



Factors Affecting the Experience of Mothers in Birth

* Dwi Rahmawati^{1*}, Devi Arista², Dewi Riastawati³, Gustien Siahaan⁴
^{1,2,3,4} Universitas Adiwangsa Jambi, Indonesia

* Corresponding author: dwirahmawati.jmb@gmail.com

Abstract. Childbirth is an important experience for a woman and her partner and is a complex psychological event. Evidence shows that the experience of giving birth can influence feelings about parenting, maternal health, and family well-being. It is estimated that between 10-34% of all women have negative or traumatic births. The problem in this study is whether there are factors that influence the mother's experience of giving birth. Where the aim is to find out the influence of delivery methods, birth attendants, Self-Efficacy, IMD, Parity and the factors that most influence the experience of mothers giving birth. This research is a mixed method research, namely Sequential Explanatory. The quantitative research was carried out using the survey method, namely by conducting an assessment using the CEQ (Childbirth Experience Questionnaire) and CBSEI questionnaires. Qualitative methods are carried out using in-depth interviews or in-depth interviews with informants. The research subjects studied were postpartum mothers 3 days - 40 days in the working area of the Tempino Health Center with 55 respondents and 10 informants using the Random Sampling and Purposive Sampling techniques using the Chi Square test (non-parametric test). The results showed that the p value of delivery method was 0.001, the p value of birth attendant was 0.001, the p value of self-efficacy was 0.003 and the p value of parity was 0.90 and the p value of IMD was 0.13. So, it was found that the factor that greatly influenced the experience of mothers giving birth in the work area of the Tempino Inpatient Health Center was self-efficacy. So, it can be concluded that many factors influence the experience of mothers in childbirth from the results of filling out the questionnaire and strengthened by the results of the interviews we conducted with postpartum mothers where mothers can broadly share their experiences during the birth process.

Keywords: Childbirth experience, Delivery method, Birth helper, Self-efficacy, IMD, Parity.

1. INTRODUCTION

Childbirth is an important experience for a woman and her partner and is a complex psychological event. Evidence shows that the experience of giving birth can influence feelings about parenting, maternal health, and family well-being. It is estimated that between 10-34% of all women experience negative or traumatic births (Taheri et al., 2018; Turkmen et al., 2018). Negative birth experiences can affect subsequent reproduction that is, women with negative birth experiences may have fewer children and longer intervals are common in primiparous mothers with increased pain and a poor approach and possibility of cesarean section in their next birth (Gottvall and Waldenström, 2002).

On the other hand, spontaneous birth with a midwife who supports the mother well, gives her a sense of control and strength, becomes psychological support if continuous midwifery support can be associated with a positive birth experience (Dahlberg et al., 2016; Maimburg et al., 2016; Turkmen et al., 2018;). In 2020 there were 63,242 (95.66%) pregnant women who gave birth with the help of health workers, while the provincial target was 96%, which means that Jambi Regency has reached this year's target. In 2020, 57,211 (86,631%) pregnant women gave birth at health services out of 69,260 pregnant women (Jambi Provincial Health Office, 2020). Achieving targets will create more positive experiences.

To achieve a successful positive birth experience, midwives and maternity practitioners must provide support to mothers during the birth process and build women's Self-Efficacy through providing accurate and constructive birth

information. Self-efficacy or belief in the ability to face childbirth can be considered as an important factor influencing the motivation of pregnant women to give birth normally or by caesarean section (Berentson-Shaw, Scott, & Jose, 2009).

In recent years, the SC Method has become an alternative method in some communities. In the past, the SC delivery method was a frightening method for women, but with advances in medicine and technology, the frightening impression began to change and now this method is in great demand (Sihombing, Saptarini, & Putri, 2017). World Health Organization (WHO) data show that between 2007 and 2008 CS births increased in Asian countries, ie. per 110,000 births (Sihombing et al., 2017). In Indonesia, the data obtained by the SC method exceeds the average recommendation of the World Health Organization (WHO) by 10-15%. The 2018 Riskesdas results show that 17.6% of all births is the highest in Indonesia, namely DKI Jakarta at 31.1%, the lowest percentage is Papua 6.6% (Ministry of Health RI, 2021).

In the working area of the Tempino Inpatient Health Center there were 28 postpartum mothers for the initial survey including 17 mothers who gave birth normally and 11 pregnant women who gave birth by Sectio Caesarea (SC). Overall, women seem to create more positive memories of spontaneous birth with minimal obstetric intervention, assisted by health workers, especially midwives. And then in the process of giving birth with Sectio Caesarea (SC) as a whole, women seem to create more negative memories because mothers feel worried about the risks of emergencies.

Based on the problems and phenomena above, the authors are interested in conducting research on the factors that influence the experience of mothers giving birth in the working area of the UPTD inpatient health center Tempino Muaro Jambi in 2022.

2. METHODS

This research is a mixed method research, namely Sequential Explanatory. The quantitative research was carried out using the survey method, namely by conducting an assessment using the CEQ (Childbirth Experience Questionnaire) questionnaire which will describe the experience of giving birth to a mother. The qualitative method was carried out using in-depth interviews or in-depth interviews with informants, interviews to confirm the results of quantitative research and explored informant responses based on the research objectives. The qualitative design used was phenomenology.

The quantitative design in this study was non-experimental with a cross-sectional approach, namely the independent variables (Effect of Delivery Methods, Delivery Assistance, Self-Efficacy, IMD, Parity) were observed using a questionnaire on the dependent variable (Experience of Maternity) using the CEQ questionnaire and the CBSEI questionnaire, then the results were analyzed. The research population was 120 postpartum mothers. The sample in this study were postpartum mothers as many as 55 respondents and 10 informants. Sampling technique in quantitative research by means of random samples. In qualitative research by means of purposive sampling. This research will be conducted in the UPTD work area of the Tempino inpatient health center which is estimated in January 2023. This research was carried out by means of questionnaires and interviews. Data analysis in this study was univariate and multivariate, the statistical test used to analyze the data for these two variables was by using the Chi-square.

3. RESULTS AND DISCUSSION

3.1 QUANTITATIVE UNIVARIATE ANALYSIS

Table 4.1
Distribution of the Frequency of Mothers Giving Birth in the Work Area of the Tempino Inpatient Health Center in 2023

n=55				
No	Variable	Category	N	%
1	Childbirth Method	Normal	52	94,5
		SC	3	5,5
2	Delivery Assistance	Midwife	52	94,5
		Doctor	3	5,5
3	Self-Efficacy	Positive	44	80
		Negative	11	20
4	IMD	Yes	42	76,4

		No	13	23,6
		Primipara	16	29,1
5	Parity	Multipara	16	29,1
		Grandemulti	23	41,8
5	Maternity Experiences	Positive	49	89,1
		Negative	6	10,9

Based on the results of table 4.1, the distribution of the frequency of delivery methods for mothers in the working area of the Tempino Health Center is known to be 52 (94.5%) mothers who gave birth normally. It is known that the distribution of the frequency of birth attendants for mothers in the working area of the Tempino Health Center is known as 52 (94.5%) of the respondents who were assisted by midwives. Maternity mothers with positive self-efficacy were 44 (80%) respondents. There were 42 (76.4%) respondents who did IMD. Mothers giving birth with the most parity were mothers with grandemulti as many as 23 (41.8%) respondents. There were 49 (89.1%) respondents who had negative delivery experiences.

3.2 QUANTITATIVE BIVARIET ANALYSIS

1. The Effect of Delivery Methods on the Experience of Mothers in Birth in the Work Area of the Tempino Inpatient Health Center in 2023

Table 4.2

Childbirth assistant	Maternity experience				p value
	Negative		Positive		
	N	%	n	%	
SC	3	100	0	0	0,001
Normal	3	5,8	49	94,2	
Total	6	10,9	49	89,1	

Based on the Chi Square Test in table 4.2, the value of $\rho = 0.001$ ($\rho < 0.05$) is obtained, so statistically there is a significant influence between the method of delivery on the experience of mothers giving birth in the working area of the Tempino inpatient Health Center in 2023.

Based on the Chi Square Test on the method of delivery on the experience of the mother giving birth, a value of $\rho = 0.001$ ($\rho < 0.05$) is obtained, so statistically there is a significant influence between the method of delivery on the experience of the mother giving birth in the working area of the Tempino inpatient Health Center in 2023. From Based on the results of previous analysis and research, researchers assume that the method of delivery should really influence the mother's experience during childbirth, because women who give birth normally will get different treatment compared to mothers who give birth by SC and how to heal after normal delivery and SC. This depends on the desire of the mother to give birth normally or SC. However, there are some mothers who want to give birth normally, they can give birth by SC due to several birth problems, such as prolonged first and second stages, full placenta previa, CPD and so on.

2. The Effect of Delivery Assistance on the Experience of Mothers in Birth in the Working Area of the Tempino Inpatient Health Center in 2023

Table 4.3

Childbirth assistant	Maternity experience				p value
	Negative		Positive		
	N	%	n	%	
Doctor	3	100	0	0	0,001
Midwife	3	5,8	49	94,2	
Total	6	10,9	49	89,1	

Based on the Chi Square Test in table 4.3, the value of $\rho = 0.001$ ($\rho < 0.05$) is obtained, so statistically there is a significant influence between delivery attendants on the experience of mothers giving birth in the working area of the Tempino inpatient Health Center in 2023.

Based on the Chi Square Test on birth attendants, the value of $\rho = 0.00$ ($\rho < 0.05$), statistically there is a significant influence between the method of delivery on the experience of mothers giving birth in the working area of the Tempino inpatient Health Center in 2023. Informants assisted by midwives during childbirth, they told the midwife that when the mother was sick, her blood pressure was high, and if there were difficulties during childbirth, such as rupture of the membranes, some said that if the midwife helped, the delivery process would go smoothly. There are also those who give birth in the hospital, because they experience pregnancy problems such as a closed birth canal and cannot be born and because of a cesarean section (Nurhayati & Mugeni, 2019).

Reinforcing factors are factors that can most trigger mothers to choose birth attendants, including motivated mothers with previous smooth delivery experiences, the influence of midwives and the role of husbands. One of the innovations of midwives motivates mothers to give birth, namely that every mother who checks at the midwife will be escorted by health staff to their respective homes and ease of payment such as paying in installments or using a BPJS card.

In addition, the factors that influence mothers in choosing birth attendants are the level of education and type of work. Higher education informants and those working as health cadres chose midwives as high birth attendants. Factors that allow mothers to choose birth attendants are the availability of birth attendants and the ease of transportation to birth attendants. The informant's reinforcing factors were previous birth attendants, the role of the husband, the role of the midwife and the role of the traditional birth attendant (Nurhayati & Mugeni, 2019).

From the results of the analysis and previous research, the researchers assume that they strongly agree that birth attendants greatly influence the mother's experience of giving birth. Because, if the mother gives birth with the midwife, the mother gets mother's loving care which makes the mother give birth more confident, calmer and feel that she is always supported by the midwife and family. Meanwhile, birth attendants who assist deliveries with doctors, mothers only meet at the time of handling operations and care.

3. The Effect of Self-Efficacy on the Experience of Mothers in Birth in the Working Area of the Tempino Inpatient Health Center in 2023

Table 4.4

<i>Self-Efficacy</i>	Maternity experience				<i>p value</i>
	Negative		Positive		
	N	%	n	%	
Negative	4	36,4	7	63,6	0,003
Positive	2	4,5	42	95,5	
Total	6	10,9	49	89,1	

Based on the Chi Square Test in table 4.4, a value of $\rho = 0.003$ ($\rho < 0.05$) is obtained, so statistically there is a significant influence between self-efficacy on the experience of mothers giving birth in the working area of the Tempino inpatient Health Center in 2023. Based on the Chi Square test on self-efficacy, the value is obtained, so statistically there is a significant influence between self-efficacy on the experience of mothers giving birth in the working area of the Tempino inpatient Health Center in 2023.

The results of the analysis of this study are in line with research conducted by Ramie et al (2014) on self-control and self-efficacy increasing the satisfaction of mothers undergoing the delivery process. who have good self-efficacy, feel satisfied in undergoing the delivery process. The results of statistical tests showed that there was a relationship between self-efficacy and satisfaction of mothers undergoing childbirth at Ratu Zalecha Martapura Hospital and Banjarbaru Hospital (p value 0.000, α : 0.05). From the results of the analysis, the value of OR=4.79 was also obtained, meaning that respondents with good self-efficacy had 4.79 times the opportunity to feel satisfied during the delivery process compared to respondents who had poor self-efficacy (Raime et al, 2014).

Mothers who are satisfied with their birth experience will feel happy with the presence of their baby and will have an impact on the ease of adjustment and starting the role of motherhood. Conversely, traumatic childbirth can affect the mother's ability to care for and provide breast milk to the baby and result in poor bonding between mother and baby (Simkin, 1992). Mothers who are able to maintain good self-control can reduce the impact of labor pain, and mothers who have high self-efficacy show a better level of satisfaction

in undergoing the birth process for themselves, for nurses, midwives and doctors who assist in the delivery process (Christiaens & Bracke , 2007).

4. The Influence of IMD on the Experience of Mothers in Birth in the Work Area of the Tempino Inpatient Health Center in 2023

Table 4.5

IMD	Maternity experience				<i>p value</i>
	Negative		Positive		
	N	%	n	%	
No	3	23,1	10	76,9	0,13
Yes	3	7,1	39	92,9	
Total	6	10,9	49	89,1	

Based on the Chi Square Test in table 4.5, the value of $\rho = 0.13$ ($\rho > 0.05$) is obtained, so statistically there is no effect of IMD on the experience of mothers giving birth in the working area of the Tempino inpatient Health Center in 2023.

So statistically there is no effect of parity on the experience of mothers giving birth in the working area of the Tempino inpatient Health Center in 2023. The results of the study are not in line with the research conducted by Lugita, S (2023) found that there is a significant influence between midwife knowledge, midwife support and training midwives on the implementation of IMD in the Seginim Health Center Area There is a significant relationship between the knowledge of midwives, midwife support and training of midwives on the implementation of IMB. Mothers with successful IMD showed a higher percentage of normal placental detachment than mothers with unsuccessful IMD. Initiating early breastfeeding will stimulate the release of oxytocin thereby stimulating uterine contractions to expel the placenta immediately. Maternity mothers who successfully perform IMD show a higher percentage of bleeding in the IV Stage of normal delivery than those who fail to perform IMD. By doing IMD the baby will suckle the mother, it will stimulate the posterior lobe pituitary to release oxytocin which stimulates the uterus to contract so that it clamps the blood vessels in the end, the bleeding in the fourth stage after giving birth stops.

There is an influence of IMD with the occurrence of Uterine Involution and the amount of bleeding in the IV Stage. According to Rusli, mothers who gave early initiation of breastfeeding had uterine involution proceeding normally than those who did not do IMD and there was fewer bleeding during the fourth stage of labor in mothers who did IMD than mothers who did not do IMD (Rukmini, 2005).

5. The Effect of Parity on the Experience of Mothers in Birth in the Work Area of the Tempino Inpatient Health Center in 2023

Table 4.6

Parity	Maternity experience				<i>p value</i>
	Negative		Positive		
	N	%	n	%	
Primipara	1	6,3	15	93,8	0,90
Multipara	3	18,8	13	81,3	
Grandemulti	2	8,7	21	91,3	
Total	6	10,9	49	89,1	

Based on the Chi Square Test in table 4.6, the value of $\rho = 0.90$ ($\rho > 0.05$) is obtained, so statistically there is no effect of parity on the experience of mothers giving birth in the working area of the Tempino inpatient Health Center in 2023.

Based on the Chi Square Test on the parity of mothers giving birth, it was obtained a value of , so statistically there was no effect of parity on the experience of mothers giving birth in the working area of the Tempino inpatient Health Center in 2023. The results of this study were not in line with research conducted

by Andri, Y (2013) who obtained results that the value of $\rho_{xy} = 0.553$, then consulted to the critical price table with a significance level of 95% (0.364), it can be concluded that work is accepted, namely there is a relationship between parity and the level of anxiety of third trimester pregnant women in facing labor (Andri, Y, 2013).

Parity's relationship with the level of anxiety in pregnancy in the face of childbirth, shows that someone who has previously given birth (Multipara) tends not to experience much anxiety compared to people who have never given birth (Nullipara). This is because multiparous women have experienced the feeling of giving birth before, so they have views of what childbirth is like, unlike nulliparous women who have never felt the sensation of giving birth, so they tend to experience anxiety. Nullipara is a woman who has never given birth to a viable baby, that is, she has never had the experience of giving birth and having a baby before. Therefore, it is important for midwives to provide parent education, for example the preparation needed for mothers to face childbirth, both moral and material preparation. Equipment for mother & baby needed during childbirth should be prepared before the day of delivery arrives, the vehicle used to accompany the pregnant woman, who accompanies the mother and which health and facilities to go to, try to have it discussed and decided before giving birth because of that, it is needed explanation and information from health workers, especially midwives, to mothers and husbands regarding this matter when the mother carries out an ANC inspection, so that at the time of delivery it can be done (Wildayanti, 2019).

According to (Fajrin, 2018) The fear of pregnant women is directly influenced by experience and direct information from posters and print media. Includes magazines, bulletins, newspapers and electronic media (radio, computers, television, etc.). High anxiety in pregnant women related to previous abnormal events, such as abortion, previous birth experience. Interactions between emotion and worry have been identified in women with distress. Managed anxiety is often associated with better postpartum adjustment, and anxiety during pregnancy is consistently not associated with birth complications.

According to (Dewi et al., 2020) second and third births are conditions that are relatively safe for childbirth during the reproductive period, because during this period of labor there are pathological conditions where the uterine wall has not undergone much change so that the fetus can develop properly. Mothers who know the condition of their fetus well influence the level of anxiety to be lighter when facing labor.

The effect of experience on childbirth actually can also affect or may not affect the experience of childbirth. Maternity parity can affect the delivery experience because mothers with primiparas may be more worried during labor due to their inexperience compared to mothers with multiparas or grande multi.

6. Factors that Very Influence on the Experience of Mothers in Birth in the Working Area of the Tempino Inpatient Health Center

Based on multivariate analysis using the logistic regression test, it was found that the p value of delivery method was 0.51, the p value of birth attendant was 0.51, the p value of self-efficacy was 0.04 and the p value of parity was 1.56. So it was found that the factor that greatly influenced the experience of mothers giving birth in the work area of the Tempino Inpatient Health Center was self-efficacy. Good self-efficacy will direct the mother to accept directions. Pregnant and maternity women who have received preparation for childbirth in the form of birth ball and psychological exercises, will be better able to prepare themselves when they feel pain and discomfort during the delivery process (Björk E, 2017).

3.3 ANALYSIS OF QUALITATIVE RESEARCH RESULTS

Interviews regarding the growth and development of toddlers were conducted by researchers with 10 informants consisting of 6 postpartum mothers, 3 midwives (2 community health center midwives and 1 village midwife) and 1 obstetrician. From the interviews that have been conducted, the results have corroborated the quantitative research related to the experiences of mothers giving birth and the purpose of this study itself. Qualitative methods are carried out with the aim of obtaining qualitative data in order to test, expand, deepen the results of quantitative research. Data collection using qualitative methods is data collected in the first phase of research using quantitative methods.

There are many factors that influence the mother's experience of giving birth which can be explored through interviews conducted with respondents who more broadly regarding the delivery process including delivery methods, birth attendants, IMD, parity, self-efficacy. There are positive and negative birth experiences, so we can explore what causes mothers to experience positive and negative experiences and the impacts they cause. Services during childbirth are equally important in the delivery process which can affect the mother's experience. In addition to interviews with postpartum mothers, we also interviewed health workers who participated in observing the development and experiences of mothers during the birth process.

4. CONCLUSIONS

Based on the results of the research and the description of the discussion about the factors that influence the experience of mothers giving birth in the work area of the Inpatient Health Center, several conclusions can be drawn as follows:

- a. The method of delivery that is more common for women giving birth in the work area of the Inpatient Health Center in 2023 is that many give birth with midwives and affect the experience of mothers giving birth.
- b. More birth attendants for mothers in the working area of the Inpatient Health Center in 2023 will give birth with midwives and affect the experience of mothers giving birth.
- c. More self-efficacy for women giving birth in the work area of the Inpatient Health Center in 2023 is more positive and influences the experience of mothers giving birth.
- d. IMD is more common in women giving birth in the work area of the Inpatient Health Center in 2023, namely many mothers who do IMD and it does not affect the mother's experience of giving birth, in contrast to the results of interviews which stated that IMD can reduce anxiety in mothers even though it is carried out in less than 1 hour, not as expected. should be due to complications that occur in the mother.
- e. More parity for mothers in childbirth in the working area of the Inpatient Health Center in 2023, namely mothers with grandemulti parity and does not affect the experience of mothers giving birth.
- f. Self-efficacy is the variable that most influences the experience of childbirth in the working area of the Inpatient Health Center in 2023.

REFERENCES

- Ai Yeyeh, Rukiyah, et al. et al. (2010). *Midwifery Care 1*. Jakarta: CV. Trans Info Media.
- Ambarwati Retna, E, Wulandari. D. 2009. *Postpartum Midwifery Care*. Yogyakarta: Mitra Cendikia
- Andayasari, L., Muljati, S., Sihombing, M., Arlinda, D., Opitasari, C., Mogsa, D. F., & Widiyanto, W. (2015). Proportion of Cesarean Section and Factors Associated with Cesarean Section in Jakarta. *Health Research Bulletin*. <https://doi.org/10.22435/bpk.v43i2.4144.105-116>
- Aprina, A., & Puri, A. (2016). Factors Associated with Caesarean Section Delivery at Dr. H. Abdul Moeloek Hospital, Lampung Province. *Health Journal*. <https://doi.org/10.26630/jk.v7i1.124>
- Bigelow, A., Power, M., Maclellan-peters, J., Alex, M., Macdonald, C., 2012. The effect of mother/baby skin-to-skin contact on postpartum depression symptoms and maternal physiological stress. *Journal of Obstetrics. Gynecol. Neonatal Nursing*. 41 (3), 369–382.
- Bramson, L., Lee, J., Moore, E., Montgomery, S., Neish, S., Bahjni, K., Melcher, C., 2010. The effect of early skin-to-skin contact during the first three hours after birth on exclusive breastfeeding during hospital stay. *Hum Journal. Lactation* 26 (2), 130–137.
- Brubaker, LH, Paul, IM, Repke, JT, Kjerulff, KH, 2019. Early mother-infant contact and positive birth experiences. *Birth* 46 (1), 42–50.
- Bryanton, J., Gagnon, AJ, Johnston, C., Hatem, M., 2008. Predictors of women's perceptions of the birth experience. *Journal of Obstetrics. Gynecol. Neonatal Nursing*. 37 (1) 24-4.
- Christie, J., Poulton, BC, Bunting, BP, 20
- Care, A. et al. (2020) 'Mothers' Knowledge of the Importance of Examination in North Bekasi District, Bekasi City in 2019', 5(1), pp. 32–40.
- Cunningham. (2014). *Williams Obstetrics*. Jakarta: EGC.
- Cunningham, F. G. (2018). *Williams Obstetrics*. Edition 23. Volume 1. Jakarta: EGC.
- Kaelan, M.S. (2012). *Interdisciplinary qualitative research methods*. Yogyakarta: Paradigma.
- Kalhor, M., SamieeRad, F., Garshasbi, M., MohitAbadi, Z., Sefollah, S., 2016. Evaluating the effect of mother-infant skin-to-skin care on neonatal outcomes in preterm infants. *JSSU* 24, 375–386.

- Maimburg, R.D., Væth, M., Dahlen, H., 2016. Women's experience of childbirth. A five-year follow-up of the randomised controlled trial "Ready for Child Trial. *Women Birth* 29, 450–454. doi:10.1016/j.wombi.2016.02.003.
- Maimburg, R.D., Væth, M., Dürr, J., Hvidman, L., Olsen, J., 2010. Randomised trial of structured antenatal training sessions to improve the birth process. *BJOG* 117, 921–928. doi:10.1111/j.1471-0528.2010.02584.x.
- Meedya, S., Fahy, K., Parrat, A.J., 2016. The Milky Way education and support programme: structure, content and strategies. *Women Birth* 29 (4), 388–393.
- Moore, E.R., Bergman, N., Anderson, G.C., Medley, N., 2016. Early skin-to-skin contact for mothers and their healthy newborns. *Cochrane Database Syst. Rev.* 11, CD003519.
- Mörelus, E., Theodorsson, E., Nelson, N., 2005. Salivary cortisol and mood and pain profiles during skin-to-skin care for an unselected group of mothers and infants in neonatal intensive care. *Pediatrics* 116 (5), 1105–1113.
- Notoatmodjo, S. 2012. *Health research methodology*. Jakarta: Rineka Cipta.
- Notoatmodjo, S. 2017. *Health research methodology*. Jakarta: Rineka Cipta.
- Nursalam. 2011. *Concept and application of nursing science research methodology*. Jakarta: Salemba medika.
- Olza, I., Uvnas-Moberg, K., Ekström-Bergström, A., Leahy-Warren, P., Karlsdottir, SI, Nieuwenhuijze, M., Villamea, S., Hadjigeorgiou, E., Kazmierczak, M., Spyri dou, A., Buckley, S., 2020. Birth as a neuro-psychosocial event—An integrative model of maternal experiences and their relation to neurohormonal events during childbirth. *PLoS One* 15, 1–15. doi: 10.1371/journal.pone.0230992.
- Prawirohardjo, Sarwono. 2010. *Obstetrics*. Jakarta: EGC
- Rahmawati, D, Wilujeng, I, Jumadi, Kuswanto, Nurul, Astuti (2020). Problem Based Learning E-Handout: Improving Students' Mathematical Representation and Self Efficacy: Al-BiRuNi Physics Education Scientific Journal <http://ejournal.radenintan.ac.id/index.php/al-biruni/issue> DOI: 10.24042/jipfalbiruni.v9i1.4607
- Sanjaya, Wina. (2015). *Educational Research*. Jakarta: Prenada Media Group.
- Sugiyono. (2018). *Quantitative, Qualitative, and R&D Research Methods*. Bandung: Alfabeta.
- Sugiyono. (2018). *Educational Research Methods Quantitative, Qualitative, and R&D Approaches*. Bandung: Alfabeta.
- Sukarni, I. & P, Wahyu. 2015. *Maternity nursing textbook*. Yogyakarta: Nuha Medika.
- Taheri, M., Takian, A., Taghizadeh, Z., Jafari, N., Sarafraz, N., 2018. Creating a positive perception of childbirth experience—Systematic review and meta-analysis of prenatal and intrapartum interventions. *Reprod. Health* 15, 1–13. doi:10.1186/s12978-018-0511-x.