



Intrapartum care satisfaction at three levels of healthcare facilities in Jakarta[☆]



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KEYWORDS

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Abstract

Objective: To identify maternal satisfaction with childbirth delivery services at three levels of healthcare facilities in Jakarta, Indonesia.

Method: 151 postpartum mothers in Jakarta were selected according to the proportion of childbirth deliveries at three levels of healthcare facilities. The instruments used were a respondent's characteristics questionnaire; the Childbirth Expectation Questionnaire (Indonesian version); a social support questionnaire, which was a modification of the Indonesian version of the Postpartum Support System and Family Coping Questionnaire; and the Indonesian version of the Satisfaction with Intrapartum Care.

Results: The majority of respondents expressed their satisfaction with the childbirth delivery services at the three levels of healthcare facilities. The most influential factor for satisfaction with the childbirth delivery service at the level 1 healthcare facility was the expectation of labour (odds ratio [OR] 49.15; 95% confidence interval [CI]: 2.29–105.45). The factor that most influenced satisfaction with the childbirth delivery service at the level II and level III healthcare facilities was social support (OR 16.55; 95% CI: 1.09–251.98 and OR 56.2; 95% CI: 3.41–927.7, respectively).

Conclusions: The pattern of satisfaction with intrapartum care did not differ significantly between the three levels of healthcare facilities ($p > 0.05$).

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Introduction

Intrapartum care is the activity and series of events focused on the mother from the time of childbirth until 6 h postpartum.¹ The World Health Organization states that the quality of care during childbirth at delivery facilities should reflect an excellent physical infrastructure and inventory management; human resources with ability, knowledge, and information; effective communication between healthcare workers and patients; social and emotional support; and the capacity to handle pregnancy and childbirth complications.² Childbirth and birth itself are unique experiences for a woman and her family. Labour may be a painful event for a woman that can cause extreme trauma.³ Exploration and elaboration in assessing the satisfaction with delivery care are critical for measuring the success rate of maternal care.⁴ Dissatisfaction of mothers with their childbirth experience can adversely affect the health of both the mother and baby, leading to postpartum depression, traumatic stress disorder, future abortions, preferences for caesarean section, disruption of sexual relations, negative feelings towards the baby, and poor adaptation to the caring role and breastfeeding.⁵⁻⁷

Many factors influence maternal satisfaction with childbirth services, including age, parity, marital status, family income, social status, type of childbirth, family support, education, patient involvement in decision-making, and care by healthcare workers.⁸⁻¹⁰ In Indonesia, health services are classified into three levels; level I health facilities are primary healthcare facilities, level II health facilities provide specialist services, and level III health facilities provide subspecialty services. The types of services and facilities available for childbirth care vary depending on the level. Basic primary healthcare facilities, which are not as well-equipped as level II and level III facilities, are only able to provide services for normal childbirth without complications. Satisfaction regarding the childbirth delivery services among the three levels of health facilities should not differ, however, because the delivery service provided must be satisfied regardless of the facility level, and each level provides delivery services depending on the patient's condition and type of service required.

Various satisfaction studies have demonstrated that the level of satisfaction with health services, in general, is low. A previous study reported that the maternal satisfaction rate of 246 postpartum mothers in Jember, East Java, with childbirth care at level II healthcare facilities was 62.2%.¹¹ Another study revealed that the level of satisfaction with care of 88 postpartum mothers in the maternity ward of the Karimun District Hospital, a level II healthcare facility, was 55%.¹² A study by Khitam of 298 postpartum mothers in four maternal and child healthcare centres in Al Matraq City, Jordan, revealed a maternal satisfaction rate of only 17.8%.¹³ The present study focuses on healthcare services in general; there are currently no data identifying differences between perceptions of maternal satisfaction at various levels of childbirth healthcare facilities. This study was conducted at three levels of healthcare facilities in the DKI Jakarta area. As the capital city of Indonesia, Jakarta has good coverage of childbirth assistance in healthcare services compared with other regions, 97%.¹ These data are important for future

development and evaluation of healthcare systems at various levels, especially with regard to childbirth healthcare to improve the quality and quantity of complete healthcare services.

Method

This was a cross-sectional study conducted throughout 1 month at three levels of healthcare facilities that perform childbirth healthcare in Jakarta. Respondents were selected by consecutive sampling. Inclusion criteria were mothers 20–35 years of age, 24 h postpartum, married, full-term pregnancy, inpatient, able to read and write, conscious, mentally healthy, and able to speak Indonesian. A total of 151 respondents were included based on the proportion of the mean number of patients at each level of childbirth healthcare facility during the previous month. Therefore, there were 50 respondents from level I healthcare facilities, 56 respondents from level II healthcare facilities, and 45 respondents from level III healthcare facilities. The objective of this study was to determine whether there was a relationship between the dependent variables, i.e., service delivery satisfaction, with independent variables, i.e., maternal factors, including education status, employment, economic status, parity status, childbirth attendants, childbirth expectation, and social support at the three levels of healthcare facilities.

This study applied four instruments: the respondent's characteristics questionnaire; the Childbirth Expectation Questionnaire (CEQ) used to measure the level of childbirth expectation; the Postpartum Support System Questionnaire and the Indonesian version of the Family Coping Questionnaire to measure the social support received by the mother; and the Satisfaction with Intrapartum Care Questionnaire to measure the mother's satisfaction with childbirth care. The Indonesian versions of all the instruments were used and validated in previous studies. Ethics approval for the study was obtained from the Faculty of Nursing Research Ethics Committee of the Universitas Indonesia No. 243/UN2.F12.D/HKP.02.04/2018.

Results

Most of the respondents at the three levels of healthcare facilities were highly educated, had adequate economic status, were multiparous, and were assisted during childbirth. The majority of respondents at the level I and III facilities were employed, while the majority of those at the level II health facilities were unemployed. The level of childbirth care satisfaction did not differ significantly between the three levels of healthcare facilities. The satisfaction level of delivery services was 78% at the level I facilities, 83.9% at the level II facilities, and 73.3% at the level III facilities. The factor with the highest influence on childbirth healthcare satisfaction at the level I health facilities was childbirth expectation (odds ratio [OR] 49.149; 95% confidence interval [CI] 2.29–1054.59). The factor with the highest influence on childbirth healthcare satisfaction at both the level II and III health facilities was social support received by the mothers at the beginning of pregnancy, childbirth, and after

giving birth from family, health workers, environment, and spouse (OR 16.547; CI 95% 1.09–251.98 and OR 56.202; 95% CI 3.41–927).

Discussion

Satisfaction with childbirth healthcare is based on how mothers assess the extent to which expectations were met from the beginning of pregnancy to the childbirth healthcare standards of the healthcare facility.^{9,14} Logistic regression analysis was used to test the differences in the proportions of three subscales of satisfaction in delivery services, with one category used for comparison. Because odds ratios can only be obtained using a 2 × 2 table, then the data in a 3 × 2 table must be converted to a 2 × 2 table by removing one category. Thus, we compared the level I healthcare facilities with level II healthcare facilities and then compared the level II healthcare facilities with the level III healthcare facilities. Level II healthcare facilities were included in each analysis because this group is used as the comparison group for the other groups. The highest childbirth care satisfaction was at the level II healthcare facilities, which provide specialist childbirth healthcare; the next highest satisfaction was at the level I healthcare facility that was the public healthcare centre (Puskesmas); last in the childbirth healthcare satisfaction was at the level III healthcare facility as a national referral hospital providing subspecialty childbirth healthcare. These findings suggest that maternal satisfaction is not always determined by the availability of comprehensive facilities, drugs, and healthcare. This finding may be due to differences in the characteristics of the respondents, because mothers who gave birth at the level III health facilities were pregnant women who required subspecialty childbirth assistance with several or various indications of referral, thus affecting the value of satisfaction. These results are different from those of a study by Bhattacharyya et al. in Swaziland in which the factor that most affected maternal satisfaction (90% of respondents) was the quality of childbirth healthcare given at a healthcare facility with complete facilities.¹⁵

Satisfaction with intrapartum care is scored on three satisfaction subscales, namely satisfaction with interpersonal care, satisfaction with information and decision-making, and satisfaction with the physical environment of the delivery room. The satisfaction of intrapartum care includes health workers being welcoming and friendly upon the patient's arrival, enthusiasm and confidence, the competence of the doctors and midwives/nurses, and

excellent service provided by all healthcare workers.¹³ The satisfaction with interpersonal care was not significantly different between the three levels of healthcare facilities. The majority of respondents were highly satisfied with the interpersonal care at all of the facility levels.

Satisfaction with the information and decision-making sub-scale were not significantly different between the three levels of healthcare facilities. The majority of respondents had low satisfaction perceptions in this category at every level of healthcare facility, indicating that the quality of delivery services did not match the expectations of the mother regarding the information provided and involvement of the mother as a patient in the decision-making regarding the actions to be taken. Therefore, it is necessary to evaluate the delivery services that focus on the needs of patients, which always involves the patient making decisions about the actions and treatments that will be carried out.^{16,17} Providing information about the patient's condition, what action will be taken, and the benefits and risks of a procedure, and involving the patient in making decisions about essential activities to be performed is important because it affects the perception of satisfaction with the intrapartum care.

The third subscale of satisfaction on childbirth care is satisfaction with the physical environment of the delivery room. The level of the respondents' satisfaction with the physical environment of the delivery room was not significantly different between the three levels of healthcare facilities. The majority of respondents said they were satisfied with the physical environment of the delivery room, which included adequate lamps and lighting, room size, the quietness of the room, cleanliness of the room and the equipment used, a place to wash hands, and the bathroom and toilet. The results of this study are consistent with the findings by Sheehy, et al. that patient satisfaction with adequate infrastructure, namely water, ventilation, lighting, cleanliness, clean beds, and toilets must be fulfilled by the healthcare facility to increase satisfaction with the childbirth healthcare experience.¹⁸

The satisfaction of delivery services was significantly different among the three levels of healthcare facilities. At the level I healthcare facilities, education, employment, economic status, childbirth attendance, childbirth expectation, and social support were related to maternal satisfaction with childbirth care ($p < 0.05$). At the level II healthcare facilities, only economic status, childbirth expectation, and social support ($p < 0.05$) were related to maternal satisfaction. At the level III healthcare facilities, the factors

Table 1 Level of maternal satisfaction with delivery services at three levels of healthcare facilities.

Healthcare facilities	Satisfaction with delivery service				Total		P value	OR CI 95%
	Low		High		n	%		
	n	%	n	%				
Level I	11	22	39	78	50	100	0.596	0.679 (0.72–5.02)
Level II	9	16.1	47	8.9	56	100		
Level III	12	26.7	33	73.3	45	100	0.290	1.89 (0.718–5.02)

Abbreviations: OR, odds ratio; CI, confidence interval.

Table 2 Childbirth service satisfaction subscale at three levels of healthcare facilities in Jakarta.

Kepuasan	Healthcare Facilities I (n = 50)		Healthcare Facilities II (n = 56)		Healthcare Facilities III (n = 45)	
	n	%	n	%	n	%
<i>Interpersonal care</i>						
Low satisfaction	2	4	7	12.5	0	0
High satisfaction	48	96	49	87.5	45	100
<i>Information and decision-making</i>						
Low satisfaction	42	84	49	87.5	39	86.7
High satisfaction	8	16	7	12.5	6	13.3
<i>Physical environment of the maternity room</i>						
Low satisfaction	3	6	2	3.6	7	15.6
High satisfaction	47	94	54	96.4	38	84.4

related to satisfaction of delivery services were economic status, attendance, childbirth expectation, and social support ($p < 0.05$).

The factor most influencing maternal satisfaction with delivery services at the level I healthcare facilities was childbirth expectation (OR 49.149). This finding supports the findings by Rudman, et al. that the determinants of childbirth satisfaction are the expectation of the mother towards the childbirth that develops from the beginning of pregnancy until after completing the labour process.¹⁰ While the factor most influencing maternal satisfaction with delivery services at the level II (OR 16.547) and III (OR 56.202) healthcare facilities was social support, is consistent with Li, et al. who reported that the factors that influence the satisfaction with childbirth are spouse and family support, modification of prenatal care standards (including providing education), and friendly service for mothers.¹⁹ The support provided by spouses and families, whether received during pregnancy, during childbirth, and after childbirth, provides a feeling of calm and relief and a pleasant atmosphere that increases maternal satisfaction with childbirth healthcare and helps mothers in their changing roles.

At the level I healthcare facilities, it is necessary to maintain a level of satisfaction with interpersonal care and the physical environment of the delivery room because these two subscales had high satisfaction scores. It is also necessary to increase patient satisfaction with the information and decision-making subscale because the level of satisfaction on this subscale was low at the level I healthcare facilities. At the level II healthcare facilities, the satisfaction subscales that must be maintained because they had a high level of satisfaction are those concerned with the physical environment of the delivery room and interpersonal care. The satisfaction subscale that must be improved, however, is the satisfaction with information and decision-making because the satisfaction value on this subscale was low. At the level III healthcare facilities, the satisfaction subscale that must be maintained is satisfaction with interpersonal care because it showed high satisfaction values followed by satisfaction with the physical environment of the delivery room. The satisfaction subscale that must be

improved at the level III healthcare facilities is providing information and decision-making.

The low level of satisfaction with providing information and decision-making at all three levels of healthcare facilities should be taken into consideration by healthcare personnel to prioritize providing honest information about the conditions and actions to be taken, the choices and risks of activities, and risks if actions are not taken. This study also indicates that the mother and family should have a clear understanding of the patient's rights and the contribution of the patient to the childbirth care and how the perception of the mother's satisfaction with the childbirth care can be improved. The level of satisfaction with the provision of information was low at all three levels of healthcare facilities, which may be due to its combination with decision-making. Decision-making relates to information given. The ability of the mother to make decisions is compromised in more difficult pregnancies because of the more complicated labour and emergency conditions, the smaller the role of the patient in decision-making because decision-making is based on priority interventions to save the mother's and baby's life. Despite the low decision-making and lack of communication from healthcare workers, however, information must still be provided (Table 1).

Although the number of samples in this study is small, this is the first study in Indonesia regarding the satisfaction with delivery services at three levels of healthcare facilities. The results of this study provide information on the level of satisfaction of childbirth services for patients and healthcare workers as service providers and serve as a reference for further research to evaluate interventions that can be used to improve maternal satisfaction with childbirth services. Further studies using other methods and a larger number of samples with cluster sampling methods should be performed to confirm the results of the present study (Table 2).

Conflict of interests

The authors declare no conflict of interest.

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