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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 health 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.” (MW02-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 institu-

tions, 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 cur-

tains 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 two hospitals. As a result, it is possible that opinions, experiences, 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

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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.

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