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Exploring healthcare providers' perspectives of childbirth education classes for quality of care and positive childbirth experience: an interpretative phenomenological analysis study

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Abstract

Background Pregnancy is a significant transitional life experience that can be one of the most stressful experiences in life. Childbirth education is designed to improve health behaviors and offers information on psychological and physical changes that occur in pregnancy, signs that labor has begun, hospital routines and what to expect, how to manage pain through non-pharmacological strategies, the first hours of a newborn's life, and the benefits of breastfeeding. Healthcare providers play an essential role in this education. To discover how healthcare providers view childbirth education classes, we explored their perceptions in relation to the quality of care and positive childbirth experiences.

Methods An interpretative phenomenological qualitative approach was conducted in three government hospitals in the Eastern Province of Saudi Arabia. Data collection involved conducting semi-structured interviews with 15 participants. The sample consisted of physicians, nurses, and educators, ensuring a diverse range of perspectives.

Results An interpretative phenomenological analysis was conducted for data analysis. One core category (*Road to a Pleasant and Safe Journey*) with three themes *(Mother's Experience*, *Obstacles*, *and Struggles of Healthcare Providers*, and *Solutions & Suggestions)* emerged from the data analysis. The study findings indicate that childbirth education programs boost maternal health and facilitate a more positive delivery experience.

Conclusions Receiving childbirth education about natural and instinctive childbirth was necessary for low-risk mothers to experience a positive childbirth experience. The education also enabled mothers to feel in control during pregnancy, birth, and postpartum. From the results of this research the following recommendations can be made: childbirth education should be mandatory for all hospitals and primary healthcare institutions in the Kingdom and its

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curriculum should be standardized by the ministry of health and all healthcare providers employed in maternity care should be required to attend the standardized childbirth education programs.

Keywords Childbirth education, Classes, Childbirth experience, Pregnancy, Prenatal care

Background

Childbirth education classes is designed to improve health behaviors and offers information on psychological and physical changes that occur in pregnancy. Classes have played an integral part in antenatal care services for many years, focusing on preparing women for childbirth, choosing a birthing method and supporting self-efficacy in childbirth, which, in turn, could have an effect on women's birth experience [1]. They have been found to be very helpful and effective in improving mothers' knowledge of childbirth, their outcomes, and experience [2, 3] and making women less anxious, more confident, and more able to communicate openly [4]. Childbirth preparation classes encourage pregnant women to make their own decisions before and throughout childbirth and use the motherhood skills they have learned in classes to manage their labor pain, look after their infant, and breastfeed [5].

World Health Organization [6] guidelines consider positive experiences of childbirth to be a major feature of care. Women who have a positive experience of childbirth are not overwhelmed by physical or emotional issues, and this is important because how they view and experience childbirth directly impacts the health of the infant and the mother [7]. Research has shown that negative experiences of pregnancy and childbirth lead to rise in the rate of cesarean births, postpartum depression, and fewer future pregnancies [8].

Women evaluate the quality of the perinatal care they receive in childbirth according to whether they are satisfied with the care they receive, and this determines whether they use the health facilities available to them [9]. Devkota et al. [10] note that it is crucial to improve the quality of care to ensure that the mothers are safe and that mortality and morbidity rates fall. One of the WHO's main goals is to create integrated and excellent quality pregnancy care services so that women have a positive experience of pregnancy and childbirth [6]. Although many Saudi Arabian women give birth every year, the birth rate in 2022 was 16.2 births per 1000 people; Saudi Arabia is facing a rapid rise in Cesarean deliveries with an average of 32.9% from the total deliveries in 2021 [11], where the World Health Organization suggested that Cesarean Section should not exceed 15% of the total deliveries [12].

Furthermore, women's need for emotional support and communication with specialists, in addition to information about birth, should be included in any educational activities that aim to improve their knowledge [13].

Abebe et al. [14] observed that women in developing countries may be prevented from accessing antenatal, delivery, and postnatal care due to cultural beliefs and practices. Cultural background also has a significant impact on the location of the delivery, and the likelihood of a home delivery increases as a result [15, 16].

Midwives and obstetric nurses play an essential role in assisting women to establish a healthy lifestyle throughout pregnancy. Various studies, including those of Arrish et al. [17], de Jersey et al. [18], Furness et al. [19], Lindqvist et al. [20], McCann et al. [21], and Willcox et al. [22], have shown that midwives and obstetric nurses regularly cite a lack of time and resources, both human and financial, as a barrier to providing care that supports pregnant women's healthy lifestyle choices and weight gain.

However, research on exploring healthcare providers' perspectives of childbirth education classes in related to quality of care and positive childbirth experience is lacking. To address the limitations of the childbirth education, this study used interpretative phenomenological approach to discover how healthcare providers in Saudi Arabia view childbirth education classes in terms of quality of care and positive childbirth experiences. In addition, the study set out to explore, from the perspective of healthcare providers, how effectively childbirth education classes impact mothers' stress and anxiety levels, the rate of cesarean sections, the overall quality of care, and the provision of a positive childbirth experience, with the potential to significantly improve maternal health outcomes.

Methods

In this study, an interpretative phenomenology research design has been adopted. This should provide important insights into the perceptions of nurses, physicians, and educators regarding childbirth education classes and the impacts that they have on childbirth experiences and care quality. This approach was deemed to be most suitable as it is highly effective in describing, interpreting, and understanding the lived experiences of participants. Smith et al. [23] explain that interpretative phenomenology analysis focuses on uncovering personal lived experience and engagement in a specific event [23].

Participant characteristics and setting

Purposive sampling was employed in this study to recruit participants. The study consisted of three groups: seven physicians, six nurses, and two educators. Participants

were recruited until no new ideas were evident in the interviews ($n = 13$). Written and verbal consent was obtained from each participant prior to their interview. As the study involved specific inclusion criteria, namely that all participants were required to be employed at Ministry of Health hospitals, and have at least five years' experience working in maternity units. From a three governmental hospitals in Eastern Province, Saudi Arabia. Each month, each hospital delivers around 300 newborns. Qatif Central Hospital, with 375 beds and more than 1000 mothers visiting the antenatal clinic monthly. The second hospital is the Maternity and Child Hospital in Dammam, with a 400 bed capacity and more than 1000 mothers visiting the antenatal clinic monthly. Furthermore, the third hospital is Al Hassa Maternity and Child Hospital, with a 450 bed capacity and more than 1500 mothers visiting the antenatal clinic monthly. These three hospitals are considered the largest in the area that provides such mother care services with high standards and is labeled as mother-friendly hospitals [24].

Procedures

Participation in this study was completely voluntary and an announcement was posted on hospital bulletin boards and sent to the target population via email. The word-of-mouth approach was also employed to help in participant recruitment. The sample size was determined using the data saturation approach, and data collection was discontinued when new individuals could not provide any more insights [25]. Each participant was interviewed once and the interviews took place between November 2023 and January 2024. To protect their privacy and the confidentiality of the information that they provided, each participant was interviewed separately. Before starting the interviews, it was imperative to ensure that participants were relaxed. The researcher verbally checked that the participants agreed with the requirements listed in the informed consent form. Participants were asked to write their name, address, and phone number on a form before the interviews started. This meant that the researcher could contact the participants if needed. The interviews followed a semi-structured format and the researcher created a set of questions and items to discuss (Table 1). Furthermore, the format of the interview was modified if needed [26].

The interviews took place in the participants' workplaces; only the researcher and the participant were present. The interview settings were chosen based on the environment in which participants felt most at ease, aiming to uncover the participants' perspectives and obtain a greater knowledge of their experiences and lasted between 40 and 60 min. Audio equipment was also used to record the responses of the participants. To elicit important information, questions based on participants' views were presented in the survey, including "Why? "How? or "What do you mean by this?"

Table 1 Interview guide

1. What does the quality of prenatal care mean to you?
2. What is your perception of childbirth education?
3. What are the main objectives of childbirth education for pregnant women to be focused on?
4. What are the essential topics for educating about natural, instinctive childbirth to overcome difficulties during pregnancy?
5. In your opinion, what are the success factors of these classes?
6. What are the barriers to implementing childbirth education classes?
7. What are your suggestions for greater success in these classes?
8. In your opinion, how do you evaluate the childbirth program in your hospital?
9. What is your opinion as a healthcare provider on the attitudes of the staff in the delivery room? Were they helpful to the mothers for having natural, instinctive childbirth? Why?
10. Is there any effect of childbirth education on the vaginal birth rate? If so, can you please explain?
11. What are the effects of childbirth education on pregnant women during pregnancy, at the time of delivery, and postpartum?
12. Do childbirth education classes reduce pregnant women's stress and fear about the delivery?
13. How do physicians/nurses /childbirth educators view the influence of childbirth education classes on the quality of care and a positive childbirth experience?
14. Is there a standardized childbirth education program in the Ministry of Health hospitals? If so, can you please explain.
15. From your experience, explain some birth stories of mothers who attended education classes.

Study trustworthiness

Four criteria were used to assess the quality of the data collected, and these were credibility, dependability, confirmability, and transferability [27]. Moreover, to ensure that the research had high credibility, the researchers worked with the interview subjects and asked for input on the transcripts. Dependability was ensured by verifying the results with the healthcare providers who were not part of the study. The participants were asked to confirm that the narratives had accurately expressed their real ideas and feelings in order to establish confirmability. Finally, to evaluate transferability, we looked at whether the findings could be applied to comparable populations, particularly those in other region of Saudi Arabia. The use of these techniques increased the rigour of the research findings.

Data analysis

The interviews were directly transcribed verbatim from an audio recording The interviews were directly transcribed verbatim from an audio recording. The written narratives were ten to twelve pages long, depending on each participant's unique experience. The interviews were conducted with the participants under the direction

Table 2 Step by step to conducting IPA analysis

STEP 1: Starting with the first case: reading and rereading
STEP 2: Explanatory notes
STEP 3: Constructing experiential statements
STEP 4: Searching for connections across experiential statements
STEP 5: Naming the personal experiential themes and consolidate
STEP 6: Continuing the individual analysis of other cases
STEP 7: Working with personal experiential themes to develop group experiential themes across cases

Table 3 Core category with themes and sub-themes

	Core Category	Road to a Pleasant and Safe Journey
	Theme	**Sub-themes**
1	Mother's Experience	Positive Experiences of Mothers
		Negative Experiences of Mothers
		How Healthcare Providers Influence the Birthing Process
2	Roles, Obstacles, and Struggles of Healthcare Providers	Community Awareness
		Mother's Cultural Background
		Staff Language Barriers
		Staff Shortage
		Access to Childbirth Education
		Physical and Emotional Support
		Attitude
		Responsibility
		Teamwork
		Training
3	Solutions & Suggestions	Standardized Childbirth Education Program
		Childbirth Education Publicity
		Promoting Childbirth Education Classes
		Developing the Quality and Quantity of Childbirth Education
		Improving Quality of Care

of research questions to obtain thorough and objective feedback. Revisions based on prior interpretations were made as the interviews were analysed and coded iteratively. Once the interviews had finished, they were recorded and transcribed, after which an interpretative phenomenological analysis was carried out [23]. Using an idiographic and inductive approach, this strategy aimed to uncover the participants' perspectives and obtain a greater knowledge of their experiences. The idiographic method is associated with comprehending distinct and individual people [23]. Table 2 outlines the steps involved in interpretative phenomenological analysis, as proposed by Smith et al. [23]. It was also requested that a specialist in qualitative research evaluate and validate the results and methods of analysis.

Results

Sample characteristics

Seven physicians, six nurses, and two educators provided their consent to participate in the interview sessions. All the participants were 53% of whom were Saudi and 47% of whom were non-Saudi.

Findings from the Semi-Structured interviews

The group experiential themes can all be placed in the core category of *Road to a Pleasant and Safe Journey*, as they all relate to providing women in pregnancy with physical and emotional comfort, which enhances the quality of care and establishes positive birthing experiences.

After the data analysis had been performed and the themes had been developed, three key themes associated with the research questions and focal points of this study were identified, as presented in Table 3. These three themes were revealed during the interpretative analysis of the transcribed interviews and are presented below alongside relevant contextual information that supports them (including excerpts from the participants' data).

Core category- road to a pleasant and safe journey

1. Mother's Experience.
2. Roles, Obstacles, and Struggles of Healthcare Providers.
3. Solutions & Suggestions.

A detailed examination of the participant interviews enabled the researchers to make thematic conclusions, which are presented in detail below. The participants' experiences are emphasized to support the outlined themes, using direct quotes representative of experiential comments.

Theme 1. mother's experience

The participants discussed how the childbirth education program affected mothers' experiences and how healthcare professionals impacted this journey to ensure a safe and satisfying delivery. This theme included three subthemes: *Positive Experiences of Mothers*, *Negative Experiences of Mothers*, and *How Healthcare Providers Influence the Birthing Process*.

Positive experiences of mothers

Education enables women to enjoy a safe and positive childbirth experience, as most of the participants discussed:

> *There has been a notable impact on the vaginal birth rates, and this could be due to the education classes supplying the mothers with useful information ready for their positive birth experience (Nurse M).*

> *In one birth story that I recall, a mother who had attended the childbirth education program within*

our hospital had a very positive experience of childbirth as a result. On arrival at the labor room, she was calm and relaxed. She persisted with her exercises, changed her position often, and continuously practiced the breathing technique, ultimately delivering her baby safely and smoothly (Nurse K).

The childbirth education program encourages the mother to focus on the positive elements of the delivery, such as touching the hair of their baby when they are being delivered or being curious about their placenta. Education is therefore crucial in limiting the fear of the mother because they are motivated to have a positive experiences of childbirth (Nurse H).

The focal objective of education is to promote a positive childbirth experience so the mother is able to look back upon her labor with happiness. The education adheres to the notion that if the mother understands why certain things are happening, she is more likely to remain calm and accept the situation (Physician L).

Prenatal education is perceived to be critically important in contributing to a positive experience of childbirth. A successful, confident, and happy birth experience is much more likely when the mother has been educated about all aspects of the process and is thus supported by relevant knowledge and an optimistic emotional stance (Physician H).

Negative experiences of mothers

Childbirth education can be effective for mothers who have previously had negative experiences, as some of the participants commented:

The classes are helpful for first-time mothers and those pregnant females who have had negative experiences because their worries are discussed within the class (Nurse AH).

Another nurse commented that a lack of education causes negative childbirth experiences:

Those who do not receive education often have negative experience compared to those who have participated in the classes (Nurse Q).

How healthcare providers influence the birthing processs

Participants described the factors relating to healthcare providers that influence positive outcomes:

If the education is delivered by an educator who is highly qualified, then the mother will have a lower level of stress and anxiety (Physician RS).

The healthcare providers will have an easier time relaying information to the mother during the delivery if she has had education on the processes of childbirth. If she has prepared using the techniques taught, the professionals are less likely to have to intervene, and the birth is more likely to be positive. These factors all influence how the professional is able to carry out their job (Nurse AH).

Theme 2. roles, obstacles, and struggles of healthcare providers

All the participants commented on the importance of the healthcare provider's attitude as well as problems with promoting access to these classes, increasing community awareness of childbirth education, and addressing staff shortages and language barriers. They also discussed the importance of taking into account the mothers' cultural backgrounds and the impacts these factors have on the implementation of childbirth education programs. This theme included 10 sub-themes: Community Awareness, Mother's Cultural Background, Staff Language Barriers, Staff Shortage, Access to Childbirth Education, Physical and Emotional Support, Attitude, Responsibility, Teamwork, and Training.

Community awareness

All the participants highlighted the importance of increasing community awareness about childbirth education. They stated that childbirth classes would be more effective if they were promoted in grocery stores, shopping malls, and female secondary schools.

Educating the community is critical in this regard. We must portray successful birthing stories and make classes available for women to join (Physician F).

Society must know about the benefits of childbirth education, and they should be supportive of the increase in clinics and educators. The physicians must recommend the clinics to the mothers and promote the fact that it is the best way to achieve a healthy delivery (Physician Z).

The community is a barrier to the education classes because they are unaware of how vital it is for the mother and baby. They should promote the classes in public areas, such as grocery stores and shopping centers (Nurse M).

If the wider community sees how vital childbirth education is, then the mothers may feel supported to attend (Nurse AH).

Mother's cultural background

The analysis revealed that the mother's mentality, culture, education, and diversity all impact childbirth education classes. Most participants stated that culture was a significant factor influencing childbirth education:

Childbirth education sessions can be impacted by participants' diverse mentalities, attitudes, educational backgrounds, and cultures (Nurse FO).

The first issue to discuss here is the cultural barrier. Many women talk to their mothers, sisters, and friends to find out information about pregnancy and childbirth, as they feel more comfortable discussing the topic. However, social media could be used. At present, advertising pregnancy education classes is extremely sparse on social media platforms (Nurse K).

Time and language constraints play a vital role. Due to their social and cultural backgrounds, women often find it difficult to attend the hospital and listen to the opinions of other mothers. Thus, they would prefer an individualized class rather than a group class (Nurse M).

Staff language barriers

Language problems between mothers and healthcare professionals have a detrimental impact on childbirth education, and thus women should be offered educational classes before the childbirth process occurs, according the most of the participants:

The language difficulties between professionals and mothers often impede the education effect (Nurse H).

The education can be tainted when the mother is in pain because it is hard for them to keep their attention on you when their body is struggling. Moreover, some mothers are disinterested in the education, or they feel disillusioned because the classes do not include variety of language (Nurse Q).

Staff shortage

Most of the participants stated that there was a significant shortage of midwives, resulting in unsupported deliveries:

I believe that the lack of midwives in the delivery room constitutes a significant problem, since the Ministry of Health clearly states that trained midwives are an essential resource. General nurses do their best but do not have enough training and knowledge of obstetrics and gynecology to step in and replace midwives (Physician A).

I recommend increasing the number of nurses serving as educators in the clinics, delivery rooms, and antenatal and postnatal departments, as these individuals already have very full schedules, and this can significantly hinder their capacity to educate new and expectant mothers. The most significant obstacles hindering the implementation of such classes are the schedules of nurses in the units/clinic and timing (Nurse K).

Access to childbirth education

Insufficient classes are available to cover all mothers. These limitations lead to unsatisfactory experiences and outcomes, most of the participants shared:

Our hospital is at the infancy of childbirth education and requires a long journey of development (Physician R).

Childbirth education classes are not accessible in every locality. Additionally, this issue can affect the quality of care offered to the pregnant women (Physician M).

Every mother should have access to a childbirth education clinic (Physician Z).

Physical and emotional support

Prenatal care is defined as the support, both physical and emotional, that the mothers receive, as reflected by some of the participants:

The definition of prenatal care is the antenatal support mothers acquire (Educator W).

Childbirth education must consider mothers' physical and emotional factors by preparing them with a clear understanding of the childbirth process that decreases

mothers' stress and fears and enhances their emotional support, as two nurses reflected:

> *The woman should learn about the changes in herself and her body, from both physical and emotional perspectives, that will occur during pregnancy, labor, childbirth, and in the postnatal period (Nurse H).*

> *Childbirth education has a significant impact in decreasing the stress and fear of the expectant mother. Preparation for the birth is critically important; if she has a clear understanding of what is involved in childbirth in advance of the event, a mother will be calmer and more confident in approaching the delivery room (Nurse K).*

Attitude

It is important to note individual differences in healthcare providers' capacities to support natural, normal childbirth. For example, some professionals are supportive, while others are not so supportive, as highlighted by some of the healthcare providers:

> *The childbirth education program must be available for all healthcare providers in the hospital so that they are aware of what the mothers are learning about and can understand where they are coming from in the delivery room. Trust must be unified between the mothers, educators, and healthcare professionals for the sake of the baby (Physician L).*

It is important for healthcare providers to hold positive attitudes toward childbirth education and natural birth to support mothers with individualized care, as two physicians and one nurse commented:

> *Prenatal care must embrace the mother. This means to develop an individual relationship with her, provide her with individualized support, educate her, and give her the opportunity to ask questions about her situation (Physician M).*

> *I think, currently, the attitudes of nurses and physician in the birthing environment has progressed and has begun the unification of understanding between every professional in the healthcare industry, whether they are nurse or physicians (Physician RS).*

> *Nurses and midwives have a positive attitude regarding the influence that childbirth education has on reducing cesarean section rates and the need for unnecessary medical interventions (Nurse FO).*

Responsibility

Educating staff about childbirth education leads to support for mothers for natural births, as stated by most of the participants:

> *Our employees offer encouragement and support for natural childbirth and are incredibly patient throughout the labor and delivery process. Thus, they make sure that women have all the time that they need to deliver their babies safely (Nurse FO).*

> *A number of doctors responsible to provide comprehensive information to the mother during antenatal care and therefore do not make a referral for the mother to attend educational classes (Physician M).*

> *It is the responsibility of all nurses to offer patients information. The information given should encompass nutritional intake, physical activity, and what the mother can anticipate during childbirth (Nurse AH).*

Teamwork

Appropriate healthcare provider communication along with collaboration and teamwork can support mothers in achieving normal and natural deliveries, as most of the participants discussed:

> *Currently, however, the system does not allow sufficiently rapid and easy referral due to issues of coordination, teamwork, and communication between physicians, nurses, and midwives (Nurse K).*

> *I require a team of individuals who can work together to educate pregnant women using innovative approaches both in-person and virtual training (Physician L).*

> *It is vital to approach the classes from a team perspective and involve the education department, the obstetrics and gynecology physicians, the nutritional department, and pediatricians to optimize the outcomes (Physician A).*

Training

All healthcare workers need to be properly trained in childbirth to provide effective childbirth education. More childbirth education clinics are also required, as most of the participants stated:

> *The education should widen its scope so that there are more teachers in healthcare environments. Thus,*

the knowledge reaches a wider population of pregnant females. Also, there must be increased training about childbirth education for those professionals who are present in the birthing room (Nurse Q).

The doctors must have educational training because sometimes they do not explain their actions or wait for the mother's consent before examining her (Physician M).

We are trying to improve the program in my hospital. We have established a midwifery course to train more midwives in the obstetrics and gynecology clinic (Nurse K).

Theme 3. solutions & suggestions

The information provided in the interviews enabled solutions.

and recommendations to be proposed. This theme included five sub-themes: *Standardized Childbirth Education Progra*m, *Childbirth Education Publicity*, *Promoting Childbirth Education Classes*, *Developing the Quantity and Quality of Childbirth Education*, and *Improving Quality of Care*.

Standardized childbirth education program

To ensure effective communication between mothers and healthcare professionals, a standardized childbirth education program is recommended. According to participants, a successful program requires unambiguous agreement between educators and medical professionals:

No, there is not currently a system, and there is a yearning for a standardized program from the government that will be a consistent source of information for pregnant females (Physician RS).

Childbirth programs need to be made consistent and standardized, as three nurses explained:

The natural birth process, such as breathing and physical exercises, perineal care, and breastfeeding techniques, are not covered in a standardized program. I am an advocate for a standardized program of childbirth education that supports every mother across the nation in achieving a natural birth (Nurse H).

At present, there is no standardized program of childbirth education offered in the hospitals. However, implementing such a program in the future would be incredibly beneficial, and information could be uniform (Nurse FO).

Our system does not include every type of mother, and the information is not always accurate; therefore, I think it needs reviewing. The education would be transformed if we were to have a standardized program, as the healthcare professionals would have to commit to encouraging the natural birth approach (Nurse Q).

Childbirth education publicity

During the interview process, the subject of promoting childbirth education arose. According to the participants, broadly publicizing childbirth education sessions would increase community awareness:

I propose that the education system devotes time to promoting the actual childbirth classes and the need for childbirth education through good advertising (Nurse Q).

By educating the general public and expectant mothers about the importance of these sessions and advertising childbirth education classes so that everyone is aware of them and willing to attend, we can be successful in our endeavors. Sharing the success stories of mothers who took part and gave birth will inspire others to do the same (Physician F).

To be successful, these classes should reach as large a target audience as possible. Effective advertising and promotions through social and printed media will facilitate this (Nurse K).

The classes will improve if the education sector promotes the classes to the public by having a social media presence and if there are further maternal care sessions (Educator F).

Promoting childbirth education classes

With regard to improving childbirth education programs, the participants highlighted the need to enhance teaching strategies (i.e., combining online and in-person training, selecting a suitable location, and making sessions freely available).

Increased availability of specialized childbirth education clinics in both primary healthcare centers and hospitals is vital. Moreover, familiarizing expectant mothers with instinctive natural childbirth and making them aware of its significance is critical (Nurse FO).

The key objective is to provide free education to all pregnant women from the moment they learn they are expecting a baby, as this will give them the time and courage to ask questions and listen to the responses (Nurse K).

The mothers' questions must be addressed by all healthcare professionals. Additionally, the birthing education curriculum should be distributed to all medical professionals who work in the maternity department so they are well informed and able to assist (Nurse AH).

Developing the quality and quantity of childbirth educators

Additionally, a number of participants expressed the opinion that there are not enough qualified childbirth educators to ensure that classes can be made available for all mothers; thus, more of these individuals are required to improve childbirth education programs. In turn, increasing the number of educators would facilitate more classes. This was highlighted by most of the participants:

The expansion of the entire system would improve the classes. This means employing more educators in the hospitals and organizing more timeslots for classes (Nurse M).

One nurse commented that high-quality educators are critical to success: "The components that grant success are the quality of educators, the participation of a suitable birthing partner throughout the education process, and established education environments (Nurse H).

Improving quality of care

In addition to enhancing the quality of care provided before, during, and after childbirth, the solutions and recommendations the healthcare providers made in this study could also enhance their own well-being, which would ultimately generate happier and more satisfying childbirth experiences. For example, most of healthcare reported that healthcare professionals must improve their care:

All physicians, midwives, and nurses must follow the improvement of childbirth education to ensure that the mother is getting the highest standard of care (Physician H).

The well-being of expectant mothers can be maintained through the provision of high quality prenatal care. One physician and one nurse reflected:

Quality of care means that I should give the mother information about maintaining her well-being. Any risk factors identified during the appointment will be highlighted. Any evidence of maternal stress and anxiety is sought, as this may underlie mothers' questions about discomfort during gestation. Such questions require responses so as to alleviate any maternal concerns (Physician M).

The quality of the service is usually measured by the mother's expressions toward the staff after the birth. Good service is indicated by appreciation and the mother's emotional wellbeing. Formally, a questionnaire can be filled out to show the standard of service, but the mother's emotions are often enough for the nursing team (Nurse M).

Discussion

In this study, we used an interpretative phenomenological research design to explore, from the perspective of healthcare providers, how effectively childbirth education classes impact mothers' stress and anxiety levels, the rate of cesarean sections, the overall quality of care, and the provision of a positive childbirth experience. The findings included a core category of Road to a Pleasant and Safe Journey with Three themes: mother's experience, roles, obstacles, and struggles of healthcare providers, and solutions & suggestions. The analysis yielded themes that provide insight into how healthcare providers' perceptions of childbirth education classes relate to experiences of childbirth, and quality of care. The findings show that the participants were aware of the importance of the childbirth education in relation to quality of care and positive childbirth experience.

The first theme explores the impacts of healthcare professionals and childbirth education.

on mothers' experiences. This theme is divided into three subthemes: *Positive Experiences of Mothers*, *Negative Experiences of Mothers*, and *How Healthcare Providers Influence the Birthing Process*. The first subtheme explores the positive impacts of childbirth education and emotional support on helping women during the childbirth to have enjoyable, and safe experience. The second explores the effectiveness of childbirth education among mothers who previously had difficult childbirth experiences. The third considers the significance of the role of healthcare providers in influencing how mothers experience childbirth. During the interviews, healthcare workers emphasized the substantial impacts of both childbirth

education and healthcare professionals on how mothers experience the pregnancy and childbirth journey and on how a safe and fulfilling delivery is achieved.

According to the healthcare providers who participated in this study, childbirth education allows women to have a safe and happy experience during childbirth. Providing emotional support also contributes to positive outcomes. Healthcare professionals typically assert that childbirth should be a rewarding life event, suggesting that negative experiences of childbirth are caused by a lack of childbirth education. They also underlined the importance of their own role in supporting mothers during pregnancy and childbirth.

Similar to the experiences shared by the healthcare providers who participated in this study, Jan and Teijlingen [28] found that births that meet the International Confederation of Midwives' definition of "normal occur when labor begins, progresses, and ends naturally; the baby is delivered at full term in the vertex position; and no medical, pharmacological, or surgical.

interventions are used.

Preset study's findings align with those of Demirci et al. [29] and Yasin et al. [30] who found that all women struggled to have a normal birth and thus required prenatal education and emotional and psychological support from partners, family members, or healthcare professionals. Normal births and positive childbirth experiences also required good care during labor and a healthy environment.

Leinweber et al. [31] highlighted that a positive childbirth experience refers to a woman's experience of interactions and events directly related to childbirth that make her feel supported, in control, safe, and respected; a positive childbirth can make women feel joy, confident, or accomplished and may have short- or long-term positive impacts on their psychosocial well-being [31]. AlKhunaizi et al., [32] Pointed out that some clear policies, childbirth education programs, and adequate space are essential for promoting labor companionship during childbirth to ensure a positive experience.

Mwakawanga et al. [33] asserted that prenatal health education and post-birth health messaging after hospital release might encourage favorable childbirth health outcomes for the mother and her child. High-quality intrapartum care should consider not only the mother's physical and mental capabilities but also her sense of safety throughout the birthing [33]. Taheri et al. 2018 [34] found that providing emotional support and gentle intrapartum care, as well as encouraging mothers to be mentally and physically prepared for delivery, were the most effective ways to ensure a happy birth experience. Moreover, the researchers suggested that women should be engaged in childbirth education classes and provided with knowledge of the labor process to ensure a happy birth experience [34].

Healthcare providers reported inadequate administrative support from their colleagues and organizations, which impaired their ability to communicate and work together effectively. For example, midwives and labor and delivery nurses often felt helpless when advocating for women, and healthcare providers frequently felt guilt and self-blame after adverse events [35].

The second theme, roles, obstacles, and struggle of healthcare providers, highlights the attitudes of healthcare providers toward childbirth education classes' promotion of natural childbirth and notes the negative attitude of certain obstetricians toward the classes, along with issues of access to these classes caused by obstetricians. Ten sub-themes are included under the main theme: *Community Awareness*, *Mother's Cultural Background*, *Staff Language Barriers*, *Staff Shortages*, *Access to Childbirth Education*, *Physical and Emotional Support*, *Attitudes*, *Responsibility*, *Teamwork*, and *Training*. In addition, there is a need to raise community awareness of childbirth education and the importance of supporting mothers throughout pregnancy and childbirth while concurrently tackling staff shortages and language barriers. The healthcare providers also highlight the importance of considering mothers' cultural backgrounds and the effects on the introduction and management of childbirth education programs.

The healthcare providers in this study indicated *Community Awareness* as a sub-theme. Similar to the experiences shared by the healthcare providers, Dantas et al. [36] suggested including communities in the process of childbirth education to help women overcome the barriers to safe delivery. Additionally, impediments may originate from within the community itself, such as a lack of awareness or encouragement for women to start preparing for motherhood [36]. In this study, the *Mother's Cultural Background* sub-theme was raised by the healthcare providers.

Cultural background including practices, beliefs, and traditions also has a significant impact on the location of delivery, and the likelihood of home delivery increases as a result of cultural beliefs and practices of women influencing home births [15, 16]. The harmful cultural practices includes the food restriction and taboos, abdominal and uterine massage, home delivery were significantly linked to factors such as a woman lacking education, living in a rural area, not receiving antenatal care during her most recent pregnancy, and having an untrained attendant care for her during her pregnancy [14]. Chanimbaga et al. [37] conducted a study that highlighted the urgent need for community health education programs. These programs should focus on raising awareness about the impacts of traditional practices, such as restricting

food intake during pregnancy and the insufficient use of skilled birth attendants. By addressing these issues, the aim is to improve maternal well-being within the study population.

Moreover, the researchers found that problems persist with regard to providing affordable, culturally sensitive birthing care. Removing such obstacles may improve labor and delivery outcomes for mothers and their newborns [38].

The healthcare providers who participated in this study highlighted the *Staff Shortage* subtheme as having a negative impact on childbirth education. Bogren et al. [39] found that professional barriers include heavy workloads and a shortage of staff, who are also not utilized to their full potential within the health system. Another Study found midwives reported barriers to women's positive childbirth experience were identified on healthcare system factors included midwife shortage and hospital environment [39].

With regard to the *Access to Childbirth Education* subtheme, most of the healthcare providers in this study observed a lack of access to childbirth education classes. Darling et al. [40] provided evidence that a lack of information about midwifery within social networks and a propensity to move passively through the healthcare system, which typically prioritizes physician treatment, may worsen inequitable access to midwifery care for persons of low socioeconomic status. Koh et al. [41] found that couple-centered prenatal education programs are helpful for couples adjusting to parenting, which is further supported by the results of previous studies Baraki et al. [42]; Doaltabadi et al., [43]; Munkhondya et al., [3]; Sanaati et al., [44].

The healthcare providers also raised the *Physical and Emotional Support* sub-theme. Koh et al. [41] found that it is critical to educate spouses about couple-relationship adaptation, including emotional connection, support, respect, empathy, and emotional interchange, following pregnancy and delivery. Moreover, prenatal education should emphasize male engagement and healthy lifestyles for pregnant women to lower the risk of pregnancy and delivery difficulties, as evidenced by Gultie et al. [45], Sufian et al. [46], Tunkara-Bah et al. [47], and Worku et al. [48]. Monguilhott et al. [49] found that the presence of supportive family members during labor and delivery was linked to positive outcomes with successful birth stories that end with healthy mothers and babies. The researchers found that male participation in normal prenatal and intranatal care improved labor and delivery outcomes. Male education on the value of participating reproductive and child health services is crucial in enhancing the birth experiences [50].

In this study, the *Staff Attitude* sub-theme was raised by the healthcare providers when they explained the obstacles of childbirth education classes. McCauley et al. [51] found that most healthcare practitioners assist women and improve the quality of pain treatment by using a culturally and religiously sensitive approach. The healthcare providers who participated in this study highlighted the sub- theme: *Responsibility* of healthcare provider, as the healthcare provider is responsible for improving mothers' experiences during childbirth. According to González-Mesa et al. [52], educational measures should be implemented for obstetricians to improve their interactions with pregnant women. Moreover, medical staff should reconsider how they engage with expectant mothers to enhance the quality of care they provide and to make the birthing process more pleasant and humane for everyone involved [53]. Baranowska et al. [54] highlighted the necessity of verbal and nonverbal communication of healthcare providers with women during the delivery and early postpartum stages, as well as the distinct nature of the communication demands at these two stages. Additionally, prenatal education for women is necessary for them to have a normal delivery, and increasing the authority and duties of midwives is one way to promote normal birth. For the delivery to go according to plan, the mother and the midwife should both be more prepared [29].

With regard to the *Teamwork* sub-theme, most of the healthcare providers in this study observed a relationship between teamwork among the healthcare providers and the effectiveness of childbirth education classes. Researchers have shown the need for both formal and informal support for effective interprofessional cooperation and have highlighted the need to foster relationships based on trust and respectful communication in maintaining a safe workplace and delivering safe maternity care [55]. These results were corroborated by Kamkhen et al. [56], who demonstrated the pressing necessity of integrating team building into the routines of obstetric-gynecological healthcare providers. The competence and communication skills of nurses and midwives may be greatly improved, with a greater focus on enhancing prenatal appointment processes and providing continual professional training [57].

Improvements in pre- and post-training knowledge, confidence, and empowerment, as well as at the 12-week mark after the intervention, were made possible by the provision of training packages in these areas [58]. Moreover, to increase midwives' familiarity with prenatal exercises and improve their interactions with pregnant women during prenatal consultations, Okafor and Goon [59] argue for the inclusion of exercise courses in antenatal healthcare and education for midwives about suitable exercises.

Third theme in the Suggestions and Solutions theme, healthcare providers proposed ideas for improving the

quality of care and enabling a positive childbirth experience. This theme included five subthemes: *Standardized Childbirth Education Program*, *Childbirth Education Publicity*, *Promoting Childbirth Education Classes*, *Developing the Quantity and Quality of Childbirth Education*, and *Improving Quality of Care*. The providers suggested that significant changes should be made to existing childbirth education programs and recommended the introduction of a standardized childbirth education program, advising that this would benefit both mothers and healthcare providers. Healthcare providers also suggested that childbirth education programs should be widely publicized in the community, indicating that this would not only raise awareness among mothers and their families about the importance of these programs but also enhance mothers' experiences and result in improved quality of care.

The healthcare providers in this study identified the *Standardized Childbirth Education Program* as a subtheme. Ricchi et al. [60] found that women who had taken birthing classes were less likely to have epidural analgesia. The birthing class participants were also likelier to use breathing methods and to benefit from visualization exercises. Moreover, the women sought opportunities to connect with people in similar circumstances to share experiences, vent, and form lasting bonds; partner participation in the process of becoming parents was perceived as enhanced by these classes [61]. In this study, the *Improving Quality of Care* sub-theme was also raised. Khosravi et al. [62] recommend that health officials should prioritize the expansion of midwifery education and the hiring of qualified midwives to enhance the standard of care they provide to expectant mothers. Moreover, in line with previous studies, Kassaw et al. [63] found that it may be possible to improve treatment quality by promoting targeted prenatal care, expanding related infrastructure, supporting maternal education, and covering the medical expenditures of women from low-income families.

Strengths and limitations

This study has several strengths. It addresses the question of information needs regarding the perspective of healthcare providers, how effectively childbirth education classes impact mothers' stress and anxiety levels, the rate of cesarean sections, the overall quality of care, and the provision of a positive childbirth experience in three governmental hospitals and the participants had exclusive experience of childbirth education. The qualitative approach allowed for a deeper and more understanding of the perceptions of healthcare providers as they provided during the interviews.

Some participants expressed concerns about being recorded when sharing their thoughts. To resolve this, we confirmed that their data would be kept confidential and reviewed only by the research team members. Additionally, we confirmed that all data would be deleted upon full completion of the study. Further, as qualitative research relies on participants' experiences and opinions and researchers' interpretations and subjective judgments, subjectivity and interpretation challenges may be introduced. An interpretative phenomenological approach aims to ascertain individual experiences' rich details and meanings. In addition, the limited geographical scope is also a limitation and could have introduced bias into the results. However, the researcher minimized such biases as much as possible by recruiting employees from different institutions in the eastern province of Saudi Arabia to work in their current roles for different durations.

Implications and recommendations for practice

Childbirth education should be mandatory for all hospitals and primary healthcare institutions in the kingdom of Saudi Arabia and its curriculum should be standardizing by the ministry of health. Receiving childbirth education about natural and instinctive childbirth was necessary for low-risk mothers to experience a positive childbirth experience. The education also enabled mothers to feel in control during pregnancy, birth, and postpartum. Moreover, childbirth education clinics should be established at all hospitals, each with a certified educator who work in a relevant profession (e.g. health education, nurses, midwives, or physician).

Implications and recommendations for education

The research indicated that the main healthcare professionals involved with the mothers' pregnancies (physicians, nurses, and midwives) should receive childbirth education as part of their training. This would decrease the likelihood of low-risk mothers choosing an unnecessary cesarean section and increase the likelihood of their having a natural birth.

Implications and recommendations for policy

It is vital that both government and private hospitals have clear and accessible policies about the provision and implementation of childbirth education programs. This will help to limit elective cesareans, increase vaginal deliveries, and enhance mothers' childbirth experiences.

Implications and recommendations for future research

Very little quantitative evidence exists in Saudi Arabia on the efficacy of childbirth education programs in promoting quality care and positive childbirth experiences. If mothers' childbirth experiences are to be improved, education programs need first to be properly evaluated under Randomized Control Trials. Only then can their effect on maternity care and birth outcomes be properly

understood. Such research should include measures of couples' preparedness for parenting. Moreover, it is important for future research to include participants with diverse language backgrounds in order to provide valuable insight applicable to different settings. To achieve a more comprehensive understanding future studies should also consider including healthcare providers from various public and private hospitals by conducting research across different healthcare settings would provide further support for the benefits of childbirth education for the women.

Conclusion

Pregnancy and childbirth have major impacts on women's physical and psychological wellbeing. High quality holistic care helps ensure mothers and their newborns have positive outcomes. A mother's experience of childbirth, and the quality of care she receives, is improved by having caring health providers and good emotional support. It is also crucial for mothers to be part of the decision-making relating to their pregnancy. Couples need to be made aware of the childbirth education available and the benefits of having it. Mothers need to be the focus of care, and their preferences and concerns listened to. This increases their confidence about childbirth and leads to more positive experiences and their receiving higher quality care. Healthcare providers must understand their responsibility for ensuring childbirth education is delivered smoothly and effectively. This study provides an in-depth description of healthcare providers' perceptions of childbirth education classes and the impact these have on care quality and women's experience of childbirth.

From the results of this research, the following suggestions can be made: All healthcare providers employed in maternity care should be required to attend the standardized childbirth education program. Childbirth education clinics should be established at all hospitals, each with a certified educator who works in a relevant profession (e.g., health education, nurses, midwives, or physicians). It's crucial that these childbirth education clinics include input from healthcare professionals from all fields, including nurses, midwives, dietitians, physiotherapists, obstetricians, and gynecologists, to ensure a comprehensive and inclusive approach.

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Author contributions

Conceptualization, A.N.A. and S.A.H.; methodology, A.N.A. and A.G.A.-O.; validation A.A.B. and K.S.O.; formal analysis, A.N.A. and M.J.Z.; investigation, A.N.A.; resources, A.A.B and K.S.O.; data curation, A.N.A. and S.A.H.; writing original draft preparation, A.N.A.; writing review and editing A.G.A.-O., K.S.O. and A.A.B.; visualization A.G.A.-O; supervision, S.A.H.; funding acquisition, A.A.B. All authors guarantee the integrity of the content and the study. All authors have read and agreed to the published version of the manuscript.

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Data availability

In order to protect the privacy of participants, the individual data set generated in this study is not publicly available. However, the final transcripts for data analysis is available from the corresponding author upon reasonable request.

Declarations

Ethics approval and consent to participate

This study was approved by the institutional review board of King Saud University and three hospitals involved in the study before this study could proceed (Ref: No: KSU-HE-22-588) (QCH-SRECO 34/2022) (EXT-Gynea-2022-002) (H-05-HS-065). All participants provided their written informed consent to participate voluntarily and reminded of their right to withdraw at any time without any penalty. They were assured that their responses would be kept confidential and only accessible to the members of the research team. To maintain confidentiality, participants were assigned codes to use instead of their names. Finally, all participants agreed to be recorded, and they were assured that all responses and transcripts would be securely destroyed. Lastly, COREQ guidelines, which are a unified set of criteria for reporting qualitative research, were applied [64].

Consent for publication

Participants gave their informed written consent for their data to be coded for analysis, and for certain anonymous citations to be included in the publication, while respecting their confidentiality.

Competing interests

The authors declare no competing interests.

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