

## ANALYSIS OF MIDWIFERY QUALITY SERVICE IN PRIMARY HEALTH CARE

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### Abstract

**Background:** Midwifery quality service affect to quality satisfaction level and lead to a decreasing maternal mortality rate and infant mortality rate in Indonesia. Midwifery service is mostly delivered in primary health care. Therefor it is important to analyse the quality of midwifery service. **Method:** A cross sectional survey, conducted in 6 primary health care and involving 75 respondents. Two questionnaire were used to measure perceptions of midwifery quality service and quality satisfaction level. **Result:** The results showed the quality of midwifery services affected the level of service satisfaction by 2.8%. The majority of respondents felt that the midwifery service they received was satisfying as many as 39 respondents (52%). However the majority of (92%) in antenatal care the respondents stated their dissatisfaction in antenatal care service. This is caused by communication factors between midwives and patients. **Conclusion:** Many respondents stated that communication by midwives was still poor. This is caused by several factors including due to personal needs, internal communication factors, and patient service factors at the primary health care. This can be seen from the many respondents who gave an not qualified response to item reliability on the variable quality of midwifery services.

**Keywords:** midwifery, sectional survey, health care

### Introduction

Health progress is one of the important aspects that cannot be separated from national development which tries to improve welfare to all levels of society. Health is an essential human right and is one of the elements that determines the quality of human resources. In this case, health must be maintained and quality improved. This is in accordance with the third objective of sustainable development (SDG's), which is to ensure a healthy life and promote prosperity for all people of all ages. Given this, the government tries to create an existence that reflects the drive to achieve national health goals. One indicator of achieving improved health is life expectancy. Life expectancy is influenced by maternal mortality and infant mortality“.

According to the WHO report in 2014 the maternal mortality rate (AKI) in the world reached 289,000 people. The annual baby birth rate is 2.9 million births and 2.6 million babies will die in the first month of life. In Southeast Asia the number of maternal deaths is 16,000. Indonesia is listed as the country with the highest AKI in

Southeast Asia at 305 / 100,000 births, while the second rank is Philippines with 170 / 100,000 live births, third place Vietnam with 160 / 100,000 live births, fourth place Brunei with maternal mortality as many as 60 / 100,000 live births, in fifth place, Thailand with a maternal mortality rate of 44 / 100,000 live births, and ranked sixth namely Malaysia with a maternal mortality rate of 39 / 100,000 live births “ (Warmelink, Wiegers, de Cock, Klomp, & Hutton, 2017).

Indonesia ranks first in Southeast Asia which has a high maternal mortality rate of 305 / 100,000 live births (IDHS, 2015). This shows that Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) in Indonesia are still far from the target of Sustainable Development Goals (SDGs), SDG's targets of MMR is 70 / 100,000 live births and IMR is 12 / 1,000 live births. From various regencies and municipality in Yogyakarta Special Province, Bantul District is the district with the highest MMR and IMR in Yogyakarta. Maternal mortality and infant mortality rates are caused by two direct variables and indirect variables. The direct factors causing maternal mortality were bleeding (42%), eclampsia (13%), premature birth (11%), infection (10%), prolonged labor (9%). Other causes (15%). The biggest reasons for infant mortality are low birth weight (LBW) and asphyxia (lack of oxygen in the blood). While the indirect causes for maternal and infant mortality are economic, social and cultural conditions. Besides that the other causes are 3 Too late (late in making a decision, late arriving at the service place, and late getting help) and 4 Too (too old, too young, too many children, too tight birth distance) “.

According to the government, the community can also play a role in improving the quality of midwifery services in order to reduce maternal and infant mortality, namely by getting involved in planning, implementing and determining the priority of midwifery problems. In addition, the community also participates in the P4K program (birth planning and prevention of complications programs) carried out by the government by participating in providing and facilitating village ambulances that can be used for referral transportation if emergency emergencies occur. Another effort that can be carried out by the community is by participating in the health program in the implementation of the Posyandu program (Integrated Service Post) “.

Service satisfaction in antepartum, intrapartum, neonatal and postpartum care greatly influences maternal health and neonatal health. When a woman is satisfied with the service she receives, this will improve the health of the mother and her baby, and this will obviously affect the decline in maternal and infant mortality rate. Therefore, it is important for a health care facility to assess the level of service satisfaction to see the quality of health services provided to the patients, so health service facilities can participate in reducing maternal mortality and infant mortality. Comprehensive midwifery care is an examination carried out completely with laboratory and counseling examination. Comprehensive midwifery care is a comprehensive midwifery care program that starts from pregnant women, maternity, postpartum, newborns and family planning. Antenatal care is a treatment that aims to provide health checks, information about pregnancy, childbirth, and to prepare women for childbirth.

The objective of this study was to determine the quality of midwifery services to the level of satisfaction of comprehensive midwifery services at the primary health centers. This research can be used as a reference and learning in improving the quality of comprehensive midwifery services, especially antenatal, intranatal, neonatal, and postnatal care to reduce maternal and infant mortality and this research can be used as a reference for future researchers and to add to the literature on the quality of comprehensive midwifery services to the level of service satisfaction in the primary health care Bantul District.

### **Literature Review**

The experience and treatment received during pregnancy and childbirth have a direct effect on the health of a woman. Midwifery care has a significant contribution in generating quality care for mothers and babies. Experience in several developed and developing countries shows that the performance of midwives who are licensed, trained, and able to work effectively with other health workers has been linked to a rapid and sustained reduction in maternal and infant mortality by improving the quality of midwifery care “ (Baas, Erwich, Wiegers, de Cock, & Hutton, 2015).

The quality of midwifery services has three main components, namely service to patients, technical quality, and customer quality“ (Shaban, Mohammad, & Homer, 2016). Service quality refers to aspects of non-health care and reflects the patient's experience on the health system including the relationship between customers and service providers, standard facilities, support services and in which environment the service is provided. Service quality has a direct influence on the quality of all care received by service users. The quality of the technique is what the customer receives, and it is relatively more effective against what is known, and mostly it reflects issues related to the knowledge and experience of the health care provider. Customer quality refers to the characteristics that customers need to be effectively involved in the health care process, making decisions and actions to improve service quality“ (Tabrizi, Askari, Fardiazar, Koshavar, & Gholipour, 2014).

The scope of midwifery services includes the provision of care for newborns (infants), infants, toddlers, girls, young women, premarital women, women during pregnancy, childbirth and childbirth, women during intervals and postmenopausal women“ (Warmelink et al., 2017). Comprehensive midwifery care is an examination that is carried out completely with laboratory and komseling examination. Comprehensive midwifery care is a comprehensive midwifery care program that starts from pregnant women, maternity, postpartum, newborns and family planning“ (McConville & Lavender, 2014). Antenatal care is a treatment that aims to provide health checks, information about pregnancy, childbirth, and prepare women to go through labor“ (Andersson, Christensson, & Hildingsson, 2013). Intranatal care can be done by midwives, obstetricians or general practitioners. Intranatal care is a service that includes monitoring the welfare of the mother and baby and monitoring the progress of labor“ (Reed, Rowe, & Barnes, 2016). Neonatal care is a treatment given to infants up

to 28 days old” (Phillippi & Barger, 2015). Pospartum Care is care provided to the mother since 1 hour after the birth of the placenta up to 42 days postpartum” (de Bruin-Kooistra, Amelink-Verburg, Buitendijk, & Westert, 2012).

Satisfaction is the most frequently reported measure of outcomes for servant quality and satisfaction as an objective for improvement in the health care system” (Sawyer et al., 2013). Service satisfaction is a reflection of a patient on health services both technically, internationally, and from an organizational aspect” (Matejić, Milićević, Vasić, & Djikanović, 2014). Customer satisfaction in terms of antenatal care services can improve patient health, patient compliance with treatment, and improve relationships between patients and service providers. The World Health Organization (WHO) recommends monitoring and evaluating the satisfaction of pregnant women with health services, this is useful for improving the quality and efficiency of health services during pregnancy” (Galle, Van Parys, Roelens, & Keygnaert, 2015).

According to (Mohammad, Alafi, Mohammad, Gamble, & Creedy, 2014) measuring women's satisfaction with health care received has been recognized as a result of evaluating the health care system. In the context of giving birth, satisfaction is a very important thing. Assessing women's satisfaction during labor is important to improve health services and will have an impact on maternal and newborn health and the relationship between mother and baby. Dissatisfaction received by patients during labor will lead to post partum depression and will cause anxiety to the woman. This will also cause fear in the next labor.

Service satisfaction is increasingly being used as an indicator of the quality of health services. Service satisfaction is a subjective perception of a patient about his expectations of the extent to which his health care can be fulfilled. Satisfaction of services with health care is determined by the interaction between patient expectations and the health characteristics they receive. In practice, hope can refer to ideal health services and desired health care. Various studies show that factors such as waiting time before consultation, continuity in seeing the same health worker, and good communication with health workers can improve service satisfaction” (Galle et al., 2015).

In antepartum, neonatal and postpartum care, assessment of maternal satisfaction is primarily focused on service availability, physical environment, hygiene and accommodation conditions, work organization, interpersonal relationships with health workers, and competency skills of health workers. Satisfaction with these aspects is strongly influenced and shaped by the socio-demographic characteristics of women (education level, age, marital status, and economic status) and personal factors (values, attitudes, pain thresholds, medical history, family support). The effect of maternal satisfaction is the result of a variety of objective conditions, both clinical and technical, but also many subjective factors by nature” (Matejić et al., 2014).

In order to improve the quality of midwifery services the government also participated in efforts to improve the quality of midwifery services to reduce maternal mortality and infant mortality by increasing health care facilities, improving the quality

of human resources (health workers) by conducting training and seminars to improve the skills of health workers in providing services to patients. In addition, another government effort to improve the quality of midwifery services is by creating programs that can help improve maternal and infant health and reduce maternal and infant mortality. Programs that have been carried out by the government are integrated ANC (integrated antenatal care), P4K program (delivery planning program and prevention of complications), and posyandu program (integrated service post). The government hopes that this program can help improve the quality of midwifery services and reduce maternal and infant mortality“.

### **Method**

This cross sectional study was conducted at primary health centers with inpatient ward unit in Bantul district. The subjects in this study were pregnant women, partum mothers and postpartum mothers who did the examination at the primary health care with inpatient ward unit in Bantul district. The researchers used two questionnaires. First, the service quality questionnaire consisted of 25 questions were prepared based on 5 characters (Reliability, Assurance, Tangibles, Empathy, and Responsiveness). Second, the questionnaire level of service satisfaction. In this questionnaire there were 23 questions. This questionnaire was prepared based on 4 characters (antenatal care, intranatal care, neonatal care and postnatal care). Both questionnaire have been tested validity and reliability with the value 0,757 to service satisfaction level and 0,762 to quality of midwifery service.

In this study, researchers used univariate analysis to describe the characteristics of respondents, the variable quality of midwifery services and the level of service satisfaction. In bivariate analysis, researchers used chi-square, this method was used to analyze cross tabulations between independent variables and dependent variables to analyze the relationships between variables. While for multivariate analysis, researchers used multiple linear regression statistical tests to test the effect of each independent variable on the dependent variable or simultaneously on the dependent variable. This test also served to determine aspects of service quality that most influence the level of service satisfaction. This study was approved by the ethics committee with number 710/KEP-UNISA/X/2018.

### **Results and Analysis**

#### **Characteristic of Respondents**

The characteristics of respondents observed in this study included age, education, employment, costs, and place of examination. Data on respondents' characteristics can be seen in the following table:

**Table 1**  
**Frequency Distribution of Respondents' Characteristic**

No	Category	Characteristic	Frequency	
			N	%
1	Age	15-25 years old	31	41.3%
		26-35 years old	42	56%
		36-45 years old	2	2.7%
2	Employment	Housewives	40	53.3%
		Employees	22	29.3%
		Civil Government	2	2.7%
		Labors	9	12%
		Entrepreneur	2	2.7%
3	Education	Primary School	4	5.3%
		Junior High School	21	28%
		Senior High School	44	58.7%
		University	6	8%
4	Health Insurance	Independent	15	20%
		National Health Insurance	60	80%
5	Examination Place	Clinic	16	21.3%
		Hospital	21	28%
		No treatment in the other places	38	50.7%

Based on the table 1, it is known that the majority of respondents in this study were respondents aged between 26-35 years as many as 42 respondents (56%). The average occupation of respondents who participated in this study were housewives as many as 40 respondents (53.3%). The average respondent's education was high school graduates as many as 44 respondents (58.7%). Based on the type of financing used by respondents, it can be seen that the majority of respondents paid the examination fee using National Health Insurance was as many as 60 respondents (80%). Viewed from the aspect of the examination place, the majority of respondents did not conduct examination in the other places, respondents who did not carry out examinations in other places were 38 respondents (50.7%).

### Quality of Midwifery Services

**Table 2**  
**Frequency Distribution of Midwifery Service Quality**

Service Satisfaction	Qualified N (%)	Satisfying N (%)	Not Qualified N (%)
Tangible	41 (54.7%)	34 (45.3%)	-
Reliability	35 (46.7%)	20 (26.7%)	20 (26.7%)
Assurance	44 (58.7%)	26 (34.7%)	5 (6.7%)
Empathy	38 (50.7%)	29 (38.7%)	8 (10.7%)
Responsiveness	42 (56%)	28 (37.7%)	5 (6.7%)

Based on the table 2, it can be seen that the majority of respondents (44 respondents) felt that the quality of midwifery services they receives was qualified on the assurance item. While some respondents (20 respondents) felt that the quality of midwifery services that they received was not qualified in the item of reliability.

**Service Satisfaction Level**

**Table 3**  
**Frequency Distribution of Service Satisfaction Level**

Midwifery Service	Satisfied N (%)	Quite Satisfied N (%)	Not Satisfied N (%)
Antenatal	6 (8%)	-	69 (92%)
Intranatal	74 (98.7%)	-	1 (1.3%)
Neonatal	70 (93.3)	-	5 (6.7%)
Postnatal	14 (18.7%)	-	61 (81.3%)

Based on the table 3, it can be seen that the majority of respondents were satisfied on Intranatal items as many as 74 respondents, and the majority of respondents were dissatisfied with the antenatal items as many as 69 respondents.

**Bivariate Analysis**

**Table 4**  
**Result of Bivariate Analysis**

Service Satisfaction Level	Service Satisfaction								
	Satisfied	P (%)	Average	P (%)	Not Satisfied	P (%)	Total	P (%)	P-Value
Excellent	3	4%	32	42.7%	0	0%	35	46.7%	0.266
Satisfying	2	2.7%	32	42.7%	5	6.7%	39	52.0%	
Poor	0	0%	1	1.3%	0	0%	1	1.3%	
Total	5	6.7%	65	86.7%	5	6.7%	75	100%	

From the table 4, it can be concluded that respondents who were satisfied with the level of excellent were 3 respondents (4%). Respondents who felt average with excellent were 32 respondents (42.7%). Respondents who were satisfied with midwifery services were satisfying as many as 2 respondents (2.7%). Respondents who felt average with satisfying midwifery services were 32 respondents (42.7%). Respondents who felt poor with not satisfied midwifery services were 5 respondents (6.7%). Respondents who felt average satisfied with poor midwifery services were 1 respondent (1.3%). Based on the Chi-Square test obtained p value of 0.266 ( $p > 0.05$ ) so it can be concluded that there is no significant relationship between the quality of midwifery services and service satisfaction.

**Multivariate Analysis**

**Table 5**  
**Result of Multivariate Analysis**

Variables	Unstandardized Coefficients		Standardized Coefficients	t	sig	Co-linearity Statistic	
	B	S.E	Beta			Tolerance	VIF
Tangible	0.248	0.275	0.212	0.883	0.380	0.245	4.079
Reliability	-0.013	0.162	-0.017	-0.082	0.937	0.345	2.902
Assurance	0.084	0.215	-0.105	0.391	0.697	0.197	5.070
Empathy	-0.010	0.158	-0.011	-0.063	0.950	0.503	1.990
Responsiveness	-0.119	0.228	-0.142	-0.523	0.603	0.191	5.226

It is known that the sig value for the effect of tangible on satisfaction of midwifery services is  $0.380 > 0.05$  and the value of t count is  $0.883 < t$  table 1.994, so it can be concluded that there is no influence between tangible and midwifery service satisfaction. From the sig value for the realibility effect on satisfaction of midwifery services is  $0.935 > 0.05$  and the value of t count  $-0.082 < t$  table 1.994, so it can be concluded that there is no significant influence on satisfaction of midwifery services. It is known that the sig value for the influence of assurance on satisfaction of midwifery services is  $0.697 > 0.05$  and the value of t count is  $0.391 < t$  table 1.994, so it can be concluded that there is no influence between assurance and satisfaction of midwifery services.

It is known that the sig value for the effect of emphaty on satisfaction of midwifery services is  $0.950 > 0.05$  and the value of t count is  $-0.063 < t$  table 1.994, so it can be concluded that there is no influence between assurance and satisfaction of midwifery services. It is known that the sig value for the effect of responsiveness on midwifery service satisfaction is  $0.603 > 0.05$  and the value of t count is  $-0.523 < t$  table 1.994, so it can be concluded that there is no influence between responsiveness to midwifery service satisfaction.

**Table 6**  
**Koefisien Determinasi**

Model	R	R Square	Adjusted R Square	Std. Error of the estimate
1	0,167	0,028	-0,042	9,35580

From the table 6, it is known that the R Square value is 0.028, this means that the simultaneous use of midwifery quality (tangible, reliability, assurance, empathy, responsiveness) variables for midwifery service satisfaction is 2,8%.



## Discussion

The results showed that the highest age of respondents was in the age range 26-35 years (Table 1). This shows that many respondents are in productive age. Age is very influential on the level of one's knowledge, the older the person's age, the more experience he receives. In productive age a woman will be more active in digging up information to improve her knowledge. At productive age, a woman can be more active in participating in various activities such as organizations, work groups or so on so that a woman will be easier to receive information“ (Baas et al., 2015).

The work of respondents is based on the results of research that the majority of respondents are housewives (Table 1). Employment as a housewife can be assumed to generally have limitations in income. Work can also affect a person's level of knowledge. Someone who has a high economic level also has a high level of education so that it can influence the level of satisfaction of respondents. This is in accordance with the theory which states that in general the work will have implications for the high demands of health services. The higher the demand for health services, the more difficult it will be to reach a point of satisfaction“ (Baas et al., 2015). So it can be concluded because the majority of respondents were housewives so they did not demand too much about the quality of midwifery services and they assumed that the services midwives gave to them had met their expectations, so they felt that the services provided by midwives were satisfying. However, this does not apply to respondents who are too busy with their work, so they do not have the time to explore information about health to increase their knowledge related to health. In addition, economic conditions also relate to a person's ability to meet needs or facilities that can increase satisfaction with health services“ (Shaban et al., 2016).

Education also greatly influences the level of one's knowledge. In this study, most respondents had high school education (Table 1). From the results of this study, it can be concluded that patients with a majority of high school education tend to feel quite satisfied with the services provided by midwives, according to research that states that the level of service satisfaction is strongly influenced by the level of knowledge of patients“ (Sawyer et al., 2013). Different education of someone will influence someone in making decisions, in patients who are highly educated it is easier to accept a new idea compared to patients who are low educated so that information is more easily accepted. Respondents who have a high level of education tend to be easier to receive information provided by health workers, whereas respondents who have a low level of education will find it difficult to receive information provided by health workers.

Comprehensive midwifery care is a comprehensive midwifery care program, ranging from antenatal care, intranatal care, neonatal care, postnatal care and family planning services. From the results of the research conducted based on four items of quality midwifery services which include tangible, realibility, assurance, empathy, responsiveness, it was found that the average patient felt that the quality of midwifery services provided was satisfactory. However, in the realibility item there were still 20 respondents who stated that midwifery services received by respondents were of poor

quality. Reliability is the ability to provide services that are promised accurately and reliably.

Quality midwifery services will also provide satisfaction to these patients. The low quality of midwifery services will lead to complaints from patients who receive services, if this happens and is not addressed properly, the health facilities will save their patients. The quality of midwifery services is also related to the priority of improving quality and limited funds, services must be selective and appropriate to the needs of patients.

Although the majority of the results of the study showed that many respondents stated that the quality of midwifery services was satisfactory but there were several items that indicated that there were still respondents who felt that the quality of midwifery services provided was not of high quality. This can be seen from item reliability, there are still some respondents who stated that the level of midwifery service they received was not of high quality. This of course can be influenced by several things, including the midwife does not clearly explain the things that must be obeyed in maternal care. This of course can affect the level of service satisfaction. In accordance with the theory that service quality has three main components, namely service quality, technical quality and customer quality. Technical quality describes what customers receive relative to what they know and mostly reflects issues related to the knowledge and experience of health care providers. Customer quality itself refers to the characteristics that customers need to be effectively involved in the health care process, decision making and actions to improve the quality of services delivered. Service quality refers to non-health aspects and reflects the customer's experience of health care with the health system“ (Tabrizi et al., 2014).

The quality of midwifery services shows all forms of actualization of service activities that satisfy those who receive services in accordance with responsiveness, fostering guarantees, showing physical evidence that can be seen, according to empathy from people who provide services in accordance with the reliability of carrying out the services provided consequently to satisfy those who receive service. The quality of midwifery services consists of three levels, namely Quality Surprise (quality), if the reality obtained by consumers exceeds the desired service. Second, Satisfaction Quality (satisfactory), if the reality received by the consumer is the same as the desired service and third, Unacceptable Quality, if the service received by consumers is lower than what is expected“ (Thompson, Land, Camacho-Hubner, & Fullerton, 2015).

In terms of service satisfaction shows that patients feel quite satisfied with the midwifery services provided. Service satisfaction is a subjective and dynamic perception of the extent to which health care needs needed by patients are met“ (Galle et al., 2015). Although almost all respondents stated that the level of service satisfaction they felt was quite satisfied, there were still respondents who were dissatisfied in the items of antenatal care and postnatal care. In the antenatal care item there were 69 respondents who stated they were dissatisfied and in the postnatal care item there were 61 respondents who stated they were not satisfied. Antenatal care is a very important

process for a mother to carry out her pregnancy. Antenatal care is very important for a mother, because antenatal care aims to monitor the progress of pregnancy, ensure maternal well-being and fetal growth, improve and maintain physical, mental and social health of mother and baby, and monitor early problems in pregnancy“ (Srivastava, Avan, Rajbangshi, & Bhattacharyya, 2015). During antenatal examinations care for midwives should always monitor the condition of the mother properly and always provide information needed by the mother during her pregnancy.

Factors that cause the number of respondents who state dissatisfaction are due to communication factors. In providing antenatal care services, midwives are required to always provide counseling in accordance with their complaints and conditions. During the study, researchers observed that there were still many midwives who did not provide counseling in accordance with maternal complaints. So that the problems faced by patients are not resolved properly. This clearly will have an impact on the level of service satisfaction.

Postnatal is also an important stage that is passed by a mother after the mother gives birth to her baby. The postnatal period is the most vulnerable period, where the maternal mortality rate (MMR) occurs most in the postnatal period. Many cases such as bleeding, uterine atony, and placental retention that occur in the postnatal period and are a major cause of maternal death. Therefore, it is important for midwives to provide the best services in the antenatal and postnatal period.

The factor that causes the number of respondents who are dissatisfied is the service factor of the midwife. In providing postnatal care midwives do not provide services in accordance with the standar procedure operasional (SOP), for example in the case of post-natal examinations which midwives should monitor every 15 minutes in the first 2 hours after delivery, midwives only check every 30 minutes or once an hour. This is clearly not in accordance with the standar operational procedure (SOP) and is very dangerous for the mother. Because at two hours postpartum is a vulnerable period where there are many cases of maternal death. Besides the communication factor between midwives and patients, where the midwife does not provide an accurate explanation related to the puerperium. This causes the respondents to feel dissatisfied with the services of the midwife.

In measuring service satisfaction there are two aspects that can affect service satisfaction, namely the component of patient expectations and components of health service performance. Service satisfaction is a reflection of patients and has different domains of health care, including technical, interpersonal, and organizational aspects. Satisfaction with the different aspects of health care received increases health outcomes, continuity of care, compliance, and relationship with providers. Aspects that affect service satisfaction include socio-demographic characteristics (education, age, marital status, and economic status), number of personal factors (values, attitudes, pain thresholds, and personal support). The satisfaction of the mother with the care she received previously can be said to be an experience that results from subjective judgments of what the mothers expected earlier. In antenatal, intranatal, neonatal and

postnatal care assessments, assessment of maternal satisfaction is focused on service availability, physical environment, hygiene conditions, work organization, interpersonal relations with health professionals, and health professional expertise and competencies“ (Matejić et al., 2014).

From the test results using the chi square formula, the results show that there is no significant relationship between the quality of midwifery services to the level of service satisfaction. This is in accordance with the theory which states that the higher the quality of midwifery services the higher the level of satisfaction felt by patients“ (Forster et al., 2016).

Nevertheless other factors can influence the results of the study stating that there is no significant relationship between the quality of midwifery services to the level of service satisfaction. This is influenced by several things. First because of personal needs, in this case the availability of ultrasound devices as supporting antenatal examination. There is no ultrasound device available at the primary health care so that many patients carry out ultrasound examinations at the clinic or at the hospital. Second, internal communication factors, in conducting comprehensive midwifery examinations, midwives are required to provide services in accordance with applicable standards and provide IEC in accordance with patient needs, but due to limited time and availability of midwives in providing midwifery care this results in less midwives in providing services and also IEC so that this also affects the level of service satisfaction. This is consistent with research that states that service satisfaction in some countries regarding midwifery services is still lacking, women show that midwives are less communicative in providing services. They suggested that midwives could be more communicative and pay more attention to women's needs“ (Baas et al., 2015).

When viewed from the statement items contained in the service satisfaction questionnaire, there were some respondents who felt that midwives did not provide clear information related to the administration that applies to patients in the primary health care, midwives did not notify patients about the facilities available at the primary health care and how they were used, midwives also does not give attention to the complaints felt by the patient. In the midwifery questionnaire the respondent also felt that the midwife did not inform the mother about how to care for the newborn and the midwife also did not provide an explanation regarding the care of the postpartum period. This of course will affect service satisfaction, so that although many respondents stated that the quality of midwifery services perceived by respondents was satisfactory and the level of service satisfaction was stated to be quite satisfactory but from several factors above it could influence the results of research and cause no significant relationship between the quality of midwifery services and level of service satisfaction.

Another thing that can affect service satisfaction and the level of midwifery services is in terms of accreditation of health centers. Of the six primary health care that were used as research sites, two main accredited health centers were Piyungan health center and Dlingo I health center, two middle accredited health centers namely Imogiri I health center and Sewon I health center, and two basic accredited health centers namely

Kasihani I health center and Jetis health center also can affect service satisfaction this can be seen from how these health centers apply the standard of service to patients. When the service standard is carried out in accordance with the applicable soup, this will affect service satisfaction. This is consistent with research that states service satisfaction is a reflection of patients and has different domains of health care, including technical, interpersonal, and organizational aspects. Satisfaction with the different aspects of health care received increases health outcomes, continuity of care, compliance, and relationship with providers“ (Matejić et al., 2014).

Service satisfaction is one indicator of service quality that we provide and service satisfaction is a capital to get more patients and to get loyal patients. Loyal patients will reuse the same health services if they need to return. Even loyal patients will invite others to use the same health care facilities. Besides that loyal patients are a means of promotion that is quite efficient. Having loyal patients will increase selling power. Thus, cross subsidies to improve service quality and rewards given to all human resources in health care institutions will increase.

Based on multiple linear regression tests it can be concluded that there is no influence between the quality of midwifery services on the level of satisfaction of midwifery services. From the test shows that in each item the quality of midwifery services (Tangible, Reliability, Assurance, Emphaty, Responsiveness) none of the items that influence the level of satisfaction of comprehensive midwifery services. If seen from multicollinearity which tests whether the regression model is found there is a correlation between independent variables. A good regression model should not have a correlation between independent variables. From the tolerance value and Variance Inflation Factor (VIF) (table 6) we can see that there are no independent variables (Tangible, Reliability, Assurance, Emphaty, Responsiveness) that have a tolerance value of less than 0.10 which means there is no correlation between independent variables whose value is more than 95%. The results of the calculation of Variance Inflation Factor (VIF) also show the same thing that there is no one independent variable (Tangible, Reliability, Assurance, Emphaty, Responsiveness) that has a value of more than 10. So it can be concluded that there is no multicolony between independent variables in the regression model.

There are factors that can influence the absence of the influence of service quality (Tangible, Reliability, Assurance, Emphaty, Responsiveness) on the level of satisfaction of comprehensive midwifery services, these factors are internal communication. Internal communication is communication that is used by an association / service provider to provide services through various promotional efforts and plays a role in shaping consumer desires. In midwifery services communication is a very important aspect.. Therefore, it is important for midwives to improve communication between midwives and patients to improve the satisfaction of midwifery services. From the results of the vision of researchers in the field, the communication of midwives to patients was poor because the number of midwives on duty was not in accordance with the number of patients in the primary health care. The lack of service

time at the primary health care especially in the maternal and child health poly becomes one of the factors that causes poor communication between midwives and patients. This is consistent with research that states that midwives need to improve interactions with patients. The results of the study show that midwives can improve communication with patients and midwives can listen to each patient's complaints. In addition, patients also expressed a desire that midwives can show that they are responding to patient complaints seriously and more carefully“ (Baas et al., 2015).

Based on research conducted which states that many women prefer to conduct examinations in clinics or in obstetricians' practice due to lack of communication by midwives in primary care centers, so that women feel complaints are felt lack of good handling“ (Shabila, Ahmed, & Yasin, 2014). The woman felt that midwives' communication in primary care was so bad that important information regarding pregnancy was not shared with patients. Therefore many patients do not understand about care during pregnancy. Based on this we can see that communication between midwives and patients is very important, not only during pregnancy but in all complaints felt by patients midwives need to provide clear explanations so that patients can find out their health conditions and can know the appropriate treatment for their condition.

Based on (table 6) it can be seen that the empathic variable has the most significant value, which is 0.950. Emphaty is the ease of making good communication relationships, personal attention and understanding the needs of patients. Good communication is proven to increase service satisfaction felt by patients. This will have a good effect during the treatment period. In good communication, midwives can provide education to patients regarding the period of pregnancy, childbirth, childbirth and infant care “ (Sawyer et al., 2013).

In the study in providing services, especially antenatal care, midwives did not provide information related to care during pregnancy so that patients did not understand care during the antenatal period. The antenatal period is an important period for the mother and fetus. In this period it is important for a woman to understand information about pregnancy, especially information about fetal development. Therefore, it is important for midwives to improve communication to patients so that patients get information according to their needs“ (Galle et al., 2015).

## **Conclusion**

The results showed the quality of midwifery services affected the level of service satisfaction by 2.8%. This is caused by several factors including due to personal needs, internal communication factors, and patient service factors at the primary health care.

This research can be used as a reference and learning to improve the quality of midwifery services to reduce maternal mortality and infant mortality. This research can also be used as a reference for further research and to add to the literature on the quality of midwifery services. The results of this study can be used as input to improve the

performance of midwives in providing comprehensive midwifery services, especially antenatal, intranatal, neonatal, and postnatal care to improve service satisfaction with the services provided by midwives.

Midwives are expected to further improve communication to patients, especially in providing IEC related to antenatal, intranatal, neonatal and postnatal care, so that with this it is expected that patients will increasingly understand and will carry out recommendations given by midwives, if patients are able to properly implement the midwife's recommendations it is expected can reduce maternal and infant mortality. Primary health care can hold effective communication training to improve communication between midwives and patients, so that patients can receive information regarding their conditions properly.

Primary health care can hold audits related to the quality of midwifery services. For example, the primary health care forms an audit team that will conduct a midwife performance audit. An audit can be carried out every 3 months or according to the health center policy. The audit team has the duty to monitor, assess and evaluate the performance of midwives during service to patients. The audit team can consist of midwives, nurses and doctors who are referred to audit staff. The audit results will later become material for improving performance, so that the hope that the quality of midwifery services will increase and this will affect not only service satisfaction but also help reduce maternal mortality and infant mortality in Bantul Regency.

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