

ISSN 2354-7642 (Print), ISSN 2503-1856 (Online) JNKI (Jurnal Ners dan Kebidanan Indonesia) (Indonesian Journal of Nursing and Midwifery) Tersedia *online* pada: http://ejournal.almaata.ac.id/index.php/JNKI

JNKI (Jurnal Ners dan Kebidanan Indonesia) (Indonesian Jurnal of Nursing and Midwifery)

## Relationship characteristic of midwife in pregnancy services and patient satisfaction In Public Health Center, Soreang, Bandung

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## ABSTRAK

Latar Belakang: Pelayanan Kehamilan/Antenatal Care (ANC) sebagai faktor utama dalam menentukan outcome persalinan termasuk deteksi dini faktor risiko dan juga menentukan awal pengobatan ibu hamil yang mengalami komplikasi selama hamil. Kualitas pelayanan kehamilan yang bermutu bergantung pada karakteristik tenaga kesehatan yang memberikan pelayanan, karakteristik terdiri dari usia, kualifikasi pendidikan, pelatihan dan lama kerja. Tujuan:Penelitian ini bertujuan menganalisis hubungan antara karakteristik bidan dalam pelayanan kehamilan dengan kepuasan pasien.

**Metode:** Penelitian ini menggunakan rancangan penelitian analitik cross sectional yaitu pengukuran variabel bebas dan terikat dengan waktu bersamaan. Sampel dalam penelitian ini adalah seluruh bidan yang bekerja di Puskesmas Kecamatan Soreang yaitu 18 bidan. Bidan yang diteliti melakukan pemeriksaan pasien masing-masing berjumlah 8 orang untuk setiap pemeriksaan kehamilan. Teknik pengumpulan data dilakukan dengan pengisian kuesioner kepuasan pasien oleh ibu hamil dan observasi pelayanan kehamilan oleh tenaga terlatih dengan lembar checklist pelayanan kehamilan. Selanjutnya data dianalisis dengan uji chi square dan analisis multivariabel regresi logistik berganda.

**Hasil:** Hasil penelitian terdapat hubungan karakteristik bidan terhadap pelayanan kehamilan yaitu indikator pelatihan secara bivariabel signifikan mempengaruhi pelayanan kehamilan secara keseluruhan dengan uji p 0.007. Waktu tunggu memiliki korelasi negatif terhadap pemeriksaan fisik, laboratorium, konseling dan keseluruhan pemeriksaan kehamilan dengan nilai p 0.002. Analisis multivariabel menunjukkan hasil menunjukkan bahwa faktor karakteristik bidan yang paling mempengaruhi pelayanan kehamilan adalah usia dengan nilai p 0.040 [POR 1.83(1.028-3.259)], pelatihan dengan nilai p 0.019 [POR 2.6(1.168-5.741)]. Tidak ada hubungan pelayanan kehamilan dengan kepuasan pasien dengan nilai p 0.796.

**Kesimpulan:** Dalam pelayanan kehamilan faktor yang paling mempengaruhi adalah usia dan pelatihan yang dilakukan oleh bidan. Terdapat juga korelasi negatif waktu tunggu dengan pemeriksaan fisik dan laboratorium yaitu semakin lama waktu tunggu semakin berkurang pula pelayanan pemeriksaan fisik yang diberikan bidan terhadap pasien. Tidak ada hubungan pelayanan kehamilan dengan kepuasan pasien.

KATA KUNCI: karakteristik bidan; pelayanan kehamilan; kepuasan pasien

# ABSTRACT

**Background:** Pregnancy/Antenatal Care (ANC) services are the main factors in determining delivery outcomes including early detection of risk factors and also determining early treatment for pregnant women who experience complications during pregnancy. The quality of quality pregnancy services depends on the characteristics of health workers who provide services, the characteristics consist of age, educational qualifications, training and length of work.

**Objectives:** This study aims to analyze the relationship between the characteristics of midwives in pregnancy services and patient satisfaction.

**Methods:** This study used a cross-sectional analytical research design, namely the measurement of independent and dependent variables at the same time. The sample in this study were all midwives who worked at the Soreang District Health Center, namely 18 midwives. The midwives studied conducted examinations of 8 patients each for each pregnancy examination. Data collection techniques were carried out by filling out patient satisfaction questionnaires by pregnant women and observing pregnancy services by trained personnel using a pregnancy service checklist sheet. Furthermore, the data were analyzed by chi square test and multivariable multiple logistic regression analysis.

**Results:** The results showed that there was a correlation between the characteristics of midwives and pregnancy services, namely the training indicator in a bivariable manner significantly affected the overall pregnancy service with a p-test of 0.007. Waiting time has a negative correlation with physical examination, laboratory, counseling and overall antenatal care with a p value of 0.002. Multivariable analysis showed that the characteristics of midwives that most influenced pregnancy care were age with p-value 0.040 [POR 1.83(1.028-3.259)], training with p-value 0.019 [POR 2.6(1.168-5.741)]. There is no relationship between pregnancy services and patient satisfaction with a p value of 0.796.

**Conclusions:** In pregnancy services, the most influencing factors are age and training carried out by midwives. There is also a negative correlation between waiting time with physical and laboratory examinations, namely the longer the waiting time, the less physical examination services provided by midwives to patients. There is no relationship between pregnancy services and patient satisfaction.

KEYWORD: characteristics of midwives; pregnancy services; patient satisfaction

Article Info : Article submitted on December 29, 2021 Article revised on February 23, 2022 Article received on March 20, 2022 DOI: http://dx.doi.org/10.21927/jnki.2022.10(1).48-54

#### INTRODUCTION

WHO states that 33–50% of maternal deaths occur, closely related to the low level of health services obtained during pregnancy (1). Pregnancy/Antenatal Care (ANC) as a major factor in determining delivery outcomes includes early screening of risk factors and can also determine the initial treatment for pregnant women who experience complications during pregnancy will be carried out (2).

Quality and quality prenatal care contributes to the health of mothers and children. The Ministry of Health recommends a minimum of 4 pregnancy checks during delivery and according to WHO at least 8 times during pregnancy. It is hoped that more frequent contact during pregnancy will reduce maternal and infant mortality, as well as detect complications that can occur early on in the examination (3).

Regular prenatal care during pregnancy is carried out in trimesters 1, 2 and 3. Pregnant women who do not perform ANC during pregnancy are at greater risk of complications during delivery (2) This is clarified by research conducted by Nurmasari and Sumarmi that pregnant women who are irregular Handayani and Mulyaningsih in their research explained that pregnant women who do not routinely check their pregnancy have a 9.6 times risk of experiencing preeclampsia compared to pregnant women who do routinely (4).

A health service is called a quality health service if the application of a requirement to

health can satisfy the patient (5). Thus, it is hoped that quality pregnancy services can make the patient feel satisfied, while the satisfaction assessment is assessed based on Tangible, Reliability, Responsiveness, Assurance and Empathy (6)(7).

The results of a study in Nepal regarding pregnancy services carried out by Bastola, namely overall satisfaction of pregnancy care services was found to be low and more than half of the respondents did not receive good quality pregnancy services (48.3%). Likewise, research conducted in rural Ethiopia also concluded that satisfaction with maternity services was found to be low (8).

Based on the results of the Soreang and Sukajadi Health Center reports in 2016 that the coverage of ANC services in the working area of the Soreang Health Center K1 (95%), K4 (87.2%), while in the working area of the Sukajadi Health Center K1 (89.7%) and K4 (75.9%). The coverage of this service is one of the lowest in Bandung Regency. Whereas the coverage of K1 and K4 describes the opportunity to detect and treat at-risk pregnant women. With low K1 and K4 coverage, it means that the risks that can occur to pregnant women will be difficult to handle. To get quality pregnancy services, it really depends on the characteristics of health workers who provide services, the characteristics consist of age, education, training and length of work. check her pregnancy to a health worker. A health service is called a quality health service if the application of a requirement to health can satisfy the patient. As for the satisfaction assessment that is assessed, namely based on Tangible, Reliability, Responsivness, Assurance and Empathy.

#### MATERIALS AND METHODS

This study used a cross-sectional analytic research design, namely measuring the independent and dependent variables at the same time. The sample of this study were all midwives who worked at the Soreang District Health Center, namely 18 people. This research was conducted in the Soreang sub-district health center in March-May 2019. The independent variables consisted of education, training, age, and length of work. The dependent variables are pregnancy care and patient satisfaction. The confounding variable is patient waiting time. Data collection techniques are direct observation and questionnaires that have been tested for validity and reliability. The data collected in this study consisted of primary data.

Observation Midwives who perform pregnancy tests on patients with a total of 8 patients per midwife. Assessment of pregnancy services is carried out by observing midwives when carrying out pregnancy services with a checklist sheet. Selection of patients by accidental sampling and providing satisfaction questionnaires to be filled out by patients. Test the validity reliability of each item of satisfaction questions in this research instrument using Spearman Rank correlation test and Cronbach's Alpha test. The results of the calculation of the validity of the question items show that all questions are valid (r value> 0.5). The reliability test of this questionnaire uses Cronbach's Alpha test. The results of the calculation of the validity and reliability of the question items show that all questions are valid (r value> 0.5) and reliable (r value = 0.817). The data obtained will be analyzed by SPSS using the bivariable method of Mann Whitney Test and Chi Square Test, which is significant if r value < 0.05. Multivariable analysis using multiple logistic regression POR (CI 95%) = prevalence odds ratio and 95% confidence interval.

# RESULTS AND DISCUSSION RESULTS

The results of the study show the characteristics of midwives, namely age with

Table 1. Characteristic Midwife

Characteristic	Physical Examination		Laboratory Examination		Counseling		Total Service					
Midwife	Median	Range	р*	Median	Range	p*	Median	Range	p*	Median	Range	p*
Age			0.431			0.413			0.231			0.232
< 35 tahun	100	88.9-100		100	88.9-100		75	50-100		91.3	73,9-100	
35-44 tahun	100	66.7-100		100	83.3-100		87.5	50-100		91.3	69,5-100	
≥ 44 tahun	100	66.7-100		100	83.3-100		75	37.5-100		91.3	65,2-100	
Qualification			0.182			0.100			0.492			0.159
D3	100	66.7-100		100	83.3-100		75	37.5-100		91.3	65,2-100	
D4	100	66.7-100		100	83.3-100		75	37.5-100		91.3	65,2-100	
Training			0.220			0.272			0.018			0.007
Yes	100	66.7-100		100	83.3-100		75	37.5-100		91.3	65,2-100	
No	100	66.7-100		100	83.3-100		75	37.5-100		91.3	65.2-100	
Length of Worki	ng		0.551			0.384			0.601			0.903
< 10 tahun	100	88.9-100		100	83.3-100		75	50-100		91.3	73.9-100	
≥ 10 tahun	100	66.7-100		100	83.3-100		75	37.5-100		91.3	65.2-100	

	Physical Exa	ysical Examination		Laboratory Examination		Counseling		Total Service	
Variable	Correlation Coefficient	р*	Correlation Coefficient	p*	Correlation Coefficient	p*	Correlation Coefficient	р*	
Waiting time	-0.262	0.002	-0.275	0.001	0.113	0.176	-0.043	0.608	

p-value (0.232), educational qualifications with p-value (0.159), length of work p-value (0.903), training in counseling services, p-value (0.018), training in pregnancy services, p-value (0.007) . The results show that the characteristics of midwives related to pregnancy services are midwives who trained.

The table above shows a positive correlation with physical examination, laboratory, counseling and overall antenatal care. Waiting time has a negative correlation with physical and laboratory examinations, namely the longer the patient's waiting time, the less physical examination services provided by the midwife to the patient. Waiting time indicator which bivariably significantly affects physical examination and laboratory examination (p<0.05). The results of multivariable analysis showed that the factor that most influenced pregnancy services was the age of the midwife with a value of p 0.040 [POR 1.83(IK 95% 1.028-3.259)], midwife training with value p 0.019 [POR 2.6(IK 95% 1.168-5.741)].

Based on the results of the bivariable analysis in the table, it is found that the age of midwives < 35 years produces dissatisfaction for pregnant women as many as 35 (24.3%) the length of work of midwives 10 years makes pregnant women feel dissatisfied as many as 67 people, midwives who do not attend training also make pregnant women not 55 people were satisfied, and D3 midwife education made patients dissatisfied as many as 82 people, there was no significant relationship between

 
 Table 3. Multivariable analysis of the relationship of various factors with pregnancy services by midwives

Variable	Koefisien B	SE	p** Value	POR (IK 95%)
Age (35-44)*	1.179	0.500	0.018	3.251(1.219-8.669)
Age (≥ 45)*	1.143	0.586	0.051	3.136(0.995-9.886)
Qualification	-0.931	0.541	0.090	0.394(0.134-1.156)
Training	0.863	0.410	0.035	2.369(1.061-5.293)
Length of Working	-0.838	0.514	0.103	0.432(0.158-1.185)

Variable	Not Satisfied (<100)	%	Satisfied (≥100)	%	p* Value
Age					0.663
< 35 tahun	35	24.3	15	10.4	
35-44 tahun	34	23.6	14	9.7	
≥ 45 tahun	30	21	16	11	
Length of Work	ing				0.578
< 10 tahun	30	21	18	12.5	
≥ 10 tahun	67	46.5	29	20	
Training					0.691
Training	42	29	22	15	
Tidak	55	38	25	17.4	
Training					
Qualification					0.578
D3	82	57	38	26.4	
D4	15	10.4	9	6.25	

 Table 4. The Relationship between Midwife

 Characteristics and Patient Satisfaction

the characteristics of midwives and patient satisfaction.

Table 5. Relationship between Pregnancy Services and Patient Satisfaction

Variable	Not Satisfied (<100)	%	Satisfied (≥100)	%	p* Value			
Physical Examination								
< Median	18	12,5	10	38.2	0.699			
≥ Median	79	55	37	26				
Pelayanan Laboratorium								
< Median	20	14	10	38.2	0.927			
≥ Median	77	54	37	36				
Counseling								
< Median	27	19	14	10	0.808			
≥ Median	70	49	33	23				
Total Service								
< Median	35	24	18	12.5	0.796			
≥ Median	62	43	29	20				

Based on the results of bivariable analysis of pregnancy services by midwives on patient satisfaction, there was a physical examination carried out by midwives. The median found dissatisfied patients as many as 79 (55%), there was no significant difference between physical examination, laboratory services, counseling services, overall services and patient satisfaction.

#### DISCUSSION

The results of the multivariable analysis showed that the education and length of work of the midwife did not affect pregnancy services, while the age of the midwife significantly affected the pregnancy service with the results of the analysis [POR 1.83 (95% CI 1.028-3.259)]. Health workers are the spearhead of health programs in an effort to reduce MMR, requiring mental and physical maturity in various actions and in decision making. For this reason, health workers are needed who have a mature way of thinking and acting (9). This is in line with Gibson's opinion that as a person ages, the person will absorb a lot of information and this information will affect him. In addition, as a person's age increases, his thinking will develop in accordance with the knowledge that has been obtained and will be careful and agile in doing his job (10)(11). From this opinion, the age of the midwife will have an effect on pregnancy services, where with increasing age it will also improve the pregnancy services provided by the midwife to the patient. The mean age of the midwife in this study was 39 years old, this shows that the older the age, the better the pregnancy services provided.

Midwife education has no significant effect on services, the majority of midwives at the Soreang District Health Center as many as 83% have D3 education. Education may not have an effect because the number of midwives who have received D4 education is only 17% and this makes it difficult to compare between D3 and D4. Research conducted in Asia explains that education and training opportunities are important for health workers for the personal and career development and skills of midwives (8).

Service quality is a measure of how well the level of service provided is in accordance with the wishes of the patient. Patients will feel satisfied if the performance of health services they get is the same or exceeds expectations and vice versa. Dissatisfaction or feelings of disappointment will arise if the performance of the health services they receive does not match their expectations

Based on the results of this study, there was no significant relationship between pregnancy services and patient satisfaction. This is the same as research conducted by Mayasari in 2015 at RSIA AMC that there is no relationship between clinical services and patient satisfaction, because patients are still satisfied with poor service and assume that disease information is not given in detail but they are still satisfied because they are comfortable. with the examining doctor (12).

This is in contrast to a study conducted by Oladapo in Nigeria in 2008, that there is a relationship between pregnancy services and patient satisfaction at the puskesmas there, although there are some gaps between expectations and reality in pregnancy services (13).

Research conducted in Nigeria also explains that there is a relationship between pregnancy services and patient satisfaction in terms of health workers who are caring, empathetic, easy to contact, have good skills. The findings explain that although there is a significant relationship between service and satisfaction, there are services that are lacking in terms of clinical examination and counseling (9).

From the results of researcher interviews with pregnant women who have the characteristics of junior high school education as many as 62 people (43%), on average said they did not know the benefits of comprehensive pregnancy services, and the majority of them were satisfied with pregnancy services at the Soreang Health Center because it was considered complete and cheap.

Research conducted in Soreang found counseling that was often not done by midwives, namely family planning by 43%, BBL by 55% and preparation for childbirth 69%. This is in line with research conducted in Kazakhstan that pregnant women receive little or no information about family planning and childbirth. Although this is often considered unimportant in counseling because it is considered that it can still be given during the puerperium, it should be given so that the mother and Families can prepare physically and psychologically to face childbirth and the postpartum period.

One of the variables in this study regarding the significant waiting time for services, namely p = 0.002 with a negative correlation to the physical examination, meaning that the longer the patient waits to be examined, the shorter the physical examination is carried out. According to research conducted by Oladapo in Nigeria and Galle in Belgium, long waiting times make patients dissatisfied with services. This improvement should be about making it easier for patients to see a midwife or shortening long waiting times, not just focusing on medicalization (14)(15).

Research conducted by Chemir found that waiting time makes patients dissatisfied with pregnancy services, this can actually be overcome by improving the quality of counseling (14)(16).

### **CONCLUSION AND RECOMMENDATION**

In maternity services, the most influencing factors are age and training carried out by midwives. There is also a negative correlation between waiting time with physical and laboratory examinations, namely the longer the waiting time, the less physical examination services provided by midwives to patients. This is the basis that the waiting time for examination is not long so that the pregnancy services provided are good and can increase the indicators of patient satisfaction with services.

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