



Available Online at EScience Press

### **Journal of South Asian Studies**

ISSN: 2307-4000 (Online), 2308-7846 (Print) https://esciencepress.net/journals/JSAS

# Mothers' Perceptions of the Birthing environment on their Birth Satisfaction: A Qualitative Study

#### <sup>a</sup>Asma Yunus, <sup>b</sup>Rugia Safdar Bajwa, <sup>a</sup>Shahzad Khaver Mushtag

- <sup>a</sup> Department of Sociology & Criminology, University of Sargodha, Sargodha, Punjab, Pakistan.
- <sup>b</sup> Department of Applied Psychology, Bahaudddin Zakariya University, Multan, Punjab, Pakistan.

\*Corresponding Author Email ID: rugiasafdar@bzu.edu.pk

#### ABSTRACT

The purpose of this qualitative research is to investigate the effect that the birthing environment has on the level of birthing satisfaction experienced by 15 mothers in the city of Lahore, Pakistan. In the study, a purposive sampling approach was utilized to identify participants who had an assisted birth at a public sector institutional facility. To capture the experiences and perspectives of the participants on the birthing environment during labor, semi-structured phenomenological interviews were conducted with each of the participants. To discover recurring themes within the data, the thematic analysis method was utilized. According to the results of the study, the birthing environment appears to play a considerable part in determining the quality of the delivery experience and the level of mother's satisfaction. It was found that access to basic amenities such as water and hygiene facilities, along with having a clean and pleasant setting, supportive staff, and privacy, were critical aspects that contributed to their level of satisfaction with their birthing experience. On the other side, there were a number of issues that were recognized as having a negative impact on the birthing experience. These included a lack of privacy, poor hygiene, and inadequate infrastructure. According to the findings of the study, improving the birthing environment may have a beneficial effect on the overall positive experience of birthing mothers.

Keywords: Birthing environment, birth satisfaction, Privacy, Assisted delivery, Hygiene.

#### INTRODUCTION

The act of giving birth is a significant event in a woman's life, and the environment in which she gives birth can have a significant impact on how she experiences the process of labor and delivery. Birth joy is a multi-faceted concept that can be affected by a multitude of factors, including the physical surroundings, the quantity of social support one receives, and the level of medical treatment that one receives throughout labor and delivery. A range of positive outcomes, such as maternal mental health, the onset and continuation of breastfeeding, and maternal-infant connection, have been linked to a person's level of satisfaction with their birth experience (Hodnett *et al.*, 2013).

Under the context of Pakistani culture, the arrival of a new member into the world is a big event that deserves to be celebrated and respected. On the other side, the process of giving birth in Pakistan is frequently fraught with challenges, such as a low standard of medical treatment, inadequate infrastructure, and restricted access to qualified birth attendants (Khan & Chughtai, 2011). The physical setting in which women in Pakistan give birth can also be a substantial source of difficulties for them. This is because hospitals in Pakistan frequently lack basic resources, such as comfortable beds, clean bathrooms, and secluded spaces for labor and delivery. Most women in Pakistan give birth in one of the nation's many public hospitals.

DOI: 10.33687/jsas.011.03.4582

The surrounding birthing environment has the potential to have a significant impact on the overall birth experience that a woman has. The surrounding birthing environment can influence a woman's sense of control, comfort, and safety while she is in the process of laboring and delivering her baby (Hodnett *et al.*, 2013). Also, the environment can have an impact on the quality of care that is provided by the medical staff, which in turn can

have an impact on the degree to which a patient is content with the birthing experience they had (Adams & Bianchi, 2014).

Pakistan, home to nearly 200 million people according to the World Bank (Bank, 2021) faces significant maternal health challenges. The Pakistan Demographic and Health Survey (PDHS) 2017-18 (ICF, 2019) reports a maternal mortality ratio of 186 per 100,000 live births. Further, the PDHS findings reveal that in Pakistan, only 47% of women receive care from skilled birth attendants during childbirth, and a mere 48% of deliveries occur in healthcare facilities, pointing to considerable gaps in maternal healthcare access and quality.

In Pakistan, the birth of a child is seen as a momentous occasion that is honored by the society because of its significance and recognition as an important event. On the other side, the process of giving birth in Pakistan is frequently fraught with challenges, such as a low standard of medical treatment. inadequate infrastructure, and restricted access to qualified birth attendants (Khan & Chughtai, 2011). The quality of childbirth and satisfaction with the childbirth experience affect the transition to motherhood, future reproductive decisions, and the psychological well-being of the mother (Yunus et al., 2023). Among various determinants of quality of care during childbirth, the most neglected is the birthing environment. The study highlights the important role of physical space in a positive birth experience.

#### CONCEPT ANALYSIS OF BIRTH SATISFACTION

Birth satisfaction refers to a mother's subjective experience of giving birth, which includes feelings of control, independence, support, and delight about both the technique and the outcome (Hodnett, 2002). It is a complex concept that is influenced by a variety of factors, including the nature of the patient-healthcare provider contact, the hospital atmosphere, the level of pain treatment, the delivery method, and the infant's health (Fenwick *et al.*, 2017).

The concepts of birth satisfaction and birthing experience are extremely similar. Birth satisfaction focuses on the positive aspects of the experience, whereas "labor experience" encompasses both positive and unpleasant aspects of childbirth (Kamalifard *et al.*, 2021). Birth satisfaction is an important outcome of childbirth that has been related to enhanced maternal and newborn health outcomes, such as higher breastfeeding rates, increased maternal mental health, and better infant development

(Stoll et al., 2014).

Birth satisfaction can be measured using a variety of measures, including the Childbirth Experience Questionnaire and the Birth Satisfaction Scale-Revised (BSS-R) (CEQ). The BSS-R is a validated tool that assesses six areas of birth satisfaction: care quality, women's characteristics, labor stress, perceptions of control over labor and delivery, and caregiver support (Martin et al., 2019). The CEQ is a multidimensional instrument that assesses four dimensions of childbirth: individual capacity, professional assistance, perceived safety, and engagement (Wiklund et al., 2008).

Birth satisfaction also includes the mother's good, subjective experience of childbirth. It is influenced by many factors and has a considerable impact on maternal and fetal health outcomes. The present study uses a phenomenological approach to find out the conscious structure of the birthing experience of a woman.

#### **RESEARCH OBJECTIVES**

The primary objectives of the research paper are to

- 1. Know how the birthing environment influences a mother's safety, comfort, and privacy.
- 2. Explore how the birth setting affects a mother's ability to communicate with her support team and healthcare providers
- 3. Find out how the birth setting affects a mother's satisfaction with childbirth.
- 4. Discern how the delivery environment affects a mother's mental health and postpartum recovery.

#### SIGNIFICANCE OF THE STUDY

The study of the birthing environment and satisfaction with birth is essential for several reasons, for example, positive delivery experiences can lead to better results for both the mother and the baby. By understanding the birthing environment factors that support a pleasant delivery experience, healthcare providers may elevate the grade of care they provide and improve health outcomes (Goldkuhl et al., 2022). A positive birth experience is an important component of patientcentered care, which is a key component of high-quality healthcare. By investigating the effect of the birthing environment birth satisfaction, healthcare on practitioners can create a more patient-centered environment that suits each person's unique needs and preferences. Contrary to this, a negative birth experience can lead to longer hospital stays, higher medical costs,

and a higher risk of readmission. By improving the birthing environment and encouraging birth satisfaction, healthcare practitioners can reduce costs associated with unpleasant childbirth experiences.

Studying how the birthing environment influences birth satisfaction can provide healthcare workers with evidence-based insights into the best methods to improve the birth experience. This can help to advance evidence-based medicine and raise treatment standards and resultantly can improve maternal health and wellbeing. A negative birth experience can lead to poor maternal mental health outcomes such as postpartum depression and anxiety. Healthcare workers can improve mothers' mental health outcomes by improving the birthing environment and boosting birth pleasure.

In general, birthing environment and birth satisfaction research are critical for improving patient-centered care, saving healthcare costs, supporting evidence-based practice, and improving mother and newborn health outcomes.

#### LITERATURE REVIEW

There is some evidence to support the idea that a woman's birth environment may have a significant impact on her overall birthing experience. Birth joy is a complex idea that can be influenced by a wide range of factors, including one's physical surroundings, the quantity of social support they receive, and the quality of the medical care they receive. In Pakistani culture, the birth of a child is viewed as a major event that should be treasured and acknowledged. Contrarily, the labor and delivery process in Pakistan is usually fraught with challenges, including subpar medical care, poor infrastructure, and limited access to skilled birth attendants. The goal of this literature review is to examine how one's birthing environment affects the degree of birth pleasure felt by Pakistani mothers.

The environment in which a woman gives birth can have an impact on how much control, comfort, and safety she perceives while giving birth (Hodnett *et al.*, 2013). Many studies have illuminated the critical part that a woman's immediate surroundings play in deciding how she gives birth. The birthing environment, which includes elements like the cleanliness and comfort of the delivery area, had a significant impact on the degree of joy that women had during labor, according to research done by Adams and Bianchi (2014). Like this, a study conducted by Stoll and colleagues (2016) found that the birthing environment

had a substantial impact on the birth experiences of women. These features were the availability of privacy, a comfortable bed, and a tranquil environment (Stoll *et al.*, 2016).

The quality of care provided by medical staff may be impacted by the physical surroundings, which may also have an impact on the mother's overall satisfaction with the birthing process. The results of a study conducted by Gharoro and Igbafe (2009) showed a direct correlation between the birthing environment, which included the availability of essential supplies and equipment, and the quality of the care provided during childbirth (Gharoro & Igbafe, 2009). Similar findings were made by another study (Ahmed *et al.*, 2019), which found that the quality of care provided during labor was significantly influenced by the availability of essential tools and supplies such as clean birthing kits and medications.

In Pakistan, giving birth is frequently complicated by issues such as a generally low grade of medical care, poor infrastructure, and limited access to qualified birth attendants (Khan & Chughtai, 2011). The challenges that Pakistani women face during childbirth have been the subject of numerous research. The results of a study (Malik *et al.*, 2019) revealed that childbirth presented significant challenges for Pakistani women. Inadequate infrastructure and limited access to qualified birth attendants were a couple of these challenges. In a similar line, a study (Shaeen *et al.*, 2022) found that childbirth was accompanied by significant challenges for women in Pakistan, including a low standard of medical treatment and insufficient infrastructure.

The environment in which labor occurs is one of the biggest challenges that women encounter in Pakistan. The results of a study conducted by Qureshi and coworkers (Qureshi et al., 2016) revealed that the birthing environment in Pakistani hospitals was typically subpar and that there was constrained access to critical tools and supplies. This is evident in the frequent shortages of essential medical equipment, such as sterile instruments and fetal monitors, and basic supplies like medications and clean linens. These deficiencies significantly hinder the ability to provide adequate care and increase the risks of complications during childbirth. Similarly, the study by Shaikh and colleagues found that the birthing environment in Pakistani hospitals was typically insufficient, characterized by low levels of hygienic standards and little seclusion (Shaikh et al., 2017).

If one wants to enhance women's overall birth

experiences and birth satisfaction, it is essential to improve the birthing environment of maternity units in Pakistan. The necessity of improving Pakistan's healthcare infrastructure, notably its hospitals, has been highlighted by numerous studies. According to Qureshi *et al.* (2016), there is a need to improve the physical infrastructure, which should also make sure that necessary tools and supplies are easily accessible. Similarly, the study by Shaikh *et al.* (2017) recommended updating hospital environments in terms of privacy and hygiene.

One of the most crucial things that can be done to improve birth satisfaction is to raise the standard of care provided by medical staff, in addition to making physical changes. The results of a study (Shaikh *et al.*, 2017) recommended changing healthcare professionals' attitudes and practices toward women who were giving birth. In the same vein, a study promoted the improvement of medical personnel's communication skills as well as the provision of information and education to female patients (El Bizri *et al.*, 2021).

#### THEORETICAL FRAMEWORK

Several theories demonstrate the relationship between the birthing environment with birth satisfaction. Here are some of these:

Theories of Environmental psychology study how the outside world affects people's attitudes, behavior, and general well-being. The term "Eco-psychology" also applies to environmental psychology. This theory holds that factors like comfort, isolation, and control can be influenced by the physical surroundings, which in turn can affect how content a woman is with her birthing experience (Curtis, 2017).

Following the person-environment fit hypothesis, everyone has a special set of desires and preferences that, to be fully satisfied, must be met by the immediate environment. The birthing environment, which can either satisfy an individual's goals and preferences or fall short of doing so, can have an impact on how happy a person feels about their birth (Kazemi *et al.*, 2023).

The social support theory contends that a person's general health can be significantly impacted by the amount of social support they receive from their family, friends, and medical professionals. This idea holds that a person's birthing environment can affect how content they are with their birth to some extent by either making it easier or harder to get social support (Hodnett, 2002).

According to attachment theory, a person's early encounters and interactions have the power to change their lifetime expectations and views about romantic relationships. In the 1960s, John Bowlby created the attachment hypothesis. According to this hypothesis, the birthing environment might affect birth pleasure by helping or limiting the mother's and her baby's ability to form a strong bond (Mander & Chalmers, 1997).

The premise of the control hypothesis is that humans have a natural need to exercise some level of control over both the circumstances of their lives and the environment in which they live. This hypothesis states that the mother's perception of control over the labor and delivery process can be strengthened or lessened by the physical surroundings (Kazemi *et al.*, 2023).

These theories generally imply that a person's level of birth experience satisfaction can be significantly influenced by their birthing environment. Aspects including comfort, privacy, control, social support, and attachment might have an impact on this level of satisfaction.

#### **METHODOLOGY**

This section describes the qualitative research methodology employed in a study that examined the effect of mothers' perceptions of Pakistan's birthing environment on their satisfaction with their child's birth. The study recruited 15 women who had given birth within the previous years and had received care in hospitals or healthcare facilities in Pakistan. To identify the respondents, women were accessed from Outdoor Patient Wards (OPD) of two public sector hospitals in Lahore. These women were interviewed during their visit to OPD for vaccination and follow-up checkups. They were interviewed at their convenience places. Some were interviewed in the hospital and others were at their places. Sample selection was based on a purposive sampling technique. The inclusion criterion for sample selection was.

- Mothers who had a vaginal delivery during the last year, reside in Lahore permanently.
- Mothers who are literate enough to understand basic medical terms about pregnancy and childbirth.
- Above the age of 18 years so that they may give informed consent for the interview.

The exclusion criterion was the mothers who had a stillbirth, birth with C-section or had gone through any complication during childbirth to avoid any psychological

trauma that may be triggered by interview questions.

To collect data, a semi-structured interview guide was developed. With the participants' permission, semi-structured interviews were conducted in Urdu, the official language of Pakistan, and audio recordings were made. The size of the sample was determined by the saturation principle. The objective of this study was to gain an in-depth understanding of the participants' experiences and perceptions regarding the birthing environment of labor and how it influences their level of birth satisfaction. The interview data was transcribed verbatim for analysis purposes.

The interview queries were designed to be open-ended and will probe the following topics:

- The physical and psychological environment in which the participant gave birth.
- The participants' perspectives on the external physical world.
- The effect of the birthing environment on the participants' birth satisfaction.
- Suggestions to improve the birthing environment of healthcare facilities and hospitals.

The data was subjected to a thematic analysis, which involved reading and rereading transcripts to identify recurring themes and patterns. Ethical considerations including informed consent, privacy, and confidentiality were also observed. The identities of the participants were kept secret by assigning pseudonyms and the data were preserved securely to protect the participants' privacy.

#### **RESULTS**

This section contains the findings of the thematic analysis of the interview data that was collected to examine the influence of the birthing environment on the birth satisfaction of Pakistani mothers. The experiences and views of the participants on the birthing environment in which they gave birth and its impact on their birth satisfaction served as the basis for the analysis.

The study found that the influence of birthing environment on the level of birth satisfaction experienced by Pakistani mothers fell into one of three main categories. Comfort and Privacy, communication and Support, Cleanliness and Hygiene. The following discussion will focus on these core findings derived from data.

#### **Comfort and Privacy**

The first theme found was privacy and comfort. The participants stated that their level of comfort and privacy

was significantly impacted by the birthing environment in which they gave birth. Due to the lack of privacy, the presence of other patients, and the presence of medical professionals, most participants stated that they did not feel at ease in the hospital setting.

As one participant put it: "I felt uneasy since there were too many individuals around. I didn't sense any sense of privacy." According to another participant, "I couldn't fall asleep since the hospital bed was so uncomfortable. No one could help me, and I was in anguish."

Some of the participants mentioned:

"The hospital rooms were packed with too many people, and there was barely any personal space. It was really difficult to find any peace during such an important time." "I felt exposed and uneasy in the shared space. There was zero privacy, which made my experience stressful and made childbirth difficult for me as I could not relax my body all the time."

The participants stated that their level of comfort and privacy was significantly impacted by the birthing environment in which they gave birth. Hospitals, according to the participants, should offer more private rooms and make sure that patients have access to soft beds and pillows. To preserve privacy and comfort, they also suggested that hospitals restrict the number of visitors allowed in the delivery room.

The results of this study are in line with earlier studies that stressed the value of privacy and comfort during labor (Hodnett et al., 2013; Rowe-Murray & Fisher, 2002). Lack of privacy and comfort can cause feelings of vulnerability, anxiety, and discomfort during childbirth, which can harm the birthing process (Sandall et al., 2016). Hence, giving Pakistani mothers private rooms and soft mattresses and pillows can increase their contentment with childbirth. Hospitals, according to the participants, should offer more private rooms and make sure that patients have access to soft beds and pillows. To preserve privacy and comfort, they also suggested that hospitals restrict the number of visitors allowed in the delivery room.

#### **Communication and Support**

The second recurring theme was support and communication. The participants stated that their satisfaction with their birth was significantly impacted by the communication and assistance they received from medical personnel during labor. Many participants said that during labor, medical personnel did not provide them with enough support or communication.

As one participant put it: "The medical professionals gave

me no explanations. They failed to explain what was going on when I was in pain." According to another participant, "Throughout the birthing process, I felt forgotten and ignored. The medical professionals did not offer any assistance or inspiration."

Some other participants mentioned:

"I felt like nobody was paying attention to me, and I had to wait a long time for help. The hospital staff seemed so busy that they didn't have time to talk to me properly."

"I was really confused and anxious about my care and my baby's health because the hospital staff didn't communicate with me clearly."

The participants recommended that hospitals train their medical staff more on good patient communication during birth. To ensure their comfort and well-being, they also suggested that hospitals should offer greater emotional support to patients during childbirth.

Quality maternal health care must include effective communication and emotional support (Tuncalp *et al.*, 2015). Lack of emotional support and communication during childbirth can cause emotions of abandonment and loneliness, which can have a negative effect on the birthing process (Sandall *et al.*, 2016). As a result, training medical workers in excellent communication and emotional support might enhance Pakistani mothers' happiness with their deliveries. The participants recommended that hospitals train their medical staff more on good patient communication during birth. In order to ensure patients' comfort and well-being, they also suggested that hospitals should offer greater emotional support to patients during childbirth.

#### **Cleanliness and Hygiene**

Cleanliness and hygiene were recognized as the third overarching theme. According to the participants, the degree to which the environment in the hospital was clean and sanitary played a significant role in determining how satisfied they were with their delivery experience. The majority of participants stated that the environment of the hospital was filthy, which caused them to feel uncomfortable and anxious.

One of the participants said, "I was concerned about getting an illness due to the uncleanliness of the hospital atmosphere. It caused me to feel tense and awkward in my body."

Another participant mentioned that "The bathroom had not been cleaned, and there was no toilet paper in there. The whole thing was a horrible ordeal."

A woman expressed "The hospital wasn't very clean,

which made me worry a lot about getting infections."

One participant said, "The facilities at the hospital were not hygienic, and I was concerned about the health risks for myself and my newborn baby."

In order to provide superior maternal health care, cleanliness, and hygiene are vital necessities ((Tuncalp et al., 2015). When it comes to labor, a lack of cleanliness and sanitation can lead to infections and other difficulties. both of which can have a bad impact on the overall experience (Sandall et al., 2016). The participants stated that hospitals should make it a priority to maintain a clean and hygienic environment within the hospital to reduce the risk of infections and to offer patients a secure setting. In addition to this, they suggested that hospitals should increase the number of people working in the cleaning departments so that patients are always treated in a sanitary setting. Thus, the provision of a clean and hygienic hospital environment as well as proper staffing levels for cleaning can boost the level of birth satisfaction experienced by Pakistani women.

#### DISCUSSION

The birthing environment is one of the most influential factors in birth satisfaction. An article published in the journal Environmental Psychology asserts, "The birthing environment can affect birth satisfaction by influencing factors such as comfort, seclusion, and control" (Abedini et al., 2021). Research has repeatedly demonstrated that women who give birth in an atmosphere that is both supportive and pleasurable are more likely to be satisfied with their birthing experience (Kozhimannil et al., 2013). The level of comfort is one of the most significant aspects of the birthing environment that can influence a person's satisfaction with their birth. A comfortable environment can help reduce feelings of tension and anxiety, as well as promote feelings of serenity and well-being. According to some studies, having comfortable accommodations, the ability to control the temperature, and adequate lighting can significantly increase birth satisfaction (Mander & Chalmers, 1997). On the other hand, being in an uncomfortable environment, such as one that is excessively bright or noisy, can cause individuals to feel discomfort and discontent.

Privacy is another important aspect of the birthing environment that influences how a person feels about their birth experience. According to a number of studies, mothers who give birth in environments that afford them some privacy during labor and delivery report

significantly higher levels of overall satisfaction (Hodnett, 2002). When women have access to private areas, they can feel more in control of their surroundings, making it simpler for them to concentrate on the labor and delivery process without being interrupted or distracted.

Control is essential to the labor and delivery process, and a woman's circumstances during labor and delivery can have a significant impact on her sense of control. According to a number of studies, mothers who believe they have some control over the labor and delivery process are more likely to report greater levels of happiness (Kozhimannil et al., 2013). Access to pain treatment, the ability to make informed decisions, and the presence of supportive healthcare professionals can all contribute to a sense of control and increase birth enjoyment.

The presence or absence of social support is an additional factor that can significantly impact postpartum contentment. Depending on the physical surroundings, the presence of supportive family members, friends, or healthcare professionals can be facilitated or hindered, and this can affect the character of social support. Numerous studies have shown that social support is essential to postpartum contentment and that the birthing environment can play a significant role in either encouraging or discouraging social support (Kozhimannil *et al.*, 2013).

It is difficult to deny the significance of the birthing environment in promoting birth satisfaction. One of the most important things that healthcare providers can do to enhance the overall birth experience for their patients is to create a supportive, patient-centered birth environment that caters to each woman's unique needs and preferences. Future research should continue to investigate the impact of a person's birthing environment on the quality of their birthing experience and identify the most effective ways to promote positive birthing experiences.

## LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

There are several limitations to studying. The study is limited to public sector hospitals located in Lahore, Pakistan. Which is a potential bias in the findings of the study. Also, regarding the sampled participants, those who did not agree to participate in the study may have had more satisfying experiences during their birthing process.

The potential for prejudice on the part of the researcher is yet another disadvantage of qualitative research. There is a possibility that the researcher is operating under some preconceived notions or assumptions, both of which have the potential to color their interpretation of the findings. In addition, the researcher may have a restricted view of the experiences of the participants, which may be influenced by his or her cultural background or personal prejudices in the same way that the researcher may have a limited perspective on the experiences of the participants.

In addition, the scope of the study may be constrained by the limited resources and facilities that are available in the hospitals located in Lahore, Punjab, Pakistan. Hospitals in low-income and middle-income nations can have limited resources or insufficient staff, both of which can have an impact on the birthing environment and the quality of treatment for birthing.

Researchers can use a variety of methods to minimize selection and researcher bias to address these limitations. One example of one of these methods is using a diverse sample of participants and undertaking member checks to ensure that the findings accurately reflect the participant's experiences. Researchers also have the option of using a mixed-methods approach, which allows them to enhance qualitative findings with quantitative data and provide a full understanding of the effect that the birthing environment has on birth satisfaction. Researchers are now able to work together with healthcare providers and legislators to address the constraints posed by the physical settings of hospitals and to encourage women to have happy birthing experiences.

#### **CONCLUSION**

In conclusion, the findings of this study offer significant new insights into the role of the birthing environment in a mother's satisfaction. According to the findings, increasing the availability of private rooms, comfortable beds and pillows, effective communication, and emotional support, as well as a clean and hygienic environment, may be able to improve the level of satisfaction felt by Pakistani mothers following the birth of their children. These findings have significant repercussions for the delivery of maternal health care in Pakistan and have the potential to guide the formulation of policies and programs designed to improve maternal health outcomes in the nation.

#### **REFERENCES**

- Abedini, F., Esmaelzadeh-Saeieh, S., & Ghasemi, V. (2021). The relationship between birthing environment and birth satisfaction: A narrative review. *Journal of Environmental Health Science and Engineering*, 19(1), 213-224. <a href="https://doi.org/10.1007/s40201-021-00641-w">https://doi.org/10.1007/s40201-021-00641-w</a>
- Adams, E., & Bianchi, J. (2014). Full circle: The development of a birth center. *The Journal of Perinatal Education*, *23*(1), 34-43.
- Ahmed, I., Ali, S. M., & Amjad, S. (2019). Evaluating the impact of clean delivery kit use on the quality of childbirth practices: A randomized controlled trial in Peshawar, Pakistan. . *Journal of Health, Population, and Nutrition*, 38(1), 1-9.
- Bank, W. (2021). *Pakistan*. https://data.worldbank.org/country/pakistan
- Curtis, A. (2017). The birthing environment of birth. *The Lancet*, 389(10085), 1690-1691. https://doi.org/10.1016/S0140-6736(17)31376-9
- El Bizri, L., Jarrar, L. G., Ali, W. K. A., & Omar, A. H. (2021). The role of community pharmacists in increasing access and use of self-care interventions for sexual and reproductive health in the Eastern Mediterranean Region: examples from Egypt, Jordan, Lebanon and Somalia. *Health Research Policy and Systems*, 19(1), 1-11.
- Fenwick, J., Gamble, J., & Hauck, Y. (2017). Factors contributing to birth satisfaction: A systematic review. *Women and Birth*, *30*(6), 459-471.
- Gharoro, E. P., & Igbafe, A. A. (2009). The effect of delay in decision-making on the outcome of emergency caesarean sections in Nigerian women. *Journal of Obstetrics and Gynaecology*, 29(4), 317-320.
- Goldkuhl, L., Dellenborg, L., Berg, M., Wijk, H., & Nilsson, C. (2022). The influence and meaning of the birth environment for nulliparous women at a hospital-based labour ward in Sweden: An ethnographic study. *Women and Birth*, *35*(4), e337-e347.
- Hodnett, E. D. (2002). Pain and women's satisfaction with the experience of childbirth: A systematic review. *American journal of obstetrics and gynecology*, 186(5), S160-S172.
- Hodnett, E. D., Gates, S., Hofmeyr, G. J., & Sakala, C. (2013). Continuous support for women during childbirth. *Cochrane database of systematic reviews*(7).
- ICF, N. I. o. P. S. N. P. a. (2019). Pakistan Demographic and

- Health Survey 2017-18
- a. R. Pakistan, Maryland, USA: NIPS and ICF.
- Kamalifard, M., Hashemian, F., Fardiazar, Z., & Amini, P. (2021). The relationship between childbirth experience and maternal satisfaction: A systematic review and meta-analysis. *Journal of Maternal-Fetal and Neonatal Medicine*, 34(1), 102-109.
- Kazemi, A., Beigi, M., & Najafabadi, H. E. (2023). Environmental factors influencing women's childbirth experiences in labor-delivery-recovery-postpartum unit: a qualitative cross-sectional study. *BMC Pregnancy and Childbirth*, 23(1), 169.
- Khan, S., & Chughtai, S. (2011). Pakistani women's experiences and perceptions regarding childbirth in Lahore's public hospitals. *Midwifery*, *27*(2), 231-237.
- Kozhimannil, K. B., Hardeman, R. R., & Attanasio, L. B. (2013). "Is anyone listening?" Women's experiences of childbirth in the US. *Social Science & Medicine*, 84, 1-6. https://doi.org/10.1016/j.socscimed.2013.02.013
- Malik, N., Ahmed, M., Ahmed, J., Khan, M. A., & Ahmed, A. (2019). Challenges faced by women during childbirth in rural Sindh, Pakistan. *Journal of Pakistan Medical Association*, 69(2), 232-236.
- Mander, R., & Chalmers, B. (1997). Variation in satisfaction with childbirth in New South Wales. *Australian and New Zealand Journal of Obstetrics and Gynaecology, 37*(2), 182-188. <a href="https://doi.org/10.1111/j.1479-828X.1997.tb02170.x">https://doi.org/10.1111/j.1479-828X.1997.tb02170.x</a>
- Martin, C. J. H., Fleming, V. E., & Lee, E. (2019). A critical review of the literature on women's birth satisfaction. *International Journal of Childbirth*, 9(1), 16-30.
- Qureshi, N., Shaikh, B. T., Sajjad, N., & Sayed, S. A. (2016). Knowledge and attitudes of healthcare providers regarding safe motherhood in Karachi, Pakistan. International Journal of Women's Health, 8, 39-47.
- Rowe-Murray, H. J., & Fisher, J. R. (2002). Baby friendly hospital practices: cesarean section is a persistent barrier to early initiation of breastfeeding. *Birth*, *29*(2), 124-131.
- Sandall, J., Soltani, H., Gates, S., Shennan, A., & Devane, D. (2016). Midwife-led continuity models versus other models of care for childbearing women. *Cochrane database of systematic reviews*(4).

- Shaeen, S. K., Tharwani, Z. H., Bilal, W., Islam, Z., & Essar, M. Y. (2022). Maternal mortality in Pakistan: challenges, efforts, and recommendations. *Annals of Medicine and Surgery*, *81*, 104380.
- Shaikh, B. T., Hatcher, J., & Rizvi, N. (2017). Does user fee removal policy provide financial protection from catastrophic health care payments? Evidence from a tertiary care public hospital in Karachi, Pakistan. *PloS one*, *12*(8), e0182241.
- Stoll, K., Hall, W., Janssen, P., Carty, E., & Lee, L. (2014). Birthplace and satisfaction: Why do women prefer homebirths in Australia? *BMC Pregnancy and Childbirth*, *14*(1), 1-10.
- Stoll, K., Hauck, Y., Downe, S., Edmonds, J., Gross, M. M., Malott, A., . . . Hall, W. A. (2016). Cross-cultural development and psychometric evaluation of a

- measure to assess fear of childbirth prior to pregnancy. *Sexual & Reproductive HealthCare, 8,* 49-54.
- Tuncalp, O., Were, W., MacLennan, C., Oladapo, O., Gülmezoglu, A., Bahl, R., . . . Kristensen, F. (2015). Quality of care for pregnant women and newborns—the WHO vision. *Bjog*, *122*(8), 1045.
- Wiklund, I., Edman, G., Ryding, E. L., & Andolf, E. (2008). Expectation and experiences of childbirth in primiparae with caesarean section. *BJOG: An International Journal of Obstetrics & Gynaecology*, 115(3), 324-331.
- Yunus, A., Rahat, R., & Bano, S. (2023). Influence of Religiosity on Childbirth Satisfaction among Pakistani Women. *Journal of History and Social Sciences*, 14(1), 18-27.

Publisher's note: EScience Press remains neutral about jurisdictional claims in published maps and institutional affiliations.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution, and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made. The images or other third-party material in this article are included in the article's Creative Commons license unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this license, visit http://creativecommons.org/licenses/by/4.0/.

© The Author(s) 2023.