prevalence of postpartum contraception at the Rivers State University Teaching Hospital was 10.9% of all contraceptive acceptors. The prevalence of postpartum contraception from this study was lower than the finding of 80.3% in Ethiopia[7] , 75% in Malawi[8] , 32% in Nepal but higher than 10.3% reported by Mengesha et al [9], in Northwest. Variations in the reported rates across studies could be due to methodological differences. However, the low rate of postpartum contraception observed buttresses the high rate of unmet need for postpartum contraception in our setting. Also, the present study revealed that the commonest method of postpartum contraception used by postpartum women in Rivers state was Implanon (a long - acting contraceptive implant), accounting for 35.6%. Another long-acting contraceptive implant- Jadelle, was the third most common method used by postpartum women indicating their preference for the contraceptive implants. This finding is contrary to the findings of Joshi et al.,[10] in Kailali District in Nepal where condoms and Depot medroxyprogesterone acetate (DMPA) or Depo-Provera were found to be the most common contraceptive methods used by postpartum women. It is not surprising that Implanon was the most common type used as it was readily available at the time of study following training of contraceptive service providers on its insertion and removal. This finding is in keeping with that of previous finding in a hospital-based study in the state by Wekere et al.[11] Postpartum women got



information on postpartum contraception mainly from the hospital buttressing the need for regular health education during antenatal and postnatal visit.

Conclusion

The prevalence of postpartum contraception in Rivers State is low with a very high unmet need for postpartum contraception. Findings will enhance postpartum counselling, service delivery and improve maternal health in line with sustainable development goals (SDGs)-3.

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Vaginal Delivery after Caesarean Section in Nigeria: A Literature Review

Adewumi BA[1], Idowu OC[1], Salufu S[1], Olukunle TA[1], Adebayo SA[1], Sanusi AT[1], Esan BA[1], Adesina OA[12]

Affiliations

[1]Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria

[2] Department of Obstetrics and Gynaecology , College of Medicine, University of Ibadan, Ibadan, Nigeria

Corresponding Author

Dr. O. C. Idowu

Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria

08106743220, idoscale@gmail.com

Introduction

Vaginal birth after caesarean section has become increasingly important in the context of rising global caesarean delivery rates. Global estimates suggest that caesarean section rates increased to 21% by 2018, with projections of nearly 30% by 2030. Although Africa reports lower rates, repeat caesarean delivery contributes significantly to maternal morbidity. VBAC offers an opportunity to reduce unnecessary repeat surgery while preserving maternal and neonatal safety when appropriately managed.

Methods

This narrative literature review synthesised peer□reviewed studies on VBAC published over the last decade. Electronic databases searched included PubMed, Scopus, and Google Scholar. Search terms included 'VBAC', 'trial of labour after caesarean', and 'Nigeria'. Studies addressing success rates, outcomes, attitudes, and policy perspectives were included.

VBAC Success Rates and Determinants

Internationally, VBAC success rates average about 70–75%. Nigerian studies report lower success rates, ranging between 36.3% and 61.7%. Determinants of success consistently identified include prior vaginal delivery, non-recurrent indications for previous caesarean section, adequate inter-pregnancy interval, and delivery in facilities with continuous intrapartum monitoring.

Maternal and Neonatal Outcomes

When conducted in appropriately selected women, VBAC is associated with favourable maternal and neonatal outcomes. However, adverse outcomes are more likely in settings with limited access to emergency obstetric care, delayed referrals, and inadequate intrapartum surveillance. These findings underscore the need for context-specific protocols.



Challenges and Policy Implications

Key challenges to VBAC practice in Nigeria include limited antenatal care utilisation, shortage of skilled healthcare providers, inconsistent institutional policies, and sociocultural misconceptions. The absence of nationally standardised VBAC guidelines contributes to wide regional variation in practice.

Recommendations

Improving VBAC practice in Nigeria requires investment in healthcare infrastructure, development of context-appropriate evidence□based guidelines, public education to address misconceptions, and strengthened data collection systems to monitor outcomes and trends.

Conclusion

VBAC is a critical component of safe motherhood strategies in Nigeria. With appropriate patient selection, skilled care, and supportive policies, VBAC can safely reduce repeat caesarean sections and associated morbidities. Further research is needed to understand sociocultural influences and optimise VBAC acceptance nationwide.



Skin Wound Closure Outcome Using Tissue Adhesive versus Subcuticular Absorbable Suture at Elective Caesarean Section: A Randomized Controlled Trial

Joshua Ebuka Ifebude[1], Olayinka Ogunbode[12], Olutosin Alaba Awolude[12], Olukayode Iyun[3], Aminat Oladosu-Aderele[4], Segun Adetunji Adebayo[1]

Affiliations

[1]Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Oyo State, Nigeria

[2]Department of Obstetrics and Gynaecology, University of Ibadan, Oyo State, Nigeria

[3]Department of Plastic, Reconstructive and Aesthetic Surgery, University of Ibadan, Oyo State, Nigeria

[4]Department of Obstetrics and Gynaecology, Federal Medical Centre, Abeokuta, Ogun State, Nigeria

Corresponding Author:

Joshua Ebuka Ifebude

Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria.

Email: joshuaifebude@gmail.com

Introduction

Caesarean section is one of the most commonly performed surgical procedures worldwide. The method of skin closure plays a critical role in postoperative pain, wound healing, cosmetic appearance, and overall patient satisfaction. Traditional subcuticular suturing remains widely used, while tissue adhesives have gained popularity due to perceived advantages including shorter operative time and reduced postoperative discomfort. Evidence comparing these techniques in obstetric practice remains mixed, necessitating further evaluation.

Methodology

This randomized controlled trial was conducted among women undergoing elective caesarean section. Eligible participants were randomized into two groups: skin closure with Dermabond tissue adhesive or Vicryl 2/0 subcuticular sutures. The study was single-blinded, with outcome assessors blinded to the intervention. Cosmetic outcomes were evaluated using the POSAS score, while secondary outcomes included patient satisfaction, wound closure time, postoperative analgesic use, and wound complications.

Results

Of the 192 women randomized, 185 completed the study. Tissue adhesive demonstrated significantly shorter wound closure time and reduced analgesic requirement within the first 24 hours postoperatively. While patient-reported cosmetic outcomes favored tissue adhesive, observer assessments showed no statistically significant difference. Wound complication rates were similar in both groups.



Discussion

The findings suggest that tissue adhesive offers perioperative advantages in terms of speed of closure and postoperative pain control. However, the lack of clear superiority in cosmetic outcome or patient satisfaction indicates that both closure methods are clinically acceptable. Cost, availability, and surgeon preference may therefore guide choice of technique, especially in low-resource settings.

Conclusion

Tissue adhesive is an effective alternative to subcuticular sutures for skin closure at elective caesarean section, offering faster closure and reduced analgesic requirement without compromising cosmetic outcomes. Both techniques remain suitable options in obstetric surgical practice.



A Rare Occurrence of Multiple Vaginal Fibroids: A Case Report from Yenagoa, Bayelsa State, Nigeria

Stanley E. Ozori[1], Nuvie Oyeyemi[1], Lukman Obagah[1], Warisuo S. Ariwelo[1], Oghenetega Onojoserio[1], Miracle C. Amadi-Oyioma[1], Oghenetega J. Agbagoro[1]

Affiliations

[1]Department of Obstetrics and Gynaecology, Federal Medical Centre, Yenagoa, Bayelsa State, Nigeria

Corresponding Author

Dr. Stanley E. Ozori,\

Department of Obstetrics and Gynaecology, Federal Medical Centre, Yenagoa, Bayelsa State, Nigeria

+2348065876000, Email: ozoriniseod@yahoo.com

Introduction

Fibroids are non-cancerous tumours commonly seen in the uterus. They can be found occasionally on the cervix, broad ligament, round ligament, uterosacral ligament, and ovaries. It is rarely seen in the vagina. To the best of our knowledge, this is the first recorded case in Southern Nigeria. The incidence of this condition is a few hundred cases in the world. In Africa, there is very scanty documentation of this condition. This may be due to failure to report such cases or under-reporting, poor health-seeking behaviour, or shame on the part of the patients, which prevents them from seeking gynaecological care.

It is found in women aged 35-50 years. Patients do not usually have symptoms. For symptomatic patients, the symptom is related to the location of the fibroid. The condition has a propensity to occur on the anterior vaginal wall. It exhibits mimicry with many benign vaginal conditions. Hence, spot diagnosis can be difficult. Preoperative investigations to make a diagnosis are difficult, especially for small-sized vaginal fibroids. Thus, histopathological examination is key to diagnosis. Surgical excision is curative in all cases recorded.

Case Presentation

Mrs. OTI, a 36-year-old Para 2+2, presented with multiple vaginal swellings of 14 months duration. Vaginal swellings were of insidious onset, gradually increasing in size, especially during her last confinement. They were not painful but were firm in consistency. They were noticed during douching. No other swellings in any other parts of her body. There was no bleeding per vaginam, abnormal vaginal discharge, urinary symptoms, or coital difficulties. Mrs. OTI had two complete miscarriages in 2019 and 2020, both followed eight weeks history of amenorrhoea. She did a Papanicolaou smear in 2020, which was normal. She had a spontaneous vaginal delivery in 2018. She had a caesarean section, twenty-two months before presentation, where endometriotic deposits were noticed in the intraperitoneal cavity and on the pelvic organs. There was no family or personal history of gynaecological cancers. She has



a family history of uterine fibroids. She does not take tobacco products or alcoholic beverages.

General and systemic examinations were essentially normal. Vaginal examination revealed two clumped together, pale, non-tender, rubbery nodules at the middle third of the left lateral vaginal wall. They measured 0.5 cm x 1.0 cm and 1.0 cm x 1.0 cm, respectively. There was also a solitary non-tender, firm, 1.0 cm x 1.0 cm nodule at the distal one-third of the posterior vaginal wall.

Mrs. OTI's preoperative investigations (full blood count, electrolyte, urea, and creatinine assay, and urinalysis) were normal. She was counselled on the need for surgical excision of the masses and their subsequent histological analysis. Surgical excision was done under saddle block; routine cleaning and draping were done. The bladder was emptied with a metal catheter. Specula were introduced into the vagina to expose the vaginal masses. The excision procedure entailed clamping the vaginal nodules with artery forceps and making an incision at the base of each nodule, followed by enucleation of the masses. The vaginal walls were repaired with continuous Vicryl 2/0 sutures. The vagina was packed with povidone iodine-soaked gauze, which was removed after 12 hours.

Her postoperative recovery was satisfactory. She was discharged home in the evening on broad-spectrum antibiotics and analgesics. She was given a two-week appointment at the gynaecological clinic. At the gynaecology clinic visit, she had no complaints. She presented her histopathological report.

The histopathological gross findings showed specimens consisting of fragments of greyish-white tissue, each measuring 0.7 cm x 0.7 cm x 0.5 cm. Microscopic findings showed a benign mesenchymal lesion with differentiation towards leiomyoma. There was no atypia seen. A histologic diagnosis of vaginal leiomyoma was made.

Conclusion

Vaginal fibroid is a rarity. Multiple vaginal fibroid is a distant rarity. Thus, a high index of suspicion is necessary when examining women presenting with nodule(s) in the vagina. Such swellings or nodules should be subjected to histological assessment to clinch the diagnosis of vaginal Leiomyomata.



Association of Low Serum Vitamin D Levels and Spontaneous Preterm Birth in Lagos State University Teaching Hospital: A Case–Control Study

Rilwan Adeniyi Seriki[1], Simeon Omoruyi Bazuaye[2], Adeniyi Adewunmi[3]

Affiliations

[1]Department of Obstetrics and Gynaecology, Lagos Island Maternity Hospital, Lagos, Nigeria
[2]Lagos State University Teaching Hospital, Lagos, Nigeria
[3]Lagos State University Teaching Hospital, Lagos, Nigeria

Corresponding Author

Dr. Seriki Rilwan Adeniyi
Department of Obstetrics and Gynaecology, Maternal and Child center Eti-Osa, Lagos state, Nigeria.
Email: seriki4med@gmail.com, Phone number: +234802788OR73

Introduction

Preterm birth, defined as delivery before 37 completed weeks of gestation, is the leading cause of neonatal mortality worldwide and a major determinant of long-term childhood morbidity. Nigeria bears a disproportionately high burden of preterm births compared with global averages. While the aetiology of spontaneous preterm labour remains unclear in many cases, inflammatory and infectious pathways are increasingly recognised. Vitamin D plays a role in immune modulation and suppression of placental inflammation, suggesting a possible link with preterm birth.

Objectives

To determine the association between low maternal serum 25-hydroxyvitamin D levels and spontaneous preterm delivery, and to evaluate its predictive value for preterm birth.

Methodology

This case–control study was conducted at Lagos State University Teaching Hospital over five months. Participants included women with singleton pregnancies who delivered at ≥28 weeks. Women with hypertensive disorders, diabetes mellitus, sickle cell disease, chronic kidney disease, or vitamin D supplementation were excluded. Venous blood samples were collected and analysed for serum 25-hydroxyvitamin D using chemiluminescent microparticle immunoassay. Statistical analysis was performed using SPSS version 25, with significance set at $p<0.05$.

Results

Low serum vitamin D was present in 41.9% of women with preterm delivery compared with 19.4% of term controls. A significant association was observed between vitamin D deficiency and preterm delivery ($p=0.006$). Multivariable logistic regression showed increased odds of preterm delivery among women with low vitamin D levels (AOR=5.44). The ROC analysis demonstrated poor discriminatory ability.



Discussion

The findings demonstrate a significant association between low maternal serum vitamin D levels and spontaneous preterm birth, consistent with several regional and international studies. However, the low area under the ROC curve suggests that vitamin D deficiency functions more as a risk factor than a reliable predictive marker for preterm delivery.

Conclusion

Low maternal serum vitamin D levels were significantly associated with spontaneous preterm birth in this population. Optimisation of vitamin D status during pregnancy may contribute to reducing adverse perinatal outcomes, although vitamin D should not be used as a standalone predictive tool.

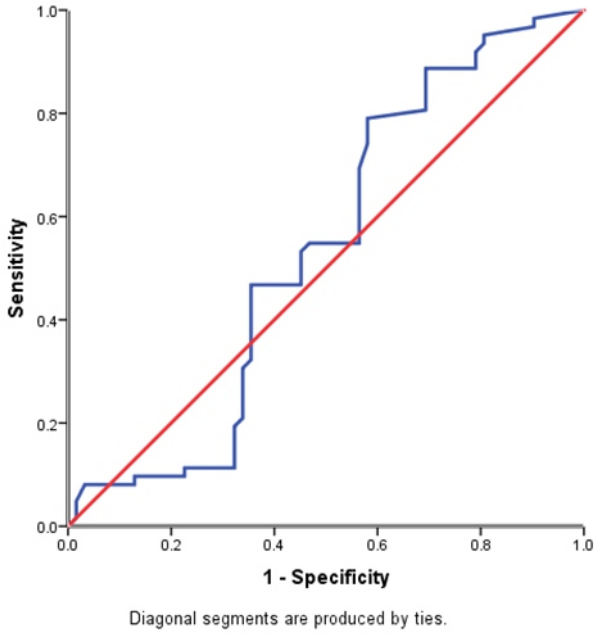

Figure 1: Receiver Operating Characteristic (ROC) Curve Showing Serum Vitamin D as a Predictor of Preterm Delivery.



Iniencephaly: A Case Report

Chinedu G Obikili[1], Felix A Elachi[2], Otobo Ujah[3], Collins E Onyenuloya[4], Edward O Ogbara[2], Halima Mukaddas[2].

Affiliations

[1]Solina Centre for International Development and Research, Abuja, Nigeria

[2]National Obstetric Fistula Centre, Bauchi, Nigeria

[3]Department of Obstetrics and Gynaecology, Federal University of Health Sciences, Otukpo, Nigeria.

[4]Department of Paediatrics, Garki Hospital, Abuja, Nigeria.

Corresponding author:

Chinedu George Obikili

Solina Centre for International Devlopment and Research

8 libreville Crescent, off Aminu Kano Crescent, Wuse 2, Abuja

+2348179507218, *obikilichinedu@gmail.com*

Introduction

Burden of congenital anomalies:

Anomalies are a leading cause of neonatal mortality and morbidity worldwide. They account for a significnat portion of the 2-3 million annual neonatal deaths and middle income countries are disporpottionatley affected due to several contributing factors.

Antenatal Surveillance:

Restricted access to ultrasound also delays diagnosis.

Lack of informed access to preventive care:

Lack of availability of information regarding folic acid supplementation.

Diagnosois of iniencephaly

Iniencephaly is a rare, severe neural tube defect first described in 1836 and characterized by pathognomic traid that includes occipital bone defects and head retroflexion.

There is extreme retroflexion of the head, malformation of the occiput and variable cervicothoracic spinal dysraphism.

It is frequently lethal in utero or in the neonatal period.

Early prenatal diagnosis permits appropriate counseling and management decisions and highlights opportunities for primary prevention.

Risk Factors

The etiology is often unclear but known risk factors includes

- Folic acid deficiency
- Maternal medical conditions
- Maternal febrile illness
- Medication exposure
- Genetic predisposition



Clinical case presentation

Mrs. A.S., a 25-year-old gravida 4, para 3+0, was transfered as an emergency from a primary health center with a one-day history of premature rupture of membranes and prolapse of a fetal foot. Critically, she was an unbooked patient with no antenatal care accessed during the index pregnancy. Her last menstrual period was uncertain, with an estimated gestational age of 32 weeks.

Her obstetric history was significant for three prior term deliveries. Socially, neither she nor her husband had any formal education. She reported experiencing intermittent febrile illnesses during the pregnancy for which she consumed multiple traditional herbal concoctions. There was no history of chronic medical conditions, alcohol or tobacco use, or a family history of congenital anomalies.

Clinical Findings and Management

She was admitted in the active phase of labour. She was afebrile and hemodynamically stable. Abdominal examination revealed a symphysiofundal height of 32cm, and fetal heart sounds were absent.

Pelvic examination confirmed footling breech presentation with the cervix 8cm dilated. An obstetric ultrasound confirmed intrauterine fetal demise; detailed fetal assessment was limited by severe hydramnios and an abnormal fetal posture. Laboratory findings were significant only for mild anemia (PCV 29%).

A diagnosis of intrauterine fetal demise, footling breech, witha suspected, major fetal malformations was made. Labour was augmented with oxytocin, resulting in the delivery of 1.24kg stillborn female neonate.

Delivery yielded a stillborn neonate with classic external features of iniencephaly: extreme retroflexion of the head, apparent absence of a distinct neck, a short spine, poorly formed thorax, hypertelorism, low-set ears and ambiguous external genitalia. The mother declined autopsy. She received supportive care and counseling.

Discussion

This case presents a classic phenotype of iniencephaly, with the pathognomonic triad of extreme head retroflexion, abnormal spinal malformation. The absence of an open cranial defect subtype is iniencephaly clausus. The etiology is multifactotial several risk factors converging in this case. The preconception folic acid supplementation is a critical risk factor, as folate is essential for neural tube closure reported maternal febrile illness and use of traditional concoctions represent potential teratogenic exposures contributed to the malformation.

While direct causal established, these factors collectively created a high-risk environment.

This case underscores significant public health challenge the vital importance of primary prevention through fortification and supplementation, and the role of prevention via early prenatal ultrasound for timely counseling. Ultimately, it argues for the urgent need maternal healthcare and congenital anomaly surveillance resource settings to better understand and prevent successful outcomes.



A primary limitation is the lack of autopsy or advanced it precludes full anatomical characterization. Despite this external presentation offers valuable educational illustration severe neural tube defect.

Conclusion

This case underscores the value of early prenatal screening and ultrasound for neural tube defects, the importance of preconception folic acid supplementation, and the need for improved birth defects surveillance and perinatal education in low-resource settings.

Reporting such cases can improve awareness and health education, prevent recurrence through preconception care and genetic counseling and strengthen public health measures for congenital anomaly prevention.



Localization of Non-Palpable Subdermal Contraceptive Implants by Ultrasonography: A Case Series

Obilade AO[1], Olawepo TA[1], Adeniji OA[1], Abdus□Salam RA[2], Olanlege SO[1]

Affiliations

[1]Department of Obstetrics and Gynaecology, Adeoyo Maternity Teaching Hospital, Ibadan, Nigeria

[2]Department of Obstetrics and Gynaecology, University College Hospital / College of Medicine, University of Ibadan, Ibadan, Nigeria

Corresponding Author

Olawepo TA

Department of Obstetrics and Gynaecology, Adeoyo Maternity Teaching Hospital, Ibadan, Nigeria

botawakkalt@gmail.com

Introduction

Subdermal contraceptive implants are among the most effective long-acting reversible contraceptive methods, offering sustained contraception for three to five years depending on the type. Although designed to remain palpable beneath the skin, implants may become non-palpable due to deep insertion, migration, fibrosis, or weight gain. Non-palpable implants pose diagnostic and therapeutic challenges, necessitating imaging prior to attempted removal to prevent iatrogenic injury.

Case Series Summary

Four women aged 26–32 years were referred with non-palpable etonogestrel-releasing subdermal implants. Indications for removal included expiration of implant duration and desire for pregnancy. In all cases, plain radiography confirmed the presence of the implant but failed to accurately define depth or anatomical relationships.

High-frequency ultrasonography (9–11 MHz linear transducer) was used to localize each implant. The implants were visualized as echogenic linear structures or echogenic dots with posterior acoustic shadowing on longitudinal and transverse scans, respectively. The distance from skin surface and relationship to neurovascular bundles were clearly demonstrated. Skin marking under ultrasound guidance enabled precise incision placement and minimal tissue dissection during removal.

Discussion

This case series highlights the pivotal role of ultrasonography in managing non-palpable subdermal contraceptive implants. While plain radiography confirms implant presence, it does not provide information on depth or proximity to critical structures. Ultrasonography overcomes these limitations and avoids radiation exposure. Accurate localization reduces operative time, tissue trauma, and risk of complications. Given its accessibility and safety



profile, ultrasonography should be the preferred first-line imaging modality in resource-limited and tertiary settings alike.

Conclusion

Ultrasonography is an effective and practical tool for the localization and guided removal of non-palpable subdermal contraceptive implants. Its routine use promotes safe, minimally invasive removal and reduces the likelihood of complications.



Hydronephrosis and Survival Outcomes in Cervical Cancer Patients in Sub-Saharan Africa: A Scoping Review

Sunday Oladimeji Oyerinde[1], Uduak Ima Andrew-Bassey[2], Mary Adeola Oyerinde[3], Isaac Folorunsho Adewole[4]

Affiliations

[1]Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria
[2]Pan African University Life and Earth Sciences Institute (Including Health and Agriculture), Ibadan, Nigeria
[3]Department of Health Education, Faculty of Public Health, College of Medicine, University of Ibadan, Ibadan, Nigeria
[4]Department of Obstetrics and Gynaecology, Faculty of Clinical Sciences, College of Medicine, University of Ibadan, Nigeria

CorrespondingAuthor:

Sunday Oladimeji Oyerinde
Department of Obstetricsand Gynaecology, University College Hospital, Ibadan, Nigeria
Email: sunday.oyerindedimeji@gmail.com | Phone: +2348033802369

Introduction

Hydronephrosis is a common complication of advanced cervical cancer, usually resulting from ureteric obstruction by locally invasive disease. In high-income settings, early diagnosis and standardised urological interventions mitigate renal damage and allow timely oncologic treatment. In contrast, most women with cervical cancer in SSA present with advanced disease, where hydronephrosis frequently complicates management and contributes to excess mortality.

Objectives

1. To determine the prevalence of hydronephrosis among cervical cancer patients in SSA.
2. To describe management strategies, including ureteral stenting and percutaneous nephrostomy.
3. To evaluate the survival implications of hydronephrosis and urinary diversion.

Methods

This scoping review adhered to PRISMA-ScR methodology. Studies published between 2000 and 2025 were identified through systematic searches of major biomedical and African-focused databases. Two reviewers independently screened studies and extracted data on prevalence, management approaches, renal complications, and survival outcomes. Study quality was assessed using the Newcastle–Ottawa Scale and the Mixed Methods Appraisal Tool where appropriate.



Results

Hydronephrosis prevalence ranged from 20% to 85%, with the highest burden observed in FIGO stage IIIB–IVB disease. Renal complications included elevated serum creatinine, electrolyte imbalance, anaemia, recurrent urinary tract infections, and anuria in severe cases. Percutaneous nephrostomy enabled rapid renal function recovery and facilitated continuation of chemoradiation in eligible patients. However, access to diversion procedures was often limited by cost and resource constraints.

Discussion

The findings highlight hydronephrosis as a major contributor to poor survival in cervical cancer patients in SSA. Late presentation, delayed diagnosis of obstruction, and limited access to urinary diversion compound adverse outcomes. Although prophylactic stenting shows promise, implementation requires imaging capacity, trained personnel, and multidisciplinary coordination that are often lacking in low-resource settings.

Conclusion

Hydronephrosis is a common and severe complication of cervical cancer in SSA and independently predicts poorer survival. Strengthening early detection, expanding access to urinary diversion, and developing standardised management algorithms are critical to improving outcomes. Further research is needed on cost-effective and context-specific intervention strategies.

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Asymptomatic Intrauterine Device Perforation as a Cause of Antepartum Uterine Rupture in a Preterm Pregnancy: A Case Report

Mahmud F. A[12], Ani S. M[2], Azeez O. S[2], Danjumai A. D[2], Sada S. I[12], Aliyu R. M[12], Garba-Alkali A. E[2], Randawa A. J[12]

Affiliations

[1]Department of Obstetrics and Gynaecology, Faculty of Clinical Sciences, College of Medical Sciences, Ahmadu Bello University, Zaria, Nigeria

[2]Department of Obstetrics and Gynaecology, Ahmadu Bello University Teaching Hospital, Zaria, Nigeria

Corresponding author

Mahmud F. A

Department of Obstetrics and Gynaecology, Faculty of Clinical Sciences, College of Medical Sciences, Ahmadu Bello University and Ahmadu Bello University Teaching Hospital, Zaria, Nigeria

fatijamawa@yahoo.com

Introduction

The intrauterine device is a widely used, effective, and generally safe method of contraception. Uterine perforation is a rare complication, occurring in approximately 1 in 1,000 insertions. Perforation may occur at insertion or as a delayed process through gradual erosion of the uterine wall. Most cases are asymptomatic and are often diagnosed incidentally during evaluation for missing strings or unintended pregnancy. Rarely, such perforations may predispose to severe obstetric complications, including uterine rupture, as illustrated in this case.

Case Report

A 37-year-old para 10 woman presented at 29 weeks' gestation with acute abdominal pain. She was not in labour and had no vaginal bleeding. Her antenatal course had been uneventful. An IUD had been inserted six weeks postpartum following her last delivery five years earlier and was removed prior to the index pregnancy due to irregular menstruation. Her previous obstetric history included two first□trimester miscarriages without complications.

On examination, she was pale, with uterine tenderness that precluded detailed palpation. The cervix was closed, and there was no vaginal bleeding. Bedside ultrasonography revealed intrauterine fetal demise, a fundally located placenta, and free intraperitoneal fluid. Following resuscitation, emergency exploratory laparotomy revealed a fundal uterine rupture with approximately 1.5 litres of haemoperitoneum. Uterine repair and bilateral tubal ligation were performed. She received five units of blood and made an uneventful postoperative recovery.



Discussion

Uterine perforation following IUD insertion is rare but well documented. Identified risk factors include high parity, postpartum insertion, and breastfeeding. In this case, the patient was a grandmultipara who had IUD insertion during the postpartum period while breastfeeding, both of which increase the risk of perforation.

Most perforations are clinically silent, particularly secondary perforations that develop gradually. Late complications are uncommon but include migration into adjacent organs such as the bladder. The unique feature of this case is the absence of symptoms from insertion until pregnancy, when fibrosed scar tissue at the site of perforation likely gave way under uterine distension, resulting in uterine rupture and massive haemoperitoneum.

Conclusion

This case highlights that even apparently uncomplicated IUD insertion and removal may be associated with serious delayed obstetric complications. A high index of suspicion is required in pregnant women with a history of IUD use who present with acute abdomen. Ongoing research and improved understanding of IUD□related complications are essential to optimise patient safety.

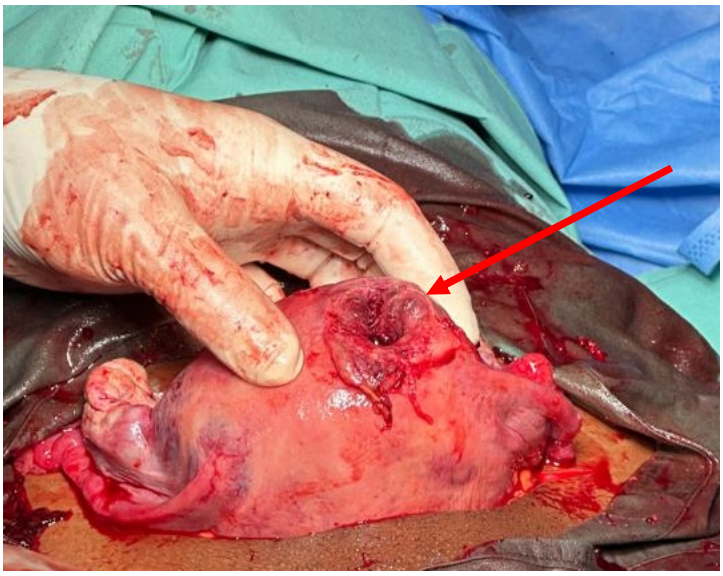

Figure 1: A picture showing uterine perforation(arrow head) from a displaced intrauterine device

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Successful Rescue Cerclage Following Incidental Detection of Cervical Incompetence with Subsequent Live Birth at Term: A Case Report

Ganiyat A. Akera-Adegboyega[1], Risikat E. Kadir[1], Fatai O. Olaniyi[1], Temilola K. Adesina[2], Hadijat O. Raji[1]

Affiliations

[1]Department of Obstetrics and Gynaecology, Federal Medical Centre, Idi Aba, Abeokuta, Ogun State, Nigeria

[2]Department of Obstetrics and Gynaecology, University of Ilorin Teaching Hospital/University of Ilorin, Ilorin, Kwara State, Nigeria

Corresponding Author

Dr Ganiyat A. Akera-Adegboyega

Department of Obstetrics and Gynaecology, Federal Medical Centre, Idi Aba, Abeokuta, Ogun State, Nigeria.

ghanak622@gmail.com

Introduction

Preterm birth remains the leading cause of neonatal morbidity and mortality worldwide. Cervical incompetence contributes significantly to second-trimester miscarriages and early preterm births. Rescue cerclage is indicated in selected cases of painless cervical dilatation with bulging membranes in the absence of uterine contractions, infection, or active bleeding. Several studies have demonstrated that rescue cerclage can prolong gestation and improve perinatal outcomes.

Aim

To highlight the immediate and potential long-term benefits of clinical research participation, illustrated by successful rescue cerclage following incidental diagnosis of cervical incompetence.

Case Presentation

Mrs A.B, a 25-year-old G2P0+1 woman at an estimated gestational age of 26 weeks, was being recruited for a study on bacterial vaginosis in pregnancy. General examination was unremarkable, and abdominal examination revealed a singleton fetus in cephalic presentation with normal fetal heart rate. Speculum examination revealed a cervix dilated to approximately 4 cm with bulging fetal membranes. Following counselling, she received parenteral antibiotics, antenatal corticosteroids, magnesium sulphate, and tocolysis. Emergency rescue cerclage was performed under subarachnoid block using the McDonald technique after gentle reduction of the membranes with a moist swab. Postoperatively, she was maintained on antibiotics, nifedipine, and progesterone support. Subsequent antenatal follow-up was uneventful. The cerclage was removed at 37 weeks and 4 days, and she delivered a live female neonate weighing 3.2 kg with good Apgar scores the following day.



Discussion

Cervical incompetence is defined as the inability of the cervix to retain a pregnancy in the absence of labour due to structural or functional defects. Rescue cerclage is technically challenging because of protruding membranes and the risk of iatrogenic rupture. Various techniques, including Trendelenburg positioning and membrane reduction using a moist swab, have been described to facilitate safe cerclage placement. Adjunctive use of antibiotics and tocolytics is considered integral to management in rescue cerclage due to the increased risk of ascending infection. In this case, appropriate selection and supportive care resulted in a favourable maternal and neonatal outcome.

Conclusion

Rescue cerclage, when applied in carefully selected patients, can significantly prolong pregnancy and prevent preterm birth. This case underscores the value of vigilant clinical assessment and highlights how participation in research may yield immediate and beneficial clinical outcomes.

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Evolution of Male Family Planning: Current Research and Future Directions

Famutimi EO[1,2], Adejumo PO[3], Lubbe W[1], Otegbayo BE[1], Oluwasola TAO[4], Olayemi O[5], Okanlawon FA[6]

Affiliations

[1]NuMIQ Research Focus Area, Faculty of Health Sciences, Potchefstroom, South Africa
[2]Clinical Nursing Department, University College Hospital, Ibadan, Nigeria
[3]Department of Medical Surgical Nursing, Faculty of Nursing, University of Ibadan, Ibadan, Nigeria
[4]Department of Obstetrics and Gynaecology, College of Medicine, University of Ibadan; University College Hospital, Ibadan, Nigeria
[5]Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria
[6]Faculty of Nursing Sciences, Chrisland University, Abeokuta, Nigeria

Introduction

Male family planning has historically been limited to condoms and vasectomy, contributing to persistent gender disparities in contraceptive responsibility. The global reproductive health community increasingly recognises the importance of engaging men as active participants in family planning. Advances in hormonal and non-hormonal male contraceptive research provide new opportunities to address unmet contraceptive needs and support achievement of Sustainable Development Goals related to health and gender equality.

Methods

A comprehensive literature search was conducted across SciSpace, PubMed, Google Scholar, and ArXiv for studies published between 2020 and 2025. Search terms included male contraception, male family planning, hormonal and non-hormonal contraceptives, vasectomy, and spermatogenesis inhibition. Following screening and eligibility assessment, 47 relevant publications were included and analysed narratively.

Findings

Current male contraceptive research spans hormonal, non-hormonal, and pharmacologic approaches. Hormonal regimens combining testosterone and progestins suppress gonadotropins and inhibit spermatogenesis, with advanced candidates in late Phase II trials. Non-hormonal strategies, including vas-occlusive methods and molecular inhibitors of sperm production or function, offer potential advantages such as rapid reversibility and minimal systemic effects. Acceptability studies indicate substantial willingness among men to adopt new contraceptive methods, although sociocultural and regulatory barriers persist.

Discussion

The evolution of male contraception reflects progress in biomedical innovation alongside persistent implementation challenges. Ensuring safety, reversibility, and user acceptability remains paramount. Broader uptake will depend on regulatory clarity, industry engagement, health system integration, and public education to address gender norms and misconceptions.



Conclusion

Male contraception research has reached a pivotal stage, with several candidates demonstrating clinical promise. Expanding male contraceptive options could significantly reduce unintended pregnancy rates and promote equitable shared responsibility in reproductive health. Sustained investment and multidisciplinary collaboration are essential to realise this potential.



Intravesical Migration of Intrauterine Contraceptive Device (IUCD) Diagnosed Ten Years after Insertion: A Case Report and Literature Review

Sokan OS[1], Ariyo TP[1], Odunaro O[1], Olonade LO[2], Sokan LC[3]

Affiliations

[1]Department of Obstetrics and Gynaecology, State Hospital, Ota, Ogun State, Nigeria
[2]Department of Obstetrics and Gynaecology, State Hospital, Ifo, Ogun State, Nigeria
[3]Caring Angels Hospital, Ota, Ogun State, Nigeria

Corresponding Author:

Dr Olalekan S. Sokan,
Department of Obstetrics and Gynaecology, State Hospital, Ota, Ogun State, Nigeria..
Email: lekansokan@yahoo.com

Introduction

Intrauterine contraceptive devices are among the most effective and commonly used reversible contraceptive methods worldwide. Although generally safe, IUCD-related complications such as uterine perforation and migration have been reported. Migrated devices have been found in the peritoneal cavity, bowel, omentum, and urinary bladder. Intravesical migration is rare but may result in significant morbidity if diagnosis is delayed.

Case Presentation

A 42-year-old primiparous trader with a previous caesarean section presented with complaints of urinary frequency and dysmenorrhoea. An IUCD had been inserted ten years earlier. She noticed missing IUCD threads about two months before presentation, which was confirmed on speculum examination. Pelvic computed tomography scan demonstrated an IUCD within the urinary bladder. She subsequently underwent open cystostomy with successful removal of the device. Her postoperative recovery was uneventful.

Discussion

Intravesical migration of IUCDs usually follows uterine perforation, which may occur at insertion or as a delayed process due to gradual erosion of the uterine wall. Risk factors include postpartum insertion, breastfeeding, previous uterine surgery, and high parity. Clinical presentation is often delayed and non-specific, necessitating a high index of suspicion. Imaging modalities such as ultrasound, plain radiography, and computed tomography are useful for localisation. Once migration is confirmed, surgical retrieval—either endoscopic or open—is recommended.

Conclusion

This case highlights intravesical migration of an IUCD as a rare but important long-term complication. Regular follow-up after IUCD insertion, early investigation of missing threads, and timely imaging in women with unexplained urinary symptoms are essential to prevent morbidity.



Periodontal Disease and Oral Health-Related Quality of Life Among Pregnant Women in Ibadan Metropolis, Nigeria

Posi E. Aduroja[1], Olanrewaju A. Akinrefe[12], Mojibola Onawoga[1], Tolulope Ogundiran[3]

Affiliations
[1]Department of Public Health, Lead City University, Ibadan, Nigeria
[2]Department of Dental Therapy, Lead City University, Ibadan, Nigeria
[3]Department of Preventive and Community Dentistry, Lead City University, Ibadan, Nigeria

Corresponding Author
Posi E. Aduroja,
Department of Public Health, Lead City University, Ibadan.
+2348139222743, pe.aduroja@gmail.com

Introduction
Periodontal disease affects the gingiva, periodontal ligament, and alveolar bone and is one of the most prevalent oral health conditions globally. Hormonal changes during pregnancy predispose women to gingivitis and periodontitis. Despite the high burden of periodontal disease among pregnant women in Nigeria, its influence on daily functioning and quality of life has received limited attention.

Methods
This cross-sectional study was conducted among pregnant women attending antenatal clinics in selected health facilities within Ibadan Metropolis. Data were collected using adapted WHO Oral Health Survey questionnaires and the OHIP-14 tool. Periodontal examination was performed using a CPITN probe. Sociodemographic characteristics, oral hygiene practices, and dental service utilisation were recorded.

Results
Most participants (52.5%) were aged 25–34 years. Although 89.4% reported good oral hygiene practices, 85.6% had never visited a dental clinic before or during pregnancy. Periodontal disease affected 64.4% of respondents, predominantly mild forms. The DMFT index showed low caries experience overall. OHRQoL disruption was minimal, with low mean OHIP-14 scores.

Discussion
The high prevalence of periodontal disease observed aligns with previous Nigerian studies. The low impact on perceived quality of life may reflect limited awareness of oral health consequences or adaptation to chronic symptoms. Poor utilisation of dental services despite good hygiene practices highlights systemic barriers to oral healthcare access.



Conclusion

Periodontal disease is common among pregnant women in Ibadan Metropolis, though its perceived impact on quality of life is limited. Strengthening oral health education and integrating dental services into routine antenatal care may reduce periodontal disease burden and improve maternal health outcomes.



Assessing Knowledge Uptake following the Basic Emergency Care Course in North-Eastern Nigeria: A Pre- and Post-Test Questionnaire and Participant Survey Approach

Safiyya Faruk Usman[1], Usman Adamu Gwaram[2]

Affiliations

[1]Obstetrician and Gynaecologist, Federal Medical Centre, Abuja, Nigeria
[2]Trauma and General Surgeon, National Hospital, Abuja, Nigeria

Corresponding Author

Safiyya Faruk Usman
Federal Medical Centre, Abuja, Nigeria
Tel: 07067503320, Email: safiyafaruk@yahoo.com

Introduction

Emergency medical conditions, including trauma, obstetric emergencies, and acute medical illnesses, account for approximately 10% of the global disease burden. In Nigeria, deficiencies in emergency care training and systems contribute to preventable deaths. The WHO–ICRC Basic Emergency Care course was developed to equip frontline providers with a structured approach to the acutely ill and injured patient.

Objectives

To evaluate knowledge uptake and changes in confidence following participation in the WHO Basic Emergency Care course in North-Eastern Nigeria.

Methodology

This prospective before–after study was conducted during two BEC courses delivered in Yola, Adamawa State, between May and June 2022. Participants included doctors, nurses, midwives, and community health extension workers. Pre- and post-course multiple-choice tests assessed knowledge, while Likert-scale ratings measured confidence. Statistical analysis included paired t-tests and Wilcoxon signed-rank tests.

Results

A total of 47 participants completed the training. Mean knowledge scores increased significantly from 49.2% to 76.8% ($p < 0.001$). Nurses and community health extension workers demonstrated the greatest relative gains. Confidence improved across all emergency domains, particularly airway management and trauma immobilisation. Participant feedback highlighted hands-on skills and scenario-based learning as the most valuable components.

Discussion

Findings from this study align with previous evaluations of the BEC course in other African countries, demonstrating reproducible improvements in knowledge and confidence. The substantial gains observed among non-physician cadres support task-shifting strategies to



strengthen emergency care capacity. However, system-level challenges such as limited equipment and weak referral pathways may constrain translation into practice.

Conclusion

The WHO Basic Emergency Care course significantly enhanced emergency care knowledge and confidence among frontline healthcare workers in North-Eastern Nigeria. Embedding BEC training within routine health worker education and strengthening emergency care systems could improve patient outcomes.

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Successful Delivery in Two Nigerian Women with Severe Kyphoscoliosis: Case Reports

Adeoti RA[1], Ademua A[2], Allen-Taylor J[3], Aremu O[1]

Affiliations

[1]Department of Obstetrics and Gynaecology, Ring Road State Hospital, Ibadan, Nigeria
[2]Department of Anaesthesia, Ring Road State Hospital, Ibadan, Nigeria
[3]Department of Orthopaedics, Ring Road State Hospital, Ibadan, Nigeria

Corresponding Auhor

Rashidat Olajumoke Adeoti
Department of Obstetrics and Gynecology,
Ring Road State Hospital, Ibadan, Oyo State, Nigeria
Email: adeotiorj@.gmail.com. Telephone: +234 8099193726
ORCID NUMBER: https://orcid.org/0009-0001-6726-3281

Introduction

Kyphoscoliosis is a complex spinal deformity characterised by combined kyphosis and scoliosis. Physiological changes of pregnancy may exacerbate cardiopulmonary compromise in severe disease, leading to historically poor outcomes. Recent reports, however, demonstrate that favourable pregnancy outcomes are achievable with appropriate care.

Case Report 1

A 24-year-old G3P1+1 woman with severe kyphoscoliosis booked at 12 weeks' gestation with a dichorionic diamniotic twin pregnancy. She was co-managed by obstetricians, anaesthetists, and orthopaedic surgeons. Despite severe spinal deformity, she remained clinically stable. Caesarean section was performed at 36 weeks under spinal anaesthesia, resulting in delivery of two live neonates with good Apgar scores.

Case Report 2

A 35-year-old primigravida with severe kyphoscoliosis and uterine fibroid booked early for antenatal care. She remained stable throughout pregnancy and underwent elective caesarean section at 38 weeks under general anaesthesia, delivering a healthy female neonate.

Discussion

Cobb's angle greater than 40° defines severe kyphoscoliosis. Multidisciplinary care was essential in these cases, especially in a resource-limited setting. Delivery by caesarean section was influenced by pelvic distortion, malpresentation, and previous caesarean delivery.

Conclusion

Severe kyphoscoliosis is not an absolute contraindication to pregnancy. Individualised multidisciplinary management can lead to favourable obstetric outcomes even in low-resource settings.



Figure 1: Dorsal view of the patient 3 weeks after delivery



Successful Removal of 139 Fibroids in a Uterus-Preserving Myomectomy in a Low-Resource Centre in Nigeria: A Case Report

Rashidat O. Adeoti[1], Adewale J. Lasisi[2]

Affiliations

[1]Department of Obstetrics and Gynaecology, Ring Road State Hospital, Ibadan, Oyo State, Nigeria

[2]Department of Obstetrics and Gynaecology, Adeoyo Maternity Teaching Hospital, Ibadan, Oyo State, Nigeria

Corresponding Author

Rashidat Olajumoke Adeoti

Department of Obstetrics and Gynecology, Ring Road State Hospital, Ibadan, Oyo State, Nigeria

Email: adeotiorj@.gmail.com. Telephone: +234 8099193726

ORCID NUMBER: https://orcid.org/0009-0001-6726-3281

Introduction

Uterine fibroids are the most common benign tumours of the female reproductive tract, with a prevalence ranging from 40% to 80% among women of reproductive age. They are particularly common among women of African descent and frequently present with menorrhagia, abdominal swelling, pressure symptoms, and subfertility. Although hysterectomy is often advised for women with extensive fibroid burden, myomectomy remains the preferred option for those who desire uterine preservation.

Case Presentation

A 43-year-old nulliparous woman presented with a two-year history of progressive abdominal swelling and irregular, heavy menstrual bleeding. Examination revealed an abdominopelvic mass equivalent to a 34-week gestation uterus. Ultrasound confirmed multiple uterine fibroids. Following counselling, the patient opted for abdominal myomectomy to preserve fertility.

Preoperative optimisation included haematinics and blood transfusion. Surgery was performed under combined spinal–epidural anaesthesia using a midline vertical incision. Blood loss was minimised with use of tranexamic acid and an isthmic tourniquet fashioned from a Foley catheter. A total of 139 fibroid nodules were enucleated from submucous, intramural, and subserosal locations. Estimated blood loss was 1.4 litres, and the patient recovered uneventfully.

Histopathological Findings

Gross examination showed 139 nodular fragments with a characteristic whorled appearance. Microscopy revealed benign smooth muscle proliferation with areas of hyaline degeneration and dystrophic calcification, consistent with leiomyomata, with no evidence of malignancy.



Discussion

This case represents one of the highest numbers of fibroid nodules successfully removed during a single myomectomy in a low-resource setting. Nulliparity and advancing reproductive age were important risk factors. Effective haemorrhage control strategies, including tranexamic acid, regional anaesthesia, and temporary uterine tourniquet, were critical to surgical success. Despite the absence of advanced imaging such as MRI, careful intraoperative technique allowed uterine preservation.

Conclusion

Extensive uterine fibroids do not preclude successful uterus-preserving surgery. With meticulous surgical technique and adherence to evidence-based blood loss reduction strategies, abdominal myomectomy can be safely performed even in low-resource settings.





Figure1: uterus riddled with fibroids before myomectomy. Figure 2: various sizes of fibroid removed during myomectomy, a total of 139 nodules

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ReproductiveIntentions, Conception Practices, and HIV Transmission Risks among Women Living with HIV in Ibadan, Nigeria. A Cross-sectional Study

Sunday OladimejiOyerinde[1], OlutosinAlabaAwolude[12], OlubukolaAdeponleAdesina[12]

Affiliations

[1]Department ofObstetrics and Gynaecology, University CollegeHospital, Ibadan, Nigeria
[2]Department ofObstetrics and Gynaecology, Collegeof Medicine, University of Ibadan, Nigeria

Corresponding Author

Sunday OladimejiOyerinde
Department ofObstetricsand Gynaecology, University CollegeHospital, Ibadan, Nigeria
Email: sunday.oyerindedimeji@gmail.com | Phone: +2348033802369

Objective

As more women living with HIV(WLHIV) pursue planned pregnancies, persistent gaps in safer-conceptions, counselling, partner engagement and viral load monitoring continue to elevate both horizontal and vertical transmission risks.

This cross-sectional study examines reproductive intentions, conception practices, partner serostatus and the role of viral-load knowledge in shaping transmission risk, while identifying gaps and safer conception counselling to strengthen integration of reproductive health within HIV care.

Methods

Across-sectional descriptivestudy was conductedamong HIV-positivewomen who conceivedwhile receiving carein theAntiretroviralTherapy (ART)and PMTCTprograms at the University CollegeHospital, Ibadan.

Datawere collected using apretested 20-item anonymous questionnaire administered to consenting participants.

Information obtained included sociodemographic characteristics, reproductiveintentions, viral load awareness, partner's HIVstatus, conception practices, andexposureto contraceptivecounselling.

Data were analysed using descriptive and inferential statistics, with significanceset at$p$ <0.05.

Results

The mean age of participants was 30.3 years.

Most pregnancies were planned (67.4%), and 68.8%of women were unaware of their viral load before conception.

The main reason for pregnancy was the desire for more children (61.4%).

Unprotected sexual intercourse accounted for 94.4% of conceptions, mostly within sero discordant relationships.



Partner awareness of HIV status was high (76.7%). However, 69.1% had not received contraceptive counselling before conception, though 60.5% had ever used contraception. Antiretroviral therapy use significantly influenced the decision to conceive (p =0.004).

Conclusion

Despite awareness of HIV status, many women intentionally pursued pregnancy through unprotected intercourse, indicating persistent gaps in safer conception counselling.

Strengthening reproductive health education, viralload monitoring, and integration of safer conception strategies within PMTCT and ART services is vital to reducing HIV transmission.



Caesarean Section Rates, Indications, and Outcomes at the University College Hospital, Ibadan

Oguntola JA[1], Adesina OA[1,2]

Affiliations
[1]Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria
[2]College of Medicine, University of Ibadan, Ibadan, Nigeria

Corresponding Author
Oguntola JA
Dept of Obstetrics and Gynaecology, University College Hospital, Ibadan.
08033841744, standardwale@gmail.com

Introduction
Caesarean section is one of the most commonly performed obstetric surgical procedures worldwide. While it is associated with improved maternal and perinatal survival when appropriately indicated, excessive use has been linked with increased maternal morbidity, higher healthcare costs, and adverse outcomes in subsequent pregnancies. The WHO recommends that population-level CS rates should not exceed 10–15%, yet many tertiary hospitals, particularly referral centres, report much higher rates.

Methodology
This retrospective study reviewed all caesarean deliveries conducted at the University College Hospital, Ibadan, between January 2016 and December 2017. Data were collected using a standardized proforma and included sociodemographic characteristics, obstetric history, indications for CS, anaesthetic technique, estimated blood loss, maternal complications, and neonatal outcomes. Data analysis was performed using Stata version 13.0.

Results
The CS rate exceeded 50% in both years under review. Emergency CS constituted the majority of procedures. Most women were booked patients, and nearly half had a history of previous caesarean section. Subarachnoid block was predominantly used, with relatively low blood loss and transfusion requirements. Hypertension was the most common comorbidity, while anaemia was the leading postoperative complication. Neonatal outcomes were generally favourable, with no immediate maternal deaths recorded.

Discussion
The high CS rate observed reflects the role of UCH Ibadan as a major referral centre managing high-risk pregnancies. Previous caesarean section as the leading indication underscores the importance of reducing primary CS rates and promoting TOLAC where appropriate. The predominance of regional anaesthesia and low transfusion rates suggests adherence to safe surgical and anaesthetic practices.



Conclusion

Caesarean section rates at UCH Ibadan are considerably higher than WHO recommendations. Efforts to reduce unnecessary primary caesarean sections and increase the uptake of safe vaginal birth after caesarean may help moderate the rising trend while maintaining favourable maternal and neonatal outcomes.



Total Uterine Inversion Secondary to a Large Necrotic Submucous Fibroid Managed by Haultain's Procedure and Abdominal Hysterectomy: A Case Report

Dr. B. A. Adewumi[1], Dr. O. O. Oni[1,2], Dr. O.O. Lawal[1,2], Dr. M. A. Sulaiman[1], Dr. R. A. Adeola[1], Prof. O. A. Adesina[1,2].

Affiliations

1. Department of Obstetrics and Gynecology, University College Hospital (UCH), Ibadan, Nigeria.
2. College of Medicine, University of Ibadan, Ibadan, Nigeria.

Corresponding Author

Dr. B. A. Adewumi
Department of Obstetrics and Gynaecology, University College Hospital, Ibadan, Nigeria
badewumi@outllook.com, 08033967253.

Background:

Uterine inversion is a rare but life-threatening gynecological emergency, classified as puerperal or non-puerperal.

The non-puerperal uterine inversion (NPUI) remains one of the rarest gynaecological surgical emergencies with unknown incidence.

This rarity is evident by the paucity of literatures on the condition with fewer than 200 cases reported globally and similarly in Nigeria.

Non-peurperal form is often linked to intrauterine masses, most frequently pedunculated submucous fibroids.

Chronic total inversion caused by necrotic fibroids can be difficult to diagnose and manage, making early recognition and surgical treatment crucial to reduce morbidity and mortality.

Case Presentation:

We report the case of a 49-year-old Para 5+0(4A) woman who presented at the Gynaecology Emergency Unit of the University College Hospital (UCH), Ibadan, with heavy menstrual bleeding, watery vaginal discharge, progressively protruded foul-smelling vaginal mass, pelvic pain and fever.

Examination revealed a 10 x 12cm, necrotic, septic mass prolapsing through the introitus, consistent with a pedunculated submucous fibroid, and a totally inverted uterus.

Pelvic ultrasonography showed an empty uterine bed. The patient was admitted, resuscitated and stabilized, and underwent surgery one week later.

At surgery, the necrotic mass was shelled out from the uterine fundus. Through laparotomy, Haultain's procedure was combined with the manual transvaginal pushing of uterine fundus to achieve a successful reduction of the uterus.

Then, a total abdominal hysterectomy with bilateral salpingo-oophorectomy (TAHBSO) was performed as the patient has completed her family size, coupled with the septic nature of the inverted uterus.

The postoperative course was uneventful, and the patient was discharged in good condition.



Conclusion:

Septic total uterine inversion caused by a bleeding submucous fibroid is a potentially fatal condition.

Early diagnosis, prompt fibroid removal, and timely surgical correction are critical for successful management, with hysterectomy sometimes required as definitive treatment.