

Service quality of integrated Antenatal Care (ANC) and pregnant women participation on Human Immunodeficiency Virus (HIV) tests

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ABSTRACT

World Health Organisation (WHO) data in 2016 estimated that 36.7 million people suffered from HIV globally, and 34.5 million among them were adults. Yogyakarta Special Province in 2016 found that there were 2,954 cases of HIV with the highest cases in Sleman Regency as many as 868 cases. The purpose of this study was to determine the relationship between perceptions of integrated antenatal care quality service and the participation of HIV testing of pregnant women. The study applied cross sectional research method. The population in this study were pregnant women who performed ANC in a public health centre in September - November 2018 with a total of 318 pregnant women. The samples in the study were 154 with the simple random sampling technique. The instrument of data collection in this study used a questionnaire. Data analysis employed chi Square and logistic regression. The results of bivariate statistical tests using chi square showed that sig value = 0.000 < 0.05 with OR 13.896 meaning that women who had a good perception of the quality of ANC services had 13.896 higher chance to have HIV tests compared to those who had poor perceptions of the quality of integrated ANC services. Good perception of the quality of integrated ANC services for pregnant women had a greater chance of taking an HIV test.

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1. Introduction

The incidence of HIV worldwide continues to increase every year. The WHO data show that in 2016 HIV cases is estimated to be as much as 36.7 million globally, as much as 34.5 million of whom are adults. Of 17.8 million of the infected are women and as many as 2.1 million children under the age of 15 years. The number of deaths from Acquired Immunodeficiency Syndrome (AIDS), is as many as 1 million people, with the Division of 890 thousand of whom are adults and as many as 120 thousand are children less than 15 years old (WHO, 2016).

Research results (Bindoria et al., 2014) discovered that HIV testing which integrated with the ANC can improve prevention of HIV transmission from mother to baby. Research results Gunn et

al., (2016) found that HIV testing initiated by health workers managed to increase the scope of tests on sexually transmitted infections (STI) and HIV, as compared to the control group ($p = 0.008$). Service quality perceptions of the ANC may well affect the participation of expectant mothers in conducting HIV testing. It is influenced by the quality of service received by pregnant women in accordance with the desired hope so cause the desire in the utilization of existing health facilities (Fawole, Okunlola, & Adekunle, 2009).

According to Panasuraman et al, in Ramseook-munhurrin, Lukea-bhiwajee, & Naidoo (2010) health services is divided into five quality dimensions i.e. Tangibles, Reliability, Responsiveness, Assurance and Emphaty. The five dimensions of service quality is used to measure the quality of health services or better known as Service Quality (SERVQUAL). Good quality service will affect the decision making of the community to the repeated utilization of a continuous nature against the granting of the same service. Toha, research results (2010) shows the perception of responsiveness is the dimension that have a relationship than most other dimensions (Assurances, tangible, emphaty and reliability).

Sleman Regency Health Office data shows that the number of pregnant women by the year 2017 was 10,171 and from those expectant mothers 9,734 (95.70%) accessed HIV test. This study aimed to determine the relationship between perceptions of integrated antenatal care quality service and the participation of HIV testing of pregnant women.

2. Research Methods

This type of research is conducted the survey with cross sectional design. The population in this research is all the pregnant women who accessed integrated ANC in a public health centre. Sampling technique used simple random sampling with a total sample of 154 respondents. Instruments used to measure the perception of the quality of the service called the SERVIQUAL questionnaire (Service Quality). The bivariate test used the chi square test and test using multivariate logistic regression test.

3. Results And Discussion

3.1. Results of the Univariate

Table 1. Results Univariate Analysis

Number	Variable	Category	F (n = 154)	Percentage (%)
1.	The Perception Of The Quality Of ANC Integrated	Good	71	46,1
		Not Good	83	53,9
	<i>Tangible</i>	Good	71	46,1
		Not Good	83	53,9
	<i>Reliability</i>	Good	70	45,5
		Not Good	84	54,5
	<i>Responsiveness</i>	Good	77	50,0
		Not Good	77	50,0
	<i>Assurance</i>	Good	61	39,6
		Not Good	93	60,4
	<i>Emphaty</i>	Good	70	45,5
		Not Good	84	54,5
	2.	The Participation Of HIV Testing	Join The HIV Testing	107
Do not join the HIV testing			47	30,5

Based on table 1, the perceptions of pregnant women on the quality of ANC was mostly good i.e. 53.9% of the five dimensions of service quality perception SERVIQUAL. The perception of

responsiveness is the best among them a perception of dimensions other i.e. amounting to 50% and that is not good is the perception of Assurances 60.4%, knowledge of pregnant women about HIV is mostly not good i.e. 50.6%, the attitude of the vast majority of pregnant women is not good namely 51.9 per cent and most expectant mothers do HIV testing i.e. 69.5%.

The results of this study is inline with previous studies conducted by Munaryo (2008), that the quality of the most dominant influence utilization facilities service and repeated visits inpatient HOSPITALS in Bradford is a quality dimension power responsiveness. The results of the analysis of the responsiveness of the service quality antenatal care shown that the more responsiveness of midwives providing the services the higher the respondents give the level of a good quality services.

Based on the research of Ekanem & Gbadegesin, (2009) the participation of pregnant women on HIV testing is associated with supports of healthcare in terms of facilities and infrastructure. Pregnant women who received Antenatal Care Services (ANC) have knowledge and subsequently lead them to access counseling and test. HIV test participation is affected by access to information, the perceived benefits, health workers, support the recommendation of the husband, education and knowledge.

3.2. Bivariat Analysis

Table 2. Relationship of perception of pregnant women about the quality of the integrated ANC and participation of HIV testing

The Perception Of Service Quality ANC	The Participation Of HIV Testing		Total	P value	OR		
	HIV Testing	No HIV Testing					
	F	%	F	%	N	%	
Good	65	60,7	6	12,8	71	46,1	10,575
Not Good	42	39,3	41	87,2	83	53,9	0,000 (4,129-27,086)

Based on table 2, it is suggested that there is a statistically significant relationship between perceptions of pregnant women about the service quality of the integrated ANC with access to HIV test. It can be seen from the result that in the value of the p value 0.00 ($0.00 < 0.05$) with the value OR 10.575 which can be interpreted that pregnant women who have the perception of the quality of the ANC will either 10.575 times larger to accessed HIV testing. The results of this study support the research conducted Sánchez-Gómez et al (2014) that despite many obstacles, counselling and HIV testing can still be performed and accepted by the pregnant women who wished to reduce the risk of transmitting HIV to his son in the event when the service could provided appropriate health workforce.

The perception of service quality will affect the use of the facilities. With respect to the standard of the implementation of the integrated implementation of the ANC, there is aspect which is necessary to be considered i.e. the role of health worker (midwife) that support the implementation of HIV testing (improving the quality of service, inform about the availability of HIV testing, understanding support sources and restricting factors). Previous research reveals that screening of HIV/AIDS amongst pregnant women is safe and effective for the prevention of the transmission of HIV from mother to baby.

Table 3. Relationship of perception of pregnant women about 5th dimensional quality of the Integrated ANC and participation of HIV testing

Variabel	The Participation Of HIV Testing				Total	P value	OR
	HIV Testing		No HIV Testing				
	F	%	F	%			
Tangible							
Good	61	57,0	10	21,3	71	46,1	4,907
Not Good	46	43,0	37	78,7	83	53,9	0,000 (2,212-10,882)
Reliability							
Good	66	61,7	4	8,5	70	45,5	17,305
Not Good	41	38,3	43	91,5	84	54,5	0,000 (5,782-51,788)
Responsiveness							
Good	61	57,0	16	34	77	50,0	2,569
Not Good	46	28,6	31	66	77	50,0	0,001 (1,258-5,249)
Assurance							
Good	55	51,4	6	12,8	61	39,6	7,228
Not Good	52	48,6	41	87,2	93	60,4	0,000 (2,832-18,444)
Emphy							
Good	65	60,7	5	10,6	70	45,5	13,000
Not Good	42	39,3	42	89,4	84	54,5	0,000 (4,758-35,520)

Based on table 2 it can be seen that it is interpreted that the perception of the five dimensions of service quality of ANC. The best dimension was responsiveness i.e. 50% and the least good dimension is guarantee i.e. 60,4%. It means that there are relationships amongst the five dimensions of service quality of the ANC with the participation of HIV testing. It can be seen from the value of the p value 0.000 ($0.000 < 0.05$) with the value OR the highest among the five dimensions of service quality, the reliability reached up to 17.303 which means that pregnant women who have the perception of reliability will either 17.303 times greater to perform HIV testing and value OR the lowest is the perception of responsiveness 2.596.

The results of this is inline with the results of the study Jallow et al., (2012), where the patient's perceptions about reliability of service related to the participation of HIV testing. When patients receive a good and complete information, it would encourage pregnant women in utilizing the services provided by the service givers. An explanation of the benefits of HIV testing has a great influence for expectant mothers to access HIV testing because it would have benefits for both mother and fetus. The results of the research conducted by Papanikolaou & Zygiaris (2012) stated that the existence of a relationship between a guarantee with the participation of HIV testing. The ability of health workers in giving high guarantees or good to users of the service will increase the desire of service users in utilizing the facilities that have been offered by the giver of services. HIV testing is sensitive for the community because of the negative stigma in society about HIV disease.

The ability of responsiveness that is given a midwife in dealing with patients perception of the causes about the quality of service will be impacted positively. This is apparent from the form of wise and can persuade patients to take advantage of the facilities and get the service. Assessment of responsiveness of service is an assessment of the quality of service the most dynamic. Customer expectations about the speed of service tend to increase over time in line with advances in technology and health information are owned by customers (Achidi, 2015). The results of research performed by Nwaeze et al (2013) which declared the existence of a relationship between empathy with the participation of HIV testing. Health workers can provide good services with a focus on the patient and listen to complaints and try to be a good partner for pregnant women so that expected to cultivate an attitude of openness to patients about problems encountered.

Granting of services of quality and the ANC on HIV testing of pregnant women for free can also cause a high acceptance/desire in this research. Different things is likely to happen if service of process standards of the ANC and VCT real charged to pregnant women. Policies, systems and

support from all parties need to be prepared to support the implementation of the standards of the ANC and HIV testing in an effort to prevention of HIV from mother to infant (Groves & Wyckoff, 2008).

4. Conclusion

There is a significant relationship between service quality perceptions the ANC with integrated participation of HIV testing with sig = 0.000 < 0.05 with OR 10.575 means mothers who have the perception of service quality will likely ANC 10.575 times test HIV compared with mothers who have integrated the service quality perceptions the ANC is not good.

5. Recommendation

Expected to improve the quality of service of the ANC so that integrated perception of service quality to be good and was able to increase participation do HIV testing

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