National Organisation of Nurses and Midwives of Malawi

MALAWI JOURNAL OF NURSING AND MIDWIFERY
MJNM

MALAWI JOURNAL OF NURSING & MIDWIFERY

Advancing Nursing and Midwifery Research for Healthier Communities

EVIDENCE
We generate and share quality knowledge.

PRACTICE
We inform practice and improve care.

IMPACT
We strengthen health systems and communities.

VOLUME 1 | ISSUE 1 | 2026
A Publication of the National Organisation of Nurses and Midwives of Malawi (NONM)

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Dr. Genesis Chorwe-sungani, Chief Editor, MJNM

EDITORIAL

IT is with immense pride, gratitude, and a deep sense of responsibility that I welcome you to the inaugural issue of the Malawi Journal of Nursing and Midwifery (MJNM). This milestone marks the beginning of an important journey towards advancing nursing and midwifery scholarship, promoting evidence-based practice, and strengthening health systems through the dissemination of high-quality research.

The establishment of the Malawi Journal of Nursing and Midwifery reflects our collective commitment to creating a vibrant platform for the generation, exchange, and application of knowledge that addresses the health priorities of Malawi, the African region, and the global community. As the nursing and midwifery professions continue to evolve in response to emerging health challenges, there is an increasing need for rigorous scientific evidence to guide education, clinical practice, leadership, and policy. This journal has been established by the National Organisation of Nurses and Midwives in Malawi (NONM) to meet that need.

Nurses and midwives constitute the largest proportion of the healthcare workforce and are at the forefront of delivering person-centred, safe, and equitable healthcare services. Their contributions extend beyond direct patient care to include leadership, education, research, health promotion, disease prevention, and advocacy. Through this journal, we seek to amplify these contributions by providing a credible avenue for publishing innovative research, systematic reviews, quality improvement initiatives, clinical innovations, policy analyses, educational scholarship, and thought-provoking commentaries.

The Malawi Journal of Nursing and Midwifery embraces multidisciplinary collaboration and welcomes contributions from researchers, educators, clinicians, policymakers, students, and other health professionals whose work advances nursing, midwifery, and healthcare delivery. We particularly encourage research that addresses local and regional health priorities while contributing to the global body of scientific knowledge.

As Chief Editor, I am committed to ensuring that the journal maintains the highest standards of academic excellence, integrity, transparency, and ethical publishing. Every manuscript submitted to the journal will undergo a rigorous peer-review process conducted by experienced reviewers to ensure scientific quality, methodological rigour, and relevance. Our editorial team is dedicated to fostering an efficient, fair, and constructive review process that supports authors in producing impactful scholarly work.

This inaugural issue represents the dedication and hard work of many individuals. I extend my sincere appreciation to the NONM President, NONM Executive Director, the editorial board members, reviewers, authors, institutional leaders, and all partners who have generously contributed their expertise, time, and unwavering support towards making this vision a reality. Their collective efforts have laid a strong foundation upon which this journal will continue to grow and flourish.

Looking ahead, our aspiration is for the Malawi Journal of Nursing and Midwifery to become a leading scholarly publication in Africa and beyond. We envision a journal that not only disseminates research but also stimulates meaningful dialogue, influences healthcare policy, strengthens nursing and midwifery education, and ultimately contributes to improved health outcomes for individuals, families, and communities.

I warmly invite researchers, practitioners, educators, and students to make this journal their preferred platform for sharing knowledge, engaging in scholarly discourse, and advancing the nursing and midwifery professions. Together, we can build a robust culture of research and innovation that informs practice, shapes policy, and transforms healthcare delivery.

Thank you for joining us as we embark on this exciting journey. We look forward to your continued support, valuable contributions, and active engagement as we work collectively to advance nursing and midwifery science for the benefit of Malawi, Africa, and the wider global community.

Message from the President of the National Organization of Nurses and Midwives of Malawi (NONM)

Malawi Journal of Nursing and Midwifery *For volume 1, issue 1, published 2026*

Shouts M. Galang'ada Simeza, *President, National Organization of Nurses and Midwives of Malawi (NONM)*

IT gives me great honour and professional pride, on behalf of the National Organization of Nurses and Midwives of Malawi (NONM), and all the nursing and midwifery professionals in Malawi, to congratulate the editorial team, contributors, reviewers, and all stakeholders upon the launch of the inaugural issue of the Malawi Journal of Nursing and Midwifery.

The establishment of this Journal marks a significant milestone in the advancement of nursing and midwifery scholarship, professional excellence, evidence-informed practice, and health systems strengthening in Malawi. At a time when healthcare systems across the world are increasingly confronted by complex public health challenges, workforce shortages, disease burdens, technological transitions, and evolving patient needs, the role of nursing and midwifery research and professional knowledge generation has never been more important.

Nurses and midwives remain the backbone of healthcare delivery systems. In Malawi and globally, they constitute the largest proportion of the health workforce and continue to provide essential services across communities, primary healthcare facilities, hospitals, educational institutions, and public health systems. However, the growing complexity of healthcare demands that nursing and midwifery practice should increasingly be guided by research evidence, innovation, critical inquiry, collaborative practice, and lifelong professional development.

The launch of the Malawi Journal of Nursing and Midwifery therefore provides an important platform for professional reflection, scientific dissemination, policy dialogue, and scholarly engagement among nurses, midwives, educators, researchers, students, regulators, and healthcare leaders. The Journal creates an opportunity for Malawian nurses and midwives to document local experiences, generate contextually relevant evidence, share innovations, influence policy, and contribute meaningfully to both national and global health discourse.

Importantly, the Journal emerges at a critical moment when the nursing and midwifery professions are increasingly being called upon to provide leadership in advancing Universal Health Coverage, primary healthcare strengthening, maternal and newborn health, mental health services, public health preparedness, digital health transformation, and interprofessional collaborative practice. As such, strengthening nursing and midwifery scholarship is not merely an academic exercise, but an important investment toward improving healthcare quality, patient outcomes, workforce responsiveness, and health systems resilience.

As NONM, we strongly believe that professional growth and professional voice are strengthened through research, publication, mentorship, and knowledge sharing. We therefore encourage nurses and midwives across all levels of practice and training to actively participate in research, scholarly writing, innovation, and publication. The Journal should serve not only as a repository of scientific knowledge, but also as a catalyst for professional confidence, leadership development, critical thinking, and intellectual engagement within the professions.

I wish to particularly commend the editorial leadership and all contributors who have worked tirelessly to bring this inaugural issue into reality. Establishing a professional journal requires vision, commitment, academic integrity, collaboration, and perseverance. This achievement therefore deserves recognition and collective professional support.

As we celebrate this important milestone, may the Malawi Journal of Nursing and Midwifery continue to grow into a respected platform for advancing nursing and midwifery science, education, practice, leadership, and policy influence both within Malawi and beyond.

On behalf of NONM, I extend our sincere congratulations and best wishes for the continued success and sustainability of the Journal.

From Concession to Contract: Collective Bargaining as the Engine for Health System Resilience in Malawi

Malawi Journal of Nursing and Midwifery *For volume 1, issue 1, published 2026*

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Introduction

NURSES and midwives form the primary foundation of healthcare delivery in Malawi, carrying out the majority of direct patient care across all levels of the health system. In rural areas—where over 80% of the national population resides—nurses and midwives account for over 90% of all frontline healthcare providers (ICAP, 2016). They serve as the universal first entry point for 90% of individuals seeking care at local health centers and community facilities. Within maternal and child health, nurse-midwives operate as the primary providers of essential obstetric and newborn care, managing the entire maternal continuum from antenatal visits through labor, delivery, and immediate postnatal care. Furthermore, due to the critical shortage of Medical Doctors, their clinical scope has expanded significantly; nurses routinely run specialised outpatient services, initiate antiretroviral therapy (ART) for HIV management, treat tuberculosis, and stabilise pediatric and medical emergency cases.

Despite their vital role, Malawian healthcare workers face severe structural challenges. Critical staffing shortages force nurses at busy facilities—especially health centers—to manage 75 to 100 patients/nurse or midwife daily (Partners In Health, 2023). Public sector vacancy rates for registered nurses and nurse-midwife technicians remain high at 40% and 54%, respectively. These shortages are further exacerbated by IMF-imposed financial restrictions that limit public sector hiring, leaving thousands of qualified nursing graduates unemployed despite high vacancy rates (Partners In Health, 2023). Furthermore, workforce distribution is heavily skewed, with 74% of healthcare workers serving in urban areas that account for only 19% of the population. Although academic institutions train hundreds of nurses and midwives annually, public sector absorption remains severely limited by budget constraints and government hiring freezes. Additionally, retention is affected by low remuneration, heavy workloads, inadequate risk and professional allowances, and fragile labor protections—all of which drive unacceptable levels of workplace burnout and international migration. Resolving these staffing challenges is critical to building a resilient health system capable of achieving national.

The Evolution of the National Organisation of Nurses and Midwives of Malawi (NONM) from a Professional Movement to Registered Trade Union (1979-Date).

The Genesis (1979–2006): The foundational mandate of the Nurses Association of Malawi (NAM) in 1979 was established as a professional movement to give nurses and midwives a unified voice within the national healthcare system. Driven by international influences such as the International Council of Nurses (ICN) and local leadership. NAM's early operations focused on upholding professional standards, advancing social welfare, and demonstrating the vital contribution of nursing to healthcare delivery. During this era, advocacy was characterised by a highly consultative and collaborative approach, maintaining strong, collegial links across the QUAD structure—comprising policy, training, regulatory, and practice bodies. This made the Associations' chairperson to be included in the council of the Nurses and Midwives Act of Malawi- a legal mandate of the nurses which has been carried on to date. To enhance professionalism, NAM established the paper-based NURSING Journal in 80s which modern technology cannot trace its contents.

Advocacy strategies under NAM were grounded in diplomatic negotiation, resource mobilization, and broad stakeholder engagement. Key milestone achievements were framed around service delivery impact; for instance, the successful advocacy for three months of paid maternity leave was argued on the grounds of improving infant health outcomes and nursing care quality rather than purely labor rights. This professional orientation fostered nearly universal membership and high organisational cohesion across national, district, and area levels. NAMs' strong advocacy initiative made the International Labour Organisation (ILO) to start its work in Malawi in order to advance labour issues.

The Strategic Transition to a Registered Trade Union (2007–Present): The transition in 2007 from a professional association to a registered trade union—the National Organisation of Nurses and Midwives of Malawi (NONM)—marked a significant paradigm shift. Driven by external support from inter-

national partners, including the Norwegian Nurses Organisation through NORAD grants, the transition aimed to legally safeguard the rights, working conditions, and socioeconomic interests of the nursing and midwifery workforce. However, the initial phase of unionisation introduced a strategy that many perceived as militant, reliance on strike threats, legal action, and confrontational bargaining tactics. This shift created conflict with government authorities leading to initial resistance and apprehension among senior nurse and midwife leaders who feared job insecurity or political fallout. Although NONM membership is still at 56% of the total Malawi nursing and midwifery population, it has significantly grown from just 50 members in 2006 to 10,571 in 2026.

In recent years as political democracy matures in Malawi, NONM has evolved into a balanced, labor organisation. Modern operational strategies combine rigorous socio-economic advocacy—such as bargaining for improved wage structures, risk allowances, and protective wear—with strategic dialogue and collaborative partnerships. By maintaining direct engagement with key government offices like the Ministries of Health, Local Government, the Directorate of Human Resources Management and Development and the QUAD professional structures, the organisation bridges the gap between labor activism and professional ethics, prioritizing patient care while aggressively defending the rights and wellness of health workers.

The Dual Identity: Merging Professionalism and Labor Activism: Currently, NONM operates under a comprehensive mandate rooted in both national statutory frameworks and international labor law. Professionally, its core foundation inherits the historical legacy of the NAM as stated under the Nurses and Midwives Act of 1995.

As a trade union, NONM ascribes to many national and international statutory frameworks including the Constitution of Malawi, the Labour Relations Act (1996), and the Employment Act (2000, as amended in 2021). Internationally, it is guided by several key ILO conventions. These fundamental instruments establish the legal basis for NONM's union activities, including the Freedom of Association and Protection of the Right to Organise which guarantees healthcare workers the right to establish and join independent professional organisations (Convention, 1948 No. 87). Furthermore, the Right to Organise and Collective Bargaining Convention, 1949 (No. 98) protects nurses and midwives against anti-union discrimination while securing their legal right to negotiate employment terms. Equity and safety within the workplace are additionally guaranteed through the Equal Remuneration Convention, 1951 (No. 100), mandating uniform pay and benefits for equal value across the health workforce, and the Discrimination (Employment and Occupation) Convention, 1958 (No. 111), safeguards members against workplace discrimination based on sex, political opinion, or social origin. Finally, the Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187) upholds a continuous, preventative culture of safety, health, and protective care within clinical environments. Together, these domestic and international legal instruments empower NONM to harmonise professional standards with strong labour rights protections.

By establishing itself within these frameworks, NONM occupies a unique dual space within Malawi's civil society. Carrying forward the foundational professional responsibilities of the NAM, the organization functions as both a professional body dedicated to nursing and midwifery excellence and a registered trade union committed to safeguarding the socio-economic welfare of its workforce (NONM Strategic Plan, 2024–2026). Through this dual mandate, NONM serves as the official mouthpiece for the nursing and midwifery profession in Malawi. This dual focus is clearly illustrated by the organization's recent achievements, in 2025-2026, including successfully advocating for the recruitment of 706 frontline workers, influencing direct promotions for over 100 "Best Nurses" by the State President who was the guest of honor during the 2025 International Nurses Day celebrations, implementation of salary increments of over 2000 health professionals who were promoted in June 2025, and a 150% to 250% upward revision of locum (overtime pay) rates to ease severe economic pressures for all health workers of Malawi.

In addition, NONM, with support from its long-standing partner—the NNO—launched the Small-Scale Research Grants Initiative to foster local, evidence-based practices and pioneered basic Sign Language training for nurses to structurally advance Universal Health Coverage (UHC). NONM hosts the Malawi Journal of Nursing and Midwifery (a replacement of NAMs' NURSING Journal) which is a platform for nurses and midwives to share their scientific knowledge that can be used for evidence based care as they care for their patients and the general public. As the Malawi Journal of Nursing and Midwifery launches its inaugural issue mid-year of 2026, strengthening the nursing and midwifery workforce is critical to building a resilient health system.

However, while these isolated gains are significant, they remain structural concessions rather than enforceable, in-

stitutionalized rights. In the absence of a legally binding Collective Bargaining Agreement (CBA), gains earned through political goodwill, short-term conciliation, or informal negotiations remain highly vulnerable to changing political priorities, macroeconomic shocks, and unpredictable measures.

The Strategic Imperative of the Collective Bargaining Agreement (CBA): To secure a stable professional environment, NONM is currently driving negotiations for a formal CBA directly with the Malawi government through the Ministries of Health and Sanitation, and Labour, Skills and Innovation, Local Government Services Commission, Government Health Services Commission, Office of the President and Cabinet, Department of Human Resource and Development and Ministry of Finance just to mention a few. Moving to a contract-based labour relationship changes the dynamic from a cycle of continuous disputes to an ongoing, institutionalised social dialogue. The current CBA draft aims to institutionalise fundamental employee protections that have been missing from public service frameworks for years, such as standardised severance pay, accessible medical aid packages, and transparent career advancement paths for both academic and promotion. Research syntheses indicate that collective bargaining agreements in nursing yield modest wage premiums and general improvements in patient outcomes, though evidence regarding broader nurse retention and job satisfaction remains mixed. By introducing innovative clauses like the "right to disconnect" outside regular working hours, the CBA confronts the hidden epidemic of professional burnout. This structural approach addresses the core issues causing Malawi's severe "brain drain" and provides a reliable mechanism to protect the physical and mental well-being of our nursing and midwifery workforce.

Overcoming Structural Obstacles to Health Sector Stability: The path to successful implementation of this collective bargaining model is filled with complex challenges. Externally, the country's fragile economy, high inflation rates, and a heavy reliance on international donor funds present ongoing challenges to long-term financial planning. Locally, a complex regulatory landscape—including strict laws that limit legal strike actions and complex dual-licensing requirements (e.g. a nurse registered with the nurses and midwives' council of Malawi with additional clinical training e.g. Anesthesia required to be registered by the Malawi Medical Council)—often limits traditional union influence.

Internally, NONM navigates a complex political and regulatory environment. A current point of friction involves government over reach regarding the appointment of an executive to the regulatory body. This action directly conflicts with the Nurses and Midwives Act and undermines the statutory autonomy of a profession legally bound by that legislation. To counter these pressures, NONM is proactively reinforcing its inner structures through local leadership training in advanced labor relations and unionism—ensuring collective bargaining is backed by a legally literate membership capable of protecting professional rights at the facility and country level.

Conclusion: NONMs' Vision for 2026 and Beyond

Looking ahead to 2026 and beyond, the NONM is committed to expanding its union density beyond its current 56% threshold, recognizing that achieving full membership is essential to securing a powerful, unified voice capable of transforming short-term concessions into a legally binding CBA. By bridging its historical mandate as a professional association with its statutory authority as a registered trade union, NONM aims to institutionalise sustainable workforce protections—such as standardised severance pay, transparent career progression paths, and burnout-mitigating provisions like the "right to disconnect"—to curb the ongoing severe brain drain and protect the physical and mental well-being of nurses and midwives who are the frontline health workers in Malawi. Ultimately, by positioning collective bargaining not merely as a labor dispute tool, but as a critical engine for workforce retention, continuous professional development, and overall health sector stability, NONM is laying the necessary structural foundation to achieve Universal Health Coverage and ensure long-term health security for all Malawians.

References

ICAP / NEPI Brief (2016): Nursing Education Partnership Initiative (NEPI) – Malawi Brief

Partners in Health (2023). Nurses, Crucial to the Global Health Workforce, Face Dwindling Ranks as Demand Grows. Retrieved from, https://www.pih.org/article/nurses-crucial-global-health-workforce-face-dwindling-ranks-demand-grows

International Labour Organisation. (2006). Promotional Framework for Occupational Safety and Health Convention (No. 187).

Malawi Government. (1995). Nurses and Midwives Act (Chapter 36:02).

Strengthening Professional Regulation to Advance Nursing and Midwifery in Malawi: A Call for Collective Leadership

Malawi Journal of Nursing and Midwifery *For volume 1, issue 1, published 2026*

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THE launch of the inaugural Malawi Nursing and Midwifery Journal marks an important milestone in our country's pursuit of excellence in nursing and midwifery. It provides a platform for scholarly discourse, innovation, evidence generation, and professional reflection. More importantly, it offers an opportunity to reaffirm the indispensable role of professional regulation in safeguarding the public while advancing the nursing and midwifery professions.

Nurses and midwives constitute the largest cadre of healthcare professionals in Malawi and remain the backbone of the health system. They provide care across the continuum of life; from health promotion and disease prevention to emergency, curative, rehabilitative, and palliative services. As Malawi implements the Health Sector Strategic Plan III (2023–2030), strengthening the nursing and midwifery workforce is fundamental to achieving Universal Health Coverage (UHC), improving maternal and newborn outcomes, and realizing the aspirations of Malawi 2063. The HSSP III prioritizes quality service delivery, human resources for health, leadership and governance, digital health, and research. A well-regulated nursing and midwifery profession is therefore, indispensable.

Professional regulation is far more than registration and licensure. It is a comprehensive system that establishes standards for education, practice, ethics, continuing professional development, accreditation of training institutions, and disciplinary processes that protect the public from unsafe practice. The Nurses and Midwives Council of Malawi (NMCM), established under the Nurses and Midwives Act No 16 of 1995 (Cap. 36: 02), has the statutory responsibility of ensuring that every licensed practitioner possesses the competence, integrity, and professionalism expected by society.

However, regulation must continuously evolve to match changing healthcare needs. Advances in technology, increasing specialization, emerging diseases, demographic transitions, and growing public expectations require regulatory frameworks that are responsive, evidence-based, and forward-looking. Regulatory reform should therefore, focus on competency-based practice, digital registration systems, strengthened continuing professional development, enhanced quality assurance of education programs, and greater collaboration with employers, educators, and professional associations.

The Ministry of Health and Sanitation has placed considerable emphasis on improving the availability, competence, and equitable distribution of human resources for health, while strengthening governance and quality of care. These priorities resonate strongly with the Council's mandate. Effective regulation complements government efforts by ensuring that workforce expansion is accompanied by competence, accountability, ethical conduct, and patient safety. As training institutions increase enrolment to address workforce shortages, maintaining educational quality becomes increasingly important. Quantity without quality cannot produce the competent workforce required for modern healthcare delivery.

Nursing and midwifery education in Malawi has made commendable progress through curriculum reviews, accreditation of additional training institutions, expansion of degree programs, and stronger collaboration among regulators, academia, and service providers. Nevertheless, significant challenges remain. Clinical placement sites are becoming overstretched; faculty shortages continue to affect educational quality; simulation infrastructure remains inadequate in many institutions; and rapid technological changes demand continuous curriculum review. Greater investment in faculty development, digital learning platforms, simulation laboratories, and clinical mentorship is therefore,

essential if graduates are to meet contemporary practice expectations.

Similarly, nursing and midwifery practice is evolving rapidly. Healthcare delivery is increasingly multidisciplinary, technology-driven, and evidence-based. Practitioners are expected not only to provide safe clinical care but also to demonstrate leadership, quality improvement, research utilization, digital competence, and effective communication. Professional regulation must therefore, promote lifelong learning through continuing professional development while ensuring that ethical practice remains central to patient care.

Professional associations also occupy a critical position within the regulatory ecosystem. While the Council regulates the profession in the public interest, professional associations advocate for the welfare, professional development, leadership, and advancement of their members. These complementary roles should never be viewed as competing but rather as mutually reinforcing. Strong professional associations contribute to policy dialogue, leadership development, scientific advancement, and professional solidarity. At the same time, they face challenges including limited financial sustainability, low membership participation, inadequate research capacity, and constrained advocacy resources. Addressing these challenges requires renewed commitment from members and stronger partnerships with government, academia, development partners, and regulatory bodies.

Another important priority is strengthening professionalism and ethical conduct. Increasing public awareness, social media influence, and changing patient expectations require nurses and midwives to maintain the highest standards of accountability. Complaints against practitioners should be viewed not merely as disciplinary matters but also as opportunities for learning, systems improvement, and strengthening public confidence. Regulatory processes must therefore remain transparent, fair, timely, and focused on protecting the public while supporting remediation where appropriate.

The future of nursing and midwifery regulation in Malawi lies in collaboration. Government, regulators, educational institutions, employers, professional associations, researchers, development partners, and practitioners all have shared responsibility for strengthening the profession. Evidence generated through this journal should inform regulatory reforms, educational innovations, clinical guidelines, and health policy decisions. Research must increasingly address locally relevant challenges and generate practical solutions for improving patient outcomes.

As the Acting Registrar of the Nurses and Midwives Council of Malawi, I remain optimistic about the future of our profession. Malawi possesses a dedicated nursing and midwifery workforce, resilient educational institutions, committed professional leaders, and supportive national policies. By embracing innovation, strengthening regulation, promoting ethical practice, investing in education, and fostering collaborative leadership, we can build a nursing and midwifery profession that is responsive to the health needs of our people and aligned with national development aspirations.

May this inaugural journal inspire critical thinking, professional excellence, and evidence-informed leadership. Let it serve as a catalyst for continuous improvement in nursing and midwifery education, practice, research, and regulation. Together, we can strengthen public trust, improve quality of care, and contribute meaningfully to a healthier Malawi.

References

Government of Malawi. (2023). Health Sector Strategic Plan III (2023–2030): Reforming for Universal Health Coverage. Ministry of Health.

Government of Malawi. (2023). Malawi 2063: First 10-Year Implementation Plan. National Planning Commission.

International Council of Nurses. (2021). The ICN Code of Ethics for Nurses. Geneva: ICN.

The Nurses and Midwives Act No. 16 of 1995.

World Health Organization. (2021). Global Strategic Directions for Nursing and Midwifery 2021–2025. Geneva: WHO.

The Transformative Power of Nursing Research in Advancing Healthcare

Malawi Journal of Nursing and Midwifery *For volume 1, issue 1, published 2026*

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A dedication to evidence, innovation, and professional development in nursing practice is demonstrated by the establishment of the first nursing research journal, which signifies more than just the publication of academic work. Nursing research has become indispensable at a time when rising diseases, labor shortages, technology advancements, and growing health disparities are putting more strain on healthcare systems worldwide. The majority of healthcare workers are nurses, who continue to have the closest relationships with patients, families, and communities. Therefore, their observations, experiences, and scientific investigations are crucial in developing successful healthcare interventions and policies.

For many years, caring and bedside support were the main focus of the practice-oriented nursing profession. Modern nursing goes well beyond conventional caregiving responsibilities, even though compassion is still at the core of nursing identity. The modern nurse is a leader, researcher, advocate, educator, and clinician. By bridging the gap between academic understanding and real-world application, nursing research guarantees that patient care is informed by facts rather than custom or conjecture.

The direct influence that nursing research has on patient outcomes is among its greatest accomplishments. It has been demonstrated that evidence-based nursing interventions can lower hospital-acquired infections, enhance patient safety, improve pain treatment, and raise patient satisfaction. Nurses find best practices that enhance the effectiveness and quality of healthcare delivery through methodical investigation. Nurses can ask important questions thanks to research: Which interventions work best? How might the experiences of patients be enhanced? Which techniques improve long-term health outcomes and recuperation? In a fast changing healthcare environment, these kinds of questions are crucial.

Importantly, nursing research also amplifies the voices of patients and communities. Nursing research frequently stresses holistic care, social determinants of health, patient experiences, and community well-being, in contrast to some disciplines that may concentrate primarily on disease processes. Nurses see firsthand the difficulties marginalized groups experience, such as poverty, stigma, cultural hurdles, and obstacles to accessing healthcare. As a result, concerns that might normally go unnoticed in mainstream medical literature are often addressed in nursing research. One of the major advantages of the profession is this patient-centered viewpoint.

Context-specific nursing research is especially needed in many low- and middle-income nations. Resources, disease burdens, staff capability, and cultural dynamics vary greatly among healthcare systems. In other contexts, solutions created in wealthy nations might not necessarily be feasible or long-lasting. In order to produce information that accurately reflects local reality, local nursing research becomes essential. Research carried out in nearby hospitals and communities can direct legislators and healthcare executives toward practical and successful reforms. Nursing journals become tools for national development and the improvement of the health system by publishing such work.

Professional empowerment is another important function of nursing research. Nurses who participate in research develop their analytical abilities, critical thinking, and intellectual curiosity. It motivates professionals to go beyond standard practice and actively contribute to the body of knowledge in healthcare. Regretfully, a lot of nurses still believe that research is difficult, unapproachable, or only for academics. This view needs to be altered. Research

should be included into routine clinical work rather than being seen as distinct from nursing practice. Patient audits, observational studies, and even straightforward quality improvement initiatives can produce insightful results.

The creation of a nursing research journal has the potential to significantly impact the development of a research culture. These publications give inexperienced researchers the chance to publish their work, get criticism from their peers, and interact with larger academic communities. Additionally, they encourage young nurses and students to see research as a worthwhile and attainable endeavor. Journals are crucial for promoting cooperation amongst interdisciplinary professionals, educators, legislators, and doctors. Healthcare systems grow more robust and patient-responsive through the sharing of knowledge.

Nevertheless, major obstacles still stand in the way of the advancement of nursing research. Many institutions continue to struggle with a lack of finance, limited research training, severe clinical workloads, and inadequate mentorship. Nurses frequently find it difficult to strike a balance between their intensive patient care duties and their academic pursuits. Organizational cultures may undervalue nursing scholarship or fail to offer professional growth opportunities in certain contexts. Institutional dedication, funding for research facilities, and leadership support are necessary to overcome these obstacles. Nursing research must be acknowledged by governments, hospitals, and academic institutions as a strategic goal rather than an optional endeavor.

The future of nursing research is likewise being reshaped by digital innovation and technology. Artificial intelligence, telemedicine platforms, data analytics, and electronic health records offer previously unheard-of possibilities for producing and evaluating medical data. In order to interact with these technologies in a responsible and productive manner, nurses must possess the necessary abilities. However, ethical issues like informed consent, patient privacy, and fair access to care must continue to be at the forefront of study procedures. Even in highly developed healthcare systems, nursing research must uphold the principles of human-centered care, compassion, and dignity.

The journal serves as a stimulus for professional growth and intellectual interaction in addition to being a storehouse of articles. The caliber, applicability, and integrity of the work it publishes will determine its success. While maintaining a firm grasp of the reality of patient care, researchers must aim for scientific rigor. Editors and reviewers are required to respect ethical norms and promote a variety of viewpoints, especially from marginalized groups and environments with limited resources. The journal may also influence nursing leadership in the future. Leadership that is informed by research is crucial to the transformation of healthcare. Understanding evidence generation puts nurse leaders in a better position to promote patient safety programs, staffing increases, legislative changes, and fair access to healthcare. The journal helps develop a generation of nurses who are not only caregivers but also innovators and change agents by encouraging intellectual involvement.

In conclusion, the launch of a nursing research journal is both appropriate and essential. It stands for a dedication to improving healthcare outcomes, bolstering professional identity, and promoting evidence-based practice. More significantly, it gives nurses the ability to produce knowledge rather than only absorb it. The journal creates new opportunities for innovation, teamwork, and significant healthcare change as it opens its pages to researchers, practitioners, and students. Even if the path ahead may be difficult, learning is still one of the most effective ways to advance nursing and enhance people's lives.

References

Melnyk, B. M., & Fineout-Overholt, E. (2022). Evidence-based practice in nursing & healthcare: A guide to best practice. Lippincott Williams & Wilkins.

Polit, D. F., & Beck, C. T. (2021). Nursing research: Generating and assessing evidence for nursing practice (11th ed.). Wolters Kluwer.

World Health Organization. (2020). State of the world's nursing 2020: Investing in education, jobs and leadership. Geneva: WHO.

American Nurses Association. (2021). Nursing: Scope and standards of practice (4th ed.). American Nurses Association.

Nurse Training in Malawi: Time to Shift from Numbers to Competence, Context and Career Pathways

Malawi Journal of Nursing and Midwifery *For volume 1, issue 1, published 2026*

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Introduction

IN Malawi, nursing is not just a profession; it is the health system. Nurses and midwives provide over 80% of direct clinical care, lead district health facilities, and are often the only health worker a community will ever see. How we train them, therefore determines the health of the nation. Over the last two decades, Malawi has made bold strides. We have moved from hospital-based training to a regulated system of 16 accredited colleges, led by the Nurses and Midwives Council of Malawi, and anchored by university programmes. The intent was right: increase numbers to address critical shortages. The unintended consequence is now clear: we have focused more on quantity than on quality, relevance and retention. For this inaugural issue, I argue that nurse training in Malawi stands at a crossroads and needs three decisive shifts.

The Triumph and Strain of Expansion: The decision to double and triple intakes *of nurse training* was necessary. Malawi's density of nurses is still 0.4 per 1000 population against the WHO recommended 4.45 per 1000 for Universal Health Coverage. Yet expansion has outpaced investment. Most training institutions operate with less than 60% of required faculty, and many tutors lack specialized training in nursing education. Libraries lack current texts, skills labs lack functional manikins, and student accommodation is overcrowded. More critically, clinical learning is in crisis. With 50-100 students competing for placement in one central hospital ward, competing for limited patients, equipment and qualified preceptors: hands-on learning is diluted. Students observe rather than practice, and qualified nurses, already overworked, have little time or incentive for preceptorship. We are at risk of producing graduates who can pass examinations but struggle with clinical reasoning, decision-making, and compassionate care in resource-limited settings.

A Training System Divided: We have created a two-tier system. At the base are Nurse Midwife Technicians (NMTs) - diploma holders who form 70% of the workforce and sustain rural services. At the top are university-trained Registered Nurses with degrees. The bridge between them is fragile. Upgrading from NMT to *Bachelor degree* is costly, requires leaving employment for years, and offers little guaranteed career progression within the Ministry of Health structure. The result is demotivation. Many young nurses see only two options: stagnate as an NMT or migrate abroad. Neither serves Malawi. Furthermore, our curricula, though recently revised to be competency-based, still lean heavily on Western textbooks and hospital-centric models. They under-prepare nurses for the realities they will face: managing conditions without a clinician, running a non-communicable disease clinic, providing adolescent mental health support, or leading quality improvement in a district with erratic power supply.

Training for Export: The Ethical Dilemma: We cannot discuss nurse training without discussing migration. Since 2021, active recruitment from the *United Kingdom (UK), United States of America (USA)* and Gulf states has intensified. The UK alone added Malawi to its list of countries with significant out-migration of health workers. We lose experienced nurses and, increasingly, new graduates within 12 months of registration. While individual rights to mobility must be respected, and we cannot ethically blame

individuals seeking better livelihoods, we must be honest: Malawi, is subsidizing the health systems of some of the developed countries while rural facilities at home remain unstaffed. Our training model does not account for this loss. We need a training and retention model that assumes some migration will happen and plans for it.

The Way Forward: Three Imperatives*:* The next decade of nurse training must shift from counting graduates to building competence, context relevance and career pathways.

Invest in the clinical learning environment as much as the classroom: The Nurses and Midwives Council of Malawi should enforce a minimum preceptor-to-student ratio and the Ministry of Health, should create a formal, incentivized Clinical Preceptor cadre. Every accredited nursing training institution must have standard, a low-cost but high-fidelity, functional simulation laboratory to bridge the gap before students touch a patient. This calls for both public and private training institutions to receive an investment for this.

Make curricula context-relevant and interprofessional: Let us teach what Malawi suffers from and in the realities of a resource-limited setting. Prioritize midwifery, critical care, NCDs, and mental health. Embed leadership, digital health, and research utilization from year one *of nurse training.* Interprofessional education, where nursing, midwifery, medical and allied health students learn together, should be mainstreamed to foster teamwork from the classroom.

Build retention into the education pathway: Retention starts during training. If a student never experiences a well-supported rural placement, they are unlikely to return there to work. We must strengthen rural immersion programmes, provide district-based scholarships with return-to-service agreements, and create clear academic ladders from certificate to PhD within Malawi. Digital learning and blended programmes, can allow nurses to upskill without leaving their duty stations or families. If a nurse can see a future here, he/she is more likely to build his/her future here.

Conclusion

Malawi does not lack young people eager to serve as nurses. Our duty is to ensure that when they answer that call, we give them training that is rigorous, relevant, and respectful of their potential. We have succeeded in producing more nurses. The next 20 years must be about producing the right nurses, rightly supported, for Malawi.

References

World Health Organization. State of the World's Nursing 2020. Geneva: WHO; 2020.

Ministry of Health Malawi. Human Resources for Health Strategic Plan 2018-2030. Lilongwe: MoH; 2018.

Nursing and Midwives Council of Malawi. Standards for Nursing and Midwifery Education and Training. Lilongwe: NMCM; 2023.

Bvumbwe T, et al. Brain drain and retention of Malawian nurses: implications for training. Malawi Med J. 2024;36:12-18.[1]

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Traumatic Birth and Childbirth-Related Post-Traumatic Stress Disorder: Improving Mental Health Care in Maternity Services in Malawi

Malawi Journal of Nursing and Midwifery *For volume 1, issue 1, published 2026*

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Dates

Received: November 8, 2024

Accepted: November 13, 2025

Published: August 31, 2026

Executive summary: ***THE*** Policy brief on childbirth-related post-traumatic stress disorder (CB-PTSD), examines into critical issue of perinatal mental health, focusing on traumatic birth. Traumatic birth experiences and subsequent CB-PTSD symptoms can cause substantial suffering and have major long-term health implications with extremely distressing mental disorder for women, their infants, and families (Ayers et al., 2024; Horsch et al., 2024). This research sheds light on CB-PTSD which refers to the psychological symptoms that develop after or a direct consequence of having had a traumatic birth.

The Policy brief highlights the requirement for improved mental healthcare services, recognizing the lack of mental health screening and little evidence on how to best assess, prevent, and treat CB-PTSD (Horsch et al., 2024). It emphasizes the role of addressing the risk factors for CB-PTSD by incorporating strategies to promote continuity of care, good support and communication during pregnancy, continuous one-to-one support during labor into practice (Horsch et al., 2024; Thomson et al., 2021). The policy brief promotes respect to women's rights to autonomy before, during, after birth, and responsive care. The Policy brief underscores the importance of collaborative efforts, research-driven interventions, and policy guidance on the prevention, care, and treatment initiatives to address traumatic birth and CB-PTSD.

Introduction: Although the birth of a baby is viewed positively in nearly all cultures, research suggests between 20 and 40% of women find childbirth psychologically traumatic with some of these women go on to develop CB-PTSD as a result (Ayers et al., 2016), and 4% of women who give birth develop CB-PTSD (Ayers et al., 2024), with clinically significant PTSD symptoms observed in up to 16.8% of women (Dekel et al., 2017). Traumatic birth experiences and subsequent CB-PTSD symptoms can cause substantial suffering and have major long-term health implications for women, their infants, and families. However, traumatic childbirth experience and CB-PTSD remain largely unrecognized in maternity services and are not routinely screened for during pregnancy and the postpartum period.

Birth events and CB-PTSD provide an opportunities to prevent traumatic childbirths and CB-PTSD from occurring (Ertan et al., 2021; Horsch et al., 2024). This could be done through recognition of past traumas, continuity of care, good support and communication during pregnancy, continuous one-to-one support during labor, asking about people's birth experiences, can be incorporated into practice and need to be emphasized in the context of preventing and reducing psychological birth trauma and CB-PTSD (Ayers et al., 2024; Horsch et al., 2024).

Methodology: This research overview is based on the authors' study on traumatic birth and CB-PTSD conducted among 6-12 weeks postpartum mothers. The methodology incorporates data from recent literature related to CB-PTSD. Databases were searched to identify peer-reviewed publications related to CB-PTSD. The literature reviewed included scientific papers and consensus recommendations for practice, policy and research papers on CB-PTSD. Therefore, this overview is the result of study findings which aims to provide actionable insights for practicing healthcare professionals to improve mental health care in maternity services.

During birth, risk factors most strongly associated with CB-PTSD were negative subjective birth experiences. Communication during birth was a protective factor in the occurrence of CB-PTSD in the authors' study. Poor communication is a birth risk factor, which is associated with poorer birth outcomes and a greater risk for CB-PTSD, as is mistreatment during child birth (Garthus-Niegel et al., 2020). Lack of communication from staff, specifically experiencing verbal obstetric violence being the most likely to affect the development of PTSD (Martinez-Vázquez et al. 2021). This may reflect the specific behaviors and characteristics of medical staff that will always cause negative reactions

among mothers. Reported in van Dinter-Douma et al. (2020), appropriate verbal treatment, providing concrete and understandable information, and ensuring informed consent were most frequently used to reduce fear or the likelihood of a traumatic birth experience. According to the findings reported by Chabbert et al. (2021), a good relationship with healthcare professionals and feeling the professionalism of midwives are also predictors of positive childbirth experiences.

Discussion of policy options

1). Screening for traumatic birth and CB-PTSD

Evidence indicates that childbirth-related trauma and childbirth-related posttraumatic stress disorder and its associated risk factors may be addressed through psychosocial interventions including screening to reduce burden caused on an individual. CB-PTSD is an extremely distressing mental disorder and has a substantial negative impact on those who give birth, fathers or co-parents, and, potentially, the whole family (Horsch et al., 2024). Still, a traumatic childbirth experience and CB-PTSD remain largely unrecognized in maternity services and are not routinely screened for during pregnancy and the postpartum period (Ayers et al., 2018). Adequate prevention, screening, and intervention could alleviate a considerable amount of suffering in affected families (Horsch et al., 2024).

2). Train healthcare professionals in perinatal mental health care to deliver evidence-based services

In Malawi midwives and other professionals working and providing maternity care are frequently the first health professionals who could identify traumatic birth and CB-PTSD, or to whom women with risk for CB-PTSD or any common perinatal mental disorders may go to seek for help. However, the country has low mental health specialists. This shows that pregnant women, women in labor and postpartum women attending maternity services may have limited access to mental health specialists. Despite a gross shortage of mental health specialists in the country, midwives therefore could participate in the prevention and detection of women with traumatic birth and CB-PTSD when providing maternity care (Ayers et al., 2024).

3). Integrate mental health with maternity care services

According to the National mental health policy, (2020), mental health is integrated in general health care system at policy level in Malawi, so that people could have increased access to mental health services. This means that mental health care could also be integrated with maternity care to allow mothers receive mental health care along with the usual antenatal, labor and delivery, and postnatal care as needed. Integrating mental health into maternity care requires midwives to assess and deal with mental health problems affecting women in maternity care settings in Malawi; to enhance early identification, prevention and intervention of traumatic birth and CB-PTSD risk, hence improve and maintain the well-being of mothers and others.

Despite the National mental health policy, Malawi lacks policy guidelines for maternal mental health care to increase awareness of perinatal mental health problems, however, recently a practical guide for maternity healthcare workers has been put in place (Williams & Stewart, 2024). Few countries have policies in place for the prevention of traumatic birth and treatment of CB-PTSD, (Thomson et al., 2021). Lack of clear policy or guidance means many do not access these services (Sperlich et al., 2017). There is need to put in place clinical guidelines, policy needs, training on perinatal mental health problems, and adequate resourcing of services to support healthcare providers to address the problems and prevent traumatising behaviors, such as obstetric violence, traumatic birth and CB-PTSD

Policy recommendations

The following recommendations have been proposed to be suitable for Malawi context:

- Healthcare professionals must respect women's rights to autonomy i.e., maltreatment and obstetric violence must stop and women must receive responsive care.
- Healthcare professionals must interact with childbearing women and their families in ways that maximise positive birth experiences and minimise negative experiences for women and their supporting persons.
- Healthcare professionals must respond to childbirth-related mental health problems with compassion, understanding, and respect. Specialist support services for those who experience traumatic births are uncommon, this is the same with Malawi.
- Routine clinical practice should incorporate assessment of birthing mothers' experiences of care and identification of negative birth experiences in order to evaluate and improve care.
- National guidelines for maternity and mental health care are needed to increase awareness of perinatal mental health problems, including traumatic birth and CB-PTSD, and outline evidence-based, practical strategies for detection, prevention and treatment.
- Healthcare policies for maternity and mental health services should provide for prevention, detection, and

treatment of traumatic birth and CB-PTSD.

- Maternity care services need to offer routine screening for perinatal mental health and traumatic birth as part of family-centered, integrated care. National policies among others will help to emphasise regular screening for identifying those women and birth companions affected, and establishing formalised care pathways to facilitate access to effective care for women and families.
- Maternity services need to be resourced to act on feedback around respectful care, including dignity, autonomy, and healthcare providers' communication and interaction with women.

References

Ayers, S., Bond, R., Bertullies, S., & Wijma, K. (2016). The aetiology of post-traumatic stress following childbirth: A meta-analysis and theoretical framework. Psychological Medicine, 46(6), 1121–1134. https://doi.org/10.1017/S0033291715002706

Ayers, S., Horsch, A., Garthus-Niegel, S., Nieuwenhuijze, M., Bogaerts, A., Hartmann, K., Karlsdottir, S. I., Oosterman, M., Tecirli, G., Turner, J. D., Lalor, J., & COST Action CA18211. (2024). Traumatic birth and childbirth-related post-traumatic stress disorder: International expert consensus recommendations for practice, policy, and research. Women and Birth: Journal of the Australian College of Midwives, 37(2), 362–367. https://doi.org/10.1016/j.wombi.2023.11.006

Ayers, S., Wright, D. B., & Thornton, A. (2018). Development of a Measure of Postpartum PTSD: The City Birth Trauma Scale. Frontiers in Psychiatry, 9, 409. https://doi.org/10.3389/fpsyt.2018.00409

Chabbert, M., Panagiotou, D., & Wendland, J. (2021). Predictive factors of women's subjective perception of childbirth experience: A systematic review of the literature. Journal of Reproductive and Infant Psychology, 39(1), 43–66. https://doi.org/10.1080/02646838.2020.1748582

Dekel, S., Stuebe, C., & Dishy, G. (2017). Childbirth Induced Posttraumatic Stress Syndrome: A Systematic Review of Prevalence and Risk Factors. Frontiers in Psychology, 8. https://www.frontiersin.org/articles/10.3389/fpsyg.2017.00560

Ertan, D., Hingray, C., Burlacu, E., Sterlé, A., & El-Hage, W. (2021). Post-traumatic stress disorder following childbirth. BMC Psychiatry, 21(1), 155. https://doi.org/10.1186/s12888-021-03158-6

Garthus-Niegel, S., Horsch, A., von Soest, T., Haga, S. M., Drozd, F., Ayers, S., & Eberhard-Gran, M. (2020). Posttraumatic stress symptoms following childbirth: Associations with prenatal attachment in subsequent pregnancies. Archives of Women's Mental Health, 23(4), 547–555. https://doi.org/10.1007/s00737-019-01011-0

Horsch, A., Garthus-Niegel, S., Ayers, S., Chandra, P., Hartmann, K., Vaisbuch, E., & Lalor, J. (2024). Childbirth-related posttraumatic stress disorder: Definition, risk factors, pathophysiology, diagnosis, prevention, and treatment. American Journal of Obstetrics and Gynecology, 230(3, Supplement), S1116–S1127. https://doi.org/10.1016/j.ajog.2023.09.089

Martinez-Vázquez, S., Rodríguez-Almagro, J., Hernández-Martínez, A., & Martínez-Galiano, J. M. (2021). Factors Associated with Postpartum Post-Traumatic Stress Disorder (PTSD) Following Obstetric Violence: A Cross-Sectional Study. Journal of Personalized Medicine, 11(5), 338. https://doi.org/10.3390/jpm11050338

National mental health policy. (2020, April). Mental Health Policy.pdf—Republic of Malawi National Mental Health Policy Ministry of Health | Course Hero. https://www.coursehero.com/file/57897225/MENTAL-HEALTH-POLICYpdf/

Sperlich, M., Seng, J. S., Li, Y., Taylor, J., & Bradbury-Jones, C. (2017). Integrating Trauma-Informed Care Into Maternity Care Practice: Conceptual and Practical Issues. Journal of Midwifery & Women's Health, 62(6), 661–672. https://doi.org/10.1111/jmwh.12674

Thomson, G., Diop, M. Q., Stuijfzand, S., Horsch, A., Lalor, J. G., de Abreu, W., Avignon, V., Baranowska, B., Dikmen-Yildiz, P., El Hage, W., Fontein-Kuipers, Y., Horsch, A., Garthus-Niegel, S., Mesa, E. G., Hadjigeorgiou, E., Healy, M., Inci, F., İsbir, G. G., Jeličić, L., … COST After birth Consortium. (2021). Policy, service, and training provision for women following a traumatic birth: An international knowledge mapping exercise. BMC Health Services Research, 21(1), 1206. https://doi.org/10.1186/s12913-021-07238-x

van Dinter-Douma, E. E., de Vries, N. E., Aarts-Greven, M., Stramrood, C. A. I., & van Pampus, M. G. (2020). Screening for trauma and anxiety recognition: Knowledge, management and attitudes amongst gynecologists regarding women with fear of childbirth and postpartum posttraumatic stress disorder. The Journal of Maternal-Fetal & Neonatal Medicine, 33 (16), 2759–2767. https://doi.org/10.1080/14767058.2018.1560409

Williams, D., & Stewart, R., C. (2024, January). Malawi Maternal Mental Health Manual.

The Problem: Low Implementation of Evidence Based Practice in Nursing and Midwifery Care (EBP-NMC) Delivery in Malawi

Policy Brief

Malawi Journal of Nursing and Midwifery *For volume 1, issue 1, published 2026*

Executive Summary

***THE** problem:* Although the available literature in Malawi is limited, it indicates that implementation of evidence-based practice (EBP) is deficient. There is little utilization of research evidence in decision making; health, nursing, and midwifery practice (NMP), and policy formulation (MOH 2016; Mulenga and Naidoo 2017; Chiwaula 2022). NMP is dynamic, traditional ways of providing care cannot be effective always, but the implementation of EBP ensures the delivery of safe, effective, quality, cost-effective nursing and midwifery care (NMC).

Policy options: Implementation of EBP is a real challenge in NMP in Malawi. The following policy options can improve the implementation of NMC. These include: (1) implementing EBP innovations and tackling EBP challenges; (2) building practitioners' capacities and autonomy in conducting implementation research to develop recommendations and try out evidence-based models; and (3) effective collaboration for EBP between researchers, policy-makers, managers, nursing and midwifery practitioners.

Implementation considerations: The following strategies offer a stepping stone into the implementation of EBP: establishing a system that supports EBP implementation; strengthening knowledge transfer; capacity and empowerment of practitioners to implement innovations; installing EBP organizational culture and proactive leadership; strengthening clinical systems of generating, accessing, utilization and disseminating local evidence to support decision making; establishing and maintaining clear communication channels among researchers, policymakers, managers, practitioners. This also requires tackling barriers which include: Low drive for EBP implementation; lack of resources; guidelines and strategies to direct and guide EBP implementation; capable (knowledgeable, skilled, experienced, and autonomous) nurses and midwives; and integration of EBP into NMC provision.

Improving the implementation of EBP is an urgent action. This policy brief urges researchers, policy-makers, managers, nurses, and midwifery practitioners to consider the options presented in this brief as a stimulus for action-oriented steps toward ensuring the delivery of safe, effective, cost-effective, and quality care.

Introduction: The provision of EBP-NMC delivery is a priority agenda, it helps to improve the quality of care, and outcomes (Saunders & Vahvilaines-Julkenen 2016). The actual implementation of EBP-NMC has been persistently low, especially in Africa and Malawi. Nursing care decisions are derived from nursing experiences including education; understanding of patient status; situation awareness; and autonomy not from research evidence (Nibbelink & Brewer 2018). In Malawi, nursing decisions come from routine nursing traditions, authority, and personal experiences, not scientific research (Ministry of Health 2016). The actual nursing care processes at the point of nursing care delivery do not follow the EBP process (Ministry of Health and Population 2018). As such, nurses and midwives (NMs) must implement Evidence Based Practice (EBP) to change undesired practices to improve nursing care outcomes (Spruce 2015).

This policy brief brings together global, African, and local research evidence to inform deliberations for improving the provision of EBP-NMC delivery in Malawi. Relevant evidence has been searched to describe the problem, the options for addressing the problem, barriers to implementing those options, and implementation strategies to address these barriers.

Size of the problem: The Implementation of EBP among nurses and midwives is at different levels with a huge problem in Africa and Malawi. In the United Kingdom, utilization of research evidence in nursing practice is at 85% (Veeramah 2016). In the

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Dates

Received: November 13, 2025

Accepted: January 22, 2026

Published: August 31, 2026

United States, 65.5% of the nurses could not consistently implement EBP in treating patients (Melnyk et al. 2016). In Norway, most nurses rarely utilize research evidence in care provision (Stokke et al. 2014). In Iran, the EBP of nurses was at 57.66% (Naderkhah 2016). In the Mid-Atlantic region, 49% never used research evidence to change clinical practice (Warren et al 2016).

In Africa, there is low translation and use of research knowledge in health policy, programs, and formulation of guidelines and standards (Agbedia et al. 2014; Corluka et al. 2014). In Ethiopia, only 15.7% of the nurses use research evidence in clinical practice (Hadgu, Almaz, & Tsehay 2015).

In Malawi, the actual implementation of EBP is very low. There is poor utilization of research evidence in practice and policy formulation (World Health Organization 2014). There is also low EBP implementation in PMTCT programs (Mulenga & Naidoo 2017)

Nationwide supervision reports showed that nurses in the public sector do not apply research evidence in care provision (MOH 2016). This shows that the utilization of research evidence in NMC delivery is a real challenge that requires urgent action.

Factors underlying low implementation of EBP in the delivery of NMC: There is no specific study that has documented factors underlying the low implementation of EBP in NMC delivery in Malawi. Still, factors that were identified from the studies done elsewhere, also apply to Malawi. The factors include a lack of: libraries with recent journals; EBP education, training, and mentorship programs; time for accessing and appraising evidence; guidelines and protocols; systems and support for EBP (Fristedt, Areskoug-Josefsson, & Kammerlind 2016; Mohsen, Safaan & Okby 2016; Baird and Miller, 2015; Hadgu et al. 2015; Farokhzadian, Khajouei & Ahmadian 2015; Baiomy, Ekram, and Khalek 2015; Marshall et al. 2014). Specifically, the institutional libraries in Malawi do not have nursing and medical journals, working computers, and the internet for nurses to conduct a thorough search and retrieval of evidence that can support EBP.

Education, training, and mentorship are promising strategies for promoting EBP among nurses, they increase EBP knowledge and skills including the utilization of evidence in decision-making (Balneaves et al. 2015; Fristedt, et al. 2016; Farokhzadian, et al, 2015). In Malawi, Nurses and Midwives (NMs) lack knowledge and skills in search strategies and databases, due to a lack of structured, facility-based EBP education, training, and mentorship programs for nurses and midwives. In addition, most nurse leaders do not have EBP knowledge and experiences to mentor and guide junior NMs.

Correspondingly, there is a lack of a strong system, management, supportive leadership, and general support for EBP. There is no: specific budget line for EBP resources; EBP norms to influence behaviours and receptive context for change. The facilities also lack EBP implementation models to guide the implementation of change in practice

Besides, there is no stakeholder engagement for EBP implementation. For instance, there is no corroboration forum between researchers, policy-makers, managers, and NM practitioners. Such forums are important for knowledge transfer; sharing of real problems that require research; communication of results, and areas desiring change.

Furthermore, there are no clear-cut interventions to improve the delivery of EBP at the service delivery level. Although there is a national research agenda to guide the implementation of research and EBP approaches in health care (MOH, 2023); there are no detailed guidelines to guide nurses and midwives on how to implement EBP.

A personal obligation to work in line with EBP is a stepping stone to the improvement of EBP (Fristedt et al. 2016). In this line, NMs' job descriptions include the use of EBP approaches in the delivery of NMC as their formal role, to encourage them to work within that scope as an obligation (MOH, 2024). That is why this policy brief is important to provide valuable information and present options that can guide nurses on the actual utilization of research evidence to improve the delivery of EBP-NMC.

Policy options

EBP-NMC delivery cannot be emphasized, it leads to safe, effective, cost-effective and quality care. The following sections offer potential options for improving the implementation of EBP-NMC. The policy options can be used independently, or concurrently to complement each other. From the literature, it has become clear that there is a need to:

Policy option 1: Establish a system of implementing EBNMC innovation and tackling EBNMC challenges.

Policy option 2: Increasing practitioner's autonomy and build their capacities to conduct implementation/ operational research

Policy option 3: Building a sustainable collaboration for EBNMC provision between researchers, policy-makers, managers, and nursing and midwifery practitioners.

Policy Option 1: Establish a system of implementing EBNMP innovations and tackling EBNMP challenges

This option will allow institutions to reposition themselves and design ways to overcome the hindrances to EBNMP delivery. There is a need to:

1. Build the capacity of the NMs workforce through regular in-service education, mentorship, and training programs for practitioners to be able to: identify gaps/ problems; and gather, appraise, select, and apply the best research evidence to effect the desired changes.
2. Institute a system of EBP delivery with strong leadership, clear vision, culture, and receptive environment, tools (EBP guidelines and protocols); resources for implementation of EBP. It includes allocation of a budget line for resources; time for EBP implementation; investing in informatics infrastructure (libraries with up-to-date literature or journals, computers, and internet); and establishing mechanisms for sharing results, and best practices.

Policy Option 2: Increasing practitioner's autonomy and build their capacities to conduct implementation/ operational research to generate Malawian-specific data to be integrated into the development of recommendations and try out evidence based models to improve service delivery

This policy option will allow implementation or conducting of operational research to: generate context-specific evidence relating to Malawian implementation processes to discover real factors influencing the implementation of evidence-based intervention; introduce potential solutions into NMC provision; guide scaling up and sustainability interventions. As such, it requires:

1. Institutions to strengthen functions of the focal departments for implementation or operation research.
2. Strengthening the capability of NMs to identify gaps; frame research questions; design and implement innovations and evaluate the efficacy of the intervention.
3. Introducing and testing/ piloting approaches, and adopting EBP models to guide practitioners, policy-makers, and interested stakeholders.

***Policy option 3:* Building a sustainable collaboration for EBNMC provision between researchers, policy-makers, managers, and nursing and midwifery practitioners.**

Collaboration between researchers and knowledge users is essential for the successful implementation of EBP among collaborative stakeholders (Dipankui, 2017). This option will allow researchers and knowledge users to discover key issues for a successful collaboration, such as:

1. Formulate collaborative policies or procedures or a memorandum of understanding between researchers and knowledge users (managers, decision-makers, and practitioners) to support the collaboration
2. Establish a forum of collaboration (regular technical working group, face-to-face care review meetings,) where policymakers, decision-makers, and nursing and midwifery practitioners will be interacting with researchers.
3. Partnerships between researchers and managers/ practitioners, to jointly fund and implement operation research projects or best practices.
4. Regular organization of care conferences or dissemination meetings together to facilitate the sharing and adoption of best practices to the wider community of nurses.

Implementation Considerations

Facilitating implementation of the policy options requires changing the status quo and effective planning of intervention that will facilitate the movement of evidence into practice. So, stakeholders should focus on strategies that can drive the implementation of EBP and address barriers to EBP implementation such as:

1. Establishing a system with resources and necessary tools (vision, guidelines, procedure) for EBP which supports integrating the options into the institutional structure.
2. Strengthening systems for knowledge transfer.
3. Strengthening capacity, capability, and empowerment of practitioners to implement innovations
4. Installing EBP organizational culture and proactive leadership that support and promote knowledge generation, utilization, and sharing.
5. Establishing and strengthening clinical systems of

generating, accessing, utilizing, and disseminating local evidence, to support decision-making; and

6. Establishing and maintaining clear communication channels among, academics/researchers, policy-makers, managers, and practitioners.

Barriers and strategies for addressing implementation barriers

1. Low drive for EBP implementation (most managers, nurses, and midwives agree by mouth that implementation of EBP is important, but do not take action)

i. Mobilize managers and practitioners for EBP implementation.

ii. Advocate for inclusion of EBP activities in implementation plans

2. Inadequate resources for the implementation of EBP

i. Introduce a budget line to support EBP initiatives

ii. Mobilize support from partners interested in promoting EBPs

3. Lack of capable (knowledgeable, skilled, experienced, and autonomous) nurses and midwives.

i. In-service education and training of providers

ii. Mentorship of providers

iii. Regular supportive supervision of NMs

4. Lack of guidelines and /or strategies to direct and guide EBP implementation

Develop or revise existing care guidelines to include EBP

5. EBP not integrated into NMC provision

• Pilot models that facilitate the integration of EBP initiatives into NMC provision

Next steps

This policy brief has provided evidence on the magnitude of problems related to EBP in NMC and the options are a stepping stone toward effective implementation of EBP-NMC. The best step is to utilize this brief to inform deliberations about policies, plans, and programs. The options are viable to improve research evidence utilization in NMP. However, operational studies are key to trying out models that can improve the delivery of EBP-NMC and contribute to the body of knowledge for EBP for Malawi.

References

Agbedia, C., Okoronkwo, I., Onokayeigho, E. and Agbo, M.A., 2014. Nurses' perspective of the research-practice gap in nursing. Open Journal of Nursing, 2014.

Baiomy, S. and Khalek, E.A., 2015. Factors influencing effective implementation of evidence-based practice among nurses in Assiut city hospitals, Egypt: A Comparative Study. IOSR J Nurs Heal Sci, 4, pp.11-9.

Black, A.T., Balneaves, L.G., Garossino, C., Puyat, J.H. and Qian, H., 2015. Promoting evidence-based practice through a research training program for point-of-care clinicians. JONA: The Journal of Nursing Administration, 45(1), pp.14-20.

Chiwaula, C.H., Kanjakaya, P., Chipeta, D., Chikatipwa, A., Kalimbuka, T., Zyambo, L., Nkata, S. and Jere, D.L., 2021. Introducing evidence based practice in nursing care delivery, utilizing the Iowa model in intensive care unit at Kamuzu Central Hospital, Malawi. International Journal of Africa Nursing Sciences, 14, p.100272.

Corluka, A., Cohen, M., Lanktree, E. and Larocque, R., 2014. Uptake and impact of research for evidence-based practice: lessons from the Africa Health Systems Initiative Support to African Research Partnerships. BMC Health Services Research, 14(Suppl 1), p.I1.

Dang, D., Dearholt, S.L., Bissett, K., Ascenzi, J. and Whalen, M., 2021. Johns Hopkins evidence-based practice for nurses and healthcare professionals: Model and guidelines. Sigma Theta Tau.

Farokhzadian, J., Khajouei, R. and Ahmadian, L., 2015. Evaluating factors associated with implementing evidence -based practice in nursing. Journal of evaluation in clinical practice, 21(6), pp.1107-1113.

Forrest, J.L. and Overman, P., 2013. Keeping current: a commitment to patient care excellence through evidence based practice. American Dental Hygienists' Association, 87(suppl 1), pp.33-40.

Fristedt, S., Areskoug Josefsson, K. and Kammerlind, A.S., 2016. Factors influencing the use of evidence-based practice among physiotherapists and occupational therapists in their clinical work. Internet Journal of Allied Health Sciences and Practice, 14(3), p.7.

Hadgu, G., Almaz, S., Tsehay, S.J.A.J.N.S., Almaz, S. and Tsehay, S.J.A.J.N.S., 2015. Assessment of nurses' perceptions and barriers on evidence-based practice in Tikur

Anbessa Specialized Hospital Addis Ababa Ethiopia. Am J Nurs Sci, 4(3), pp.73-83

Marshall, J.G., Morgan, J.C., Klem, M.L., Thompson, C.A. and Wells, A.L., 2014. The Value of Library and Information Services in Nursing and Patient Care. Online journal of issues in nursing, 19(3).

Melnyk, B.M., Gallagher-Ford, L., Thomas, B.K., Troseth, M., Wyngarden, K. and Szalacha, L., 2016. A study of chief nurse executives indicates low prioritization of evidence-based practice and shortcomings in hospital performance metrics across the United States. Worldviews on Evidence -Based Nursing, 13(1), pp.6-14.

Ministry of Health., 2016. The national-wide supervision report 2015 – 2016.

Ministry of Health., 2023. The National Research Agenda 2023– 2030.

Ministry of Health., 2024. Job description for the Nursing and Midwifery Directorate

Ministry of Health and Population., 2018. Nursing and Midwifery Policy.

Naderkhah, Z., Kalhor, R., Azmal, M., Badpa, M., Adel, A. and Marnani, A.B., 2016. The evaluation of the level of knowledge, attitude, and practice of evidence-based practice and its barriers among nurses working in selected Iranian hospitals. Journal of Biology and Today's World, 5 (9), pp.163-168

Naidoo, J.R. and Mulenga, C., 2017. Nurses' knowledge, attitudes, and practices regarding evidence-based practice in the prevention of mother-to-child transmission of HIV programme in Malawi. curationis, 40(1), pp.1-8.

Nibbelink, C.W. and Brewer, B.B., 2018. Decision-making in nursing practice: An integrative literature review. Journal of Clinical Nursing, 27(5-6), pp.917-928.

Saunders, H. and Vehviläinen-Julkunen, K., 2016. The state of readiness for evidence-based practice among nurses: An integrative review. International journal of nursing studies, 56, pp.128-140.

Spruce, L., 2015. Back to basics: Implementing evidence-based practice. AORN journal, 101(1), pp.106-114.

Stokke, K., Olsen, N.R., Espehaug, B. and Nortvedt, M.W., 2014. Evidence based practice beliefs and implementation among nurses: a cross-sectional study. BMC nursing, 13, pp.1-10.

Original Research

Exploring Factors affecting Early Initiation of Breastfeeding (EIBF) among mothers in Phalombe District Health Facility, Malawi

Malawi Journal of Nursing and Midwifery *For volume 1, issue 1, published 2026*

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Dates
Received: October 31, 2024
Accepted: April 26, 2026
Published: August 31, 2026

Abstract

INTRODUCTION: Initiation of breastfeeding within one hour after birth is the recommended breastfeeding practice endorsed by the World Health Organization (WHO) for its benefits to the baby. Despite the many benefits of Early Initiation of Breastfeeding (EIBF), its practice in Malawi is sub-optimal as 40% of newborns are not initiated on breastfeeding timely. This indicates that there may be several factors affecting the EIBF uptake. We conducted a study to explore factors that promote and disenable early initiation of breastfeeding among mothers in Phalombe District.

Methods: This was a descriptive qualitative study using in-depth interviews with mothers who delivered at Phalombe Health Centre. Fifteen participants were purposively selected and interviewed guided by a semi-structured interview guide. All interviews were audio recorded and transcribed verbatim. The data was analyzed manually using Conventional Content Analysis, which led to the emergence of promoting and hindering factors to EIBF

Findings: Themes that emerged from the data were EIBF knowledge and experience, support and complications. Themes that affected EIBF positively were EIBF experience from past deliveries, EIBF support from health workers and guardians received during delivery, positive mothers' perceptions about colostrum while inadequate prenatal preparation, lack of knowledge on EIBF, routine hospital practices after delivery of the baby, twin delivery, and poor support from health workers in the labor ward disenabled EIBF. The study suggests that giving adequate information about EIBF during antenatal care, adequate staffing, supporting mothers, and delaying routine hospital practices can improve the practice of EIBF.

Conclusion: The findings have shown information gaps among women in the childbearing group. The study suggests that providing education to mother on EIBF and continued support during the birthing period are critical intervention to promote EIBF.

Background

Globally, about 820,000 under-five children die yearly with 6,500 neonatal deaths every day due to diarrhea and pneumonia (WHO; UNICEF, 2018). These deaths are partly attributed to delays in initiating breastfeeding and according to World Health Organization, only half of the newborns worldwide are timely initiated breastfeeding (WHO; UNICEF, 2018). The Malawi, multiple indicator survey reports for 2021 shows that the infant mortality rate is at 40 per 1000 live births which is a poor performance. Phalombe district has a higher infant mortality rate of 69 per 1000 live births which is above the national performance of 40 per 1000, the neonatal mortality rate for Phalombe district has increased from 31 per 1000 live births in 2010 to 40 per 1000 and above the national neonatal mortality rate (NSO and Macro, 2011; NSO, 2021)

The neonatal mortality rate for Phalombe district indicates that one of the causes of increased neonatal mortality was poor infant feeding which increased the number of diarrhea cases that led to severe dehydration and hypoglycemia (HMIS, 2022). Some studies indicate that promoting, protecting, and supporting optimal breastfeeding practices is crucial for child survival because the first hours and days after birth are the most critical times for newborn survival, and delaying the initiation of breastfeeding places the baby at an increased risk of death (Kalisa et al., 2016).

To maximize these benefits to all Malawian neonates, the government of Malawi is committed to promoting and supporting optimal breastfeeding practices through the implemen-

tation of different strategies and program interventions. Some of the interventions being implemented are the Baby-Friendly Hospital Initiative (BFHI), National Nutrition Policy with Infant and Young Child Feeding guidelines, Integrated HIV Clinical Management, and PMTCT guidelines.

The government of Malawi first adopted the Baby-Friendly Hospital Initiative (BFHI) in 1993 (Kavle et al., 2019) and started implementing the program under the nutrition department. Phalombe district started to implement BFHI in 2017 with the help of implementing partners to promote, protect, and support breastfeeding practices. The District conducted training of health workers and dissemination of breastfeeding messages to health workers and communities as capacity building were done with an aim of sharing knowledge to improve child health indicators (Kavle et al., 2019). Despite these efforts, mothers still have information gaps about EIBF hence the prevalence of early initiation of breastfeeding within 1 hour after birth of life was only 40% by 2021 and 2022 (HMIS, 2022). The factors affecting the recommended practice of EIBF have not been well established. Therefore, the study was conducted to explore factors affecting early initiation of breastfeeding among postpartum mothers.

Methods

Study design: We conducted an exploratory descriptive qualitative study between December 2022 and February 2023. The study was conducted among 15 postpartum mothers to explore factors affecting early initiation of breastfeeding. The design was chosen because is able to give a reflection of lived in experiences and enabled the researcher to have a deeper understanding of the promoting and hindering factors of EIBF practice.

Setting: The study was conducted at Phalombe Health Centre which was also acting as a District Hospital because the district had no Hospital by then. The Facility had the largest catchment population of 55874 and was among Health Centers with a low prevalence of EIBF of 40 percent (HMIS, 2022). The facility manages approximately 10,000 deliveries every year.

Sampling and selection of study participants: Researchers purposively sampled 15 postpartum mothers who had given birth to a live baby within 24 hours. The mothers had just experienced the birth and delivery process within 24 hours and had a newborn baby eligible for early initiation of breastfeeding. The postpartum mothers in this study were above 18 years old, either married or not, with one or more children, educated or not, with a normal newborn and were willing to participate in the study as they gave consent.

Data collection: In-depth interviews were conducted using a semi-structured guide containing open-ended questions. Data collection was done seven days after delivery of a newborn and was done in the participant's homes to allow mothers to rest and be in a comfortable position to discuss while they had not forgotten the experiences encountered during the delivery. All interviews were recorded using a digital voice recorder in Chichewa. Each interview lasted approximately 40 - 60 minutes. To complement the audios, field notes were also collected.

Data analysis: Data from the in-depth interviews were transcribed and analyzed manually. The researcher transcribed audio recordings of the interviews and verified the transcription by re-reading the transcribed data while listening to the recorded data. The areas that were incomplete or incorrectly transcribed were noted and corrected. After transcription, the data were analyzed using conventional content analysis. Data from in-depth interviews were read several times to obtain an overview of the gathered data. The researcher took note of the introductory ideas of analytical interest that helped organize the data. The researcher identified and extracted sayings or direct participant quotations from the collected data. The codes were generated and the identified codes were grouped into potential themes. The supervisor reviewed the themes to verify the relationships and reliability of the codes and themes. The researchers considered how each theme fitted into the overall stories about the research questions.

Ethical consideration: The study received ethical approval (P.09/22/3775) from the College of Medicine Research and Ethics Committee (COMREC). The Phalombe District Health Office Research committee which is responsible for the management of all health-related research also granted permission. We also explained the purpose of the study to the facility in-charge and potential participants. Informed consents were obtained from all participants and they agreed to be audio recorded. The voice recorder and transcripts were kept under lock, and keys were accessed by the researchers only to ensure privacy and confidentiality.

Findings

Participant's characteristics: The study comprised 15

postpartum mothers. All participants were married and of the Lomwe tribe. The majority of the mothers (n =10) delayed initiation of breastfeeding. Most of them (n =10) were less than 25 years old, and among them three were first-time mothers. All first-time mothers delayed initiation of breastfeeding. The social demographic information has been summarized in table 1.

Table 1: *Participants social demographic information (n=15)*

Characteristics	Number
Age group	
Less than 25	10
25-29	2
30-34	2
35 and above	1
Marital status	
Married	15
Ethnic group	
Lomwe	15
Religion	
Christianity	13
Moslem	2
Level of education	
Standard 1-4	1
Standard 5-8	9
Form 1-2	1
Form 3-4	4
Number of children	
One child	4
2 or more children	11
Occupation	
Housewife	11
Business	2

The study identified factors that promoted early initiation of breastfeeding and factors that acted as hindrances to EIBF. The factors have been presented in themes according to their categories see Table 2 below that shows the summary of the themes that emerged from the data.

EIBF promoting factors

EIBF experience from past deliveries: Some mothers who had two or more children reported that they managed to initiate breastfeeding timely because they had knowledge and practical experience with EIBF from previous pregnancy and delivery. The experienced mothers reported having some information about EIBF from the health education they received during antenatal visits of previous pregnancies. One mother reported that she learned from the previous pregnancy antenatal visits that when the baby is born, it should be breastfed immediately. She said:

"At antenatal, they encouraged us that once you have given birth to a baby, you must start breastfeeding right away" (Participant #4).

Table 2*: Factors that emerged from the data*

Themes	Sub-themes
EIBF promoting factors	EIBF experience from past deliveries EIBF support from health workers and guardians received during delivery Influence of Mother's Perceptions about Colostrum
EIBF hindering factors	Inadequate prenatal preparation during antenatal care Routine hospital practices after delivery of a baby Poor support from health workers in labour ward

However, it was noted that all first-time mothers delayed initiating breastfeeding because they lacked experience and did not know what to do immediately after the baby was born. One of the first-time mothers reported that she just followed instructions from the midwives because she did not have experience with EIBF but the midwives did not instruct the first-time mothers to initiate breastfeeding. She said:

"We follow what doctors (midwives) say... so could I have told them that they should give me the baby? We follow what they say" (Participant #2).

EIBF support from health workers and guardians, received

during delivery: The study found only five mothers that initiated breastfeeding timely. The few mothers were assisted by a health worker to initiate breastfeeding within 60 minutes after giving birth. One mother said:

"The one who helped with my delivery took good care of me and also cared for me well, and was showing interest to help me" (Participant #11). Another mother said:

"I was told by the doctors that I should hold the baby's buttocks in my palm and the head on the elbow, they meant that this is the only way to carry the baby when breastfeeding" (Participant #2) and also another mother said:

"To me, I can say the health workers told me that I should start breastfeeding the baby and is supposed to have this first milk" (Participant #6).

Additionally, a few mothers also reported that they did not receive support from health workers but received positive support from their guardians to initiate breastfeeding within 1 hour after giving birth. The guardians advised them to initiate breastfeeding while watching them. One mother said:

"My grandmother told me that I should breastfeed the baby immediately and frequently... she said you should breastfeed and she was there watching me closely" (Participant #5).

Influence of Mother's Perceptions about Colostrum

Positive Perceptions about Colostrum: The study found that there were no misconceptions about colostrum, and, therefore did not interfere with early initiation of breastfeeding. All mothers reported that they have positive perceptions about the first milk colostrum that it protects the baby from diseases and it is essential for newborn growth. A certain mother said:

"This milk gives health to the baby and also it protects the baby from infections" (Participant # 4).

No pre-lacteal feeding: The study found that all mothers did not give their newborns any other food or drink apart from breast milk after birth. Mothers reported that they understand that breast milk is the only recommended food for the baby. A certain mother said:

"The moment the baby was born, I was breastfeeding only and the baby was not given anything to drink" (Participant #6).

Another mother said: "The baby was just suckling the milk only, and not drinking any traditional medication" (Participant #13).

Hindrances to EIBF

Inadequate prenatal preparation during antenatal care: This study shows that mothers were not given adequate information about EIBF during antenatal. Some of the reasons mothers were not equipped with information were: giving out general information about pregnancy process and health education sessions neglect by both health workers and mothers. All these led to mothers' knowledge deficit. The majority of mothers were given only general information about breastfeeding, birth preparedness, danger signs, and care during pregnancy. One mother said:
"During health education, it was all about pieces of information concerning delivery, saying when you are pregnant you face minor disorders and also you have to prepare by buying basin, wrappers (Chitenge)…but there was no message of breastfeeding" (Participant #5). Another mother said:

"We were being taught how we can live, what we can eat, how we can care for the pregnancy" (Participant #11).

This indicates that mothers lack knowledge about EIBF hence they fail to make a decision to start breastfeeding immediately after giving birth. While some mothers said had received general information, some said they did not get any health education at all because health workers neglected health education sessions during the antenatal visits. Some mothers reported that during antenatal visits, they were not educated about anything until they finished their scheduled visits. Neglecting health education was also seen among mothers as intentional as the mothers admitted that they absconded health education sessions because it is time-consuming. The reasons the women were giving for health workers neglecting health education were: the midwives were busy during the shift, midwives were coming late for work and found a lot of mothers, hence they neglected health education to cut time and do fast. One mother said:

"…I should not lie, they never liked to teach us maybe just because they used to be few of them sometimes one person, therefore, was found to be busy. Sometimes, the nurse was alone having to attend maternity at the very same time as labor ward… we would find ourselves waiting for him" (Participant #7).

Routine hospital practices after delivery of the baby: Routine hospital practices also interfered with EIBF. The majority of the mothers reported that their babies delayed

starting breastfeeding because immediately after delivery, midwives conducted routine newborn care. The routine care mentioned were: weighing the baby, wrapping the baby in a Chitenge, suturing vaginal tears, documentation, and placing the baby on a weighing scale while continuing caring for the mother. One mother said:

"After the baby was out, the nurse took the baby, put it on my abdomen, dried it well, then he requested for a cloth, covered the baby, and left it on … mm, in the weighing scale, they use in the labor ward. They left the baby in the scale and continued caring for me" (Participant #1).

Twin delivery also affected EIBF as one mother who had twins reported that, having twin delivery delayed the initiation of breastfeeding because the midwives waited a long time for the second twin to be born before initiation of breastfeeding. The mother said that the first twin was born at 3 o'clock while the second one was born at 4 o'clock but she started breastfeeding after the second baby was born, she further said:

"They delayed to suckle because he had not finished caring for me because another one was not yet born therefore it could not be possible to take a baby and start breastfeeding" (Participant #12).

Poor support from health workers in labor ward: The majority of mothers reported that they did not receive practical or emotional support from health workers during and after delivery to initiate breastfeeding within 1 hour. The mothers reported a challenge of inadequate health workers, the mothers also perceived that health workers lacked knowledge and skills of early initiation of breastfeeding, and some midwives had negative attitudes towards mothers. Therefore, these issues caused a delayed initiation of breastfeeding because the midwives were not supportive to the mothers. One mother said:

"…because there was one nurse, therefore, it was impossible to attend to us all at once" (Participant #12). Another participant said:

"It is the same nurse who brought the baby to me but the nurse did not say anything about breastfeeding initiation because there were a lot of patients, he was attending… There were 3 patients but there was only one doctor (nurse)" (Participant #3).

Another mother said: "At labor, they treat us harshly, they need to be advised because they shout at us while we don't know, they just shout. They don't share with you information concerning early initiation of breastfeeding, and instead of instructing you in the right direction, all they know is shouting at us" (Participant #2).

Some mothers reported that they delayed initiating breastfeeding because they did not receive support hence, they lacked the confidence to ask the health worker to give them the baby to start breastfeeding. The few mothers admit that they knew that they were supposed to breastfeed the baby as soon as possible after delivery, but failed because of fearing health workers' comments. The mothers were afraid to be wrong and waited for the health worker to advise them to start breastfeeding which never happened. One mother said:

"I know as soon as the baby is born, and it is given to you, you have to take the breast and give it to the baby, but, because health workers are different, you wait to be told. Maybe you try to take the breast and give it to the baby, then you hear the midwives say that you are wrong" (Participant #9).

Discussion

The study has uncovered factors that promote and disenable the practice of early initiation of breastfeeding. The study has revealed that having two or more children who were breastfed after delivery makes mothers to have experience with EIBF from the previous delivery. Experience assists mothers to practice EIBF and ensures their newborn is breastfed timely. This is similar to the findings of an Ethiopian study, where mothers with four or higher birth deliveries initiate breastfeeding within one hour than mothers with first delivery because they have experience (Shiferaw, Mossa and Gashaw, 2017). This is similar to studies conducted in Nepal-South Asia, which found that first birth orders (first delivery) initiated breastfeeding later than those of second or more birth orders (Ekubay, Berhe and Yisma, 2018; Bhandari, 2019; Seidu et al., 2020). Additionally, some Malawian breastfeeding studies also indicate that mothers with more birth deliveries had increased odds of initiating timely breastfeeding compared to mothers with fewer childbirths because multiparous mothers have previous breastfeeding experience (Nkoka, 2019; Walters et al., 2019; Chipojola et al., 2020). It has been also observed in Ethiopia (Shiferaw, Mossa and Gashaw, 2017) and Nepal that mothers with birth experience initiate breastfeeding timely than first time mothers (Ekubay, Berhe and Yisma, 2018; Belachew, 2019; Bhandari, 2019).

It has been discovered in this study that, women have recently developed a positive perception about colostrum

hence they believe that it is very important to the newborn and they ensure their baby feed on colostrum immediately after birth. Mothers positive perceptions about colostrum and promotion of EIBF was also found in Spain, where women had a positive attitude towards colostrum and they believed that first milk is good for the baby hence the prevalence of EIBF was good above 76% in their country (Atyeo et al., 2017) compared to other countries where women believe that colostrum is dirty (Kalisa et al., 2015; Mukunya et al., 2017). This study has shown that the practice of not giving pre-lacteal feeds promotes EIBF. This is similar to the cross-sectional study findings conducted in Tanzania (35). Prelacteal feeds satisfy the baby fast hence reduces the desire to breastfeed and mothers relax and delay breastfeeding timely.

However, this study demonstrates that majority of women delayed with initiation of breastfeeding because they lacked knowledge about EIBF, lacked health workers practical support after delivery and routine hospital practices which disenable timely initiation of breastfeeding. The mothers were not prepared well antenatally since they did not receive enough information about EIBF for them to decide to start the initiation of breastfeeding as soon as they gave birth. This is similar to the study findings of Rwanda, Bangladesh and Tanzania where 50% of women who initiated breastfeeding timely, had knowledge of EIBF which they gained during antenatal visits and counselling services on breastfeeding and infant feeding (Mwaisela and Mwantimwa, 2018; Belachew, 2019; Lyellu et al., 2020; Mukashyaka et al., 2020). The delay with initiation of breastfeeding also was because they lacked experience with EIBF since some were first-time mothers. (Shiferaw, Mossa and Gashaw, 2017). This is similar to Nepal studies and some parts of Ethiopia where it was discovered that children of first birth order were initiated breastfeeding later than those of second or more birth order (Ekubay, Berhe and Yisma, 2018; Belachew, 2019; Bhandari, 2019; Seidu et al., 2020; Johar et al., 2021).

Most mothers also did not receive EIBF practical support after the delivery of a baby (Seidu et al., 2020). Other studies have also noted that mothers who get practical support from midwives during labor and delivery initiate breastfeeding timely (Atyeo et al., 2017; Nkoka, 2019; Gebretsadik et al., 2020; Mose et al., 2021). Some mothers were delayed because they had a twin delivery (WHO; UNICEF, 2018; Nkoka, 2019; Walters et al., 2019).

A lot of mothers were delayed because of routine hospital practices after the delivery of the baby (Johar et al., 2021). The mothers did not receive support because of inadequate health workers (Bradley et al., 2015; WHO and UNICEF, 2022). This was also found in Uganda, where there was inadequate professional support to initiate breastfeeding because of work overload which reduces the capacity to provide adequate breastfeeding counseling and support (Kalisa et al., 2015; Kinshella et al., 2021).

Additionally, some mothers failed to practice EIBF because they lacked the confidence to request the midwives to give them their newborns for breastfeeding initiation. The mothers feared the health workers hence they remained silent waiting for midwives' instruction (Mapumulo et al., 2021). This is against the WHO recommendations as it advocates for mother-friendly care which ensures respectful and loving care to all mothers (WHO and UNICEF, 2022).

Strength and limitation

The strengths of the study are the diversity of characteristics of study participants in terms of ages, parity, education and marital status of the mothers, this provided rich data about experiences and perspectives of mothers. Secondly, the study has uncovered factors that promote and hinder the practice of early initiation of breastfeeding. However, the study was conducted at Phalombe Hospital and a small sample size was used hence findings cannot be generalized to the whole population in Malawi. The limitation resulted from the time constraints of the researcher.

Conclusion

The study has described some of the factors that promote or hinder early initiation of breastfeeding. The findings point out the importance of knowledge about early initiation of breastfeeding that can be gained during antenatal care and the support mothers need during prenatal, intrapartum, and postpartum to accomplish early initiation of breastfeeding as soon as they give birth. Mothers need to be prepared adequately during antenatal for them to make an informed decision about feeding their newborns as soon as possible after birth and develop good intentions for practicing early initiation of breastfeeding.

Acknowledgments

The author would like to appreciate the invaluable contributions of all who assisted with the data collection and reviewing of this article; Ministry of Health for the financial support and Kamuzu University of Health Sciences.

Conflict of interest

The author declares no conflict of interest.

References

Atyeo, N.N. et al. (2017) "Early Initiation of Breastfeeding Among Maya Mothers in the Western Highlands of Guatemala: Practices and Beliefs," Journal of Human Lactation, 33(4), pp. 781–789. Available at: https://doi.org/10.1177/0890334416682729.

Belachew, A. (2019) "Timely initiation of breastfeeding and associated factors among mothers of infants age 0–6 months old in Bahir Dar City, Northwest, Ethiopia, 2017: a community based cross-sectional study."

Bhandari, S. (2019) "Determinants of infant breastfeeding practices in Nepal: a national study," International Breastfeeding Journal, 14(14). Available at: https://doi.org/10.1186/s13006-019-0208-y.

Bradley, S. et al. (2015) "Too few staff, too many patients: a qualitative study of the impact on obstetric care providers and on quality of care in Malawi," BMC Pregnancy and Childbirth, 15, p. 65. Available at: https://doi.org/10.1186/s12884-015-0492-5.

Chipojola, R. et al. (2020) "Determinants of breastfeeding practices among mothers in Malawi: a population-based survey," International Health, 12(2), pp. 132–141. Available at: https://doi.org/10.1093/inthealth/ihz034.

Ekubay, M., Berhe, A. and Yisma, E. (2018) "Initiation of breastfeeding within one hour of birth among mothers with infants younger than or equal to 6 months of age attending public health institutions in Addis Ababa, Ethiopia," International Breastfeeding Journal, 13(1), p. 4. Available at: https://doi.org/10.1186/s13006-018-0146-0.

Gebretsadik, G.G. et al. (2020) "Early initiation of breastfeeding, colostrum avoidance, and their associated factors among mothers with under one year old children in rural pastoralist communities of Afar, Northeast Ethiopia: a cross sectional study," BMC Pregnancy and Childbirth, 20(1), p. 448. Available at: https://doi.org/10.1186/s12884-020-03151-z.

HMIS (2022) "Phalombe District Health Information System (DHIS 2)."

Johar, N. et al. (2021) "Factors Associated with Early Breastfeeding Initiation among Women Who Underwent Cesarean Delivery at Tertiary Hospitals in Kelantan, Malaysia," Korean Journal of Family Medicine, 42(2), pp. 140–149. Available at: https://doi.org/10.4082/kjfm.19.0178.

Kalisa, R. et al. (2015) "Magnitude and factors associated with delayed initiation of breastfeeding among mothers who deliver in Mulago hospital, Uganda," African Health Sciences, 15(4), pp. 1130–1135. Available at: https://doi.org/10.4314/ahs.v15i4.11.

Kalisa, R. et al. (2016) "Magnitude and factors associated with delayed initiation of breastfeeding among mothers who deliver in Mulago hospital, Uganda.," African Health Sciences, 15(4), p. 1130. Available at: https://doi.org/10.4314/ahs.v15i4.11.

Kavle, J.A. et al. (2019) "The revitalization and scale-up of the BABY-FRIENDLY HOSPITAL INITIATIVE in Malawi," Maternal & Child Nutrition, 15(S1), p. e12724. Available at: https://doi.org/10.1111/mcn.12724.

Kinshella, M.-L.W. et al. (2021) "Barriers and facilitators for early and exclusive breastfeeding in health facilities in Sub-Saharan Africa: a systematic review," Global Health Research and Policy, 6(1), p. 21. Available at: https://doi.org/10.1186/s41256-021-00206-2.

Kiwango, F. et al. (2020) "Prevalence and factors associated with timely initiation of breastfeeding in Kilimanjaro region, northern Tanzania: a cross-sectional study," BMC Pregnancy and Childbirth, 20, p. 505. Available at: https://doi.org/10.1186/s12884-020-03209-y.

Lyellu, H.Y. et al. (2020) "Prevalence and factors associated with early initiation of breastfeeding among women in Moshi municipal, northern Tanzania," BMC Pregnancy and Childbirth, 20(1), p. 285. Available at: https://doi.org/10.1186/s12884-020-02966-0.

Mapumulo, S. et al. (2021) "Health workers' disrespectful and abusive behaviour towards women during labour and delivery: A qualitative study in Durban, South Africa," PLoS ONE, 16(12). Available at: https://doi.org/10.1371/journal.pone.0261204.

Mose, A. et al. (2021) "Colostrum avoidance practice and associated factors among mothers of children aged less than six months in Bure District, Amhara Region, North West, Ethiopia: A community-based cross-sectional study," PLOS ONE. Edited by M.Y. Oncel, 16(1), p. e0245233. Available at: https://doi.org/10.1371/journal.pone.0245233.

Mukashyaka, J. et al. (2020) "Early Initiation of Breastfeeding Among Postpartum Mothers at Two Rwandan Hospi-

tals," Rwanda Journal of Medicine and Health Sciences, 3 (2), pp. 181–192. Available at: https://doi.org/10.4314/rjmhs.v3i2.8.

Mukunya, D. et al. (2017) "Factors associated with delayed initiation of breastfeeding: a survey in Northern Uganda," Global Health Action, 10(1), p. 1410975. Available: https://doi.org/10.1080/16549716.2017.1410975.

Mwaisela, N. and Mwantimwa, K. (2018) "Breastfeeding information seeking behaviour among parents in Mbeya City, Tanzania," Tanzania Journal of Health Research, 20 (3). Available at: https://doi.org/10.4314/thrb.v20i3.8.

Nkoka, O. (2019) "Determinants of timely initiation of breast milk and exclusive breastfeeding in Malawi: a population-based cross-sectional study."

NSO (2021) "Malawi Multiple Indicator Cluster Survey (MICS) 2019-20 for research.pdf."

NSO, M. and Macro, M. (2011) "Malawi Demographic and Health Survey 2010. https://dhsprogram.com/publications/publication-fr247-dhs-final-reports.cfm."

Seidu, A.-A. et al. (2020) "Determinants of early initiation of breastfeeding in Ghana: a population-based cross-sectional study using the 2014 Demographic and Health Survey data," BMC Pregnancy and Childbirth, 20(1), p. 632. Available at: https://doi.org/10.1186/s12884-020-03308-w.

Shiferaw, B.Z., Mossa, K.A. and Gashaw, B.T. (2017) "Factors Associated with Early Initiation and Exclusive Breastfeeding Practices among Mothers of Infant's Age Less Than 6 Months," Journal of Pediatrics & Neonatal Care, Volume 7(Issue 3). Available at: https://doi.org/10.15406/jpnc.2017.07.00292.

Walters, C.N. et al. (2019) "Maternal determinants of optimal breastfeeding and complementary feeding and their association with child undernutrition in Malawi (2015–2016)," BMC Public Health, 19(1), p. 1503. Available: https://doi.org/10.1186/s12889-019-7877-8.

WHO and UNICEF (2022) IMPLEMENTATION GUIDANCE-Protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services: the revised BABY-FRIENDLY HOSPITAL INITIATIVE. Brazzaville: Organisation mondiale de la Santé. Bureau régional de l'Afrique. Available at: https://apps.who.int/iris/handle/10665/352681 (Accessed: April 8, 2022).

World Health Organization and United Nations Children's Fund (UNICEF) (2018) Implementation guidance: protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services: the revised baby-friendly hospital initiative. Geneva: World Health Organization. Available at: https://iris.who.int/handle/10665/272943 (Accessed: September 26, 2023).

Original Research

Perceptions of Midwifery care providers and women on dynamic birth positions: Insights from ALERT study sites Ntcheu and St Gabriel hospitals in Malawi

Malawi Journal of Nursing and Midwifery *For volume 1, issue 1, published 2026*

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Dates
Received: February 21, 2025
Accepted: April 26, 2026
Published: August 31, 2026

Abstract

BACKGROUND: Malawi's Ministry of Health incorporated dynamic birth positions into strategies aimed at reducing maternal and neonatal mortality rates. Overreliance on supine birthing position has hindered progress in improving childbirth practices. This study sought to explore how midwifery care providers and women perceive dynamic birth positions within the ALERT study sites.

Method: The study used qualitative thematic analysis of ALERT data conducted in two maternity care units in Malawi. Data collection methods included 12 semi-structured interviews for midwifery care providers, 24 semi structured interviews with women, and 2 focus group discussions with midwifery care providers. Purposive sampling was used and NVIVO 14 was used to organize the data and thematic analysis was conducted.

Results: Themes like insufficient knowledge, environmental factors, Cultural norms, reduced autonomy shaped practices.

Conclusion: The study revealed that systemic, cultural, and resource-related barriers hinder the adoption of dynamic birth positions in Malawi. There is an urgent need for the development and implementation of policies that can empower midwifery care providers to support and use the dynamic birth positions during child birth.

Keywords: Perception, dynamic birth positions, midwifery care providers, women

Background

The World Health Organization (WHO) recommends using dynamic birth positions to enhance labour outcomes (Oladapo et al., 2018). Dynamic birth positions such as standing, squatting or kneeling improves intrapartum care and outcomes (Lindgren et al., 2024). Globally, lack of utilizing the birthing positions during child birth has contributed to 75% of maternal deaths (Asnawi et al., 2023) . Lithotomy position is commonly used (Fatma et al., 2025). However, birth attendants has not taken into consideration laboring women's comfort and preference (Meyvis et al., 2012). In sub-Saharan Africa, up to 94% of the women use the supine position(World Health Organization, 2014). The region accounts for 70% of maternal deaths whose major contributing factor being delivery complications (WHO, 2022).

In Malawi, 94.1% of women gave birth in lithotomy position (Zileni et al., 2021).Maternity care providers influence 95.7% of women to give birth in lithotomy positions (Benyamini et al., 2024).The ministry of Health in Malawi, highlighted that the quality of care during childbirth is greatly influenced by the attitudes, beliefs, and behaviors of maternity care providers (Ministry of Health, 2020). This study aims to close that gap of limited knowledge on why there is overreliance on supine birthing position. The insights gained will provide a foundation for designing targeted interventions and training programs that empower midwifery care providers with the skills and confidence to support women in adopting dynamic birth positions.

Methodology

Study design: Qualitative thematic analysis of data from the ALERT study was done. There were a total of 38 transcripts of which data collection methods included 12 semi-structured interviews for midwifery care providers, 24 semi structured interviews with women and 2 focus group discussions with heath care providers. The qualitative data was organized for analysis using the NVIVO 14 software data package. Using data-driven codes found from reading transcripts, coding scheme that combined codes for essential ideas associated with the study's goals was created. Reduction techniques were used to

group the data into subthemes. Thematic analysis was conducted guided by the Social Cognitive theory.

Study setting: Ntcheu district hospital and St Gabriel maternity care units in central region of Malawi served as the study sites. The facilities were chosen because of the large patient population they served. In 2021, there were 2936 births at St Gabriel hospital and 7853 births at Ntcheu hospital. Ntcheu is government owned, provide free services to larger population while St Gabriel is a faith-based institution with a fee- for-service model and handles lower volume of population. This difference in ownership offers a chance to evaluate the policies and practices used by these institutions.

Study population: The study used data collected by ALERT from midwifery care providers and women who delivered in the included hospitals and had one fetus of at least 1000g (live or stillbirth). Purposive sampling was used to ensure maximum variation in terms of health care role and years of experience of maternity care providers. Forty midwives and 6 clinical officers were selected. The participants had between 2-11 years of working experience in a maternity care setting. Data was collected from both male and female midwifery care providers working on day and night shifts in maternity unit. The study excluded women seen in second stage of labor, women who delivered in another hospital but received care in the targeted hospitals after childbirth and those with complications.

Sample size: The concept of information power was used to determine the appropriate sample size. According to Information Power, the study's objectives, scope, data quality, researcher experience, participant accessibility, diversity of viewpoints, and the idea of data saturation was taken into consideration when determining the appropriate sample size (Malterud et al., 2016) .In this regard, there was a total of 38 transcripts that were analyzed.

Data collection process: Researcher requested access to the relevant dataset from the ALERT. Data was collected by experienced qualitative researchers between December 2020 and January 2021. Institutional permission and data sharing agreement was sought from the ALERT. Relevant Data variables, including perceptions of birth positions of midwifery care providers' and women's and their involvement in child birth, was extracted. The data sharing period commenced on 1st March 2024 until 1st March 2026. Upon the conclusion of the data sharing period, the recipient returned all copies of the data, including any derived materials, and certify the secure destruction.

Analyzing data collected through conducting interviews, focus groups, and observations allowed us to triangulate findings, capturing a deeper understanding of how work environment ,autonomy and knowledge affects the perceptions of midwifery care providers and women on dynamic birth position.

Data management and analysis: Transcripts that included data regarding the dynamic birth positions were extracted from the database with the help of the clinical coordinator. Transcripts were exported and stored in a password protected computer and a protected folder. NVIVO 14 was used to organize the qualitative data for analysis. Coding was done by the researcher with periodic checks by the co- supervisor for inter-coder discrepancies. Data driven inductive coding technique was used to identify the patterns, themes and meanings that arose from the data. Codes were analyzed using data reduction techniques to look for subthemes and trends throughout the transcripts. Qualitative thematic content analysis was used to analyze the data.

Ethical consideration: The study ensured patient privacy and confidentiality by closely adhering to ethical norms on using secondary data. The College of Medicine Research Ethics Committee (COMREC) provided ethical clearance. Administrative approval was acquired from the ALERT before the study began. Further permission was sought from the Director of Health and Social Services (DHSS) for Ntcheu and St Gabriel hospitals. All information and names were treated with extreme anonymity to safeguard and preserve the privacy of medical personnel and patients.

Findings

Knowledge of midwifery care providers and women on dynamic birth Positions: The findings across both hospitals is that awareness of dynamic birth positions exists among midwifery care providers and women. Midwifery care Providers in both settings learned about positions such as squatting, side-lying, or supine during formal training, while women often discovered them through personal exploration. This reflects a socio-cognitive dynamic where professional knowledge and experiential knowledge intersect, shaping shared understanding of

Table 1: Summary of results; themes, sub-themes and codes were developed as presented in Table below:

Themes	Subthemes	Codes
Knowledge of providers and women on dynamic birth positions	Awareness and Education	Formal education on dynamic birth positions Exploration Self-discovery
	Perception of Dynamic Birth Positions by women and providers	Differs with birthing experiences Happy with birthing positions Just want to give birth Pain relief measures Needs competent providers
	Alternative Birth Positions known by providers and women	Standing Sitting Squatting Side lying
Environment, resources and context	Reasons for not guiding Women on Dynamic Birth Positions	Health workers not competent Women Following culture beliefs and tradition Personal experience Mothers comfort levels on traditional positions Flexibility of health care workers No protocols and guidelines
	Labour ward during child birth	Private Free Conducive Open space Not hearing from each other Allowing female guardians only
Decision making and autonomy of women during child birth	Reason for Not Choosing Birth Position	Not given a chance Midwives Insisted women to use traditional method Not aware of different birthing positions
	Autonomy of women during Childbirth	Recommended birthing position -traditional position It's a rule to be in lithotomy Women don't have a choice

dynamic birth positions during child birth. One provider expressed their knowledge by stating:

"They can squat; they can place one leg on something…. They can lie down, lie sideways" (MW02- In depth interview 04 with a health care worker).

Practical experience on use of alternative birthing positions: Findings show that the lack of on job training and opportunities to practice affected midwifery care providers ability to consolidate or enhance their skills on use of alternative birthing positions in two hospitals. Despite receiving formal training, almost all Midwifery care providers used the lithotomy position and not the alternative birthing positions as described below:

"We do not have experiences on them. So we cannot be telling them of the positions we do not have experience on. So we tell them to sleep in lithotomy." (MW02 In depth interview 04 with a health care worker).

Cultural practices and social norms on dynamic birth positions: The findings suggested that Midwifery care providers aligned their birthing practices with the prevailing cultural practices and norms. It was reported that women preferred the conventional supine position in line with the existing cultural expectations. These cultural norms and expectations shaped women's choices during child birth. Women further mentioned that they received guidance from their families on birthing positions. Mostly, the lithotomy position was encouraged through a demonstration. This makes it difficult for women to adopt alternative birthing positions.

"I think it is due to tradition that a woman has to sleep in an upward position. Even if we ask one lady to explain how a woman should be when giving birth she will say that a

woman has to be in the upward position. Maybe that is what they adopted from their ancestors." (MWO2-In depth interview 5 -health care provider).

"That this is how you should do it there and they also do it based on what their parents told them that you should do like this…. And here we also tell them to do…. do the same things. They cannot choose…. other ways to deliver, they feel like they are going to commit a crime I believe" (MW04-In depth interview 05 with health care worker).

Midwifery care providers Training: The study found that all providers (Government and Faith based hospitals) had the same level of training and knowledge on dynamic birth positions. In the government hospital, the reliance on lithotomy position was framed as a matter of clinical practicality. Midwifery care providers expressed that they lacked experience regarding alternative birthing positions and therefore could not confidently instruct women to use them. In the faith-based hospital, however, the lithotomy position was reinforced as part of institutional rules and cultural authority. Women described being directed into specific positions as non-negotiable. Thus, while both hospitals limited the use of alternatives birthing positions, the government hospital emphasized lack of skill and practice, whereas the faith-based hospital emphasized conformity to institutional values.

Despite Midwifery care providers receiving training on dynamic birth positions, many providers did not take into consideration of the women preferences during delivery. This highlights a missed opportunity for patient centered care as expressed by the participant below:

"We are used to them lying on their back……when we tell the woman how to position…am saying this based on my experience, in class we learn that they should Choose but us most of the times we do not…. Like myself I have never asked which Position they are comfortable with when they want to push I have never asked them before….. But what I am used at, they should lie down, hold their knees and push. To Me that is what I am" (MW04-in depth interview 5 with a health care worker)

Environment, Resources and Context during child birth: The findings show that the environment of care was essential for supporting adoption of dynamic birthing positions. For example, privacy both visual and audio, as well as space, made it easy for women to experiment with different postures and motions during labor without feeling exposed or constrained by the presence of others.

Differences in levels of privacy between a Faith-based facility and a Public facility were noted. The Faith-based institution offered enhanced privacy compared with the Public facility. In the faith-based hospital, privacy was prioritized through separate rooms, doors, and curtains, with access restricted to essential personnel. This environment reduced distractions and preserved confidentiality, creating conditions where women could feel secure enough to explore dynamic positions. In contrast, the public hospital struggled with overcrowding, limited space, and inadequate partitions. Women reported being examined or laboring in open wards where others could see them, which discouraged mobility and experimentation with alternative positions.

In addition, the Faith based Hospital offered a physical environment that supported women's comfort and autonomy during labor. The spacious layout of the suites, combined with the presence of movable furniture and unobstructed floor space, created a setting that was conducive to dynamic birth positions. This environment allowed mothers to move freely, adopt positions that eased their pain, and respond intuitively to the progress of labor.

"Yes and that's much encouraged. Most women are encouraged that when they are in labour they should be moving about they shouldn't just be sleeping even though some prefer to just being sleeping. But almost everyone they are encouraged if the labour isn't complete yet, they are encouraged to be moving around" (MW02-In depth interview 07 with health care worker).

The situation in the Public facility was different. The crowded and somewhat cluttered environment, along with limited dedicated space for staff, was not conducive to dynamic birth positions that require more mobility and space. The presence of equipment and crowded surroundings limited the flexibility needed to promote mobility and exploration of alternate birthing positions, potentially impacting the overall comfort and experience of laboring women.

Decision-making and autonomy on dynamic birth positions in childbirth: Decision-making and autonomy on dynamic birth positions during childbirth were shaped by the dynamics between healthcare providers and the women in labor. Midwifery care providers admitted they had never asked women about their preferred positions. Women

simply received instructions to lie down in supine position which was the standard practice during delivery as below.

''There, the mother does not have the choice, we tell them the position to be.'' (MW04 — In depth interview 1 with a health care worker).

"They supposed to choose the position they prefer to be when giving birth but I haven't seen any. We just tell them to lie down, and everything happens while they are in a supine position" (MW04-in depth interview 7 with a health care worker).

Women had similar views on the issue of autonomy. Choice of birth positions was largely restricted both biologically and in practice. Women perceived it as a standard practice to lie on their back during delivery as evident from the quotes:

"The way a child is born it cannot be possible to lie on the sides or otherwise, you are supposed to lie on your back that as you push you should do so well."

(MW04-In depth interview 4 with a Female participant).

In both settings, providers defaulted to instructing women to lie on their backs or adopt the lithotomy position. The women were not consulted about their preferred position during delivery. Participants narrated that they received instructions to lie facing upwards with legs apart (rotating).

"Just facing up and my legs should be apart (rotating)"… and described the directive as a rule "Aaah, it was a rule" (MW02-in depth interview 2 with a mother).

Discussion of results

Knowledge and perceptions of providers and women (cognitive factors)

Midwifery care providers are often aware of various birthing positions, the mostly practiced position is the lithotomy since is more familiar to them and they perceive that is easy to monitor patients (Yuill et al., 2020). This review emphasized that despite the known benefits of alternative positions, the lack of practical experience and institutional support often hinders their implementation. By refining self-efficacy through specialized training programs and fostering supportive settings in institutions, the current practices can be changed to more beneficial dynamic birthing positions.

Similarly, a meta-synthesis found that both women and their partners often prefer dynamic birthing positions, but these preferences are not always supported by healthcare providers (Shorey & Ng, 2023). Women demonstrated awareness of various birth positions and expressed preferences for options like squatting and side-lying due to their perceived comfort and pain relief during labor. However, their knowledge often stemmed from personal exploration rather than guidance from healthcare providers.

This knowledge gap highlights a missed opportunity for providers to empower women with information that could improve their birthing experience. In this regard, it has showed that women's knowledge, self-efficacy, observational learning, and the mutual influence of environmental circumstances and personal behavior impact their birth choices.

Barriers perceived by midwifery care providers and women's regarding dynamic birth positions

Social Factors: The perception of dynamic birth positions among healthcare providers, as influenced by institutional protocols and lack of training. Institutional policies often favor traditional positions due to their perceived ease for monitoring and intervention (Nieuwenhuijze et al., 2014). This aligned with the sentiments expressed by the healthcare providers in the study, who felt constrained by institutional norms and their own comfort levels with traditional positions.

Environmental factors: The results emphasized the significance of a private and conducive environment in labor wards, which is essential for encouraging women to adopt various birthing positions. This aligns with findings from other studies that emphasize the importance of birth environment design in facilitating dynamic birthing positions (Shimoda et al., 2018). Increasing caregivers' self-efficacy through focused training, modifying the birth environment to encourage comfort and privacy, and establishing a culture of positive reinforcement for utilizing a variety of birth positions are some possible treatments to support dynamic birth positions (Kandeya et al., 2025).

Autonomy: The findings highlighted significant challenges in decision-making and autonomy for women during childbirth, particularly regarding their ability to choose preferred birthing positions. This is aligned with findings from

other studies that emphasize the importance of respecting women's autonomy in maternity care (Deherder et al., 2022). For instance, some studies found that many women experienced moderate levels of autonomy in decision-making, with lower autonomy observed when interacting with obstetricians compared to midwives (McMahon et al., 2014). Interventions aimed at improving shared decision-making between women and providers, as well as institutional policies that support flexible birthing practices, are essential for fostering an empowering childbirth experience.

By aligning childbirth practices with the principles of autonomy, flexibility, and evidence-based care, the adoption of dynamic birth positions can become a valuable strategy in improving maternal and neonatal health outcomes in Malawi.

Facilitators perceived by midwifery care providers and women's regarding dynamic birth positions

Supportive Midwifery Care Providers: Labouring women feel empowered when the midwifery care providers actively recognize, encourage, respect their choices and empower them to practice the dynamic birth positions (Priddis et al., 2012). Midwives genuine encouragement and respect fosters a conducive environment where women can exercise their power to control the birth experience. Encouragement is a key facilitator to autonomy (Silva et al., 2024).In both hospitals, midwifery care providers do not support women's choices to exercise the flexible birthing positions.

Peer Influence and Cultural Validations: Women simulate the practice done by the champions from their community (Sanga et al., 2025). By seeing their fellow women doing the upright positions, hearing positive and encouraging feedbacks from their peers, encourage them brings a sense of familiarity and possibility to adopt the dynamic birth positions (Terentius Rugumisa, 2024). Peer- led influence reinforce autonomy and cultural relevance (Gondwe et al., 2025),making flexible positions more acceptable during childbirth. Community engagement in the government hospital is minimal hence they follow the standardized protocols while in faith based hospital is stronger.

Recommendations

Improve labour ward privacy: This will be done by developing private rooms or spaces demarcated with curtains so that women should not see each other during examinations and delivery.

Encourage staff practices to maintain dignity: Midwifery care providers should maintain dignity through empathetic care and informed choices, offer clear instructions, ensure there is both audiovisual privacy all the times.

Enhance Peer Influence and Cultural Validations: There is need for institutions to enhance collaborative environment where experienced staff models and peer role models mentor others on dynamic birth positions while validating cultural norms.

Continuous professional development: Midwifery care providers should be engaged in comprehensive on job trainings and professional development grounded by the principles of SCT .The program should dwell much on trainings and simulations, self- efficacy and observational learnings on benefits of the dynamic birth positions and the importance of autonomy and privacy in order for them to provide the comprehensive midwifery care.

Improved Interaction and supportive Midwifery Care Providers: During labor, make sure that women receive information and instructions that are consistent and easy to understand. This entails describing the benefits of each choice and the reasoning behind a specific opinion in order to help women make informed decisions.

Propose institutionalizing clear protocols or checklists to ensure consistent, respectful information-sharing: It is recommended that Institutions should develop and implement clear protocols and checklists to support the use of flexible sacrum positions. Protocols should be integrated into routine midwifery practice.

Limitations

The research employed qualitative analysis conducted in t wo hospitals. As a result, it is possible that opinions, experi ences, and impressions of other women who gave birth in isolated parts of the districts were overlooked hence the results may not be fully transferable and generalized to other settings such as private hospitals and rural hospitals.

General Conclusion

The study provides the insights into the complex interplay of how socio, cognitive and environmental factors affecting the perceptions of midwifery care providers and women using the dynamic birth positions. Overall, the study emphasized that labouring women should be in private space

and should be given the autonomy during labour. There is need for all midwifery care providers to encourage and assist women to use different birthing positions during labour and childbirth as it is associated with improved childbirth outcomes. There is need for on job trainings to equip midwifery care providers with the knowledge and skills on the dynamic birth positions. The findings high lightened the urgent need for stronger institutional support and community engagement.

Declaration

Author Contributions: All authors contributed equally to this work. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no funding.

Institutional Review Board Statement: Ethics Approval was sought from the College of Medicine Ethics and Review Board (COMREC).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The data presented in this study is available on reasonable request from the study coordinator. Due to privacy and ethical restrictions, the data is not publicly accessible. Access will be provided in a manner that ensures the confidentiality of the participants and complies with ethical guidelines.

Public Involvement Statement: No public involvement in any aspect of this research.

Acknowledgments: We would like to express our sincere gratitude to all who participated in this study.

Conflicts of Interest: The authors declare no conflicts of interest.

References

Asnawi, D. H., Idris, D. R., McKenna, L., & Abdul-Mumin, K. H. (2023). Midwives' practice of maternal positions throughout active second stage labour: An integrative review. British Journal of Midwifery, 31(8), 468–476. https://doi.org/10.12968/bjom.2023.31.8.468

Benyamini, Y., Delicate, A., Ayers, S., Dikmen-Yildiz, P., Gouni, O., Jonsdottir, S. S., Karlsdottir, S. I., Akik, B. K., Leinweber, J., Murphy-Tighe, S., Pajalic, Z., Riklikiene, O., & Limmer, C. M. (2024). Key dimensions of women's and their partners' experiences of childbirth: A systematic review of reviews of qualitative studies. In PLoS ONE (Vol. 19, Issue 3 March). https://doi.org/10.1371/journal.pone.0299151

Borer, H., & Dubovi, I. (2023). Fostering childbirth education on upright positions and mobility during labor in nulliparous women. BMC Pregnancy and Childbirth, 23(1), 1–10. https://doi.org/10.1186/s12884-023-06166-4

Deherder, E., Delbaere, I., Macedo, A., Nieuwenhuijze, M. J., Van Laere, S., & Beeckman, K. (2022). Women's view on shared decision making and autonomy in childbirth: cohort study of Belgian women. BMC Pregnancy and Childbirth, 22 (1), 1–11. https://doi.org/10.1186/s12884-022-04890-x

Fatma, Z. H., Alvesson, H. M., Namazzi, G., Kyobe, J. B., & Ayebare, E. (2025). 'This is like tradition, lie on your back, hold your leg, and push': understanding midwives' perspectives on their choice of labour positions in a Ugandan hospital. BMC Pregnancy and Childbirth, 25(1). https://doi.org/10.1186/s12884-025-07657-2

Gondwe, M. J., Mndala, L., Kondoni, C., Khumalo, A. K., Maseko, B., Munthali, L., Bamuya, C., Bilesi, R., Phiri, H., Kachale, F., Mbewe, M., Riches, J., Odland, M. L., Chipeta, E., Chodzaza, E., Lissauer, D., & Nyondo-Mipando, A. L. (2025). Ending preventable maternal deaths in Malawi: the stakeholders consensus approach to identify maternal health needs priorities. BMC Health Services Research, 25(1). https://doi.org/10.1186/s12913-025-12468-4

Kandeya, B., Chimwaza-Manda, W., Kaira, P., Hanson, C., Henriksson, D. K., Stones, W., Alvesson, H. M., & Chipeta, E. (2025). Unlocking the path to quality maternity care: a qualitative study on work environment dynamics, providers' responsiveness, and professionalism in central region, Malawi. BMC Pregnancy and Childbirth, 25(1). https://doi.org/10.1186/s12884-025-07525-z

Lindgren, H., Erlandsson, K., Berta, M., Yimer, O., Blomgren, J., Lundberg, C., Dilnesa, T., Wells, M., & Hailemeskel, S. (2024). The understanding of dynamic birth positions for women in labor and childbirth – A hybrid concept analysis. Sexual and Reproductive Healthcare, 42(October), 101039. https://doi.org/10.1016/j.srhc.2024.101039

Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample Size in Qualitative Interview Studies: Guided by Information Power. Qualitative Health Research, 26(13), 1753–1760. https://doi.org/10.1177/1049732315617444

McMahon, S. A., George, A. S., Chebet, J. J., Mosha, I. H., Mpembeni, R. N. M., & Winch, P. J. (2014). Experiences of and responses to disrespectful maternity care and abuse during childbirth; a qualitative study with women and men in Morogoro Region, Tanzania. BMC Pregnancy and Childbirth, 14(1), 1–13. https://doi.org/10.1186/1471-2393-14-268

Meyvis, I., Van Rompaey, B., Goormans, K., Truijen, S., Lambers, S., Mestdagh, E., & Mistiaen, W. (2012). Maternal Position and Other Variables: Effects on Perineal Outcomes in 557 Births. Birth, 39(2), 115–120. https://doi.org/10.1111/j.1523-536X.2012.00529.x

Ministry of Health. (2020). National Sexual and Reproductive Health and Rights (Srhr) Policy (2017-2022). 191–229.

Nieuwenhuijze, M. J., Low, L. K., Korstjens, I., & Lagro-Janssen, T. (2014). The role of maternity care providers in promoting shared decision making regarding birthing positions during the second stage of labor. Journal of Midwifery and Women's Health, 59(3), 277–285. https://doi.org/10.1111/jmwh.12187

Oladapo, O. T., Tunçalp, Bonet, M., Lawrie, T. A., Portela, A., Downe, S., & Gülmezoglu, A. M. (2018). WHO model of intrapartum care for a positive childbirth experience: transforming care of women and babies for improved health and wellbeing. BJOG: An International Journal of Obstetrics and Gynaecology, 125(8), 918–922. https://doi.org/10.1111/1471-0528.15237

Priddis, H., Dahlen, H., & Schmied, V. (2012). What are the facilitators, inhibitors, and implications of birth positioning? A review of the literature. Women and Birth, 25 (3), 100–106. https://doi.org/10.1016/j.wombi.2011.05.001

Sanga, A., Kibusi, S., & Kengia, J. T. (2025). The effectiveness of community engagement using M-Mama champions in improving awareness of obstetric danger signs, birth preparedness and complication readiness among pregnant women in Bahi, Dodoma: A cluster randomized pragmatic implementation trial. PLOS Global Public Health, 5(4), 1–24. https://doi.org/10.1371/journal.pgph.0004315

Shimoda, K., Horiuchi, S., Leshabari, S., & Shimpuku, Y. (2018). Midwives' respect and disrespect of women during facility-based childbirth in urban Tanzania: A qualitative study. Reproductive Health, 15(1), 1–13. https://doi.org/10.1186/s12978-017-0447-6

Shorey, S., & Ng, E. D. (2023). Midwives' perceptions of and experiences with normal physiologic birth: A qualitative systematic review. Birth, 50(4), 749–763. https://doi.org/10.1111/birt.12763

Silva, C. H. M., Laranjeira, C. L. S., Pinheiro, W. F., Melo, C. S. B. de, Silva, V. de O. C. e., Brandão, A. H. F., Rego, F., & Nunes, R. (2024). Pregnant women autonomy when choosing their method of childbirth: Scoping review. PLoS ONE, 19(7 July), 1–15. https://doi.org/10.1371/journal.pone.0304955

Terentius Rugumisa, B. (2024). Cultural Influences on Labor and Delivery Practices. 1–19. https://doi.org/10.5772/intechopen.1007187

WHO. (2022). WHO antenatal care recommendations for a positive pregnancy experience maternal and fetal assessment update : imaging ultrasound before 24 weeks of pregnancy. https://www.ncbi.nlm.nih.gov/books/NBK579604/pdf/Bookshelf_NBK579604.pdf

World Health Organization. (2014). Atlas of African Health Statistics. In WHO African Health Observatory and Knowledge Management (Issue 1). http://www.afro.who.int/en/clusters-a-programmes/ard/african-health-observatory-a-knowledge-management/features/4008-atlas-of-african-health-statistics-2014-health-situation-analysis-of-the-african-region.html

Yuill, C., McCourt, C., Cheyne, H., & Leister, N. (2020). Women's experiences of decision-making and informed choice about pregnancy and birth care: A systematic review and meta-synthesis of qualitative research. BMC Pregnancy and Childbirth, 20(1), 1–21. https://doi.org/10.1186/s12884-020-03023-6

Zileni, B. D., Glover, P., Teoh, K.-K., Zileni, C. W., & Müller, A. (2021). Factors influencing labour and birthing positions in Malawi. African Journal of Midwifery and Women's Health, 15(4), 1–10. https://doi.org/10.12968/ajmw.2020.0049

Original Research

Implementing and Evaluating Ward Cleanliness in an Acute Care Setting at a Referral Hospital: an Evidence-based Practice Project

Malawi Journal of Nursing and Midwifery *For volume 1, issue 1, published 2026*

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Dates
Received: May 19, 2025
Accepted: May 18, 2026
Published: August 31, 2026

Abstract

INTRODUCTION: Environmental cleanliness is important for controlling infection. A male medical ward was identified to implement best practice for ward cleaning. The interventions were based on the WHO guidelines and focused on cleaning ward surfaces, sluice room, toilets and equipment.

Methods: A mixed method was conducted using the Plan DO Study Act model. Data were collected through audits, observations, documentary analysis, focus groups and semi-structured interviews. NVivo 12 was used to handle the qualitative data. Quantitative data was managed using Excel.

Results: A baseline audit consisting of 15 criteria for ward cleanliness and the use of protocols demonstrated that no protocols were used. An evidence based ward cleaning protocol was developed and implemented. Following the intervention, ward cleaning was evaluated on 5 separate occasions, using the original audit criteria. Thirteen attributes relating to the presence of protocols and their use scored 100%, two attributes related to the process of escalation if protocols were not followed, and presence of training on ward cleanliness scored 60% respectively. Using the Medical Research Council evaluation framework; we identified three themes from qualitative data: Changes to practice, boundaries and frameworks; changes to ward ethos and environment; and system challenges.

Conclusion: The implementation of the ward cleaning protocol has provided insight into the complexities of improving care. The intervention proved successful and can be attributed to training, supervision and the involvement of ward cleaners and patient guardians.

Originality: Implementing evidence based change in a country with limited resources is highly complex. This project demonstrates successful change through the involvement of ward cleaners and guardians in the process of achieving ward cleanliness. It highlights successful collaboration between academics and clinical practitioners and the involvement of stakeholders in implementing evidence based practice.

Keywords: Ward cleaning protocols, acute ward, evidence based practice, nurses, cleaners, patient guardians.

Introduction

Data from 78 low and middle-income countries showed that half of 129,557 health care facilities lacked access to piped water, 33% did not have an improved toilet (WHO & UNICEF,2015). In 2020, WHO and UNICEF proposed standardized Water, Sanitation and Hygiene (WASH) indicators (Atzatzev, 2020). Despite these advancements, there remain gaps regarding environmental cleaning, the availability of cleaning policies and protocols, let alone training for cleaners (Elling et al., 2022). This contributes to infection spread.

The lack of proper infection control in health care facilities is a driver for antimicrobial resistance (Dancer, 2014; Holmes et al., 2016). Poor cleaning procedures can increase the risk of health care associated infections, as 15% of all hospitalized patients in LMICs are estimated to acquire an infection during their hospital stay (Elling et al., 2022)

Therefore, WASH principles are vital for providing safe health services, improving patient satisfaction and care (Lopez et al., 2020). The cleaning of any hospital environment must be carried out in a pre-planned, clearly structured and defined manner. Nurses and cleaning staff are key in this role and require training and regular updates (Elling et al., 2022). Nurses play a vital role in infection prevention (Mitchell et al., 2021).

Cleaners are the primary personnel responsible for ensuring safe health conditions for patients and staff, yet there is little evidence describing their roles (Elling et al., 2022). Cleaners are responsible for dusting, mopping, disinfecting doors, floors, and surfaces, disposing off and treating infectious waste (Cross et al., 2019).

The aim of this project was to improve ward cleanliness with the overall purpose of assessing compliance with best practice recommendations, identify barriers and facilitators to change and improve adherence to best practice. This aligns to UN Sustainable Development Goals 3, 10 and 17 focusing on improving health and wellbeing for patients.

Materials and Methods

Design: This was a pre- and post-intervention mixed methods quality improvement project conducted for seven months from March 2021 to September 2021.

Setting: The Kamuzu University of Health Sciences (KUHeS) and the School of Healthcare Sciences Cardiff University (SoHCS) worked collaboratively to improve the cleanliness of a male medical ward at a referral hospital using current evidence. Initial assessment of the ward showed overcrowding with patients on mattresses on the floor. Some of the sinks on the ward had no running water and cleanliness was poor. Cleaning responsibilities were not clear between nurses and cleaners, and no standardized cleaning protocol was in place.

Ethical approval: Ethical permission was sought from College of Medicine Research Ethics Committee (COMREC No.09/20/3134.).

Methods and study population: The Plan, Do, Study, Act (PDSA) model for quality improvement was used to implement and evaluate the project. The study population was nurses and cleaners.

Plan - Several areas for improvement were identified by nurses, doctors, pharmacists, laboratory technologists. Ward cleanliness was prioritized and agreed to focus on. An audit tool was developed to gain a baseline data and plan improvements that matched best evidence. The nurse in charge was interviewed on ward cleaning practice using the baseline tool. The results of the audit were analyzed and findings showed no protocols existed for all the 15 audit criteria (Table 1). The project team established a Steering Committee and an Operational Group consisting of staff from KUHeS, SoHCS and hospital clinical nurse leaders. A rapid review of the evidence on ward cleanliness was undertaken and an evidence based protocol for practice developed. The operational group reviewed the protocols and ensured their suitability for use on the Malawian ward. Training of nurses and cleaners took place to address deficits found in the baseline audit and prepare them for implementation of the new protocol.

Do - The protocol was implemented by all 11 permanent nurses (including matron) and part-time nurses and cleaners. In addition, one academic member of the project team provided weekly supportive supervisory and working visits. Ward cleaning protocols were in designated places and kept on file for reference. The operational group observed and analyzed the setting further, including the role of patient guardians in ward cleanliness to identify facilitators and barriers to compliance. Weekly health education sessions on ward cleanliness were extended to patients and guardians. Both steering and operational group meetings were held separately online to report successes, barriers and facilitators and identify solutions. Barriers were reported to hospital management. Staff turnover on the ward was high which necessitated further workshops and continuous ward based training.

Study – The interventions were tested to determine whether any improvements in ward cleanliness were yielded. Post implementation data were collected by a research assistant using the same audit data collection tool that was used in the baseline. Ward cleanliness was evaluated 5 times and audited randomly, at different times of the day to evaluate consistency in implementation. Focus group interviews with cleaners were conducted by the research assistant and the project team conducted online interviews with nurses.

Act – This involved making recommendations based on the findings.

Data Analysis: Quantitative data involved simple counts and conversion to percentages of standard items on ward cleanliness. For example, availability of the protocol for ward cleaning and if implemented against the total number of standard items or attributes. Qualitative data was analyzed using thematic analysis.

Results

Table I shows quantitative results of each attribute before and after implementation.

Table 1: Ward cleanliness pre and post implementation

Attribute	Baseline Audit Results		Post Audit Results	
	Yes (%)	No (%)	Yes (%)	No (%)
Is there a protocol for ward cleaning	0 (0)	1 (100)	5 (100)	0 (0)
Is there a protocol for cleaning surfaces in the ward	0 (0)	1 (100)	5 (100)	0 (0)
Is a protocol for cleaning ward followed	0 (0)	1 (100)	5 (100)	0 (0)
Is there a protocol for cleaning floors in the ward	0 (0)	1 (100)	5 (100)	0 (0)
Is a protocol for cleaning ward floors followed	0 (0)	1 (100)	5 (100)	0 (0)
Is there a protocol for cleaning beds/mattresses in the ward	0 (0)	1 (100)	5 (100)	0 (0)
Is a protocol for cleaning ward beds followed	0 (0)	1 (100)	5 (100)	0 (0)
Is there a protocol for clinical waste disposal	0 (0)	1 (100)	5 (100)	0 (0)
Is a protocol for clinical waste disposal followed	0 (0)	1 (100)	5 (100)	0 (0)
Is there a protocol for cleaning spillage of blood and bodily fluids	0 (0)	1 (100)	5 (100)	0 (0)
Is a protocol for cleaning spillage of blood and bodily fluids followed	0 (0)	1 (100)	5 (100)	0 (0)
Is there a protocol for cleaning ward equipment	0 (0)	1 (100)	5 (100)	0 (0)
Is the protocol for cleaning ward equipment followed	0 (0)	1 (100)	5 (100)	0 (0)
Is there a process for escalation if protocols have not been followed?	0 (0)	1 (100)	3 (60)	1 (20)
Is there a training program in place for staff relating to ward cleanliness and safe disposal of waste	0 (100)	1 (100)	3 (60)	0 (0)

Qualitative data was sourced from four online interviews (IN) with key staff (ward matron, sister in charge, deputy nurse in charge and project academic lead, two face to face focus groups with nurses one focus group with cleaners (n = 6). Using the MRC evaluation framework, the three themes with subthemes were identified.

Theme 1: Changes to practice, boundaries and frameworks

Subtheme i. Improving evidence-based practice: The data highlighted embedding of the protocol into practice using an evidence-based approach. The post implementation data highlighted that prior to implementation there was no protocol in place leading to a lack of standardised cleaning practice

"okay actually I would say the ward was in a mess, for example, the... infection prevention measures were not being followed, people were just doing whatever they were supposing to do." FG1

"We were not following the protocol e.g. starting with Chlorine or soap we were just mopping so the ward kept stinking. Everyone was just getting his or her water and start mopping." FG3

The high turnover of nurses and cleaners meant that a continuous programme of in-service training/CPD was required during the duration of the project.

"and with the experience of having high turnover of nurses of course this time for the past 3 months…… the cleaners they keep changing now and then and we have no control on the issue of turnover of staff both for the cleaners and nurses because as a policy that's what they do in the units and we just have to find ways on how best to have frequent workshops with the nurses and the cleaners. It can be on the bedside, it can be on the ward side, we can at times organize outside the ward. It's one of the motivating factors as well so continuously meeting them." IN 4.

The provision of CPD on the ward increased accessibility for staff to attend. The support of local academic staff helped the project move forward.

"Yes, very much aah a change has been seen because now aah our maids are trained generally the ward cleanliness, how they are supposed to clean up the floors, how the right aah solutions to be used when cleaning the wards and also the right ways of doing it so now they follow that we see a change, when they actually clean the ward you see that this area has been cleaned and this is not been cleaned cause now they are doing the right things cause previously they were doing it anyhow. Also, they have

been given a set of aah procedural manuals on how to do things so now we paste them so they read them so they know what to do now." FG1

Cleaners also appreciated how they are approached by nurses when they do not perform well suggestive of supportive team work:

"At first when we had not done a good job, they would just go straight and report us without talking to us directly. But now when we have made a mistake or maybe we did not clean the ward right, they talk to us directly and advise us on how best we can clean the ward. I see this as a good change." FG3.

Students were also orientated in the ward cleanliness protocols as the data indicates:

"we orient them so that they are aware and embrace and also participate … so we orient them… especially cleaning of the utensils, the beds, dusting is part of the role of students so we orient them to the tools…" IN4

Subtheme ii: Protocol implementation and report of patient satisfaction: Participants stated that patients commented they had seen positive changes since previous admissions to the ward.

"People who were admitted previously before the project started, they are now seeing the changes and they are appreciating the way we are doing the things."IN4

"and we are able to do things according to the project as well as for the betterment of our patient, even the patients themselves are seeing the changes." FG1

Theme 2 Changes to ward ethos and environment

Subtheme i: Clarity of roles and responsibilities: Respondents commented about the benefits of an academic staff working on the ground with clinical staff including the ward matron

"My focal area is the ward cleanliness so am there in the ward on the ground supporting, providing mentorship, encouraging the team to work, based on the protocols that we developed." IN 4

"My involvement is …..I'm responsible for the ward, so, what's so ever is happening in that particular ward I need to be aware and on top of that the moment they were bringing in this concept they approached me, and together we briefed the management." IN 1

Participants also discussed the roles of nurses, guardians and cleaners and how the project had impacted positively on patient health and guardian safety.

"We enforce that no this is not the work of the guardians, whenever something is dirty, whenever the area is not clean the one who is supposed to be cleaning is the one who is trained to do that so that we do prevent the infection." FG1

"The nurses inform the guardians to move their items from the bedside before the cleaners start cleaning and tell them to go out if they can. Those guardians that have serious patients are told to stay inside the ward but should not sit on the bed but should sit on the chair. We also tell the guardians whose patients can walk, that they can wait outside and those who patients can not to look over the patient of the other guardians." FG3

Whilst challenges remained evident, including acutely ill patients and low staffing levels, motivation had improved.

"Before there was no good team work but as of now the nurse and her team were able to work and whenever we have identified problems we are able to discuss in the ward on the bedside , training to mentor the young nurses that are on the ground working on the ward." IN 4

Subtheme ii: Improved prioritization and organization of the ward environment: Ward staff, including the ward cleaners were generally positive about the strategies that had been embedded that led to a positive change in the ethos on the ward. This included closer supervision of cleaners and visibility of the unit matron supporting nurses and cleaners.

"In-charge, unit matron you would find her on the ground on the bed side supporting the cleaners supporting the nurses so prior to that there were no such kind of working relationship." IN 4

"The nurses and in-charges told us that when we have run out of our cleaning chemicals, we should tell them and they will help so that we keep our ward clean and tidy. So when we have run out of chlorine or soap they give us." FG3

Participants made several comments about the improved working environment, for example functioning toilets and ward cleanliness

"On the side of the environment the work environment it has greatly improved you know I will start with the toilets… the nurses they are able to go to the patient toilet see how the cleaners are doing and then appreciate the efforts that are there". IN 4

"the wards are being cleaned thoroughly nowadays and ever since the introduction of three bucket system, aah we can actually see that the ward has been cleaned, because you can actually tell." FG2

"The project should continue because people from the community have started commenting that the ward has

changed. People are saying the ward has started looking hygienic. At first people come in the ward and fail to eat because of the smell in the ward and the status of the toilets." FG3

Subtheme iii: Feeling valued, empowered and teamwork: Valuing the contribution of patients and carers was evident. There was clear involvement of patients and guardians in the project signifying the importance of team work.

"I want to share with you one experience that I have had when I was in the ward supervising cleaners guiding them what to do. There was a patient ……..then he said I am impressed with what you are doing in this ward I have seen you you've taken guardians out and I heard you were talking to them about ward cleanliness and the way you were talking to the cleaners how they should do their mopping". IN 4

Patients and guardians were now taking greater responsibility for keeping the ward clean.

"…… guardians have started listening to our advice. Now we have access to places that guardians would initially put their belongings. Now we have access to all the places and we can clean all the areas. We are trying every day to clean so that they look clean. When the guardians are not keeping the place tidy we inform them." FG3

Subtheme iv: Improved staff morale: Ward staff commented that since the implementation of the project staff morale had improved despite staffing challenges and the impact of COVID taking its toll,

"Actually, personally I feel good, I love my work, I love my colleagues, we always work in team, as a team and now that the environment is clean, I like going to work knowing that I'm safe and also that I'm able to work with the colleagues aah the doctors hand in hand, I feel safe and I feel good yeah." ……"if you ask me the same question in the past three months I wouldn't say I feel okay, because COVID took toll… FG2

"I can say that at first going to work was worrisome. But now when you wake up and going to work, you are confident to go to work and that is a good place." FG3

Theme 3: Continuing challenges

Despite the successes, challenges were reported by nurses and cleaners.

***Subtheme 1: Ward facilities, Staffing and resources*:** Staff reported that some of the early improvements had not continued with problems arising in relation to the broken toilets or lack of essential equipment. Not clear

"Maintenance especially on the toilets, they are in bad condition and the sink and even some taps are not running very well." ….the drip stand the beds most beds are broken they are dirty because they have been used for a very very long time so you would clean the floor you wipe the windows, you would do the dusting but still the ward will not be looking shiny cause of the equipment that you are using right now." FG 1

"Most of our beds are not in good condition." IN 1

"There's always blockages at the toilets, there is water everywhere, that's the first challenge and the second one is aah I think there two wards so they don't operate well, you put in water, the thing don't go they're just there attracting flies and bad smells over the wards or the toilets, so the cleanliness in the toilets is not." FG2

Challenges remained due to ward overcrowding:

"Mmmh, yes, that's the big challenge, cause sometimes we have overflowing of patients and we have to put them on the floor, so even cleaning the ward becomes difficult because you can't move a patient from that place for you to clean it, generally. things get bad when the ward is too full." FG1

Subtheme ii Contract cleaning Service: An ongoing challenge impacting morale was high turnover by the contracted cleaning staff with unreliable income.

"Pertaining to the ward cleanliness so we have the cleaners on contract aaaahm they are not government cleaners, they have to bring their own resources, apparently they don't get enough resources as of today". IN3

"Ward cleanliness… you educate the other team (cleaners) and you would see another team saying those ones have gone somewhere so sometimes it's like you are starting from point one again." IN 2

"Sometimes they are not being paid they take long time to be paid and that only decreases their morale you would see them just cleaning for the sake of cleaning not that they are interested cause they are not receiving their money." IN2.

The cleaners weren't always supported in their work.

"Sometimes it gets to the point of insulting our jobs that our jobs are not worth being proud of." FG3.

Discussion

This project aimed to assess compliance with evidence-based criteria of ward cleanliness in one acute male medical ward in a hospital in Malawi. Despite its recognition, evidence based practice is not standard in most LMIC. There are barriers related to resource challenges, limited access to information, interdisciplinary communication and

inconsistency between academic and clinical practice , time, knowledge of EBP, and individual-related barriers (Shayan et al., 2019). Despite this nurses have a role to improve practice.

The roles of the professional nurse is to promote a spirit of inquiry, generation and dissemination of new knowledge, and promote the use of clinical guidelines to improve the quality of care for patients (Brunt & Morris, 2024). Clinical guidelines have the potential to reduce unwarranted practice variation, enhance translation of research into practice, and improve healthcare quality and safety if developed and implemented according to international standards (Panteli et al., 2019). This project aimed to achieve this through the development and implementation of ward cleanliness protocol through a process of planned education and support led by nurses. Having a clear implementation plan, involving all stakeholders with input from an educational lead and unit matron has led to the successful implementation of the protocol.

The findings demonstrated that both nurses and cleaners have a role in improving ward cleanliness. Nurses facilitate the implementation of EBP by ensuring a supportive environment, providing education, being role models, and mentoring others (Brunt & Morris, 2024). Nurses and cleaners expressed satisfaction and appreciation of the ward cleaning protocol implementation, when interviewed. The success was potentially due to staff support through the shared and structured approach to education, supervision, mentorship and feedback. This is supported by Ayoubian et al. (2020) and (Duff et al. (2020) who identified the importance of leadership and organizational support together with a supportive education process in improving skills and confidence. Locock et al. (2020), further highlight the importance of support, suggesting staff who feel well supported and valued would be able emotionally and psychologically, to provide good support to patients. Verbal praise, getting individual attention or assistance when needed has been reported as a good way of recognizing people at work rather than receiving gifts (White, 2014). Despite the project successes challenges were reported.

Other studies have reported challenges in implementing evidence best practice due to lack of knowledge and skill to use evidence, time mismanagement, lack of motivation, lack of resources and training resulting in nurses continuing with traditional practice due to lack of incentive (Dagne & Beshah, 2021). Okomo et al., (2024) cites challenges such as Covid 19, understaffing and poor equipment and facilities and Gon et al., (2021) identify lack of education and supportive supervision as pit falls in the implementation. Similarly, this project found that although improvements were found in all areas of the post-implementation audit, there were continuing challenges. Many related to lack of equipment and failure of facilities. This is supported by Elling et al.(2022) and Okomo et al. (2024) who found that staffing, equipment and poor facilities were pitfalls to implementation of EBP.

The use of Contract Cleaning staff was a reported barrier to effective implementation. This is also reflected in the literature, which suggests that outsourcing cleaning staff impacts on the level of hygiene, with greater incidence of methicillin-resistant Staphylococcus aureus (MRSA) and worse patient perceptions of cleanliness (Toffolutti et al., 2017). In addition, Litwin et al. (2016) found a relationship between high staff turnover, low motivation and less trained staff. However, it is suggested by Daniels et al. (2019) that specific training with clear identification of responsibilities, together with a recognition of the vital role played by cleaning staff was crucial.

Overall, despite the challenges there was considerable improvement in all attributes compared to the baseline audit. Ward protocols were developed and followed by the cleaning teams. Consistency in cleaning and protocol utilization was observed across all attributes.

Limitations

Barriers were experienced during implementation mainly related to resources and COVID 19, areas beyond our control. Whilst patient guardians were involved, due to the limited funding, patients were not involved in either the development or evaluation of the intervention.

Recommendations

The project encompassing academic and clinical partnership has been successful in achieving positive change and should be rolled out in other clinical areas. Further human and financial investment is required to sustain the positive changes influenced by the ward cleanliness interventions. Continuous training that involves cleaners is key.

Funding and Acknowledgement

The evaluation of this project was funded by a Global Challenges Research Fund (GCRF) Small Projects grant administered by Cardiff University.

References

Atzatzev. (2020, December 13). *Global progress report on WASH in health care facilities*. UNICEF DATA. https://data.unicef.org/resources/global-progress-report-on-wash-in-health-care-facilities-fundamentals-first/

Ayoubian, A., Nasiripour, A. A., Tabibi, S. J., & Bahadori, M. (2020). Evaluation of Facilitators and Barriers to Implementing Evidence-Based Practice in the Health Services: A Systematic Review. *Galen Medical Journal*, *9*, e1645. https://doi.org/10.31661/gmj.v9i0.1645

Brunt, B. A., & Morris, M. M. (2024). Nursing Professional Development Evidence-Based Practice. In *StatPearls*. StatPearls Publishing. http://www.ncbi.nlm.nih.gov/books/NBK589676/

Cross, S., Gon, G., Morrison, E., Afsana, K., Ali, S. M., Manjang, T., Manneh, L., Rahman, A., Saxena, D., Vora, K., & Graham, W. J. (2019). An invisible workforce: The neglected role of cleaners in patient safety on maternity units. *Global Health Action*, *12*(1), 1480085. https://doi.org/10.1080/16549716.2018.1480085

Dagne, A. H., & Beshah, M. H. (2021). Implementation of evidence-based practice: The experience of nurses and midwives. *PLoS ONE*, *16*(8), e0256600. https://doi.org/10.1371/journal.pone.0256600

Dancer, S. J. (2014). Cleaning and decontamination of the healthcare environment. *Decontamination in Hospitals and Healthcare*, 370–397. https://doi.org/10.1533/9780857096692.2.370

Daniels, T., Earlywine, M., & Breeding, V. (2019). Environmental services impact on healthcare-associated Clostridium difficile reduction. *American Journal of Infection Control*, *47*(4), 400-405.e1. https://doi.org/10.1016/j.ajic.2018.09.016

Duff, J., Cullen, L., Hanrahan, K., & Steelman, V. (2020). Determinants of an evidence-based practice environment: An interpretive description. *Implementation Science Communications*, *1*(1), 85. https://doi.org/10.1186/s43058-020-00070-0

Elling, H., Behnke, N., Tseka, J. M., Kafanikhale, H., Mofolo, I., Hoffman, I., Reuland, F., McCord, R., & Cronk, R. (2022). Role of cleaners in establishing and maintaining essential environmental conditions in healthcare facilities in Malawi. *Journal of Water, Sanitation and Hygiene for Development*, *12*(3), 302–317. https://doi.org/10.2166/washdev.2022.206

Gon, G., Kabanywanyi, A. M., Blinkhoff, P., Cousens, S., Dancer, S. J., Graham, W. J., Hokororo, J., Manzi, F., Marchant, T., Mkoka, D., Morrison, E., Mswata, S., Oza, S., Penn-Kekana, L., Sedekia, Y., Virgo, S., Woodd, S., & Aiken, A. M. (2021). The Clean pilot study: Evaluation of an environmental hygiene intervention bundle in three Tanzanian hospitals. *Antimicrobial Resistance & Infection Control*, *10*(1), 8. https://doi.org/10.1186/s13756-020-00866-8

Holmes, A. H., Moore, L. S. P., Sundsfjord, A., Steinbakk, M., Regmi, S., Karkey, A., Guerin, P. J., & Piddock, L. J. V. (2016). Understanding the mechanisms and drivers of antimicrobial resistance. *The Lancet*, *387*(10014), 176–187. https://doi.org/10.1016/S0140-6736(15)00473-0

Litwin, A. S., Avgar, A. C., & Becker, E. R. (2016). *Superbugs vs. Outsourced Cleaners: Employment Arrangements and the Spread of Healthcare-Associated Infections* (SSRN Scholarly Paper 2738770). Social Science Research Network. https://papers.ssrn.com/abstract=2738770

Locock, L., Graham, C., King, J., Parkin, S., Chisholm, A., Montgomery, C., Gibbons, E., Ainley, E., Bostock, J., Gager, M., Churchill, N., Dopson, S., Greenhalgh, T., Martin, A., Powell, J., Sizmur, S., & Ziebland, S. (2020). Improving staff experience. In *Understanding how front-line staff use patient experience data for service improvement: An exploratory case study evaluation*. NIHR Journals Library. https://www.ncbi.nlm.nih.gov/books/NBK554752/

Lopez, J., Sierra, S. T., Cardona, A. M. R., & Sara, S. (2020). Implementing the Clean Clinic Approach Improves Water, Sanitation, and Hygiene Quality in Health Facilities in the Western Highlands of Guatemala. *Global Health: Science and Practice*, *8*(2), 256–269. https://doi.org/10.9745/GHSP-D-19-00413

Mitchell, B. G., Russo, P. L., Kiernan, M., & Curryer, C. (2021). Nurses' and midwives' cleaning knowledge, attitudes and practices: An Australian study. *Infection, Disease & Health*, *26*(1), 55–62. https://doi.org/10.1016/j.idh.2020.09.002

Okomo, U., Gon, G., Darboe, S., Sey, I. C. M., Nkereuwem, O., Leigh, L., Camara, N., Makalo, L., Keita, A., Dancer, S. J., Graham, W., & Aiken, A. M. (2024). Assessing the impact of a cleaning programme on environmental hygiene in labour and neonatal wards: An exploratory study in The Gambia. *Antimicrobial Resistance & Infection Control*, *13*(1), 36. https://doi.org/10.1186/s13756-024-01393-6

Panteli, D., Legido-Quigley, H., Reichebner, C., Ollenschläger, G., Schäfer, C., & Busse, R. (2019). Clinical Practice Guidelines as a quality strategy. In *Improving healthcare quality in Europe: Characteristics, effectiveness and implementation of different strategies [Internet]*. European Observatory on Health Systems and Policies. https://www.ncbi.nlm.nih.gov/books/NBK549283/

Shayan, S. J., Kiwanuka, F., & Nakaye, Z. (2019). Barriers Associated With Evidence-Based Practice Among Nurses in Low- and Middle-Income Countries: A Systematic Review. *Worldviews on Evidence-Based Nursing*, *16*(1), 12–20. https://doi.org/10.1111/wvn.12337

Toffolutti, V., Reeves, A., McKee, M., & Stuckler, D. (2017). Outsourcing cleaning services increases MRSA incidence: Evidence from 126 english acute trusts. *Social Science & Medicine (1982)*, *174*, 64. https://doi.org/10.1016/j.socscimed.2016.12.015

White, P. (2014). Improving staff morale through authentic appreciation. *Development and Learning in Organizations: An International Journal*, *28*, 17–20. https://doi.org/10.1108/DLO-05-2014-0034

World Health Organization & United Nations Children's Fund (UNICEF). (2015). *Water, sanitation and hygiene in health care facilities: Status in low and middle income countries and way forward*. World Health Organization. https://iris.who.int/handle/10665/154588

Announcement of Small Scale Research Grant Recipients and Appreciation to Reviewers

The National Organization of Nurses and Midwives of Malawi (NONM), in partnership with the Norwegian Nurses Organization (NNO), is pleased to announce the successful recipients of the 2026 Small Scale Research Grants Program following a rigorous, transparent, and merit-based selection process.

The Small Scale Research Grants Program is designed to support innovative and sustainable initiatives led by nurses and midwives that contribute to the mission and strategic priorities of NONM while promoting positive change across Malawi.

A total of 25 applications were received from across the country. Following an initial screening, 23 eligible applications were shortlisted and underwent a double-blind review conducted by an independent panel of reviewers. Based on the quality of the proposals, their anticipated impact, sustainability, innovation, and alignment with the program objectives, 12 outstanding projects have been selected for funding.

We extend our sincere congratulations to all successful applicants. We are inspired by the creativity, dedication, and commitment reflected in the selected projects and look forward to seeing the meaningful impact these initiatives will have on nurses, midwives, patients, and the communities they serve.

NONM also wishes to express its heartfelt appreciation to the panel of reviewers whose professionalism, expertise, and commitment made this competitive process possible. Their careful and objective evaluation ensured that the selection process was fair, credible, and transparent. We are deeply grateful for the time and effort they invested in identifying the strongest proposals.

To all applicants, we thank you for your interest, enthusiasm, and commitment to improving health outcomes and strengthening the nursing and midwifery profession in Malawi. Although not every proposal could be funded in this round, we highly encourage unsuccessful applicants to continue refining their ideas and to apply for future funding opportunities.

NONM remains committed to empowering nurses and midwives through innovation, leadership, and community engagement. Together with our partner, NNO, we will continue investing in initiatives that strengthen the profession and improve the health and well-being of the people of Malawi.

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Original Research

Integrating Midwife-Led Basic Obstetric Ultrasound Scanning into Antenatal Services at Ndirande Health Centre in Blantyre, Malawi

Malawi Journal of Nursing and Midwifery

For volume 1, issue 1, published 2026

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Dates

Received: March 13, 2025

Accepted: April 26, 2026

Published: August 31, 2026

Abstract

BACKGROUND: Access to basic obstetric ultrasound scanning is essential for improving maternal and neonatal outcomes; however, it remains limited in low-resource settings. Integrating midwife-led ultrasound scanning into antenatal care (ANC) services enhance the early detection of complications and improve maternal health outcomes.

Aim: This study investigated the feasibility, acceptability, and impact of integrating midwife-led basic obstetric ultrasound scanning into routine antenatal care at the Ndirande Health Centre in Blantyre, Malawi.

Methods: This quality improvement project employed a phased approach to integrate basic obstetric ultrasound into antenatal care via sequential steps of training, piloting, mentorship, and full integration. A total of 7 Midwives underwent training in basic obstetric ultrasound techniques at Kamuzu University of Health Sciences (KUHES), selected based on their role as key providers at antenatal care. Routine scans were incorporated into antenatal visits over a six-month pilot period.

Results: Integration of midwife-led ultrasound scanning resulted in a 30% increase in ANC attendance. Pregnant women reported enhanced trust in antenatal services and greater confidence in pregnancy management. Midwives demonstrated a 95% accuracy rate in identifying foetal viability and position compared with obstetrician-confirmed results. However, challenges included technical difficulties with the equipment and initial resistance due to unfamiliarity with the intervention.

Conclusion: Midwife-led basic obstetric ultrasound scanning is a feasible and acceptable intervention that improves ANC utilisation and maternal satisfaction in low-resource settings. Addressing technical and training challenges will be critical for broader implementation and sustainability.

Keywords

Midwife-led ultrasound, antenatal care, obstetric ultrasound, maternal health, resource-limited settings, pregnancy outcomes, health service integration.

Introduction

Prenatal care, particularly incorporating basic obstetric ultrasound imaging, plays a crucial role in the timely detection and management of potentially life-threatening conditions in both the mother and the foetus (Tefera et al., 2024). The World Health Organization (WHO) recommends early ultrasound scanning of pregnant women during their initial visits to identify potential abnormalities(WHO, 2022). Similarly, the New Antenatal Guidelines for Malawi advocate early ultrasound imaging at 24 weeks of gestation to assess gestational age, identify foetal anomalies, and detect multiple pregnancies, aiming to enhance the overall maternal pregnancy experience(Ministry of Health, 2019).

Midwifery‐led ultrasound scanning in Malawi has been introduced as a task‐sharing innovation to address gaps in obstetric imaging within resource‐constrained health systems (Abawollo et al., 2022). Evidence from implementation studies demonstrates that midwives, when trained in focused obstetric ultrasound protocols, can reliably perform key assessments including gestational age estimation, fetal viability, presentation, and placental location(A. C. Viner et al., 2022). These competencies improve the accuracy of pregnancy dating compared to last menstrual period alone, facilitate earlier identification of complications such as multiple gestation or mal presentation, and enhance the completeness of antenatal documentation (Swanson et al., 2019). Integration of ultrasound

into routine antenatal care by midwives has been shown to be feasible and acceptable to both providers and clients, with reported improvements in community trust and service utilization(A. Viner et al., 2022). However, challenges remain in relation to equipment availability and maintenance, quality assurance mechanisms, and balancing ultrasound duties with routine clinical responsibilities (Wanyonyi et al., 2017).

Malawi's healthcare system is structured in three levels; primary health centers and community clinics, secondary district hospitals, and tertiary referral hospitals. Blantyre District is unique in lacking its own district hospital, which places additional strain on Queen Elizabeth Central Hospital (QECH), the country's largest tertiary facility and teaching hospital. Ndirande Health Centre, one of the busiest primary care facilities in Blantyre, functions as a key feeder institution to QECH, referring complicated cases and patients requiring advanced diagnostics or specialist care. Because Blantyre has no district hospital to bridge the gap between primary care and tertiary services, QECH often absorbs a dual role, serving both as a referral center for complex cases and as a district hospital for routine emergencies, with Ndirande and other health centers relying heavily on its services.

Access to basic obstetric ultrasound services often necessitates referrals to facilities such as the QECH to ascertain factors such as multiple gestations, foetal viability, gestational age, and presentation. An average of 20 women per month were referred from Ndirande Health Centre to QECH for obstetric scanning. This influx has contributed to congestion at QECH, which already handles a large number of patients from various districts. Consequently, these women faced significant challenges, including prolonged waiting times, owing to the large number of patients awaiting obstetric ultrasound scanning. To avoid these delays, some women seek services from private clinics, which incur additional costs that many cannot afford. This situation underscores the need for improved efficiency and accessibility of ultrasound scanning at Ndirande Health Centre to ensure timely and affordable obstetric care for all women.

Ndirande Health Centre, a prominent government-owned urban health facility in the Blantyre District, Malawi, serves a substantial catchment population exceeding 145,187 individuals, including approximately 62,500 women of childbearing age. Annually, over 3,000 initial pregnant women receive antenatal care at this facility (Edition, 2023). The staff at the facility comprised 11 clinical officers, two registered nurse midwives, three Registered Nurses, and 25 nurse midwife technicians. The clinic operates prenatal services on weekdays, with a considerable workload of 120 prenatal appointments and 55 initial antenatal appointments every week. To optimise efficiency and quality of care, the clinic assigned two midwives daily to conduct the routine antenatal care. However, the nurse-patient ratio currently stands at 1:2,083, which falls significantly below the WHO-recommended ratio of 1:1000 (Muller et al., 2021).

Integration of USS into antenatal services enhanced the accessibility and quality of antenatal care by empowering midwives with skills to perform essential ultrasound scans. This not only improved early detection and management of potential complications but also ensured timely and personalised care for expectant mothers. The purpose of the quality improvement project was to integrate midwife-led basic obstetric ultrasound scanning into antenatal services at Ndirande Health Centre. In this paper, we share our experiences of the step-by-step process of integrating midwifery-led ultrasound scanning into antenatal services, and discuss the enablers and challenges of integrating obstetric ultrasound scanning into antenatal care services.

Study aims: This study investigated the feasibility, acceptability, and impact of integrating midwife-led basic obstetric ultrasound scanning into routine antenatal care at the Ndirande Health Center in Blantyre, Malawi.

Methods

Study Design: This quality improvement project employed a phased approach to integrate basic obstetric ultrasound scanning into antenatal care. The process consisted of four key steps: (1) training healthcare providers, (2) introducing ultrasound services to a pilot group of clients, (3) providing supportive mentorship, and (4) fully integrating ultrasound services into routine antenatal care. Each phase was carefully planned and executed to ensure sustainability and capacity building among the healthcare providers. Quantitative data were obtained from antenatal clinic records to assess changes in ANC utilisation and maternal health outcomes before and after the integration of USS into antenatal services.

Training of health care providers: The comprehensive training program provided by KUHES addressed critical competencies such as foetal presentation determination, gestational age assessment, and early detection of pregnancy complications. KUHES provided ongoing training and refresher courses for seven midwives selected based on their

role as key providers of antenatal care for a 7day theory and 7 day practical trainings followed by a 6 months supportive mentorship to ensure that midwives stay updated on best practices and new developments in obstetric ultrasound. The key content areas covered were the identification of the presentation of a foetus, identification and monitoring of the foetal condition, understanding of the position and orientation of the foetus, placental localisation, amniotic Fluid Adequacy, and estimation of foetal age.

Scheduling health care providers: The midwives scheduled ultrasound scanning at the antenatal clinic. This ensured that one midwife focused on ultrasound scanning, whereas the other handled different aspects of antenatal care. This included scanning women with indications such as confirming gestation, confirming presentation, confirming placental location, and confirming the viability of the foetus only.

Supportive mentorship: The supportive mentorship provided by the KUHES faculty facilitated ongoing learning and guidance, while peer mentorship encouraged knowledge exchange and collaboration.

Ethics approval: Institutional Review Board Statement: Ethics Approval was waived by the College of Medicine Ethics and Review Board (COMREC), as it felt that this was a quality improvement study.

Review Findings

The integration of midwife-led basic obstetric ultrasound scanning into antenatal services: This section provides a critical overview of the findings on the integration of midwife-led basic obstetric ultrasound scanning with antenatal services at the Ndirande Health Centre in Blantyre, Malawi. This highlights several key findings regarding pregnancy outcomes and complications identified using ultrasound screening.

Full integration of basic obstetric ultrasound scanning into antenatal care services: Healthcare providers were scheduled to optimise efficiency and quality of care, and the clinic assigned two midwives on a daily basis to manage the antenatal clinic. This was followed by scanning all pregnant women seeking initial antenatal care to detect abnormalities at an early stage, as follows:

Figure 1: Number of Initial mothers versus Total scanned from August 2023 to December 2023

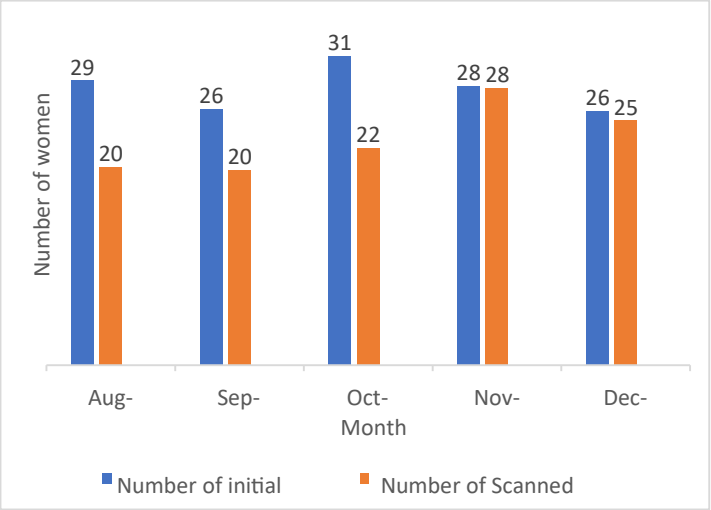
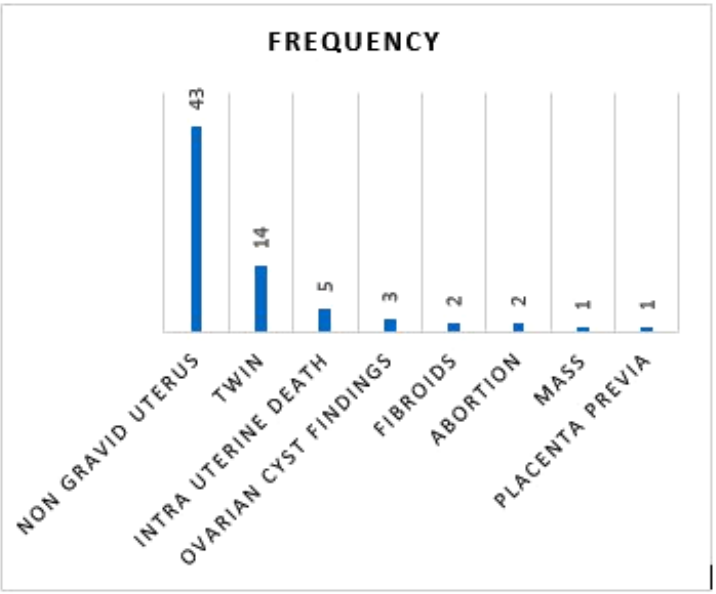


Figure 2: Outcomes observed after scanning from August 2023 to December 2023.



Key insights of ultrasound scans conducted from August 2023—June 2024:

Total Scanning Rate: Most months have a high scanning rate, with some months exceeding 100% of recorded initial visits (possibly due to repeat scans or walk-in cases). ***First Trimester Scans:*** February 2024 recorded the highest percentage of first-trimester scans (23.7%), while September 2023 had the lowest (9.0%).

Table 1: Summary of Ultrasound Scans Conducted (August 2023 – June 2024)

Month	Total Initial Visits	Total Scanned	First Trimester Scan	Confirm Gestational Age	Confirm Viability	Confirm Presentation
Aug 2023	292	203	24 (11.8%)	198 (97.5%)	3 (1.5%)	2 (1.0%)
Sept 2023	263	200	18 (9.0%)	190 (95.0%)	5 (2.5%)	5 (2.5%)
Oct 2023	317	223	26 (11.7%)	217 (97.3%)	2 (0.9%)	4 (1.8%)
Nov 2023	286	284	24 (8.5%)	253 (89.1%)	3 (1.1%)	3 (1.1%)
Dec 2023	261	251	29 (11.6%)	235 (93.6%)	4 (1.6%)	5 (2.0%)
Jan 2024	290	284	28 (9.9%)	166 (58.5%)	2 (0.7%)	3 (1.1%)
Feb 2024	337	287	68 (23.7%)	337 (100.0%)	3 (1.0%)	5 (1.7%)
Mar 2024	253	253	39 (15.4%)	233 (92.1%)	3 (1.2%)	7 (2.8%)
April 2024	290	233	33 (14.2%)	251 (107.7%)*	3 (1.3%)	5 (2.1%)
May 2024	282	251	33 (13.1%)	248 (98.8%)	11 (4.4%)	8 (3.2%)
June 2024	260	250	32 (12.8%)	251 (100.4%)*	5 (2.0%)	11 (4.4%)

Gestational Age Confirmation: Consistently high across all months except January 2024, where only 58.5% of scanned cases had gestational age confirmed.

Viability Confirmation: A small percentage of cases needed confirmation of viability, ranging from 0.7% to 4.4%.

Presentation Confirmation: Generally low but increased in June 2024 (4.4%).

Enablers and Challenges to integrating midwife-led basic obstetric ultrasound scanning into antenatal services

Enablers: Several facilitative factors have contributed to the successful integration of ultrasound scanning with antenatal services at the Ndirande Health Centre.

Comprehensive training: The provision of comprehensive training programs by KUHES played a pivotal role in enhancing midwives' proficiency in basic ultrasound scanning techniques. These educational endeavours empowered midwives with the requisite skills and competencies to conduct ultrasound examinations proficiently, thereby bolstering the diagnostic capabilities of the clinic.

Provision of ultrasound supplies: The consistent provision of ultrasound supplies, including gel, stationary, and ancillary items, by KUHES ensured the uninterrupted functionality of ultrasound machines at the Ndirande Health Centre. This sustained logistical support facilitates seamless operational continuity, enabling healthcare practitioners to conduct diagnostic procedures without impediments(Swanson et al., 2017).

Good collaboration between midwives and sonographers: The culture of collaboration between midwives and experienced ultrasonography professionals fostered a conducive learning environment in which knowledge exchange and skill enhancement thrive. Regular professional consultations and training sessions facilitated by seasoned experts bolstered midwives' understanding and confidence in interpreting ultrasound images, thereby enhancing diagnostic accuracy and efficacy.

Midwives proactively incorporated ultrasound scanning into their regular health-teaching endeavours. This fostered patient cooperation and engagement, thereby facilitating informed decision making and proactive healthcare-seeking behaviours among pregnant women.

Commitment and team work: Effective teamwork among midwives, obstetricians, and other health care professionals has fostered a collaborative environment. This ensured that any complications detected during the scans were promptly addressed with inputs from various experts.

Teamwork allowed for the distribution of tasks, ensuring that midwives could focus on ultrasound scanning, while other team members handled different aspects of antenatal care. This improves the efficiency and quality of care provided.

Leadership: The presence of a good leader possessed a clear vision, inspiring and motivating others towards a future where midwives played a key role in providing comprehensive antenatal care. The leader understands and addresses the concerns of midwives, patients, and stakeholders through empathy and fostering trust and support. Effective communication ensures that everyone involved comprehends the goals, processes, and benefits of the integration. Additionally, the leader promoted collaboration among healthcare professionals, encouraging teamwork to facilitate smooth implementation of new services.

Challenges to integrating midwife-led basic obstetric ultrasound scanning into antenatal services: The implementation of ultrasound scanning within the antenatal service at Ndirande Health Centre is affected by several challenges. The operational efficacy of ultrasound scanning sessions is frequently compromised by recurrent power outages, which result in workflow interruptions and incomplete scans. These disruptions impede timely delivery of diagnostic services.

Transfer of midwives: The intermittent transfer of midwives, particularly those with specialised training in ultrasound scanning, poses a significant challenge to the continuity and consistency of prenatal care. The departure of experienced personnel diminishes the pool of proficient practitioners, exacerbates skill shortages, and potentially compromises the quality of ultrasound-based diagnostics.

Cultural, socioeconomic, and interpersonal barriers: Cultural, socioeconomic, and interpersonal barriers impede timely antenatal care engagement among pregnant women, with many deferring clinic visits until the second or third trimester. This delay, exacerbated by factors such as lack of partner support and apprehension towards healthcare providers, hampers early anomaly detection and limits the window for intervention, thereby increasing maternal and foetal health risks.

The limited availability of ultrasound equipment: The limited availability of ultrasound equipment, with only one machine and accessible prolonged scanning wait times. This insufficiency impedes the seamless integration of ultrasound-based diagnostics into prenatal care protocols, restricting the capacity of clinics to accommodate patient volumes and deliver timely diagnostic services. The scarcity of structured training initiatives for midwives, particularly ultrasound scanning, has undermined the successful implementation of prenatal care enhancement projects.

Discussion of the findings

First, the high percentage (93.9%) of normal pregnancies among clients undergoing antenatal scanning is encouraging. This underscores the importance of routine examinations for reproductive health and early pregnancy screening, contributing to improved prenatal care and maternal-foetal health outcomes(Roro et al., 2022).

The identification of non-gravid uteri (3.7%) among clients is notable, as it may indicate various conditions such as infertility, miscarriage, or pregnancies that are too small to be detected by scanning. This finding underscores the complexity of reproductive health and the need for thorough examination and evaluation during antenatal care(WHO, 2016) . The prevalence of twin gestations (1.2%) within the cohort highlights the importance of the early detection and management of multiple pregnancies to optimise maternal and foetal outcomes.

The discovery of intrauterine death (0.4%) raises concerns and warrants further investigation of its potential causes, including maternal health disorders, placental problems, and genetic abnormalities. This finding underscores the importance of close monitoring and timely intervention for high-risk pregnancies. Similarly, the detection of ovarian cysts (0.3%) and fibroids (0.2%) underscores the need for careful evaluation of such conditions during pregnancy, as they may impact pregnancy progression and require intervention to ensure optimal outcomes for both the mother and foetus (Bascietto et al., 2017).

The identification of abortions with retained products of conception (0.2%) and placenta previa (0.1%) highlights the challenges that some women may face in sustaining a successful pregnancy, and the importance of timely management and referral to specialised care centres for appropriate treatment(Wachira et al., 2023).

Overall, these findings provide valuable insights into the spectrum of prenatal illnesses and complications experienced by the patients. They emphasised the importance of comprehensive prenatal care, close observation, and timely intervention to optimise maternal and neonatal health outcomes. Additionally, the data generated from this project can inform healthcare practices, policy changes, and future research to improve maternal and neonatal health outcomes in resource-limited settings.

Implications and Recommendations

Based on the findings and implications of this quality improvement project, the following recommendations are proposed to enhance the efficacy and accessibility of prenatal care services at Ndirande Health Centre.

Given the susceptibility of antenatal clinic operations to disruptions caused by power outages, it is advisable to procure and install dependable solar-backup power sources. This strategic investment ensures the uninterrupted functionality of ultrasound machines, thereby mitigating the risk of service interruptions and safeguarding the continuity of prenatal diagnostic capabilities during periods of power instability.

To mitigate the adverse effects of employee turnover and preserve institutional knowledge, institutions should organise structured mentorship programmes. These programs would facilitate the transfer of expertise from seasoned midwives to newly recruited personnel, fostering continuous professional development and ensuring the preservation of best practices in prenatal care service delivery.

Recognising the pivotal role of community engagement in promoting maternal and foetal health outcomes, concerted efforts should be directed towards organising targeted campaigns aimed at raising awareness among expectant mothers regarding the benefits of ultrasound screening and the importance of initiating prenatal care early. By disseminating accurate information and dispelling misconceptions, these campaigns can empower expectant mothers to make informed decisions regarding their antenatal healthcare-seeking behaviours, thereby fostering a culture of proactive maternal health management within the community.

Conclusion

The integration of ultrasound scanning at the Ndirande Health Centre serves as a critical asset in antenatal care, providing crucial interventions for the health status of both expectant mothers and foetuses. The data generated through scanning not only facilitates the early detection of potential complications but also enables healthcare practitioners to promptly intervene and administer appropriate medical interventions, thereby contributing significantly to the overarching goal of enhancing maternal and neonatal health outcomes.

Acknowledgments

We would like to express our sincere gratitude to all the participants in this study. Their openness and willingness to share their experiences were invaluable for our research. Without their contribution, this study would not have been possible.

Author Contributions

All authors contributed equally to this work. Conceptualisation, methodology, software, validation, formal analysis, investigation, resources, data curation, writing – original draft preparation was done by Jacqueline Kolove. Writing – review and editing, supervision and project administration were carried out by Patrick Mapulanga and Ellen Chirwa. All the authors have read and agreed to the published version of the manuscript.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

Data Availability Statement

The data presented in this study are available upon reasonable request from the corresponding authors. Owing to privacy and ethical restrictions, the data are not publicly accessible. Access will be provided in a manner that ensures the confidentiality of participants and complies with ethical guidelines.

Guidelines and Standards Statement

This manuscript was drafted against the COREQ (Consolidated Criteria for Reporting Qualitative Research) guidelines for qualitative research.

References

Abawollo, H.S. et al. (2022) 'Contribution of portable obstetric ultrasound service innovation in averting maternal and neonatal morbidities and mortalities at semi-urban health centers of Ethiopia: a retrospective facility-based study', BMC Pregnancy and Childbirth, 22(1), pp. 1–9. Available at: https://doi.org/10.1186/s12884-022-04703-1.

Bascietto, F. et al. (2017) 'Outcome of fetal ovarian cysts diagnosed on prenatal ultrasound examination: systematic review and meta-analysis', Ultrasound in Obstetrics and Gynecology, 50(1), pp. 20–31. Available at: https://doi.org/10.1002/uog.16002.

Edition, F. (2023) 'Government of the Republic of Malawi Health Sector Strategic Plan III'.

Ministry of Health (2019) 'Malawi National Reproductive Health Service Delivery Guidelines Malawi National Reproductive Health Service Delivery Guidelines'.

Muller, A. et al. (2021) 'In order to protect our mothers, we need to prioritize our nurses and midwives', International Journal of Africa Nursing Sciences, 15, p. 100383. Available at: https://doi.org/10.1016/j.ijans.2021.100383.

Roro, M.A. et al. (2022) 'Enablers and barriers to introduction of obstetrics ultrasound service at primary care facilities in a resource-limited setting: a qualitative study in four regions of Ethiopia', BMC Pregnancy and Childbirth, 22(1), pp. 1–9. Available at: https://doi.org/10.1186/s12884-022-04609-y.

Swanson, D. et al. (2017) 'Challenges of implementing antenatal ultrasound screening in a rural study site: A case study from the democratic republic of the congo', Global Health Science and Practice, 5(2), pp. 315–324. Available at: https://doi.org/10.9745/GHSP-D-16-00191.

Swanson, D.L. et al. (2019) 'Including ultrasound scans in antenatal care in low-resource settings: Considering the complementarity of obstetric ultrasound screening and maternity waiting homes in strengthening referral systems in low-resource, rural settings', Seminars in Perinatology, 43(5), pp. 273–281. Available at: https://doi.org/10.1053/j.semperi.2019.03.017.

Tefera, M. et al. (2024) 'Health professionals' perspectives on the role of obstetric ultrasonography in maternity care in rural eastern Ethiopia: a qualitative descriptive study', BMJ open, 14(4), p. e075263. Available at: https://doi.org/10.1136/bmjopen-2023-075263.

Viner, A. et al. (2022) 'Midwife-Led Ultrasound Scanning to Date Pregnancy in Malawi: Development of a Novel Training Program', Journal of Midwifery and Women's Health, 67(6), pp. 728–734. Available at: https://doi.org/10.1111/jmwh.13442.

Viner, A.C. et al. (2022) 'Training in Ultrasound to Determine Gestational Age (TUDA): Evaluation of a Novel Education Package to Teach Ultrasound-Naive Midwives Basic Obstetric Ultrasound in Malawi', Frontiers in Global Women's Health, 3(April), pp. 1–10. Available at: https://doi.org/10.3389/fgwh.2022.880615.

Wachira, J. et al. (2023) 'A training program for obstetrics point-of-care ultrasound to 514 rural healthcare providers in Kenya', BMC Medical Education, 23(1), pp. 1–8. Available at: https://doi.org/10.1186/s12909-023-04886-x.

Wanyonyi, S.Z. et al. (2017) 'Opportunities and Challenges in Realizing Universal Access to Obstetric Ultrasound in Sub-Saharan Africa', Ultrasound International Open, 3(2), pp. E52–E59. Available at: https://doi.org/10.1055/s-0043-103948.

WHO (2016) 'WHO Antenatal Care Guidelines', WHO Press, (March), pp. 1–6.

WHO (2022) WHO antenatal care recommendations for a positive pregnancy experience maternal and fetal assessment update : imaging ultrasound before 24 weeks of pregnancy. Available at: https://www.ncbi.nlm.nih.gov/books/NBK579604/pdf/Bookshelf_NBK579604.pdf.

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OTHER INFORMATION

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