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The Impact of a Training Program of Communication for Midwives on Women's Satisfaction during Childbirth: An Intervention Study

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ABSTRACT

Background: Training programs of communication for midwives have an impact on women's satisfaction during childbirth. ***Purpose:*** The purpose of this study is to investigate the impact of a training program on communication for midwives of different cultural and national backgrounds on women's satisfaction with the experience of childbirth. ***Methods:*** The study involved an intervention design using pre- and post-test activities. The study took place at one of the largest armed hospitals in the southern region of Saudi Arabia in the Labour and Delivery unit. The study has been developed through three main stages: Data was collected from a convenient sample of 25 working midwives in the unit. Additionally, 50 women were observed during childbirth (25 before and 25 after the intervention). ***Results:*** The study results show that there was a significant improvement in the midwives' communication process with mothers after the intervention. ($p<0.01$). Women's satisfaction with the intervention of midwives improved significantly, and their overall satisfaction also increased significantly ($p<0.010$). ***Conclusion:*** Standardizing healthcare provision among midwives is vital when working with diverse cultures. Further studies and follow-up are necessary and training programs should be implemented to ensure intervention effectiveness. ***Implications for Nursing:*** The study will serve developing educational programs based on cultural differences and communication skills for midwifery, which is important for women's satisfaction.

Keywords: Midwife communication, Childbirth, Women's satisfaction, Training programs.

What does this paper add?

1. This paper adds to the midwifery education regarding the importance of empowering women through communication during labour process in women's satisfaction.

Abbreviations

L& D= Labor and Delivery.
JCI= Joint Commission International.
CBAHI = Central Board for Accreditation of Healthcare Institutions.

Introduction

One of the critical goals of maternal health during childbirth is to improve the effective relationship between the mother and the midwife and to improve support and care during delivery (Muthige & James, 2019). Thus, effective and purposive communication,

advocacy role as well as emotional support are highly recommended. Effective interaction between midwife and mother during delivery can improve health outcomes, reduce hospital stay, eventually decrease costs, eliminate additional care needed, improve patient-oriented care and support, and increase patient overall satisfaction (Ahmed & SpringerLink, 2020; Muthige & James, 2019). Moreover, midwifery services can improve the process and create a positive delivery experience among women (Attarha et al., 2016).

Women's satisfaction with the midwifery services is one of the key indicators for quality of maternal care (Goodman et al., 2004). In that, satisfied women tend to follow treatment recommendations and health education, which will improve the overall quality of maternal health (Alidosti et al., 2013). However, satisfaction is a complex phenomenon consisting of many factors, since women can be satisfied with one aspect of care, but not with the others. Similarly, some women may appreciate the presence of more than one component, as affected by many different healthcare services provided (Mocumbi et al., 2019).

Women obtain satisfaction from different activities (Hatamleh et al., 2019; Hatamleh et al., 2021; Kiewan et al., 2021). In addition, it was found that women's freedom of choosing a midwife, a comfortable environment, support and encouragement during the delivery process were highly appreciated (Perriman et al., 2018). Moreover, another study (Karlström et al., 2015) found that taking control during birth also improves satisfaction. Personal control and helping women make decisions and understand the process provided, as well as empowering women with information and guidance, were found to be important factors in increasing women's satisfaction (Goodman et al., 2004; Moridi et al., 2020). Emotional support in relation to encouragement, active listening, appreciation, continuous presence with the woman, and reassurance also promote satisfaction (Bohren et al., 2017).

The communication process also influences satisfaction with midwifery services. Using simple, direct, and non-medical words in an understandable language promotes satisfaction (Ojelade et al., 2017). Effective communication between midwife and the mother could lead to better assessment of woman's health problems, enhance decision-making, improve the quality of health care services, and eliminate medical errors by continuous follow up and evaluation, in addition to decreasing the women's hospital stay and eventually increasing women's satisfaction (Chang et al., 2018; Rezaei-Abhari, 2019). Cultural understanding and respect, particularly providing privacy and minimizing the number of vaginal examinations as well as the presence of female providers, were found to be, among others, determinants of women's satisfaction in some developing countries (Srivastava et al., 2015; Yildirim & Bilgin, 2021).

Saudi Arabia is one of the Gulf region countries located in the Middle East. The total population of Saudi Arabia based on Wroldmeter amounted to 37,473,929 (Worldmeter, 2024, March). The total fertility rate for females aged 15-49 years was 2.4 children in 2021 in Saudi Arabia (World Bank, 2021). Regarding maternal health care, according to a world health survey, in Saudi Arabia, 94.6% of all ever-married women aged 15-49 years received at least one antenatal care visit from a skilled health care provider in Saudi Arabia. Of these, 79.7% received 4 or more antenatal care visits. 98.7% of all births in Saudi Arabia were delivered in a healthcare facility (MOH, 2019). In one qualitative study conducted in Saudi Arabia in three hospitals in Riyadh, Jeddah, and Dammam through focus group discussions involving 169 women on factors that enhance their satisfaction at the delivery site, women mentioned being respected, supported and well informed during childbirth with guided information and empowered with decision participation (Jahlan et al., 2016). Despite the evidence supporting cultural harmony between women and midwives, the majority of midwives in Saudi Arabia are non-citizens, non-Arabic speakers and come from different nationalities with different diplomas of midwifery curricula (Altaweli et al., 2014).

Cultural differences between midwives and women need more investigation to dig deeper into ways of improving women satisfaction with midwives of different cultural backgrounds. This study hypothesized that differences in cultural and educational backgrounds among midwives might influence the communication process with women, which may affect the overall women's satisfaction and the quality of services provided; therefore, training and education might improve women's overall satisfaction. Therefore, this study was designed to investigate the impact of a training program on communication for midwives of

different cultural and national backgrounds on women's satisfaction during the experience of childbirth.

Methods

Study Design and Setting

An intervention study design (pre-test-post-test) was conducted in a non-probability, purposive, convenient sample (De Vos et al., 2011) of 25 midwives. Those midwives work in one of the largest Armed Forces hospitals in the southern region of Saudi Arabia in the labour and delivery unit (L&D). This hospital was chosen, because it receives patients from all over the southern region of Saudi Arabia in the labour and delivery unit. Its labor and delivery unit is also accredited by Joint Commission International (JCI) and the Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI). The L&D ward, on average, receives daily 150 deliveries, as well as 360 daily visits to the antenatal clinic.

Study Sample

The research included a sample of all 25 available midwives working in the labour and delivery ward who received no training in childbirth or communication in the previous year of this study. Women interviewed for their satisfaction with the childbirth care were 25 in the need assessment stage (mothers the childbirth of whom was attended by the main researcher for the purpose of observing the midwives' care). The exclusion criteria for mothers were related to those with high-risk cases; gestational diabetes, preeclampsia, antepartum and postpartum hemorrhage, multiple gestation and heart diseases. 25 other women were interviewed at the evaluation stage (mothers whose childbirth was addressed to evaluate the impact of the training program on care delivery).

Instruments

Midwife Observation Guide

Midwives were observed during delivery using a semi-structured observational guide adopted from Maputle (2018). The guide included nine important aspects, including empowerment of women during birth (10 items), advocacy actions (4 items), respectful behaviours (3 items), and communication aspects with women during delivery that included information regarding the health status (4 items). It also included health education in general (2 items), health education during the first stage of birth (10 items), health education during the second stage of birth (6 items), and health education during the third stage of childbirth (3 items). Emotional support activities (4 items) and supportive physical activities (2 items) were also assessed. The semi-structured observation guide enables the researcher to describe events and behaviours of midwives during labour (Hardon et al., 1994) The observational guide included the demographic characteristics, such as the nationality of the midwife, the level of education, and years of experience. The observation guide was analyzed by presenting frequency distribution and clustered into the nine above-mentioned themes, where mean and standard deviation were presented for each of the indices. The observation was carried out by the main researcher who is a midwife through observing the delivery process from the starting of vaginal dilatation to the delivery of the placenta. The observation guide was blind for midwives (pre-and post-test).

Women's Satisfaction Questionnaire

Data was collected using women's satisfaction questionnaire through face-to-face interviews in the first 24 hours post-partum in the postpartum unit by the main researcher who carries out the observation for the midwife. The questions were derived from the midwives' observation guide, relevant studies, and surveys from the midwifery literature. The questionnaire consists of 37 items organized on a 5-point Likert scale (1 represents strongly agree and 5 represents strongly disagree). The face validity and content validity have been approved by a survey on 5 midwifery and nursing students and revealed a face validity index of 0.89 and a content validity ratio of 0.81. Moreover, the Cronbach's alpha coefficient was 0.92.

Intervention

The study was divided into three stages: the first stage was the need assessment stage/pre-test phase, where an observation check list was used to observe midwives while providing care during the delivery process (from the early stage of delivery to the fourth stage of delivery). In addition to women who were taken care of during the delivery process, women were interviewed (face-to-face) using a structured questionnaire for their satisfaction after delivery (within 24 hours after delivery). The data was analyzed, and the

main problems were identified. The main purpose for the first stage lies in identifying the key gaps for the intervention. The second stage of the study was to conduct a training program/intervention phase which was conducted through one month after the need assessment stage, where a training program was prepared and pre-tested on 5 midwifery students. The training program focused on the need assessment gaps and problems found in communication. The training program was delivered within three full days. The training was repeated three times to make sure that all the 25 midwives participated without interrupting the working schedule of the labour and delivery unit.

The training, spanning three days with five-hour sessions, focused on four key areas: enhancing communication skills, emphasizing the importance of health education throughout delivery stages, providing physical and emotional support during childbirth, and promoting women's empowerment and advocacy during the process. Utilizing interactive techniques, like simulation and role-play, the training manual, developed by the nursing college midwifery program head, and various experts, drew from midwifery and nursing literature. Endorsed by the hospital's academic affairs in midwifery and nursing and accredited by the quality improvement department, the program underwent pre-testing by five midwifery students for clarity. With collaboration from the midwifery department, the authors delivered the training.

The third stage of the study was the evaluation stage/post-test, where we verified the direct impact of the intervention program. As another observation was conducted for the 25 midwives soon after finalizing the training (one week in between), taking into consideration the same sequence of the training process as those who had been trained first were observed first. We standardized the process of observation, as it was conducted during the morning shift and not more than two midwives were observed during the day to remove any cofounding factors. The mothers (n = 25) whom the main researcher attended their delivery were attended by the main researcher for evaluation by the midwife. They were interviewed during the first 24 hours after delivery using the same structured questionnaire used earlier for the assessment of the need. The researcher who conducted the observation in both the first stage of the study (need assessment) and the evaluation stage had nursing and midwifery qualifications and long midwifery experience (more than 10 years), Saudi nationality and proficiency in English language, to ensure that she understands the care process during labour and delivery, culturally understands the reactions and communicates well with all the midwives. Midwives were all non-Arabic speaking and of different nationalities.

Ethical Considerations

Ethical approval was received from the research committee in the Armed Forces Hospitals in the southern region (Reg. No. H-O6-KM-001). Women and midwives signed a consent form for participating in the study. For the purpose of the study, the main researcher explained for the midwives the purpose of the study; however, the observational guide was not explained to the midwives in detail, so as to be able to identify the gaps for the study. But, midwives understood that they will be observed during the process of intrapartum for behavior and process of care, and signed the consent.

For the confidentiality reason, the main researcher assured the midwives that their names will not be mentioned in any research reports and neither their personal information will be published. All research data was archived in a secured place based on the Armed Forces hospital research policy.

Statistical Analysis

The statistical analysis of data was conducted by using SPSS, version 26 (Coakes & Ong, 2011). The paired t-test was used to compare the results before and after the intervention, while Pearson's product moment correlation was used to examine the correlation between the continuous variables of the satisfaction indices and the overall satisfaction and the continuous variables, such as maternal history and age. ANOVA was used to assess differences in means of dependent variables with categorical independent variables, such as education status, work status, and received health education before delivery (delivery classes) together with the main study indices. No violations for ANOVA assumptions were found.

Results

Sociodemographic Characteristics of the Midwives

Most midwives were South African, with diploma in midwifery and with more than 10 years of experience; none of the midwives were native speakers of the Arabic language, and none of them were Saudi midwives.

Demographic and Maternal Characteristics of the Women Who Participated in the Investigation

Only 8% of the women were under 20 years old; most women in the pre-training and post-training groups were over 26 years old. About a half of the women in both groups received education higher than schooling degree. The mean age of marriage for all women was 23 years; however, 6 women in the post-training group were married before the age of 20 (high-risk maternal age), but none of them had her first pregnancy before the age of 20 years. Most of the women were not employed (Table 1).

Table 1. Demographical data and maternal history for women observed during their delivery process before midwives' training (n=25 women) and those observed during their delivery process after midwives' training (n=25 women)

Characteristics	Need assessment stage (n=25)	Impact evaluation stage (n=25)
Age Mean age± SD	 28.2±5.38	 31.28±4.58
Age at first marriage Mean ± SD	 22.80±4.6	 24.08±0.64
Age at first pregnancy Mean ± SD	 24.44 ± 2.02	 23.28± 2.39
Education level School education Higher than school education	 10 (40%) 15 (60%)	 8 (32.0%) 17 (68%)
Employed Yes No	 2 (8%) 23 (92%)	 4(16%) 21 (84%)
Pregnancies (gravida) **Mean**± SD	 3.21±1.87	 3.40±1.25
Number of deliveries (Para) **Mean** ± SD	 1.72±1.20	 2.12±1.26
Number of living children **Mean** ± SD	 1.68±1.21	 2.12±0.1.19
Number of Abortions **Mean** ±SD	 0.52±0.9	 0.32±0.62
Previous place of delivery Armed Forces Hospitals Governmental Private	 23(92%) 2 (8%) 0 (0.0)	 22 (88%) 2 (8%) 1 (4%)
Current pregnancy antenatal care Yes No	 24 (96%) 1(4%)	 20 (80%) 5 (20%)
Have you ever received health education regarding the preparation of delivery in the antenatal visits? Yes No	 8 (32%) 17 (68%)	 10 (40%) 15 (60%)
When you received heath education, from whom was it? Nurse Midwife Doctor Health educator	 0 (0.0%) 0(0.0%) 1 (4%) 7 (98)	 0 (0.0) 0 (0.0%) 0 (0.0) 10 (100%)

Women's Satisfaction with the Services Provided Before the Intervention and After the Intervention

Table 2 shows that there are significant increases in positive responses related to interventions and actions of midwives after training in the following aspects: empowerment behaviours and communication of midwives with the women, midwives' emotional and physical support during delivery, general health education and health education during the three stages of delivery (P = 0.000). The pain score did not show significant changes during the intervention (P = 0.24). However, the post-test mean pain score was decreased from 7.48 to 6.96. The overall satisfaction increased significantly (P=0.001).

Table 2. Women's satisfaction indices before and after midwives' training (t- test)

	Mean ±SD*		P-value
Mother's satisfaction index	**Pre-training (n=25)**	**Post-training (n=25)**	
Women's empowerment	8.92±2.53	4.64±2.00	0.000***
Midwives' support (phy. & Psy.)**	12.40±3.6	5.88±2.20	0.000***
Communication with midwife	15.4±3.4	14.80±2.8	0.531
Health education (general)	16.60±2.84	7.80±4.08	0.000***
Health education for first stage of labour	27.76±2.69	18.400±4.36	0.000***
Health education for second stage of labour	19.24±4.23	11.20±3.41	0.000***
Health education for third stage of labour	16.96±1.96	9.64±2.44	0.000***
Women's satisfaction question	2.92±1.96	1.80±0.64	0.001***
Women's pain score	7.48±1.67	6.96±1.67	0.279

** Standard deviation, ** Physical and psychological, *** Significant at <0.05.*

Midwives' Results for Pre-intervention and Post-test

Table 3 shows a high significant improvements of the midwives' behaviours and communication regarding women's empowerment, and emotional and physical support provided for women. It also shows improvements in respecting cultural concerns and general health education, as well as health education during the first and second stages of delivery (P=0.000). However, midwives did not show a significant improvement in providing health education at the third stage of delivery ($P=0.17$). In relation to communication with women regarding their health status and the infants' health status during the process of delivery, it did not show significant improvement ($P=0.15$).

Table 3. The midwives' observed behaviour (pre-training and post-training) (t- test)

	Mean ±SD*		P-value
Midwives observed behaviour index	**Pre training (n=25)**	**Post training (n=25)**	
Women's empowerment	3.84±1.79	7.5±1.19	0.000***
Midwives support (phy. & Psy.)**	3.24±1.09	4.0±0.45	0.001***
General communication	3.68±1.10	4.oo±0.00	0.155
Health education (general)	1.20±0.832	1.90±0.276	0.000***
Health Education for first stage of labour	2.44±1.52	6.20±1.38	0.000***
Health education for second stage of labour	1.60±1.41	4.44±1.04	0.000***
Health education for the third stage of labour	0.64±1.22	1.120±1.26	0.179***

** Standard deviation, ** Physical and psychological, *** Significant at <0.05.*

Correlation between Study Indices, Women's Demographic and Maternal Data and Women's Overall Satisfaction

To investigate the relationship between women's satisfaction and the indices, Pearson's correlation was used to investigate the linear relationship between each of the indexes and the overall women's satisfaction. As presented in Table 4, a positive moderate correlation was found between satisfaction and the support index (r = -0.475, p <0.001, n = 50), implying that with more support, women's satisfaction increases. Furthermore, R^2 = 0.225, meaning that 22.5% of the variation in satisfaction is explained by support. This was followed by the relationship with the empowerment index ((r = -0.433, p <0.001, n = 50), which implies that with more empowerment, satisfaction increases. Furthermore, R^2 =

0.187 meaning that 18.7% of the variation in satisfaction can be explained by the empowerment of women. The general correlation with women's satisfaction R^2=0.315, meaning that 31.5% of variations in women's satisfaction can be explained by combining all study indices.

Table 4. Correlation indices between general satisfaction and women's empowerment, support, communication, general health education, health education in the first stage of delivery, health education in the second stage of delivery, and health education in the third stage of delivery

Variable (women's overall satisfaction with:	Correlation coefficient	R^2	Significance
Empowerment	0.433**	0.187	0.002
Support	0.475**	0.225	0.000
Communication	0.073	0.005	0.612
Health education general	0.324*	0.104	0.022
First stage health education	0.305*	0.093	0.031
Second stage health education	0.230	0.052	0.108
Third stage health education	0.418*	0.174	0.005
With all the above indices	0.562	0.315	0.018*

* Correlation is significant at the 0.05 level (2-talied).

** Correlation is significant at the 0.01 level (2- tailed).

In terms of correlation between mother demographic data and maternal history, Table 5 shows a negative relationship between each of number of pregnancies, number of deliveries and number of living children and satisfaction, which means that with increasing the number of pregnancies, deliveries or the number of children, satisfaction decreased (r= -0.307, -0.282, , -0.310, respectively). Age and age at first pregnancy or age at first marriage were found to be not correlated (Table 5).

Table 5. Correlation between overall satisfaction and demographic and maternal factors

Variable (women's overall satisfaction with:	Correlation coefficient	R^2	Significance
age	-0.225	0.050	0.115
Age at first pregnancy	-0.086	0.0067	0.553
Pregnancies (gravity)	-0.307*	0.094	0.030
Deliveries (para)	-0.282*	0.079	0.047
Number of living children	-0.310*	0.096	0.029
Abortion	-0.138	0.019	0.029

* Correlation is significant at the 0.05 level (2-talied).

On the other hand, ANOVA was conducted to assess the relationships between categorical variables (education status, working status, health education during antenatal care) and satisfaction to find out whether there were significant relationships or not.

Discussion

The study found out that midwives were having

difficulty with communication before the training and did not give women enough empowerment and satisfaction with the services. The WHO (WHO, 2018) recommended effective communication during pregnancy as a key factor in improving childbirth outcomes. Training showed a great improvement in midwife communication, cultural understanding, and directive health education. It also helped standardize the health education information during the process of birth.

Cultural sensitivity is one of the key points in the quality of health care in areas where there is a diverse population or cultural groups (Jongen et al., 2018). Jognen et al. (2018) also noted that cultural sensitivity helps increase patient's cooperation and improve the overall health outcomes. Culturally sensitive healthcare providers uphold the vision of holistic care and changes (Majumdar et al., 2004). Furthermore, it is recommended to standardize health care strategies when there is a diverse educational background of health care providers to improve the quality of health care and patient's safety (ACOG, 2019). The training showed improvements in the training aspects, which is also reflected in increasing the patient's overall satisfaction.

Among the aspects that were discussed during the training were the methods of empowering women during childbirth through participation of women in the process of birth, listening to women's suggestions, as well as including their ideas in decision making. The observed midwives showed a significant improvement in empowerment strategies (form 8.92±2.53 pre-training to 4.64±2.00 post-training; P=0.000). Before training, midwives had difficulty in understanding women's language and did not pay close attention to mothers' concerns, nor to their suggestions. Considering the diversity of midwives' languages, language could be a major problem in health care services (Ojelade et al., 2017). During the training, the midwives showed negative attitude towards women's empowerment, as they believed that they know the health risks and needs better than the mothers, and they could decide the best health care. The training was helpful in exploring and discussing the attitudes and concerns as well as introducing Saudi culture and women's empowerment. A different study conducted in Saudi Arabia found out that women would be more satisfied if they would share decisions regarding their health care (Jahlan et al., 2016). In addition, empowerment of women in childbirth was one of the factors found to enhance women's satisfaction in another study (Nilsson et al., 2013).

In terms of physical support, such as back rub and hand touch, to support women during childbirth, midwives avoided such activities before training, thinking that they could dishonor Saudi culture. However, midwives believed that such actions might be extremely helpful. Training came to clarify and discuss the beliefs and attitudes that showed a significant improvement after training with respect to the observation of midwives and the responses, as noted by (Alshammari et al., 2019).

In some cultures, psychological support during childbirth may be the role of husbands or another significant family member of the mother. Husband might take a positive role in the second stage of labour when the midwife is busy with delivering the baby (Sapkota et al., 2011). But, in Saudi Arabia, husbands and significant others were forbidden from attending delivery in most hospitals and in this research setting. In a study conducted in Riyadh, it was found that close to one third of the husbands in the study sample are not welling to attend the childbirth of their wives (Alharbi et al., 2018). In such situations, it is part of midwife's role to provide psychological support based on the Royal Collage of Midwifery (Guzewicz & Sierakowska, 2022; Midwifery, 2014).

Emotional support was one of the important factors for the satisfaction of Saudi women with childbirth, and this was already noted by some previous research (Jahlan et al., 2016). Training midwives on effective listening skills and the importance of emotional support helped show improvement after training. It has also been documented that emotional support during childbirth can improve women's birth outcomes, decrease the caesarean rate and make less use of epidural anaesthesia (Attarha et al., 2016; Guzewicz & Sierakowska, 2022).

The communication domain in the study did not show significant improvements after training (P=0.15), and the reason could be that the items under this domain are related to greeting the woman, self-introducing, explaining procedures and answering women's questions, which were observed by almost all midwives before training. Therefore, it did not show a great difference with the post-training outcomes. Answering women's questions was found to increase women's satisfaction, and a similar result was found by (Heatley et al., 2015).

Health education and keeping women well-informed during the delivery process are among the most important key indicators of women's participation and satisfaction. This research noted that, out of the 50 women observed before and after training, only 18 women received health education regarding delivery process preparation or delivery complications and preparations, and none had received health education by a midwife or a nurse. However, part of the important role of midwives is to provide health education in the antenatal period related to the preparation for delivery based on the recommendations of the royal collage of midwifery (Midwifery, 2014). Women value information received during pregnancy as a matter of involvement and power that increases their satisfaction, which was found in a study in Iran (Jafari et al., 2017).

Health education during the childbirth is effective when tailored for the three stages of delivery. Midwives showed a significant improvement in providing health education after training, as they focused on the important areas of education during the stages of delivery, particularly breathing exercise, and time to push, while taking into account cultural perspectives and needs into consideration similar to other studies (Alswaiti, 2023; Hatamleh et al., 2019; Kiewan et al., 2021). Midwives succeeded by providing information in keeping women focused on and fully involved in the process of delivery which helped in decreasing pain and becoming much more cooperative with midwives. Satisfaction among women also increased due to the health education provided. Heath education is significant in increasing the overall satisfaction from health care providers (Asiri et al., 2013) . Perception of pain during labour is also influenced by health education and labour preparation, nursing support and technical measures (McDonnell, 2000). In general, the results of this investigation confirmed that the average pain reported decreased after training.

The women's power during the delivery process and support was found to decrease pain and be correlated with childbirth satisfaction in a study conducted in Iran (Jafari et al., 2017). In our study, language barriers as well as communication problems were found in delivering this feeling to women before training. Midwives improved in this aspect after training; therefore, women's overall satisfaction increased in this regard.

Conversely, there was a negative correlation between the number of pregnancies and previous deliveries and satisfaction level. As the number of pregnancies and deliveries increased, women's satisfaction decreased. This trend may be attributed to heightened expectations of pain and poor communication, particularly among those who had previous childbirth experiences in the same setting. This echoes findings from prior research, suggesting that past negative experiences can influence the overall satisfaction (Kuo et al., 2010).

Study Limitations

The study had several limitations, notably the small sample size, which may affect the generalizability of the results. Additionally, the absence of Saudi midwives among the participants limited the exploration of cultural communication differences within the sample, hindering a comprehensive understanding of the topic.

Implication for Nursing

This study emphasizes the need for ongoing efforts to integrate cultural competence into midwives' training programs, ensuring a holistic and patient-centered approach to healthcare. It's also suggested to highlight communication differences in developing midwifery curricula.

Suggestions and Recommendations

The findings underscore the high effectiveness of midwives' training programs in enhancing communication skills, health education, and cultural sensitivity, as well as emphasizing the importance of emotional support for women, especially when dealing with diverse cultures. This research further affirms that midwives' training contributes positively to overall patient satisfaction with the childbirth experience.

The study suggests that standardizing healthcare provision through comprehensive training that addresses various educational backgrounds and cultural perspectives among midwives is crucial for improving health outcomes and enhancing women's satisfaction. Recognizing and cultivating cultural sensitivity and understanding is paramount in healthcare provision, as the lack thereof can pose significant limitations to the quality of care delivered. Further research is recommended taking different cultural backgrounds of midwives and communication aspects in different cultures into account.

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Conflict of Interests

No conflict of interests is to be declared by the authors.

REFERENCES

ACOG. (2019). Clinical guidelines and standardization of practice to improve outcomes: ACOG Committee Opinion, Number 792. *Obstet. Gynecol*., *134* (4), e122-e125. https://doi.org/10.1097/aog.0000000000003454

Ahmed, H.M., & SpringerLink. (2020). *Role of verbal and non-verbal communication of health care providers in general satisfaction with birth care: A cross-sectional study in government health settings of Erbil city, Iraq*. https://doi.org/10.1186/s12978-020-0894-3

Alharbi, A.A., Alodhayani, A.A., Aldegether, M.S., Batais, M.A., Almigbal, T.H., & Alyousefi, N.A. (2018). Attitudes and barriers toward the presence of husbands with their wives in the delivery room during childbirth in Riyadh, Saudi Arabia. *Journal of Family Medicine and Primary Care*, *7* (6).

Alidosti, M., Tahmasebi, M., & Raeisi, M. (2013). Evaluating the women's satisfaction of Hajar hospital services after the delivery [Orginal Article]. *Journal of Clinical Nursing and Midwifery*, *2* (1), 1-8. http://jcnm.skums.ac.ir/article-1-69-en.html

Alshammari, M., Duff, J., & Guilhermino, M. (2019). Barriers to nurse-patient communication in Saudi Arabia: An integrative review. *BMC Nurs*., *18*, 61. https://doi.org/10.1186/s12912-019-0385-4

Alswaiti, E. (2023). Group *versus* individual prenatal care and maternal outcomes in Jordan: An integrative review. *Jordan Journal of Nursing Research*, 1-9. https://doi.org/10.14525/JJNR.v2i4.08

Altaweli, R.F., McCourt, C., & Baron, M. (2014). Childbirth care practices in public sector facilities in Jeddah, Saudi Arabia: A descriptive study. *Midwifery*, *30* (7), 899-909.

Asiri, N., Bawazir, A., & Jradi, H. (2013). Patients' satisfaction with health education services at primary health care centers in Riyadh, KSA. *Community Medicine & Health Education*, *4*. https://doi.org/10.4172/2161-0711.1000268

Attarha, M., Keshavarz, Z., Bakhtiari, M., & Jamilian, M. (2016). The outcome of midwife-mother relationship in delivery room: A qualitative content analysis. *Health Health*, *8* (04), 336-343.

Bohren, M.A., Hofmeyr, G.J., Sakala, C., Fukuzawa, R.K., & Cuthbert, A. (2017). Continuous support for women during childbirth. *Cochrane Database Syst. Rev.*, *7* (7), Cd003766. https://doi.org/10.1002/14651858.CD003766. pub6

Chang, Y.S., Coxon, K., Portela, A.G., Furuta, M., & Bick, D. (2018). Interventions to support effective communication between maternity care staff and women in labour: A mixed-method systematic review. *Midwifery*, *59*, 4-16. https://doi.org/10.1016/j.midw.2017.12.014

Coakes, S.J., & Ong, C. (2011). *SPSS: Analysis without anguish: Version 18.0 for windows*. John Wiley & Sons, Australia.

De Vos, A.S., Delport, C., Fouche, C., & Strydom, H. (2011). *Research at grass roots: A primer for the social science and human professions*. Van Schaik Publishers.

Goodman, P., Mackey, M.C., & Tavakoli, A.S. (2004). Issues and innovations in nursing practice: Factors related to childbirth satisfaction. *Journal of Advanced Nursing*, *46* (2), 212-219.

Guzewicz, P., & Sierakowska, M. (2022). The role of midwives in the course of natural childbirth: Analysis of sociodemographic and psychosocial factors: A cross-sectional study. *Int. J. Environ. Res. Public Health*, *19* (23). https://doi.org/10.3390/ijerph192315824

Hardon, A., Boonmongkon, P., Streefland, P., Tan, M., Hongvivatana, T., van der Geest, S., van Staa, A., & Varkevisser, C. (1994). Qualitative data collection techniques in applied health research manual: Anthropology of Health and Health Care. In: *Module*, *17*.

Hatamleh, R., Abujilban, S., & Abuhammad, S. (2019). The effects of a childbirth preparation course on birth outcomes among nulliparous Jordanian women. *Midwifery*, *72*, 23-29.

Hatamleh, R., Abujilban, S., Abuhammad, S., Ariag, D.M.A., & Joseph, R.A. (2021). Effect of the helping babies breathe training program: An experimental study on Jordanian midwives' knowledge and skills. *The Journal of Perinatal & Neonatal Nursing*, *35* (2), E11-E17.

Heatley, M.L., Watson, B., Gallois, C., & Miller, Y.D. (2015). Women's perceptions of communication in pregnancy and childbirth: Influences on participation and satisfaction with Care. *J. Health Commun*., *20* (7), 827-834. https://doi.org/10.1080/10810730.2015.1018587

Jafari, E., Mohebbi, P., & Mazloomzadeh, S. (2017). Factors related to women's childbirth satisfaction in physiologic and routine childbirth groups. *Iran J. Nurs. Midwifery Res*., *22* (3), 219-224. https://doi.org/10.4103/1735-9066.208161

Jahlan, I., Plummer, V., McIntyre, M., & Moawed, S. (2016). What women have to say about giving birth in Saudi Arabia. *Middle East Journal of Nursing*, *10* (1), 10.

Jongen, C., McCalman, J., & Bainbridge, R. (2018). Health workforce cultural competency interventions: A systematic scoping review. *BMC Health Serv. Res.*, *18* (1), 232. https://doi.org/10.1186/s12913-018-3001-5

Jongen, C., McCalman, J., & Bainbridge, R. (2018). *Health workforce cultural competency interventions: A systematic scoping review*. https://doi.org/10.1186/s12913-018-3001-5

Karlström, A., Nystedt, A., & Hildingsson, I. (2015). The meaning of a very positive birth experience: Focus-group discussions with women. *BMC Pregnancy and Childbirth*, *15* (1), 251. https://doi.org/10.1186/s12884-015-0683-0

Kiewan, R., Gharaibeh, M., Alnuaimi, K., Abuhammad, S., & Aladwan, H. (2021). Attitudes of midwives and obstetricians towards midwives practiced roles in hospitals: A national study in Jordan. *International Journal of Clinical Practice*, *75* (12), e14891.

Kuo, S.C., Lin, K.C., Hsu, C.H., Yang, C. C., Chang, M.Y., Tsao, C.M., & Lin, L.C. (2010). Evaluation of the effects of a birth plan on Taiwanese women's childbirth experiences, control and expectations fulfilment: A randomised controlled trial. *Int. J. Nurs. Stud.*, *47* (7), 806-814. https://doi.org/10.1016/j.ijnurstu.2009.11.012

Majumdar, B., Browne, G., Roberts, J., & Carpio, B. (2004). Effects of cultural sensitivity training on health care provider attitudes and patient outcomes. *JNU Journal of Nursing Scholarship*, *36* (2), 161-166.

Maputle, M.S. (2018). *Support provided by midwives to women during labour in a public hospital, Limpopo province, South Africa: A participant observation study*. https://doi.org/10.1186/s12884-018-1860-8

McDonnell, M.A. (2000). *A comparison of perceptions of labor and delivery for first-time mothers with and without prenatal education* /z-wcorg/.

Midwifery, T.R.C.I. (2014). *High quality midwifery care*. The Royal Collage of Midwifery. https://www.rcm.org.uk/media/2354/high-quality-midwifery-care.pdf

Mocumbi, S., Högberg, U., Lampa, E., Sacoor, C., Valá, A., Bergström, A., von Dadelszen, P., Munguambe, K., Hanson, C., Sevene, E., Mocumbi, S., Högberg, U., Lampa, E., Sacoor, C., Valá, A., Bergström, A., von Dadelszen, P., Munguambe, K., Hansonm, C., Sevene, E., & the, C.W.G. (2019). Mothers' satisfaction with care during facility-based childbirth: A cross-sectional survey in southern Mozambique. *BMC Pregnancy and Childbirth*, *19* (1), 303. https://doi.org/10.1186/s12884-019-2449-6

MOH. (2019). *World health survey Saudia Arabia*. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.moh.gov.sa/en/Ministry/Statistics/Population-Health-Indicators/Documents/World-Health-Survey-Saudi-Arabia.pdf

Moridi, M., Pazandeh, F., Hajian, S., & Potrata, B. (2020). Midwives' perspectives of respectful maternity care during childbirth: A qualitative study. *PLOS ONE*, *15*(3), e0229941. https://doi.org/10.1371/journal.pone.0229941

Muthige, N., & James, S. (2019). Midwives' perceptions of their role in mode of birth decisions. *BJOM British Journal of Midwifery*, *27* (4), 229-234.

Nilsson, L., Thorsell, T., Hertfelt Wahn, E., & Ekström, A. (2013). Factors influencing positive birth experiences of first-time mothers. *Nursing Research and Practice*, *2013.*

Ojelade, O.A., Titiloye, M.A., Bohren, M.A., Olutayo, A.O., Olalere, A.A., Akintan, A., Oladapo, O.T., & Fawole, B. (2017). The communication and emotional support needs to improve women's experience of childbirth care in health facilities in southwest Nigeria: A qualitative study. *Int. J. Gynecol. Obstet. International Journal of Gynecology & Obstetrics*, 139, 27-37.

Perriman, N., Davis, D.L., & Ferguson, S. (2018). What women value in the midwifery continuity of care model: A systematic review with meta-synthesis. *Midwifery, 62*, 220-229. https://doi.org/10.1016/j.midw.2018.04.011

Rezaei-Abhari, F.K.S., Pourasghar, M., Yazdani-Charati, J., & Shirvani, M.A. (2019). Effect of workshop training on midwives' communication skills and

maternal satisfaction in maternity block. *Journal of Nursing and Midwifery Sciences, 6* (4), 157-163.

Sapkota, S., Kobayashi, T., & Takase, M. (2011). Women's experience of giving birth with their husbands' support in Nepal. *British Journal of Midwifery, 19* (7), 426-432.

Srivastava, A., Avan, B.I., Rajbangshi, P., Bhattacharyya, S., & SpringerLink. (2015). Determinants of women's satisfaction with maternal health care: A review of literature from developing countries. https://doi.org/10.1186/s12884-015-0525-0

WHO. (2018). World health statistics 2018: Monitoring health for the (SDGs) sustainable development goals. World Health Organization. https://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=2260104

World Bank. (2021). *Fertality rate*. https://data.Worldbank.org/indicator/SP.DYN.TFRT.IN?locations = SA

Worldmeter. (2024). *Saudi Arabia population*. https://www.worldometers.info/world-population/saudi-arabia-population/

Yildirim, G., & Bilgin, N. (2021). Women's experiences of vaginal examination during normal childbirth and affecting factors: A qualitative study. *Journal of Anatolia Nursing and Health Sciences, 24*. https://doi.org/10.17049/ataunihem.856233