Exploration moving beyond medical facility walls: opportunities, challenges and attitudes of midwives towards planned homebirth: a qualitative study

Thuraya Ibrahim Fallatah1,2, Grace Mcfarlane Lindsay2

1Senior Specialist in Midwifery, Ministry of Health, Jeddah 22427, Saudi Arabia. 2Department of Medical Surgical Nursing, Umm AlQura University, Taif 21944, Saudi Arabia.

Corresponding to: Thuraya Ibrahim Ahmad Fallatah, Senior Specialist in Midwifery, Ministry of Health, Abdullah Alroweshed street, Alsanabel District, Jeddah 22427, Saudi Arabia. E-mail: Thurayafallatah@gmail.com.

Author contributions
TIF conducted the study and wrote the first draft of the manuscript. GML supervised the study and revised the manuscript. All authors read and approved the final draft of the manuscript.

Competing interests
The authors declare no conflicts of interest.

Acknowledgments
This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Peer review information
Nursing Communications thanks all anonymous reviewers for their contribution to the peer review of this paper.

Abbreviations
PHB, planned home birth; MOH, Ministry of Health; CMNPH, conceptual model of nursing and population health; COREQ, consolidated criteria for reporting qualitative research; CNMs, certified nurse-midwives; RMs, registered midwives.

Citation

Abstract
Background: The establishment of Saudi Vision 2030 has led to a shift from obstetric care to midwifery-led care in maternity care, giving rise to planned home birth (PHB). This study may enable midwives to carry out PHB and achieve the goals of the Saudi health vision. The general aim is to explore Saudi midwives’ attitudes towards the PHB, opportunities and challenges associated with PHB implementation in Saudi Arabia. Methods: We employed a qualitative study design and conducted interviews using open-ended questions with 19 Saudi midwives recruited from thirteen health regions. Thematic analysis was manually performed to analyze the qualitative data. Results: Thematic analysis revealed seven major themes: midwives as care providers in PHB, health institutions, academic institutions, national policy for PHB, Women’s health status, socio-economic and physical environment suitability, and maternal and neonatal health outcomes. However, Saudi midwives would exhibit a favorable attitude towards PHB if decision-makers from the Ministry of Health and the Ministry of Education addressed the challenges and promoted opportunities for providers, organizations, and the population. Conclusion: The findings of the thematic analysis shed light on several positive aspects, including job opportunities and high financial incomes for midwives. However, they also revealed challenges such as a shortage of midwifery staff, a scarcity of midwifery academic programs, and an ineffective administrative support system for midwives. Integrating both sets of findings enhances the understanding of the challenges and opportunities of planned home birth in Saudi Arabia from various perspectives, capturing the breadth and depth of the obtained data.

Keywords: planned home birth; thematic analysis; maternal services; midwife, Saudi Arabia
Background

The relationship between a pregnant woman and her midwife is built on trust and mutual respect. Both parties contribute their expertise to this reciprocal relationship. The woman shares personal knowledge about her life, interests, and preferences, while the midwife provides knowledge about medical care during the childbirth process. The midwife's physical and mental presence, along with continuous support, embody the science and art of midwifery, fostering the woman's confidence in her own abilities [1, 2].

It is a fact that cultural differences within the healthcare system and the diverse needs of women seeking childbirth care can pose challenges in delivering high-quality midwifery services. However, these cultural frictions can be alleviated through home birth services, which have the potential to facilitate midwifery practices [3]. In fact, the right of women to choose the location of childbirth has been recognized as one of their most important human rights.

Furthermore, it is important to acknowledge that the choice of homebirth should be respected and accepted without questioning or investigation when formulating childbirth care policies. While women who opt for homebirth services generally have a low-risk profile, human rights grant them the ability to choose home as their preferred birthplace, even in cases of high-risk profile. Several studies have indicated that hospital-based childbirth is safer than planned home birth (PHB) for both the woman and her baby [4]. However, other studies have demonstrated that PHB can be a safer option specifically for low-risk women [5, 6].

The differences could be explained by the truth that studies showing negative effects of PHB have included high-risk women, unplanned homebirths and disturbance errors in the analysis. In effect, PHB might cause a significant reduce in the rate of maternal and neonatal deaths occurred in unplanned home births [7]. Apparently, the choice of childbirth location for women can be influenced by the presence of midwives and skilled attendants [6].

This chapter aims to conduct a literature review that is relevant to the research questions of the current study, which are focused on understanding midwives' perceptions of the opportunities and challenges associated with the implementation of home birth policies and practices in Saudi Arabia. Additionally, the study aims to explore how midwives can effectively provide appropriate care during home births. The literature review primarily focuses on midwives' attitudes toward PHB, as well as the challenges and opportunities associated with it, from various dimensions such as socio-demographic factors, environmental and physical aspects, and the dimension of health status. The review also considers related dimensions of the healthcare system, including organizations, healthcare providers, policy considerations, as well as nursing factors and population health outcomes. In Saudi Arabia, there is currently a knowledge gap regarding midwives' attitudes toward PHB, as well as the associated challenges and opportunities. Therefore, this study aims to explore and address this gap in knowledge, with the goal of improving health policies and midwifery practices in the country.

Upstream factors and midwives’ attitude, challenges and opportunities toward PHB

Attitude refers to a mental and neural state that is shaped by an individual’s experiences and exerts a directive or dynamic influence on their reactions to actions and situations related to it. It involves a readiness to respond favorably or unfavorably in a predictable manner towards a specific class of actions and things.

Several studies have examined the impact of midwives’ age, educational qualifications, and clinical experience on their attitude towards PHB [8]. The findings from these studies indicate that age plays a significant role in shaping midwives’ attitudes towards PHB. In fact, willingness to practice the midwifery in the home was correlated with factors related to midwives younger age (P < 0.001), such as their confidence in their abilities of management as well as their beliefs about safety of PHB [9]. Additionally, exposure to PHB during midwifery education, the midwife's practice in experiencing in home settings, and age were found to significantly influence attitudes towards home birth [10].

Certified nurse-midwives (CNMs) and registered midwives (RMs) who demonstrated favorable attitudes towards PHB were found to be significantly younger compared to those with unfavorable attitudes (CNMs: 48.1 vs. 49.6 years, t = 3.20, P = 0.001; RMs: 41.0 vs. 46.7 years, t = 2.86, P = 0.004) [10]. This suggests that younger midwives are more likely to have a positive attitude towards PHB and are willing to provide midwifery care in women’s homes.

The clinical practice experience of midwives in PHB settings was found to have a significant positive association with their attitudes towards PHB [8–10]. Studies have reported that midwives who had previous experience providing intrapartum home birth services had higher average scores on the Providers’ Attitude to Planned Home Birth Scale compared to those who had not provided home birth services. The difference in mean scores between the two groups was statistically significant (degree of freedom = 14.04, P < 0.0001) [8]. This indicates that midwives with clinical practice experience in home birth settings tend to have more positive and favorable attitudes towards PHB. A study conducted in the USA by Vedam and colleagues (2010) also identified a significant relationship between midwives’ clinical practice experience and their positive/favorable attitudes towards PHB among 50 midwives [8].

In an interesting study conducted by Vedam and Stoll, a linear regression model was used to identify predictors of attitudes towards PHB [9]. The results indicated that enhancing clinical experiences with PHB and expanded exposure to PHB were statistically significant predictors of favorable attitudes towards PHB (P < 0.001). Additionally, the experience of midwifery practice in a home setting was found to be a significant covariate of attitudes towards PHB [10]. This suggests that as midwives gain more exposure and experience with PHB, their favorability towards it increases.

Midwives’ educational qualifications also showed a significant positive association with attitudes towards PHB [9–11]. Researchers reported significant associations between scores on the Providers’ Attitude to Planned Home Birth Scale and educational background, practice experience, and external factors. This indicates that the scale is effective in reliably distinguishing attitudes towards home birth among CNMs with different backgrounds [8]. The P-value was found to be < 0.001 for midwives who had the opportunity to attend a PHB as part of their curriculum in nurse-midwifery school [8, 9].

In a parallel randomized controlled trial study, a total of 226 midwives working in maternity units were randomly selected from health facilities in Sokoto, Nigeria. The study utilized a statistical test called the test of fixed effect, which assumes fixed parameters to estimate the statistical models. The results of this test showed a significant main effect of PHB education and its interaction on the midwives’ intention, and attitude towards PHB (P < 0.001) [11]. In the intervention group that received PHB education, there was a stronger intention to practice PHB compared to the control group (P < 0.001) [11].

Regarding educational attainment, midwives holding a master’s degree scored higher (4.32) compared to those with an associate or bachelor’s degree in terms of their behavior and beliefs towards normal childbirth [9]. The survey findings indicated that higher levels of educational attainment in the midwifery profession were associated with greater impact on midwives’ attitudes and beliefs towards normal childbirth [9].

Methods

Study design and sample size

In the mentioned study, a qualitative research design was adopted, and 19 Saudi Midwives from thirteen health regions were interviewed using open-ended questions. The required sample size in qualitative research relies on researchers’ judgment and experience in examining collected data against the research purpose, method of research and sampling strategy, bearing in mind that qualitative researchers are...
more concerned about the quality of information obtained from participants than its quantity. In qualitative research, the emphasis is on the richness and depth of data rather than generalizability to a larger population. Therefore, a smaller sample size can be appropriate and effective in providing valuable insights and understanding of the research phenomenon.

**Study subjects**
In the current research, a total of 19 Saudi midwives were recruited based on specific inclusion and exclusion criteria. The study included all registered Saudi midwives working in Ministry of Health (MOH) hospitals and primary health care centers in Saudi Arabia during the study period, who met the criteria and were willing to participate by giving informed consent. On the other hand, certain categories were excluded from the study. Midwives working in military private hospitals or academic fields were excluded, likely due to potential differences in their practice settings or specific research objectives. Non-Saudi midwives were also excluded, possibly to focus specifically on the perspectives and experiences of Saudi midwives. Additionally, general nurses working in obstetric units were excluded, likely to ensure a more focused and specific sample of midwives.

**Conceptual framework**
The study was guided by the Conceptual Model of Nursing and Population Health (CMNPH), which is a framework that focuses on understanding population health phenomena and informing nursing research and practice [12]. The CMNPH places emphasis on disease prevention, wellness promotion and improving population health outcomes. In the context of the study, the CMNPH was relevant because it aligned with the objectives of the National Transformation Program for the healthcare sector in Vision 2030. The study aimed to explore midwives’ attitudes towards PHB and the opportunities and challenges associated with its implementation in Saudi Arabia. By understanding these factors, the study sought to contribute to improving access to healthcare services and enhancing their quality, which are key objectives of Vision 2030. The CMNPH provided a suitable conceptual framework for the study because it recognized the role of midwives in promoting wellness, preventing diseases and improving population health. The activities and interventions carried out by midwives are focused on restoring and maintaining wellness, making them directly relevant to both the improvement of population health and the practice of nursing. By using the CMNPH as a guiding framework, it helped to contextualize the research questions and align them with broader healthcare goals and strategies.

**Ethical considerations**
In this study, the researchers took necessary steps to ensure ethical considerations were addressed. An application for ethical review was prepared and submitted to the Umm AlQura University, Institutional Review Board which is responsible for reviewing research proposals and ensuring compliance with ethical guidelines. The research proposal and its methods were evaluated based on the most updated Declaration of Helsinki to ensure ethical perspectives were upheld [13]. To protect the rights and well-being of the participants, several measures were implemented. Participants were fully informed about the study, including its purpose, procedures, and potential risks and benefits. It was emphasized that participation in the study was voluntary and that they had the right to withdraw at any time without facing any consequences. The researchers also assured the participants that their data would be collected and stored anonymously, ensuring confidentiality. Ethical approval for the study was granted by Umm AlQura University (approval # A01243) after the Nursing Department Committee reviewed and approved the research proposal. Following the approval, letters of invitation were sent to the Director of Midwifery at MOH and the Chairperson & Head of the Scientific Committee at the Saudi Midwifery Group to seek permission to contact the midwives. Once permissions were obtained, an information sheet explaining the aim of the research was prepared and distributed to the potential participants. Before participating in the study, each midwife who met the inclusion criteria was approached by the researcher. The purpose and nature of the research were explained to them, and they were given an opportunity to ask any questions. Written consent was obtained from each midwife who agreed to participate, further confirming their voluntary participation.

**Data management and analysis**
All interviews were analyzed manually using thematic analysis in six stages: 1. interview transcripts were read and re-read repeatedly in order to obtain a broad understanding of the participants’ views. 2. Initial codes were generated; a complete coding approach was utilized in order to identify anything and everything across the data set which might have relevance to the research question. 3. All similar codes or meanings were collated together into potential themes. Relevant extracts from the data set were collated to form themes. 4. Potential themes were reviewed, and a thematic map generated. 5. Identified themes and sub-themes were checked against each other and the dataset to ensure they were coherent, distinctive, consistent and working together. 6. Themes were reflected at the semantic level of data with illustrative quotes from participants selected.

**Rigour**
The use of maximum variant purposeful sampling in this study demonstrates the researchers’ intention to capture diverse perspectives and ensure representation of different sub-groups within the research setting. By deliberately selecting participants who varied in relevant characteristics, such as age, experience and setting, the researchers aimed to gather a comprehensive range of insights and experiences. This approach allowed for meaningful comparisons to be made between different groups, enabling the identification of commonalities and differences in interpretations across these groups. To ensure the reporting of the study was thorough and transparent, the study team adhered to the Consolidated Criteria for Reporting Qualitative research (COREQ). The COREQ is a set of guidelines designed to enhance the reporting quality of qualitative research studies. Adhering to the COREQ guidelines helps to improve the rigor and dependability of qualitative research by promoting transparent reporting and allowing for better evaluation and understanding of the study’s findings.

**Results**

**Thematic analysis**
It is mentioned that seven major themes emerged from the thematic analysis conducted in the study. These themes were identified based on the analysis of the participants’ responses, and they provide an overview of the key findings. Quotations from the participants are used to illustrate the themes and provide direct insights from their perspectives. The actual words written by the participants are identified using italics or inverted commas, indicating that they are verbatim quotations. In addition to the major themes, the study also identified associated sub-themes that further elaborate on the main themes. The themes and sub-themes are presented in Table 1 and Figure 1.

**Midwives, a care provider in PHB**
The theme described in this section focuses on the midwives’ attitude toward PHB and the readiness of mental and neural states organized by experience to act and react favorably towards it in a predictable manner. It also describes their viewpoint towards PHB safety and then discusses whether the work experience affects the midwife’s attitude toward PHB. Finally, it discusses whether the midwives are competent to deliver PHB services in Saudi Arabia.

The qualitative section of the questionnaire asked all participants about their thought processes regarding a PHB service. Four sub-themes emerged from this analysis, namely “midwives’ attitude toward PHB, “midwives” viewpoint towards safety aspects of PHB, “work experience” and “basic competencies”. These sub-themes
Table 1 Themes and sub-themes

<table>
<thead>
<tr>
<th>No.</th>
<th>Themes</th>
<th>Sub-themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Midwives, a care provider in planned home birth</td>
<td>Midwives attitude toward PHB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Midwives' viewpoint toward PHB safety</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Work experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Basic competencies</td>
</tr>
<tr>
<td>2</td>
<td>Health institution</td>
<td>Administrative support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Midwives job opportunities</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Midwives staffing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transportation and emergency management</td>
</tr>
<tr>
<td>3</td>
<td>National policy for planned home birth</td>
<td>Awaiting guidance</td>
</tr>
<tr>
<td>4</td>
<td>Women health state</td>
<td>Eligibility criteria for PHB</td>
</tr>
<tr>
<td>5</td>
<td>Academic institution</td>
<td>Educational programs</td>
</tr>
<tr>
<td>6</td>
<td>Socio-economic, physical environment suitability</td>
<td>Disparities in preferences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fitness for purpose</td>
</tr>
<tr>
<td>7</td>
<td>Maternal and neonates health outcome</td>
<td>Holistic midwifery high quality care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Minimize medicalization</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maternal empowerment and satisfaction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Breast-feeding opportunities</td>
</tr>
</tbody>
</table>

PHB, planned home birth.

Figure 1 Themes and subthemes outcome within the context of the Conceptual Model of Nursing and Population Health

provide a more detailed exploration of the midwives’ attitudes, their considerations regarding the safety of PHB, the influence of their work experience on their attitude, and their perceived competencies related to PHB.

**Midwives’ attitude toward PHB.** The findings of the study indicate that the attitudes of Saudi midwives towards PHB are neutral, with an average score of 54.58. However, it is important to note that the qualitative analysis revealed that some participants (8 midwives) had a positive attitude towards PHB, while the remaining participants (11 midwives) expressed negative inclinations. It is mentioned that some responses were ignored due to misinterpretation or non-relevance. The study’s findings underscore the need for careful consideration of midwives’ attitudes towards PHB and the importance of addressing any concerns or reservations they may have. This can contribute to the development of evidence-based policies and practices that support safe and positive experiences for women who choose PHB in Saudi Arabia.

For instance, midwives who expressed a positive attitude explained that they wanted to see this option available in Saudi Arabia. However, they describe offering a PHB service as an inspiring step in maternity care, and they are willing to motivate themselves in their career and support the PHB as a core for the maternity care system. This positive attitude toward PHB is represented by a few midwives in the study, such as “Love to see this option available for women”. (Participant No19).

Several other midwives indicated their willingness to develop their knowledge and skills to offer safe home birth care for women’s. “I intend to develop my skills in providing empathic and women-centred
Some midwives also showed their unlimited support for a PHB. “I support a planned home birth”. (Participant No. 14).

On the other hand, some midwives showed a negative attitude and explained that they would not deliver maternity care at homes such as the following participants: “unfortunately, I will not accept to give birth care service at home at all”. (Participant No. 13). “I do not accept to offer birth care at home for women”. (Participant No. 19).

Nevertheless, some midwives say they need a support team during delivery to change their minds about home delivery. “I will not accept to go to the woman’s house to provide the service unless there is a specialized team and a gynaecologist to deal with difficult labour and if there is a specialized ambulance to transport the mother to the hospital if necessary”. (Participant No. 16).

Midwives’ viewpoint toward PHB safety. The second subtheme emerged from the analysis was “midwives’ viewpoint towards PHB safety”. This phrase is taken straight from the participant’s own words. In this subtheme, the midwives explain their viewpoint towards the safety aspects of PHB. Moreover, it reflects the midwives’ perception of whether or not PHB is the best and safest birth approach for low-risk women. In fact, the subtheme “midwives’ viewpoint toward PHB safety” is reflected in two phrases: PHB is a safe option and PHB is risky and unsafe. The qualitative analysis revealed that 11 midwives indicated that home birth is not safe, whereas only one midwife stated that home birth is as safe as hospital birth. The other participants’ answers were ignored due to misinterpretation or non-related answers.

Based on the qualitative analysis, only one midwife mentioned that PHB is a safe option for the mother and her newborn. “The home birth is a safe option”. (Participant No. 13).

On the other hand, all other respondents consider PHB a risky choice for the mother and her newborn. They believed that the mother and newborns would be subject to the risk of complications. Unsurprisingly, most surveyed midwives, such as the following participants, viewed the PHB as an unsafe option. “My biggest concern about planned home birth is the safety of mother and child”. (Participant No. 17). “I am concerned about mother and newborn safety”. (Participant No. 102). “Planned home birth is very risky”. (Participant No. 2). “The disadvantages of this service are that giving birth at home is risky”. (Participant No. 15).

Work experience. The subtheme “work experience” responses emerging from the qualitative analysis indicated that current working midwives’ lack of experience in PHB concerned them regarding implementing a PHB service in Saudi Arabia. The qualitative result showed that some participants (3 midwives) emphasized the importance of work experience for home birth. “I lack experience and how to deal with home births”. (Participant No. 14). “I didn’t attend home birth before and had no experience”. (Participant No. 7). “Developing my experience and confidence is a big concern”. (Participant No. 6).

The other participants’ answers were ignored due to misinterpretation or non-related answers.

Basic competencies. The last subtheme, “basic competencies”, was answered by only two midwives indicating that some midwives lack basic competencies in neonatal care, which would hamper home delivery according to the midwife’s own words in the analysis as follows: “I am concerned about my inability to provide primary fetal care”. (Participant No. 11). “There should be a nurse and not a midwife to take care of the newborn”. (Participant No. 12).

The other participants’ answers were ignored due to misinterpretation or non-related answers.

Health institutions
One of the most important themes that emerged from the analysis was the “Health institutions”. In this theme, midwives showed that a lack of administrative support can challenge a PHB service. The analysis introduced several new subthemes that can be considered as challenges for PHB such as the midwives’ lack of support from administration in terms of “administrative support”, “midwives job opportunities”, “midwives staffing” and “transportation and emergency management”.

Administrative support. Some participants stated the administrative challenges and issues, such as the lack of midwife’s support by health institution leaders, liability and insurance issues, risk management and the lack of a license for midwives to practice home birth as big obstacles. “The problem is the Lack of a system to support home birth”. (Participant No. 4). “Midwives need strong administrative support to implement the PHB protocols”. (Participant No. 6). “The challenges we face and issues like health insurance, professional insurance”. (Participant No. 17). “Lack of a license from the Ministry of Health to practice home birth”. (Participant No. 11).

Midwives job opportunities. The qualitative section of the questionnaire asked midwives about the opportunities they expect to obtain by implementing a PHB service in Saudi Arabia. Their answers were summarized in terms of financial return, independence, self-employment and midwife private clinics. “There will be an increase in the income of the midwife and independence”. (Participant No. 10). “One of the chances I will get is financial compensation for home birth service”. (Participant No. 11). “The best chance is that I can work with my full authority and provide full maternity care without the intervention of a doctor at home”. (Participant No. 16). “Self-employment by opening a private clinic and continuous follow-up of the pregnant woman from the time of conception, birth and postpartum care”. (Participant No. 13).

Midwives staffing. The third subtheme “midwives staffing” indicated that midwives believed that there is a shortage of midwives in Saudi Arabia and that more midwives should be provided and trained to give birth at home to meet the need. “A shortage of midwives will pose a challenge to home birth”. (Participant No. 18).

Transportation and emergency management. The subtheme “transportation and emergency management” highlighted the emergency challenges that midwives may experience during PHB.

The result of the qualitative study showed that some participants (15 midwives) were concerned about intrapartum bleeding, postpartum haemorrhage, obstructed labour, the need for a neonate intensive care unit and inefficient emergency transportation, which may increase the risk of mortality. “The bad issue I may face is a mother bleeding”. (Participant No. 14). “I worry about how to stop the bleeding if it occurs”. (Participant No. 4). “Fear of postpartum haemorrhage and fear of widening the wound”. (Participant No. 3). “I am concerned if labour is obstructed or the child is tired, and there is no doctor”. (Participant No. 5). “The need to enter the newborn for neonatal intensive care in some cases is a source of concern for me”. (Participant No. 2). “I am concerned about the failure to transfer the mother or the child to the hospital when urgent transportation is needed”. (Participant No. 6).

National policy for PHB
There are many challenges for home birth based on midwives’ viewpoints. It is necessary to consider midwives’ opinions when establishing a clear policy guaranteeing the rights of the mother, the midwife and the medical team, and to provide safety and to ensure the application of quality standards and clear planning for the implementation of a PHB policy. “Provide strict policies to ensure the safe delivery of home birth services”. (Participant No. 9). “I would be concerned that the policies and standards were still unclear”. (Participant No. 11). “The policies and standards are unclear still”. (Participant No. 6). “I am concerned that the implementation of the protocols is not planned in an excellent manner, which causes a failure to provide this service to women, which is one of their rights”. (Participant No. 5).

Women’s health status
The qualitative analysis results indicate that seven midwives provided important opinions on health disorders regarding home birth by highlighting the subtheme “eligibility criteria for PHB”. They mentioned that health disorders like gestational diabetes and hypertension may affect a PHB. Also, they highlighted the importance
of early screening and planning for every mother who wants a home birth to ensure no risk factors require her to give birth in the hospital. Unclear maternal history can challenge a PHB, and eligibility criteria for a PHB should be adopted to overcome this challenge. “The mother’s failure to disclose health problems in previous births”. (Participant No. 12). “We have to have a prior follow-up on whether the mother is legible to give birth at home or not, and will not allow home birth except in certain cases”. (Participant No. 15).

Academic institution
When midwives were asked to mention the challenges of PHB, their answers could be summarized under the subthemes “Educational programs”, “poor academic programs”, “lack of training and simulation” and “unavailability of programs that allow for the midwives with diploma degrees to complete studies and obtain a bachelor's degree to improve their experience of giving birth care at home”. At present, a midwife's failure to obtain a bachelor's degree is the biggest obstacle and challenge. Participant 10 blamed the lack of support from educational and health authorities.

The qualitative result in which 16 midwives stated that education affects their attitude to PHB. “Equipping and training currently RMs to be able to provide this care is the biggest obstacle”. (Participant No. 3). “Nursing training departments should develop sufficient training courses for midwives to be aware of all aspects of home deliveries”. (Participant No. 8). “Making clear and long-term plans and courses, conducting simulation for a home birth, and doing everything necessary for this to succeed”. (Participant No. 7).

Some midwives mentioned that PHB should be included in the midwifery curriculum in Saudi nursing colleges. “Home birth should be included in education curricula”. (Participant No. 6). “Conducting training and preparation courses for midwives working in hospitals and including this service as a skill taught in midwives' curricula”. (Participant No. 9).

Socio-economic, physical environment suitability
This theme is considered the social determinants of health encompassing socio-economic environment and physical environment, the circumstances of a population including social support, culture, physical environment surrounding the population including water, urban and rural design and resources, housing, bacteria, and viruses based on the midwives’ words. The analysis of this theme produced the subthemes of “disparities in preferences” and “fitness for purpose”.

Disparities in preferences. In this subtheme, midwives stated that the Saudi community needed more improvement in the awareness of women and families regarding the midwives’ roles and their ability to safely conduct a PHB. 117 midwives agreed with the statement that “It worries me when people I care about decide to have planned home births”. These results highlight the need for more awareness about home birth among midwives and families in the community.

In effect, the surveyed midwives explained that community thoughts may hinder the implementation of a PHB, and they hope there will be a thoughtful service in line with Saudi society’s culture. “Societal thought may constitute an obstacle to home birth”. (Participant No. 2). “Saudi society may have reservations about that”. (Participant No. 5).

There was also an emphasis on the importance of raising the level of community awareness and preference of the midwives’ roles, respect and population agreement that they are the primary maternity care provider. “Rise the community awareness about midwives role as a primary maternity care provider, not a branch”. (Participant No. 16). “I would be concerned my patients would not understand my role clearly”. (Participant No. 7). “We need extensive education for women in the society”. (Participant No. 13).

Fitness for purpose. In the subtheme “fitness for purpose”, midwives explained that a woman’s home is an ideal place for childbirth if the home environment is prepared and made suitable for childbirth, and that women need to be aware of the assessment of environmental risks and the appropriateness of their homes for childbirth. “The environment should be equipped and appropriate for birth”. (Participant No. 6). “Sterilization is very important and necessary to prevent infection”. (Participant No. 11). “The Women need awareness about risk assessment and about the suitability of their home for birth”. (Participant No. 4).

Maternal and neonates health outcome
In the qualitative survey, all participants were asked to add suggestions or comments about creating a home delivery service from the service user perspective. What emerged was that the population outcome from this service is included in the subthemes “high-quality care”, “medical intervention”, “maternal empowerment and satisfaction” and “breast-feeding chances”.

Holistic midwifery high-quality care. According to the midwife's viewpoint, there are many population opportunities for home birth. Some midwives mentioned that a PHB enables them to provide quality maternity care for women and newborns to achieve the wishes of mothers wanting a home birth. “We will be able to provide high-quality maternity care”. (Participant No. 4). “The planned home birth improves the quality of home care and reduces pressure on hospitals”. (Participant No. 2). “The planned home birth will strengthen the trust and bond between the mother and the trained midwife”. (Participant No. 1).

Minimize medicalization. The qualitative analysis showed that some midwives mentioned that a PHB would reduce medical intervention and improve the maternal outcome. “A beautiful thing is that home birth may work to reduce caesarean sections and give mothers a chance to give birth naturally, instinctive”. (Participant No. 1). “The planned home birth will greatly affect the concept of childbirth in women and reduce the rates of unnecessary medical interventions in childbirth, as well as the rates of caesarean sections”. (Participant No. 7).

Maternal empowerment and satisfaction. The qualitative result reported that some midwives stated that a PHB empowers the woman and allows her to experience the physiological birth, increasing her satisfaction. “Home birth empowering the women”. (Participant No. 8). “Home births offer the opportunity to support women to have empowered and healing birth experiences that they are happy with”. (Participant No. 6). “Public service will be more accessible to pregnant women”. (Participant No. 10). “Allow providing water births in the planned home birth is amazing”. (Participant No. 13). “I think a lot of moms will be happy about this service”. (Participant No. 5).

Breast-feeding opportunities. One midwife stated that PHB increases the chance of breastfeeding by strengthening the bond between mother and neonate. “It will strengthen the trust and bond between the mother and her child, so the child remains with his mother and is not separated from her”. (Participant No. 7).

Discussion
Most midwives expressed their views on PHB in terms of the safety of mothers and newborns, support from health services and academic institutions, having a national PHB policy, knowledge of women's health status, primary factors (socio-economic environment, physical environment), and maternal and newborn health outcomes. Given the importance of PHB, this study was designed and undertaken to gain an understanding of Saudi midwives’ attitudes toward PHB, challenges associated with the practice, and opportunities for the population, care providers, institutions, and policymakers in Saudi Arabia.

The identification of these factors aligns well with the conceptual model of Nursing and population health. The integrated findings of the current study indicate that the minimal administrative support for the midwifery profession and the shortage of bachelor's academic programs in midwifery are among the most influential factors on midwives' attitudes toward PHB in Saudi Arabia, as well as the roles of midwives in the labor and delivery of maternity care for low-risk women. This result is supported by a previous study conducted by McCourt and Rayment, which found that midwives are more effective in PHB practice when supported by the healthcare team and
administrators [14]. Additionally, an educational nursing program was found to have an impact on midwives’ attitudes towards PHB practice [15, 16].

The major theme revolves around midwives as care providers in PHB, encompassing midwives’ attitudes toward PHB, their viewpoint on PHB safety, work experience and basic competencies. Midwives perceive home birth care as a fundamental aspect of midwifery practice and thus may develop more favorable attitude toward PHB. By doing so, they can align with the goals of the Saudi health vision and contribute to improving the overall healthcare landscape.

Midwives consider home birth care to be a fundamental responsibility within the scope of midwifery practice. They emphasize the need for midwives to be effectively trained, competent, and capable of managing emergencies, while also possessing excellent communication skills. Furthermore, they stress the importance of a well-integrated health system that includes an efficient and time-saving emergency supportive team to ensure the safety of births, particularly in cases of emergencies [17, 18].

The significance of such support in home birth practice is widely recognized in healthcare literature. Adequate human resources and equipment are deemed crucial to enhance and support midwives in their PHB practice [14]. These resources play a vital role in ensuring the provision of high-quality care and maintaining the safety of both the mother and newborn during home births.

One of the main limitations of this study lies in analyzing the midwives’ own words in response to the open-ended questions, which helped develop baseline data on the challenges and opportunities associated with PHB. This phase was conducted because no previous published statistics in Saudi Arabia had explored this aspect. This methodological approach allowed us to examine the attitude of Saudi midwives in 13 health regions toward PHB, including administrative challenges, challenges faced by providers, as well as job and population outcome opportunities. This study is the first of its kind – an innovative exploration of the Saudi midwives’ attitude toward PHB – using the CMNPH prior to the implementation of home maternity care in Saudi Arabia. The aim is to provide decision-makers with background information on the Saudi midwives’ attitude toward PHB, highlighting its strengths as a point of consideration before implementing PHB, and addressing the challenges that need to be addressed and managed during the policymaking process.

Regarding study limitations, it should be noted that this study was conducted in 2022 when there was no PHB service available in Saudi Arabia. Additionally, there is a lack of statistics from the MOH or any other health sector regarding the number of midwives who are qualified to provide appropriate care during home births or hold a PHB license. Furthermore, as of now, the Saudi Commission for Health Specialists does not offer the PHB license for maternity providers, indicating a gap between the 2030 vision and the implementation of maternity care services.

The findings of this study are limited to the MOH hospitals in Saudi Arabia and focused specifically on the attitude of Saudi midwives working in MOH-based positions towards PHB. The study did not include midwives working in other health sectors, such as military, educational, or private hospitals. Therefore, the findings cannot be generalized to all healthcare settings in Saudi Arabia, particularly private practices, as they were not considered in this study.

Conclusion

The study has successfully identified contextual factors that influence the attitude of Saudi midwives toward PHB. Through a thematic analysis, the study revealed seven major themes that reflect the viewpoints of midwives regarding the challenges and opportunities associated with the implementation of PHB services. The findings shed light on several positive aspects, including job opportunities and high financial incomes for midwives. However, they also highlighted issues such as a shortage of midwife staffing, limited availability of midwifery academic programs, and an ineffective administrative support system for midwives.
By integrating these findings, a comprehensive understanding of the challenges and opportunities related to PHB in Saudi Arabia has been achieved, considering different perspectives and a wide range of data. The study results indicate that Saudi midwives currently hold a neutral attitude toward PHB. However, if decision-makers from the MOH and Ministry of Education address the challenges faced by providers, institutions and the community, while simultaneously promoting opportunities for providers, the population, and organizations, Saudi midwives may develop a favorable attitude toward PHB. This, in turn, would help to achieve the goals set by the Saudi health vision.

References