

Determinants of Successful Implementation of Early Breastfeeding Initiation in RSU PKU Muhammadiyah Gamping, Yogyakarta

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ABSTRACT

Breastfeeding can accelerate the decline in IMR and at the same time improve the nutritional status of children which will ultimately improve the nutritional status of society towards achieving adequate quality of human resources. WHO and UNICEF recommend early initiation of breastfeeding (early lact on) as a life saving measure, because Early Initiation of Breastfeeding (EBI) can save 22% of babies who die before the age of 1 month. Early initiation of breastfeeding is still not widely known by the public. Only around 4% of mothers who give birth initiate early breastfeeding in Indonesia. Whether early breastfeeding is successful or not in maternity services, hospitals and community health centers really depends on health workers, namely nurses, midwives or doctors. The aim of this research is to determine the determining factors for the success of EBI implementation at RSU PKU Muhammadiyah Gamping. The design of this research is observational analytic using a cross sectional research approach. The variables used in this research are the independent variable (maternal age, parity, education, employment, type of delivery and gestational age) and the dependent variable (EBI implementation). The sample for this study used the total population (total sampling), namely all mothers giving birth at RSU PKU Muhammadiyah Gamping in 2021 who met the inclusion criteria, numbering 490 respondents. Bivariate analysis uses the chi square test. The research results showed that there was a significant relationship between the type of delivery (p-value 0.033) and gestational age ((p-value 0.000) with the implementation of EBI in the mother. Meanwhile for the factors maternal age (p-value 0.085), parity (p-value 0.151), education (p-value 0.086), and maternal employment (p-value 0.383) showed that there was no significant relationship with the implementation of EBI (p-value <0.05) at RSU PKU Muhammadiyah Gamping. It is recommended that health workers be more plays an active role in providing education and information related to preparation for childbirth, especially readiness to initiate early breastfeeding as a guide for pregnant mothers in the final trimester.

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1. INTRODUCTION

The health of mothers and children is a priority in the implementation of health efforts, because mothers and children are a group that is vulnerable to the conditions of their families and surroundings in general. It is important to assess the health status and performance of maternal and child health efforts (Ministry of Health of the Republic of Indonesia, 2015a). EBI is very beneficial physiologically and psychologically. The benefits of EBI for mothers can encourage the release of oxytocin which causes contractions in the uterus, thus helping the placenta expel and preventing bleeding. For babies, it can provide warmth, calm so that the baby's breathing and heart rate become regular. Babies receive colostrum which contains antibodies and growth factors that help the baby's intestines function effectively, making it more difficult for microorganisms and other allergy causes to enter the baby's body and is the first immunization. EBI is a program that is being intensively recommended by the government [1].

PP No. 33 of 2012 concerning the Provision of Exclusive Breast Milk, Article 9 states that Health Workers and Health Service Facility organizers are obliged to carry out EBI on newborn babies to their mothers for at least 1 (one) hour, violations of this rule are subject to sanctions starting from a warning until the revocation of the license to practice [2]. The hospital movement that loves mothers and babies is the government's effort to reduce maternal mortality rates and neonatal mortality rates through 10 steps to protect mothers and babies in an integrated and complete manner, so that all health facilities must facilitate every mother giving birth to carry out EBI [3].

Breastfeeding can accelerate the decline in IMR and at the same time improve the nutritional status of children which will ultimately improve the nutritional status of society towards achieving adequate quality of human resources. WHO and UNICEF recommend early initiation of breastfeeding (early lactation) as a life saving measure, because Early Initiation of Breastfeeding (EBI) can save 22% of babies who die before the age of 1 month. Early initiation of breastfeeding is still not widely known by the public. Only around 4% of mothers who give birth initiate early breastfeeding in Indonesia. Finding a hospital that is willing to initiate early breastfeeding is also one of the obstacles to implementing early breastfeeding initiation. Apart from that, not all health workers and health facilities understand and are willing to implement the program [4]. Berhasil atau tidaknya penyusuan dini di tempat pelayanan ibu bersalin, rumah sakit, dan puskesmas sangat tergantung pada petugas kesehatan yaitu perawat, bidan atau dokter. Merekalah yang pertama-tama akan membantu ibu bersalin melakukan penyusuan dini. Petugas kesehatan di kamar bersalin harus memahami tatalaksana laktasi yang baik dan benar, petugas kesehatan tersebut diharapkan selalu mempunyai sikap yang positif terhadap penyusuan dini [5].

Based on data from RSU PKU Muhammadiyah Gamping, EBI has been implemented since 2014, the policy is that all babies are born spontaneously with healthy mothers and babies. For deliveries by caesarean section, the implementation of EBI only started in 2016, in its implementation there were still babies who did not receive EBI and most of the babies were helped to find the mother's nipple. Every birth at RSU PKU Muhammadiyah Gamping is always carried out by EBI. This research aims to determine the determining factors for the success of EBI implementation at RSU PKU Muhammadiyah Gamping.

2. METHOD

The research design that will be used is descriptive observational analytic using a cross sectional research approach. The variables used in this research are the independent variable (maternal age, parity, education, occupation, type of delivery, and gestational age) and the dependent variable (EBI implementation). The population in this study were mothers who gave birth at PKU Muhammadiyah Gamping Hospital in January 2021-July 2022. The sample in the study used total sampling. Samples were taken based on medical records at the time the research was conducted using inclusion criteria, namely birthing mothers who met EBI requirements. EBI Terms:

- a. The birth mother had no history of PEB, heart defects, asthma or HBSAg
- b. Healthy baby, Apgar score > 7

This research will be carried out after passing the ethical clearance test, which is a written statement given by the Research Ethics Commission of Aisyiyah Yogyakarta University which states that a research proposal is feasible to carry out after fulfilling certain requirements (informed consent), anonymity (anonymous), confidentiality, beneficence (freedom). The instruments used in this research were data from patient medical records, knowledge questionnaires, family support questionnaires, health worker support questionnaires, and master tables.

The data analysis techniques in this research are univariate, bivariate and multivariate analysis. Univariate Analysis. Bivariate analysis was carried out to see the relationship between the dependent variable and the independent variable obtained from the chi square test, to determine the significance of the relationship between the two variables and described in table form. The analysis test was carried out using computerization with the SPSS application.

3. RESULTS AND DISCUSSION

Description of the Research Place

This research was carried out at RSU PKU Muhammadiyah Gamping, which is one of the private hospitals in Sleman Regency which is a manifestation of the charitable efforts of Muhammadiyah's central leadership in the health sector. RSU PKU Muhammadiyah Gamping is a growing private hospital located on Jl. Wates Km. 5.5 Ambarketawang, Gamping, Sleman, Yogyakarta. The vision of RSU PKU Muhammadiyah Gamping is to create a Main Education Hospital with excellence in health services, education and research with a strong networking and partnership system. PKU Muhammadiyah Gamping Hospital has a service motto, namely "SIGAP" which is an abbreviation for: Smart, Islamic, Happy, Enthusiastic, Professional.

This hospital is an educational hospital, especially for Muhammadiyah charity educational institutions. Various changes that develop outside the environment and occur internally within the PKU Muhammadiyah Hospital organization regarding patient safety, limited access to health services in certain communities, developments in science and technology, huge burden disease, and the increasingly open boundaries of information which have an impact on The increasing criticality of customers towards health services as well as changes in government regulations are anticipated with various steps including improving infrastructure and human resources, thereby making PKU Muhammadiyah Yogyakarta Hospital apart from being able to compete with other health service facilities and complying with government regulations.

Midwifery services, namely maternal and child health services at RSU PKU Muhammadiyah Gamping, are carried out in accordance with standard operating procedures (SOP). This includes the implementation of loving care for mothers and babies in the implementation of Early Breastfeeding Initiation (EBI). Every birth is given prior informed consent for the implementation of EBI after the baby is born, of course in accordance with the SOP and indications for implementing EBI.

Respondent Characteristics and EBI Factors

Characteristics of respondents according to age, parity, education level, occupation, type of delivery and gestational age.

Table 1. Frequency Distribution of Respondent Characteristics and EBI Factors

Characteristics	Distribusi	Frequency	%
Age	No Risk	404	82,4
	Risk	86	17,6
Parity	Risk	212	43,3
	No Risk	278	56,7
Level Education	Low	14	2,9
	Tall	476	97,1
Work	Work	268	54,7
	Doesn't Work	222	45,3
Types of Childbirth	Vaginal Delivery	205	41,8
	Sectio Caesarea	285	58,2
Gestational Age	Preterm	34	6,9
	Aterm	456	93,1

Based on the table above, the majority of respondents who were not at risk were 404 respondents (82.4%), the highest parity of respondents was multipara, namely 278 respondents (56.7%), from the level of education the majority were tertiary (SMA/PT), namely 476 respondents (97.1%). There were 268 respondents (54.7%) who worked. Meanwhile, regarding the type of delivery, the majority of respondents gave birth by SC, namely 285 respondents (58.2%), and the majority of respondents gave birth at term (≥ 37 weeks) gestation, namely 456 respondents (93.1%).

Implementation of EBI at RSU PKU Muhammadiyah Gamping

Table 2. Frequency Distribution of EBI Implementation at PKU Muhammadiyah Gamping

No	Pelaksanaan EBI	F	%
1	EBI	407	83,1
2	Tidak EBI	83	16,9
	Total	490	100

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Based on the table above which shows the results of implementing EBI at PKU Muhammadiyah Gamping Hospital, the majority of birth mothers have implemented EBI, 407 (83.1%), but there are still mothers who have not implemented EBI, 83 respondents (16.9%).

Cross Tabulation of Factors Affecting EBI at RSU PKU Muhammadiyah Gamping

Table 2 Cross tabulation of factors influencing EBI

Variable		Implementation EBI				Total	p-value	Contingency Coefficient	Odds Ratio
		EBI		Non EBI					
		N	%	N	%				
Age	No Risk	341	69,6	63	12,9	404	0,085	0,77	1,640
	Risk	66	13,5	20	4,1				
Parity	Risk	182	37,1	30	6,1	212	0,151	0,65	1,429
	No Risk	225	45,9	53	10,8				
Education	Low	14	2,9	0	0	14	0,086	0,77	1,211
	Tall	393	80,2	83	16,9				
Work	Work	219	44,7	49	10	268	0,383	0,039	0,808
	Dpesn't Work	188	38,4	34	6,9				
Type Delivery	Delivery	179	36,5	26	5,3	205	0,033	0,096	1,721
	Vaginal	228	46,5	57	11,6				
Gestational Age	Preterm	17	3,5	17	3,5	34	0,000	0,234	3,455
	Aterm	390	79,6	66	13,5				

Based on the table above, the factors that are significantly related to the implementation of EBI in mothers ($p\text{-value} > 0.05$) are the type of delivery ($p\text{-value} 0.033$) and gestational age ($p\text{-value} 0.000$). Meanwhile, the factor of maternal age ($p\text{-value} 0.085$), parity ($p\text{-value} 0.151$), education ($p\text{-value} 0.086$), and mother's occupation ($p\text{-value} 0.383$) showed no significant relationship with the implementation of EBI ($p\text{-value} < 0.05$) at RSU PKU Muhammadiyah Gamping. The close relationship between the influencing factors is that the type of delivery (Vaginal or SC) has a 1.721 times greater influence on the implementation of EBI and term gestational age has a 3.455 times greater influence on the implementation of EBI.

Discussion

Based on the results above, the majority of mothers giving birth at RSU PKU Muhammadiyah Gamping have carried out IMD as many as 406 respondents (83.1%), but there are still mothers who have not carried out IMD as many as 83 respondents (16.9%). Based on the results of field observations during the research, many mothers refused to undergo IMD because they felt they were still tired and had pain from SC in post-SC patients and pain from uterine contractions in patients who gave birth spontaneously. Researchers knew this from the recorded medical records of babies who had not undergone IMD. Low levels of education and limited knowledge are factors that support the perception that giving IMD has no benefits for the baby so that mothers do not want to do it [6]. A positive attitude is expected to be a strong motivation in the mother's efforts to breastfeed or provide breast milk to the baby, because this motivation will play a role in the lactation process [7]. According, there is a slight difference between mothers who have positive and negative attitudes. This may be caused by discomfort or fatigue felt by the mother [6].

Most of the respondents who carried out IMD were of the non-risk age group, namely 341 respondents (69.6%) out of a total of 490 respondents. Meanwhile, only 20 respondents (4.1%) of at-risk age carried out IMD. Based on the results of the analysis test, it was found that $p\text{-value} = 0.085$, which means that there is no significant relationship between maternal age and the implementation of IMD. This shows that mothers in both risk and non-risk age groups have the same opportunity to carry out IMD. Age is one of the factors related to the quality of pregnancy or the mother's readiness for reproduction.

The results of this study are in line with research by Adryani (2014) showing that there is no significant relationship between maternal age and the success of IMD with a $p\text{-value} = 0.92$. [8]

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regarding the profile of mothers and the role of midwives in implementing IMD stated that the maternal age variable did not have a significant relationship with the practice of implementing IMD with p -value = 0.369. The mother's age may be one of the factors that influences the mother's readiness to breastfeed, however, based on the data in this study it can be assumed that the implementation of IMD may not only be influenced by maternal readiness factors but also the mother's knowledge about IMD practices which was not examined in this study. Based on the results of parity factor analysis in this study, it also shows that there is no significant relationship with the implementation of IMD (p -value=0.151). Based on the cross tabulation table, it was found that the majority of respondents who implemented IMD were respondents with no-risk parity, numbering 225 respondents (45.9%), however, only 30 respondents with risk parity did not implement IMD (6.1%). This shows that both those at risk and those not at risk have the same opportunity to implement IMD. The results of this study are not in line with the theory which states that mothers who have a parity of more than three tend not to be successful in carrying out IMD because they usually face difficulties in pregnancy and childbirth, especially excessive fatigue, which affects their emotional stability to carry out IMD.

On the other hand, mothers with parity 1-3 usually have great motivation to do and know what is beneficial for their baby. Apart from that, the ideal birth span from a psychological aspect provides an opportunity for parents to devote more intensive time to their children in their early years [9]. The results of this research are supported by Yuwansyah's statement based on the results of his research showing that 54.2% of mothers with a number of children <2 did not implement IMD, while 20.6% of mothers with parity >2 did not implement IMD. Thus, the proportion of babies who do not receive IMD is higher in mothers with parity <2 compared to mothers with parity >2. Most of the respondents who implemented IMD were highly educated, 393 respondents (80.2%) out of a total of 490 respondents, and respondents with low education all implemented IMD, 14 respondents (2.9%). These results are relevant to the results of the data analysis test with a p -value = 0.086 which shows that the level of education does not influence the practice of implementing IMD. Respondents can access information related to IMD easily in health services or through communication media, where access does not require requirements related to education level. This shows that mothers with low levels of education also have the same possibilities and opportunities to implement IMD.

Education level is one of the factors related to the implementation of IMD based on research results from research with a p -value = 0.002. Highly educated mothers realize the physiological and psychological benefits of breastfeeding from an early age so they are more motivated and have more opportunities to obtain information [8]. Mothers with higher education are more likely to provide early breast milk properly and correctly compared to mothers with low education. This statement does not support the results of this study, which are in line with the results of research which shows that there is no significant relationship between maternal education and IMD success with a p -value = 0.38. This means that a mother's education level does not influence the implementation of IMD [10].

Based on the research results, most of the respondents who implemented IMD practices were working mothers, numbering 209 respondents (44.7%), however, quite a lot of respondents who did not implement IMD also did not work, namely 188 respondents (34.8%). The results of the bivariate analysis showed p -value = 0.383, which means that there is no significant relationship between maternal employment and the implementation of IMD. It can be assumed by researchers that the mother's job is not a barrier to implementing IMD. Working mothers have more opportunities to get information and have better facilities than the positions they get at work. So it is more possible to provide early breast milk properly and correctly compared to mothers who do not work [11].

The results of this research are in line with research that the work variable does not have a significant relationship with IMD implementation practices with p -value = 0.314. However [8]. This is not in accordance with research , which shows that there is a relationship between work and the implementation of IMD. This is because working mothers have broader insight [12]. The type of delivery influences the implementation of IMD, which is shown by the results of data analysis p -value = 0.033, namely that vaginal delivery has a greater chance for the mother to be able to carry out IMD compared to delivery by SC. There were 179 respondents who performed IMD with vaginal delivery and 57 respondents (11.6%) who did not perform IMD with SC delivery. According to a review

article, one of the factors proven to influence the implementation of IMD is the type of delivery [13]. This is then related to the mother's health and physiological condition after childbirth. After giving birth, the mother goes through several phases, one of which is the first two days after giving birth. Where in this phase the mother is still focused on her own condition to undergo the recovery process. Most of the respondents who performed IMD were of term gestational age (≥ 37 weeks), namely 390 respondents (79.6%). Meanwhile, a small number of respondents, namely 17 people (3.5%) were mothers with preterm gestational age (< 37 weeks). This shows that mothers with term gestation are more likely to carry out IMD, according to the results of bivariate data analysis, p -value = 0.000, which means there is a significant relationship between gestational age and the implementation of IMD.

This research is in line with research by that the implementation of IMD at preterm gestational age is less than IMD at gestational age > 36 weeks. Based on research, only 1 respondent out of a total of 32 respondents implemented mothers with a gestational age of < 36 weeks [14]. Different results were also produced from research, that the majority of mothers who carried out IMD were mothers with a term pregnancy (> 36 weeks) as much as 97.8%. Preterm gestational age is more at risk for problems occurring in the baby being born, such as asphyxiation, breathing problems, hypoglycemia and hypothermia. Where this can be a contraindication for carrying out IMD so that it supports this research that mothers who give birth at term gestational age are 3.5 times more likely to be able to carry out IMD practices [15].

4. CONCLUSIONS

Based on the research results, it was found that there was a significant relationship between the type of delivery (p -value 0.033) and gestational age (p -value 0.000) with the implementation of EBI in the mother. Meanwhile, the maternal age factor (p -value 0.085), parity (p -value 0.151), education (p -value 0.086), and mother's employment (p -value 0.383) showed that there was no significant relationship with the implementation of EBI (p -value < 0.05) at RSUD Muhammadiyah Gamping. It is recommended that health workers play a more active role in providing education and information related to preparation for childbirth, especially readiness to initiate early breastfeeding as a guideline for pregnant women in the final trimester.

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