

## FACTORS INFLUENCING BIRTHPLACE DECISIONS AMONG POSTPARTUM WOMEN IN AWKA SOUTH, NIGERIA

**Grace Nneka Eze**

Center for Public Health and Toxicological Research, University of Port Harcourt, Port Harcourt, Nigeria.

### **Abstract:**

*This study assessed attitudes and preferences regarding childbirth locations among postpartum women in Awka South Local Government Area. A descriptive cross-sectional survey design was used, with 390 postpartum women selected through simple random sampling from a population of 15,800. Data were collected via a structured, self-administered questionnaire and analyzed using SPSS version 22.0, with descriptive statistics including measures of central tendency. Results showed that the majority of respondents (41.3%) were aged 31–40 years. Private hospitals were the most preferred place of delivery (45%), followed by teaching hospitals and health centres, while traditional birth homes and personal residences were least preferred. Women expressed positive attitudes toward institutional healthcare settings (private, teaching, and general hospitals, and health centres) and negative attitudes toward traditional and home-based childbirth. Key factors influencing preference and attitude included perceived safety, cost, distance, fear, convenience, and spouse influence. The study concludes that while many women have strong preferences for institutional childbirth settings, various socio-economic and personal factors play critical roles. It recommends that maternal health services should incorporate women's preferences to improve service utilization and outcomes.*

**Keywords:** Attitude, Preference, Childbirth location, Postpartum women

### **INTRODUCTION**

Pregnancy and delivery encompass natural physiological processes that elicit positive experiences for both people and families. Nevertheless, it is important to note that pregnancy may be a hazardous undertaking in many regions around the globe, posing significant risks and the possibility for mortality, particularly for millions of women residing in underdeveloped nations (Chitra & Gnanadurai, 2015). The condition of pregnancy places significant physiological, psychological, and emotional demands on women. The outcome of this phenomenon is frequently characterised by a lack of predictability. Pregnancy is a phase characterised by heightened susceptibility, wherein women often encounter novel difficulties (Biaggi, Conroy, Pawlby, & Pariante, 2016). The duration of gestation is associated with several illnesses, including but not

limited to depression, anxiety, and mortality (Alipour, Lamyian, & Hajizadeh, 2012). Maternal mortality, which refers to fatalities caused by pregnancy-related factors, is presently recognised as a significant worldwide health issue. According to available reports, the year 2019 had around 295,000 fatalities among women due to complications arising from pregnancy and delivery. It is noteworthy that the bulk of these deaths, amounting to 94%, occurred in low- and middle-income nations, indicating the potential for prevention measures (2019). According to the World Health Organization's (2019)

study, a significant proportion of maternal fatalities, namely 86%, occurred in Sub-Saharan Africa and Southern Asia. Moreover, it was observed that sub-Saharan Africa alone contributed to two-thirds of the total maternal deaths. According to the World Health Organisation (WHO, 2020), Nigeria is presently classified as one of the 15 nations categorised as either 'very high alert' or 'high alert' due to its maternal mortality rates (MMR) being between the range of 31 to 11,580. According to the World Health Organisation (2020), Nigeria accounts for around 20% of maternal fatalities worldwide. According to the 2018 Nigeria Demographic and Health Survey (NDHS), Nigeria's projected maternal mortality ratio (MMR) exceeded 512 per 100,000 in 2019.

According to a report by UNICEF in 2010, over 70% of these fatalities can be effectively treated or, at the very least, mitigated by preventive measures. According to Audu, Takai, and Bukar (2010), the lifetime risk of maternal mortality in developing countries is more than 400 times greater than that in industrialised nations. Nevertheless, it is crucial to note that the maintenance of optimal psychological well-being throughout pregnancy carries significant health consequences for the developing foetus (Brown, Douglas, & Flood, 2017). Fear, beliefs, and attitudes during the childbearing period constitute a significant risk factor that impacts maternal well-being both during and after childbirth.

The examination and acknowledgement of women's thoughts and attitudes during the childbearing period have significant importance within the realm of global maternity health policy. The concepts of "woman centred care" and "informed choice" acknowledge that pregnancy and delivery involve not just physiological factors, but also psychological, psychosexual, and psychosocial elements that are influenced by the specific life experiences of pregnant women. In order to enhance a woman's delivery outcomes and experience, it is important to take into account the factors outlined by Banta (2015). The recognition of the significance of women's psychological wellness has reached parity with the importance placed on their physical wellbeing (Potts & Shields, 2016).

In an approach that prioritises women, the clinician goes beyond the conventional medical protocols and risk-focused treatment to get a deeper understanding of the individual woman. This understanding is achieved by exploring her perspectives on pregnancy and childbirth, as well as her unique life circumstances (Fishbein & Raven, 2018). The conceptualisation of attitudes has been formulated through the utilisation of a three-component model, encompassing emotive, cognitive, and behavioural dimensions. The affective component encompasses the presence of either good or negative emotions towards the attitude object. The cognitive aspect pertains to the presence of thoughts or beliefs related to the object. Lastly, the behavioural portion encompasses the actions or plans to act upon the object. Social psychologists make a distinction between a belief and an attitude by proposing that a belief represents the probabilistic aspect of an idea. On the contrary, an attitude may be seen as the evaluative aspect of a notion (Banta, 2015). According to Banta (2015), a shift in perspective regarding a particular concept can arise from a modification in one's belief system concerning that concept.

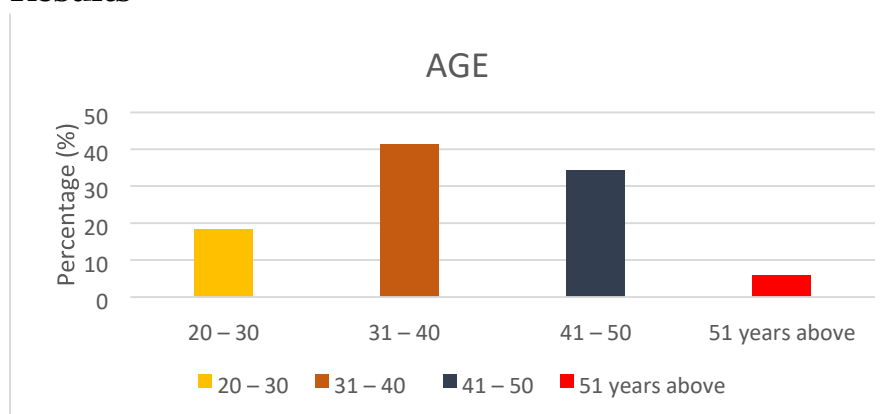
Harsanyi (2017) posits that the disparities in people's views may be solely ascribed to variations in information. When examining the context of maternity care, it becomes intriguing to explore the dynamics of information sharing between women and their healthcare providers, including the location, content, method, and individuals involved in this exchange. This examination prompts an investigation into the potential influence of such information sharing on the beliefs and attitudes of women towards maternity care. The attitudes and views of women are intrinsically connected to factors

that are particular to culture and the healthcare system. The quantity of intervention that a woman actively selects or passively gets in risk-averse biomedical systems of care can be influenced by her attitudes and beliefs about childbirth. This study assessing the attitude and preference for place during childbirth among postpartum women in Awka South Local Government.

### Methodology

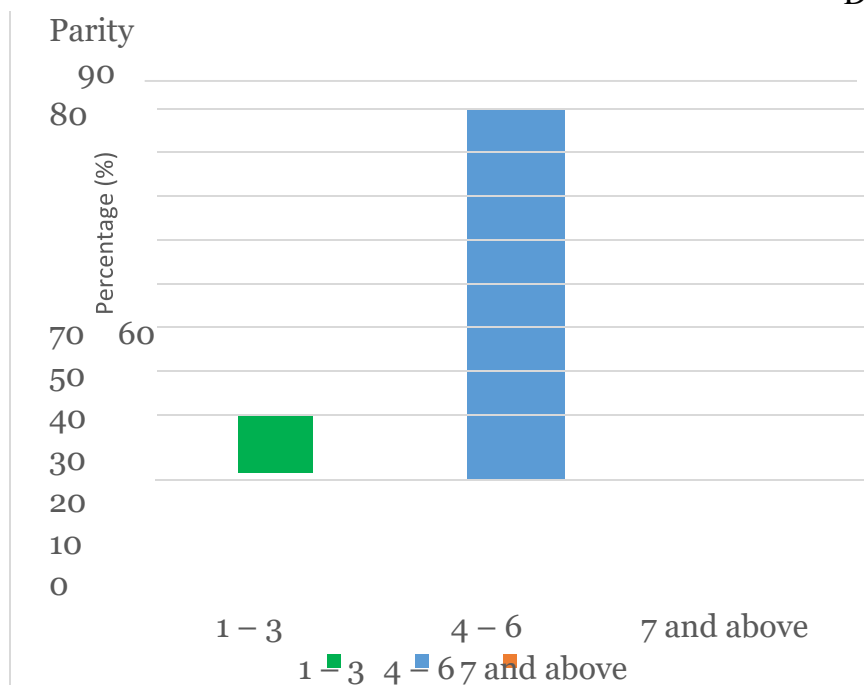
The study employed a descriptive survey research approach. The population of the study were postpartum women in Akwa LGA, Anambra State. A pilot study revealed that there are 15800 postpartum women as the time of the study. The sample size of 390 postpartum women was selected from the total population of 15800, using Taro Yamane (1967) sample size determination formular. The instrument for data collection was a self-structured questionnaire developed by the researcher. The questionnaire was divided into two (2) parts. The first part consisted of personal data while the second part contain items designed to measure women's attitude and preference of place of birth. The researcher administered the instrument by herself to the respondents and collect it after it has been filled by the respondents. Descriptive statistics was used as data analysis method. Hence, measure of central tendency statistics (mean), simple percentage and charts was used to answer the research questions while t-test statistics will be used to test the null hypothesis 0.05 level of significance.

### Results



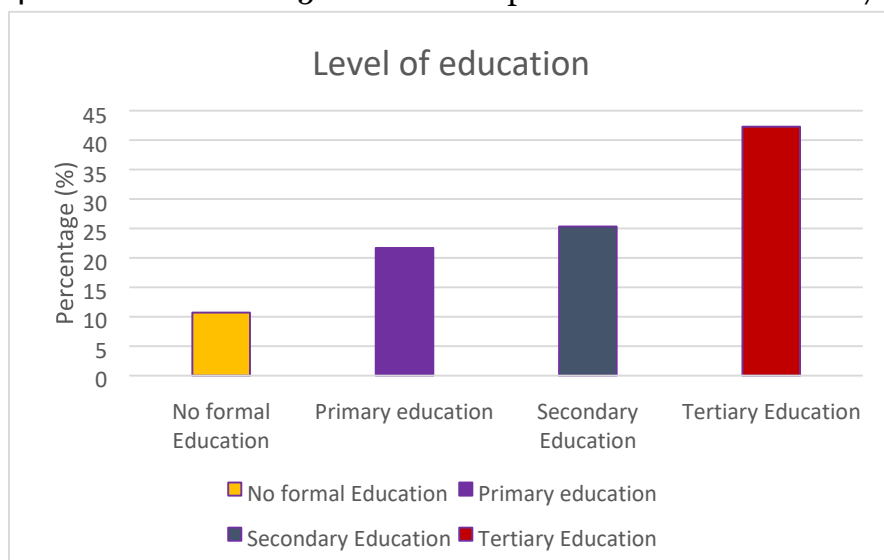
**Fig 1: Age distribution of respondents**

In Fig 1, it was shown that 18.3% of the respondents were between 20 – 30years, 41.3 % were between 31 – 40 years, 34.4% were between 41 – 50 years while 6% were between 51 years and above.



**Fig 2: Parity distribution of respondents**

In Fig 4.2, it was shown that 15.7% of the respondents had 1 -3 children, 79.3 % of the respondents had 4 – 6 children while 5.0% of the respondents had more than 7 children.

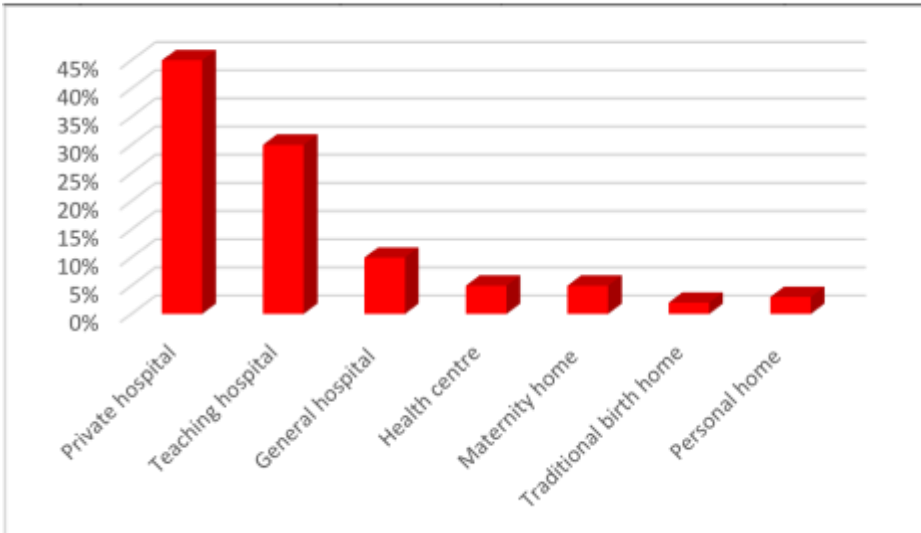


**Fig. 3: age distribution of the educational qualification of respondents**

The outcome showed in Figure 4.3 demonstrated that 42.3% of respondents had tertiary education, 25.3% had secondary education, 21.7% had primary education, while 10.7% had no formal education.

s/n	Items	Positive		Negative	
		Frequency	Percentage (%)	Frequency	Percentage (%)

1	Private hospital	300	76.92%	90	23.08%
2	Teaching hospital	250	64.10%	140	35.89%
3	General hospital	150	38.46%	240	61.54%
4	Health centre	110	28.21%	280	71.79%
5	Maternity home	90	23.08%	300	76.92%
6	Traditional birth home	80	20.51%	310	79.48%
7	Personal home	50	12.82%	340	87.18%



**Fig. 4** percentage preferred place of childbirth among postpartum women

Fig. 4, shows that 45% of the respondents preferred private hospital, 30% preferred teaching hospitals, 10% preferred general hospitals, 5% preferred health centres, 5% maternity homes, 2% traditional birth homes while 3% preferred personal homes.

**Table 1:** attitude towards place of childbirth among postpartum women

**Table 1** revealed that 76.92% had positive attitude towards private hospital as place of childbirth, 64.10% had positive attitude towards teaching hospitals, 38.46% had positive attitude towards general hospital, 28.21% had positive attitude towards health centres, 20.51% had positive attitude towards traditional birth home while 12.82% had positive attitude towards personal home.

**Table 2:** mean and standard deviation of the factors associated with attitude and preference of place during childbirth among postpartum women

S/N	Items	N	Min	Max	Mean	S.D.
1	Quality of care	390	1.00	4.00	3.44	.954
2	Safety	390	1.00	4.00	3.37	.656
3	Trust	390	1.00	4.00	3.55	.908
4	Cost	390	1.00	4.00	3.48	1.003
5	Distance	390	1.00	4.00	3.37	.656
6	Fear	390	1.00	4.00	3.44	.84

7	Convenience	390	1.00	4.00	2.51	.69781
8	Spouse decision	390	1.00	4.00	3.22	.79632
9	Parent decision	390	1.00	4.00	3.56	.79534
	<b>Average mean</b>		<b>1.00</b>	<b>4.00</b>	<b>3.32</b>	<b>.80459</b>

Table 2 shows mean ratings and standard deviations of factors associated with attitude and preference of place during childbirth among postpartum women in Awka South Local Government in Anambra State. The mean value ranges from 2.51 to 3.56 with a grand mean value of 3.32 which is above the criterion mean of 2.5 thereby showing that some factors associated with attitude and preference of place, mode, attendant during childbirth among postpartum women includes Safety, Cost, Distance, Fear, Convenience, Spouse decision tec.

Table 3: ANOVA of difference between attitude and preference for place during childbirth among postpartum women in Awka South Local Government based on age

Category	N	$\bar{X}$	SD	Df	F	Sig
25-30	180	3.01	0.72	338	0.265	0.850
31 – 35	89	2.16	0.19			
36 – 40	50	2.01	0.56			
41 and above	21	2.81	0.41			

Table 3, shows one way ANOVA of the variation in the mean rating between attitude and preference for place during childbirth among postpartum women in Awka South Local Government based on age. The p-value of 0.0150 was found to be lower than the 0.05 significant limit. Consequently, the null hypothesis which holds that is no significant difference between attitude and preference for place during childbirth among postpartum women in Awka South Local Government based on age is rejected.

### Discussion

The preference towards the place of childbirth among postpartum women is influenced by various factors such as fear of childbirth, postpartum depression, and the perceived need for formal or traditional care providers. Research has shown that fear of childbirth is associated with a preference for cesarean section (Niemenen et al., 2019; Räisänen et al., 2016; Tuğut et al., 2019; Mortazavi & Agah, 2018; El-Aziz et al., 2016). Additionally, fear of childbirth has been linked to postpartum depression (Räisänen et al., 2016; Mortazavi & Mehrabadi, 2021). Furthermore, the study by Dekel et al. (2017) highlights that childbirth can be perceived as a highly stressful experience for some women, leading to the development of postpartum posttraumatic stress disorder (PP-PTSD). This indicates that the childbirth experience itself can significantly impact postpartum mental health. Moreover, the preferences for sources of maternal care, including the place of childbirth, are influenced by cultural and religious norms, accessibility to maternal care, and the perceived need for formal or traditional care providers (Fantaye et al., 2019). Additionally, the study by Al-Mandeel et al. (2017) emphasizes the importance of supportive companions during labor and explores women's attitudes and knowledge about the significance of support during childbirth, indicating that the presence of support during



childbirth is a crucial factor in women's preferences. Furthermore, the study by Logtenberg et al. (2018) suggests that women with fear of childbirth may request pain relief more frequently, indicating that the fear of childbirth can also influence preferences for pain management during labor. Additionally, the study by Fantaye et al. (2019) highlights the variety of preferences for sources of maternal care from intrapartum to postpartum, indicating the complexity of factors influencing women's preferences.

The attitude of women towards the place of childbirth is influenced by various factors, including their previous childbirth experiences, awareness, fear of childbirth, and cultural beliefs. Research has shown that women with a history of normal delivery tend to have a more positive attitude towards normal delivery, particularly those who have experienced it previously Siabani et al. (2019). Additionally, primigravid women's awareness and fear of childbirth have been linked to their attitude and preference for the mode of delivery (khosravi et al., 2022). Furthermore, women's attitudes towards medicalization in childbirth have been found to be shaped by their backgrounds, experiences, beliefs, values, and needs, reflecting the social and political environment of childbirth in a culture or country (Espinosa et al., 2022). The influence of lifetime sexual violence on childbirth expectations has also been highlighted, indicating that exploring women's attitudes towards childbirth can serve as an approach when examining exposure to violence (Henriksen et al., 2016). Moreover, pregnant mothers' knowledge and attitude towards obstetric danger signs have been associated with their preferences and attitudes towards childbirth (Mekonnen, 2018). Additionally, unmarried pregnant women's negative attitudes towards facility-based childbirth have been linked to their perceptions of healthcare providers' attitudes towards single women (Medema-Wijnveen et al., 2012). The involvement of women in decision-making during childbirth has been emphasized, placing women at the core of midwifery care and influencing their attitudes towards childbirth (MirzaeeRabor et al., 2016). Furthermore, it has been observed that mothers may have an ambivalent attitude towards childbirth, reflecting the complexity of their feelings and perceptions (Mobarakabadi et al., 2015). Moreover, the type of attitude adopted by teenage mothers towards pregnancy and childbirth has been significantly related to the level of their dispositional optimism (Bałanda-Bałdyga et al., 2020). The attitudes of health science students towards women's childbirth experiences have been assessed, highlighting the importance of understanding and evaluating attitudes towards childbirth in healthcare education (GonzálezMesa et al., 2021). Additionally, women's knowledge and attitudes about complications during pregnancy and childbirth have been found to influence their behaviors and decision-making regarding childbirth (Balde et al., 2021). Furthermore, the attitude of pregnant women towards male involvement in birth preparedness and complication readiness has been studied, indicating the importance of understanding women's attitudes towards the involvement of their male partners in childbirth (Adamu et al., 2022).

Factors associated with women's attitudes and preferences towards place during childbirth are influenced by a multitude of complex and interrelated factors. These factors encompass psychological, sociocultural, and healthcare-related aspects, which play a significant role in shaping women's childbirth experiences and decision-making processes. Psychological factors such as fear of childbirth have been consistently associated with women's preferences for the mode of delivery. Studies have shown that fear of childbirth is linked to a preference for cesarean section, with women expressing concerns about labor pain, bodily damage, and complications. Additionally, childbirth fear has been associated with a negative birth experience and depressive symptoms, influencing women's attitudes

and preferences towards the mode of delivery. Furthermore, childbirth self-efficacy and fear have been identified as psychological factors significantly associated with childbirth preferences, highlighting the importance of addressing women's psychological well-being in shaping their attitudes towards childbirth. Sociocultural factors also play a crucial role in influencing women's attitudes and preferences towards childbirth. Cultural beliefs, societal norms, and previous childbirth experiences have been found to impact women's attitudes towards the place, mode, and attendant during childbirth. Additionally, the influence of healthcare provider recommendations, as well as the quality of care received during childbirth, has been associated with women's attitudes and preferences. Disrespect and abuse during facility-based childbirth have been linked to women's preferences for the place of delivery, emphasizing the significance of the childbirth experience in shaping attitudes. Moreover, the influence of contextual and environmental factors, such as healthcare facility utilization, has been identified as a determinant of women's attitudes and preferences towards the place of childbirth. Additionally, the influence of birthing positions, prenatal examination, and doctors' suggestions has been associated with women's mode of birth preference, highlighting the multifaceted nature of factors influencing women's attitudes and preferences during childbirth.

The findings of the study recommends as follows:

1. It was observed in this study that most women preferred private hospital. Hence, the government should ensure teaching hospitals and other public health facilities deliver quality service.
2. majority of the women preferred vaginal birth. So, midwives and nurses should ensure that CS is the last option before using it.
3. Healthcare providers should prioritize addressing fear of childbirth through psychoeducation interventions and counseling to alleviate anxiety and promote positive attitudes towards childbirth.
4. birth attendants should ensure dignified and respectful care during childbirth. This is because it is essential to positively influence women's preference of attendant during childbirth.
5. midwives and nurses should understand women's preferences for antenatal care through discrete choice experiments can inform the development of maternal healthcare services that align with women's preferences and needs.
6. Midwives and nurses should investigate reasons behind women's preferences for cesarean delivery and addressing these factors can help in promoting positive attitudes towards normal delivery and reducing unnecessary cesarean sections.

### **Conclusion**

Women attitude towards the type of delivery is influenced by subjective and internal factors. Increasing the awareness of post-partum women about the benefits of vaginal delivery and risks of caesarean section, can greatly increase the tendency of post-partum women towards vaginal delivery and reduce the rate of Cesarean Sections that have low medical indication.

### **References**

- Abdulmageed, S.S. & Elnimeiri, M. K. (2018). Sociocultural determinants of place of birth among Sudanese women. *International Journal of Community Medicine and Public Health*, 5(8), 3220-3226.



- Adamu, H., Oche, O., Kaoje, A., & Bello, F. (2022). Attitude of pregnant women towards male involvement in birth preparedness and complication readiness in selected rural communities of sokoto state, northwest nigeria. *Annals of Basic and Medical Sciences*, 3(1). <https://doi.org/10.51658/abms.202231.11>
- Ageyi-Baffour, P., Rominski, S., Nakua, E., Gyakobo, M., & Lori, J.R. (2019). Factors that influence midwifery students in Nigeria when deciding where to practice. A discrete choice experiment. *BMC Med Educ*, 13(64). doi: 10.1186/1472-6920-13- 64.
- Akhosravi, p., Beiranvand, S., Beiranvand, B., & Khalesi, Z. (2022). Relationship between primigravid women's awareness, attitude, fear of childbirth, and mode of delivery preference. *European Journal of Obstetrics & Gynecology and Reproductive Biology X*, 14, 100143. <https://doi.org/10.1016/j.eurox.2022.100143>. Doba, Y., Bulto, G., Tefera, E., Wakgari, N., Daksisa, T., Muda, T., ... & Moti, B. (2023). Birth attendants' attitudes and practice of companionship during facility-based childbirth and associated factors in the west shoa zone, central ethiopia: a mixed method design. *Sage Open Medicine*, 11, 205031212311682. <https://doi.org/10.1177/20503121231168284>.
- Fishbein M, Raven B. (2018). The AB scales: An operational definition of belief and attitude. *Human Relat* 15(1):35–44.
- Garthus-Niegel, S., Soest, T., Knoph, C., Simonsen, T., Torgersen, L., & Eberhard-Gran, M. (2014). The influence of women's preferences and actual mode of delivery on posttraumatic stress symptoms following childbirth: a population-based, longitudinal study. *BMC Pregnancy and Childbirth*, 14(1). <https://doi.org/10.1186/1471-2393-14191>
- González-Mesa, E., Díaz, C., Riklikienė, O., Thomson, G., Cazorla-Granados, O., Abreu, W., ... & Lalor, J. (2021). Assessment of the attitude towards childbirth in health sciences students - development and validation of the questionnaire cave-st. *Current Psychology*, 42(8), 6086-6095. <https://doi.org/10.1007/s12144-021-01892-4>
- Guittier M-J, Bonnet J, Jarabo G, Boulvain M, Irion O, Hudelson P. (2018). Breech presentation and choice of mode of childbirth: a qualitative study of women's experiences. *Midwifery*. 27(6):e208–e13.
- Haines T. U. (2019). The influence of women's fear, attitudes and beliefs of childbirth on mode and experience of birth. *BMC Pregnancy and Childbirth*, 12:55.
- Harsanyi J (2017) Games with incomplete information played by Bayesian players. *Manag Sci* 1967-68, 14:159–182. 320 - 34, 486-502.

Kjerulff, K., Attanasio, L., Edmonds, J., & Repke, J. (2019). Mode of delivery preference among pregnant nulliparous women. *Journal of Women S Health*, 28(6), 874-884. <https://doi.org/10.1089/jwh.2018.6989>

Lalonde, A. (2018). Mother-baby friendly birthing facilities initiative. *International Journal of Gynecology and Obstetrics*, 128: 93-94

Lambert, J., Etsane, E., Bergh, A., Pattison, R., Broek, N. (2018). 'I thought they were going to handle me like a queen, but they didn't': A qualitative study exploring the quality of care provided to women at the time of birth. *Midwifery*, 62, 256-263.

Liabsuetrakul, T; Choobun, T; Peeyananjarassri, K; Islam, QM (2020). "Antibiotic prophylaxis for operative vaginal delivery". *The Cochrane Database of Systematic Reviews*. 2020 (3): CD004455.

Meh, C., Thind, A., & Terry, A. (2020). Ratios and determinants of maternal mortality: a comparison of geographic differences in the northern and southern regions of cameroon. *BMC Pregnancy and Childbirth*, 20(1). <https://doi.org/10.1186/s12884020-02879-y>

Mekonnen, T. (2018). Assessment of knowledge and attitude towards obstetric danger signs during pregnancy among pregnant mothers attending antenatal care in mizan aman public health facilities, bench maji zone, south west ethiopia. *Journal of Gynecology and Womens Health*, 11(3). <https://doi.org/10.19080/jgwh.2018.11.555813>

Mortazavi, F. and Mehrabadi, M. (2021). Predictors of fear of childbirth and normal vaginal birth among iranian postpartum women: a cross-sectional study. *BMC Pregnancy and Childbirth*, 21(1). <https://doi.org/10.1186/s12884-021-03790-w>

Motlagh, S., Asadi-piri, Z., Bajoulvand, R., Mohseni, F., Bakhtiar, K., Birjandi, M., ... & Mansouri, M. (2020). Factors contributing to iranian pregnant women's tendency to choice cesarean section. *Medical - Surgical Nursing Journal*, 9(2). <https://doi.org/10.5812/msnj.109483>

Navas A, Artigues C, Leiva A. Effectiveness and safety of moderate-intensity aerobic water exercise during pregnancy for reducing use of epidural analgesia during labor: protocol for a randomized clinical trial. *BMC Pregnancy Childbirth*. 2018;18(1):94.

Nieminen, K., Stephansson, O., & Ryding, E. (2009). Women's fear of childbirth and preference for cesarean section – a cross-sectional study at various stages of pregnancy in sweden. *Acta Obstetricia Et Gynecologica Scandinavica*, 88(7), 807-813. <https://doi.org/10.1080/00016340902998436>

Nieuwenhuijze, M., Jonge, A., Korstjens, I., Budé, L., & Lagro-Janssen, T. (2013). Influence on birthing positions affects women's sense of control in second stage of labour. *Midwifery*, 29(11), e107-e114. <https://doi.org/10.1016/j.midw.2012.12.007>

- Pınar, G., AVŞAR, F., & Aslantekin, F. (2016). Evaluation of the impact of childbirth education classes in turkey on adaptation to pregnancy process, concerns about birth, rate of vaginal birth, and adaptation to maternity: a case-control study. *Clinical Nursing Research*, 27(3), 315-342. <https://doi.org/10.1177/1054773816682331>
- Reed, R., Sharman, R., Inglis, C., (2019). Women's descriptions of childbirth trauma relating to care provider actions and interactions. *BMC Pregnancy and Childbirth*, 17(21)1.
- Sadeghzadeh, N., Amiri-Farahani, L., Haghani, S., & Hasanpoor-Azghady, S. (2019). Iranian midwives' attitudes and beliefs toward physiological childbirth: a cross-sectional study. *BMC Pregnancy and Childbirth*, 19(1). <https://doi.org/10.1186/s12884-0192509-y>
- Sarker, B., Rahman, M., Rahman, T., Hossain, J., Reichenbach, L., & Mitra, D. (2016). Reasons for preference of home delivery with traditional birth attendants (tbas) in rural bangladesh: a qualitative exploration. *Plos One*, 11(1), e0146161. <https://doi.org/10.1371/journal.pone.0146161>