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# Analysis of Factors Related to Midwife's Performance in Filling the "Poedji Rohyati" Score in Early Detection of High Risk Pregnancy atPublic Health Center of Lima Puluh Kota District

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**A B S T R A C T**

One indicator that determines community health status is mortality. Midwives as the spearhead of antenatal care must be able to prevent maternal mortality rates (AKI) by increasing their performance in providing antenatal services in accordance with standards. One attempt to prevent AKI is by early detection of high-risk pregnancy using the PoedjiRohyati score card (KSPR). Midwife's performance is influenced by several factors, namely individual, organizational and psychological factors. This study aims to analyze the factors related to the performance of midwives in filling the PoedjiRohyati score card on early detection of high-risk pregnancies in the Lima Puluh Kota District Health Center.

This study uses a combination of quantitative and qualitative methods. Quantitative research samples were 74 respondents, data collection was carried out from January to February 2018 with interview techniques using questionnaires and observation sheets. While the qualitative research informants were the Head of Community Health and Nutrition, the head of the puskesmas and the midwife coordinator of the Piladang, Taram, Koto BaruSimalanggang and TanjungPati health centers.

The results of the study prove that the factors associated with the performance of midwives in filling in the KSPR include the level of knowledge (p = 0.031), attitude (p = 0.004), motivation (p = 0.020) and supervision (p = 0.025). The factors that are most related to the performance of midwives in filling in KSPR are attitudes (p = 0.006).

Based on the research, it can be concluded that the midwife will have a good performance in filling in the KSPR if it is based on a high level of knowledge, a positive attitude, high motivation, periodic supervision and supported by complete facilities.

## I. INTRODUCTION

The highest level of public health is the direction of health development that is characterized by increased awareness, willingness, and healthy living ability for everyone. Indicators that determine the degree of public health are mortality, morbidity, and nutritional status. Mortality is determined by infant mortality rate, under-five mortality rate, maternal mortality rate, and life expectancy (District Health Office Lima Puluh Kota, 2014). The degree of public health is influenced by many factors, which not only come from the health sector such as health services and the availability of facilities and infrastructure, but also influenced by economic factors, education, social environment, heredity and other factors.[1]

Mortality is the death rate that occurs in a certain period of time and place caused by certain circumstances, can be in the form of illness or other causes.Based on the results of Maternal Perinatal Audit (MPA), it is known that late detection of pregnancy complication is an indirect cause of maternal and infant death. Delays and complications that are the direct and indirect cause of maternal death can be prevented through early detection by health and community personnel. Cases of maternal deaths in the world occur around 600,000 women at the age of 15 to 49 years each year due to complications during pregnancy and childbirth.[1] Based on Indonesia Demographic and Health Survey (SDKI), AKI in 2012 amounted to 359 per 100,000 live births. AKI again showed a decline to 305 per 100,000 live births based on the results of the Intercensal Population Survey (SUPAS) in 2015.[2]This issue is a priority in Sustainable Development Goals (SDG's) where it says that the target of SDG's in 2030 is down to 70 / 100,000 live births.[3]

Data from West Sumatera Provincial Health Office shows that the number of maternal deaths in West Sumatera reached 90 people in 2013, lower than the previous year in 2012 of 99 people. Achieving coverage of pregnant women receiving antenatal care has not reached the target (89%). Based on data obtained from the Provincial Health Office of West Sumatra found that the District of Lima Puluh Kota is in the second lowest achievement of the antenatal coverage of 65.52% .[4]

Based on data obtained from the District Health Office of Lima Puluh Kota, it is known that the case of maternal mortality increased from 49.17 / 100.000 live births in 2013 to 133.27 / 100,000 live births in 2014.[5]

In practicing midwifery for pregnant women, midwives are required to provide quality services, especially in early detection of risk in early pregnancy as a step to reduce AKI. For this reason, midwives should use a tool that is used to detect early risk of pregnancy, namely the PoedjiRohyati scorecard, which is basically contained in the Maternal Health Care book given to mothers in early pregnancy and must be carried every visit to health facilities. Risk factors can be measured quantitatively in the form of scores, but its value is not absolute prediction.[6]

Risk factors can be measured quantitatively in the form of scores, but its value is not absolute prediction. The "PoedjiRohyati" (KSPR) score card is one way to detect early pregnancies that have a greater risk than usual (for both mother and fetus), disease or death will occur before or after childbirth.[6] The achievement of a predetermined goal is one Individual performance indicators. Individual work results depend on one's behavior in doing the job.

The achievement of the established goals is one indicator of individual performance. The work of the individual depends on the person's behavior in carrying out the work. The measurement of individual work results is done by evaluating the results of the tasks of a person or what products are produced. Therefore, midwives as the spearhead of antenatal care must improve their performance in providing antenatal services according to standards. Adopting the Gibson performance model, midwife's performance in providing antenatal care is influenced by several factors: individual factors (level of knowledge, employment, employment status, family, demographics), organizational factors (supervision, work facilities, training and development, workload, resources, structure, rewards, leadership), and psychological factors (motivation, attitude, perception, personality, work ethic and task design).[7]

One of the steps that can be done in early detection during pregnancy, one seen in the frequency of pregnant women in making visits. Pregnant women are advised to make a visit as much as 4 (four) times that once in the first trimester, once in the second trimester and twice in the third trimester. Achieving coverage of pregnant women receiving antenatal care has not reached the target (89%). Based on data obtained from the Provincial Health Office of West Sumatra found that the District of Lima Puluh Kota is in the second lowest achievement of the antenatal coverage of 65.52%.[5]

Based on the research journals conducted by Sri Rulihari, et al (2014) on factors related to the performance of midwives in the use of PoedjiRohyati scores on risk detection of pregnant women in the private practice midwife (BPS) of Gresik Regency stated that BPS had good performance in the use of scores PoedjiRohyati (56.67%) Variables related to the performance of midwives were knowledge, attitudes, motivation, perception of supervision of the Health Office and perceptions of IBI supervision, while workload variables proved to be unrelated to performance.[13]

The purpose of this study was to analyze factors related to midwife's performance in filling the "PoedjiRohyati" scorecard in early detection of high-risk pregnancy at PuskesmasKabupaten Lima Puluh Kota 2017.[6]

## II. METHODS

This study uses a combination approach (qualitative and quantitative research methods) that is observational. Quantitative research uses cross sectional design. Qualitative research by conducting in-depth information about midwife's performance in KSPR filling. This research was conducted in 4 selected health centers in Lima Puluh Kota District. The sample in quantitative research is 74 respondents proportional random sampling. While the sample in qualitative research are 9 informants consisting of head of family health and nutrition section, head of puskesmas and midwife coordinator at 4 (four) puskesmas. The data were collected using questionnaires, observations and in-depth information. The sampling technique was carried out in proportional random sampling, namely the proportion-taking technique to obtain a representative sample, taking subjects from each stratum or regionally balanced or comparable in each region. After obtained the large sample at each - each Puskesmas, then do the sampling by simple random sampling technique that is taken with simple random sample using raffle until sufficient number of samples needed at every Puskesmas. [8]

The analysis was performed univariate with frequency distribution, bivariate with Chi-Square test and multivariate analysis with Multiple Logistic Regression test.[8]

The inclusion criteria in this study are: Midwives on duty at accredited Puskesmas, willing to be a respondent,able to communicate well, being in place at the time of research (2 visits).While the exclusion criteria in this study are:Midwives performing independent practices (BPM), midwives who are sick, midwives who are studying permits.[8]

The in-depth interview informants in this study are as follows:Head of the family health and nutrition section of the Lima Puluh Kota District Health Office (informant 1), Head of Piladang Health Center (informant 2), Head of Simalanggang Koto Baru Health Center (informant 3), Taram Health Center Head (informant 4), Head of PuskesmasTanjungPati (informant 5), Piladang Community Health Center Midwife Coordinator (informant 6), Midwife Coordinator of Koto BaruSimalanggang Public Health Center (informant 7), Midwife Coordinator of Taram Health Center (informant 8), Midwife Coordinator for PuskesmasTanjungPati (informant 9).

Research Variables are: Independent Variables: Level of Knowledge, Workload, Attitude, Motivation and Supervision. Dependent Variables: Performance of Midwives.

Quantitative Research Instruments: The instruments used are questionnaires for the variables of knowledge, workload, attitude, motivation, and supervision regarding the filling of KSPR and stationery. The questionnaire used in this study has been tested for validity and used by previous researchers. Qualitative Research Instruments: The tools used are questionnaires, in-depth interview guidelines (Indepth Interview), documents, checklist sheets, pens, voice recording devices and cameras

Research Procedures: Every midwife in the Lima Puluh Kota District Health Center is based on a sample calculation and in accordance with the inclusion criteria is given an explanation of the research to be conducted. For respondents who agree, they will be asked to sign an informed consent form. After that, the researcher will conduct an interview using a questionnaire and observe the completeness of completing the PoedjiRohyati score card. After the quantitative data was collected, the study continued with the collection of qualitative data using in-depth interviews, namely the head of the family health and nutrition section of the Lima Puluh Kota District Health Office, the Puskesmas Leader and the KIA program coordinator midwife at each Puskesmas.[8]

Primary data collection: Data collection was conducted by interview using questionnaires to midwives at the Lima Puluh Kota District Health Center according to the inclusion criteria and in-depth interviews (Indepth Interview) to the Community and Nutrition Health Section of the Lima Puluh Kota District Health Office, Head of the Piladang Health Center, Taram Health Center, PuskesmasKimalBaruSimalanggang and TanjungPati Public Health Center as well as the KIA Program Midwife Coordinator for each selected Puskesmas.Secondary data collection: Data collection is done by tracing and reviewing reports or documents related to the research.[8]

| | **DinkesKab 50 Kota** | **PimpinanPuskesmas** | **BidanKoordinator Program KIA** |
|---|---|---|---|
| **Input** | | | |
| SDM | - | √ | √ |
| Sarana | √ | √ | √ |
| **Proses** | | | |
| Kepatuhan pengisian KSPR | - | √ | √ |
| Monitoring dan evaluasi | √ | √ | √ |
| **Output** | | | |
| Kelengkapan pengisian KSPR | - | √ | √ |

Quantitative Data Validity: The validity of quantitative data was carried out on questionnaires and review of documents related to the study. Where previously validity tests were conducted on available questionnaires.Qualitative Data Validity: Qualitative Data Validity is carried out with 3 (three) steps:1) Data validity is done by triangulation, that is using triangulation of source using various data source like document, result of interview, observation result.2) Triangulation of methods, namely data obtained by in-depth interviews, then checked by observation and documentation, 3) Triangulation of data is that if the three methods of testing the credibility of the data produce different data, then the researcher to further discussion to the relevant data source or another, to ensure which data are considered correct. Or maybe everything is right, because the point of view is different.[8]

Quantitative Data Analysis: Quantitative data processing is done through computerization process. Stages of quantitative data analysis procedures, namely:

a) Univariate Analysis
   Univariate analysis is done to explain or describe the characteristics of each research variable. This analysis generally results in frequency distribution and percentage of each variable (Notoatmodjo, 2010).
b) Bivariate Analysis
   If univariate analysis has been carried out, the results will be known for the distribution characteristics of each variable and proceed to bivariate analysis, which is carried out on two variables that are allegedly related or correlated. The analysis of the statistical test results using Chi-Square test to be able to conclude the relationship of two variables meaningful or not meaningful. This study will use the significance level $\alpha = 0.05$, meaning the error of the analysis of 5% or the confidence level of the estimate of the 95% population. Decision-making data analysis if the value of $p < 0.05$ then Ho rejected (Notoatmodjo, 2010).
c) Multivariate Analysis
   Multivariate analysis in this study is to determine what factors are most related to the performance of midwives in charging KSPR in early detection of high-risk pregnancy. The statistical test used is multiple logistic regression (multiple logistic regression).

Qualitative Data Processing and Analysis: Processing and analysis of qualitative data is done in the following way:

1) Make data transcripts
   Copy recorded information into notes. Each source is given source code so that data can be traced back if there are any shortcomings.
2) Data reduction
   Collect and clarify data according to the theme specified.
a) Presentation of data
   Presentation of data in the form of matrix and qualitative
b) Conclusion and verification
   Make conclusions and interpret data from interviews, find patterns and relationships and make general findings

## III. RESULT

The data of the research were obtained by interviewing 74 midwives in 4 (four) selected Puskesmas in Kabupaten Lima Puluh Kota. After the data were analyzed univariat, bivariate and multivariate then obtained result as follows:

### A. Univariat Analysis

**Tabel 1. Respondents Frequency Distribution Based on Factors Associated with Midwife Performance in Filling KSPR**

| Characteristic | f | % |
|---|---|---|
| Midwife's Performance | | |
| - Not really good | 49 | 66,2 |
| - Good | 25 | 33,8 |
| Level of knowledge | | |
| - Low | 41 | 55,4 |
| - High | 33 | 44,6 |
| Attitude | | |
| - Not really good | 29 | 39,2 |
| - Good | 45 | 60,8 |
| Motivation | | |
| - Not really good | 42 | 56,8 |
| - Good | 32 | 43,2 |
| Work Burden | | |
| - Though | 13 | 17,6 |
| - Mild | 61 | 82,4 |
| Supervision | | |
| - Not really good | 47 | 63,5 |
| - Good | 27 | 36,5 |

Based on table 1.it can be seen that more than half of midwives have poor performance in performing KSPR charging, more than half of midwife's knowledge about KSPR filling is still low, have good

attitude, have bad motivation, have light work load and get poor supervision.

### B. Bivariat Analysis

**Table.2 Relationship between Knowledge Level, Attitude, Motivation, Workload and Supervision with Midwife Performance in Charging KSPR**

| Variables | Midwive;s performance | | | | Total | | p |
|---|---|---|---|---|---|---|---|
| | Not good | | Good | | | | |
| | f | % | f | % | f | % | |
| Level of Knowledge | | | | | | | |
| - Low | 32 | 78 | 9 | 22 | 41 | 100 | |
| - High | 17 | 51,5 | 16 | 48,5 | 33 | 100 | 0,031 |
| Total | 49 | 66,2 | 25 | 33,8 | 74 | 100 | |
| Attitude | | | | | | | |
| - Not really good | 13 | 44,8 | 16 | 55,2 | 29 | 100 | |
| - Good | 36 | 80 | 9 | 20 | 45 | 100 | 0,004 |
| Total | 49 | 66,2 | 25 | 33,8 | 74 | 100 | |
| Motivation | | | | | | | |
| - Low | 33 | 78,6 | 9 | 21,4 | 42 | 100 | |
| - High | 16 | 50 | 16 | 50 | 32 | 100 | 0,020 |
| Total | 49 | 66,2 | 25 | 33,8 | 74 | 100 | |
| Burden of works | | | | | | | |
| - Though | 11 | 84,6 | 2 | 15,4 | 13 | 100 | |
| - mild | 38 | 62,3 | 23 | 37,7 | 61 | 100 | 0,197 |
| Total | 49 | 66,2 | 25 | 33,8 | 74 | 100 | |
| Supervision | | | | | | | |
| - Not | 36 | 76,6 | 11 | 23,4 | 47 | 100 | |
| - really good | 13 | 48,1 | 14 | 51,9 | 27 | 100 | 0,025 |
| - Good | | | | | | | |
| Total | 49 | 66,2 | 25 | 33,8 | 74 | 100 | |

Based on table 2 it can be seen that the percentage of poor midwife performance in charging KSPR is greater in midwives who have low knowledge level compared with midwives who have high knowledge level. After Chi-square test, there was a significant correlation between knowledge level and midwife's performance in KSPR charging, the percentage of poor midwife performance in charging KSPR was greater in midwife who had good attitude compared with midwife who had less good attitude. After Chi-square test, there was a significant correlation between attitude and midwife performance in KSPR charging, the percentage of poor midwife performance in charging KSPR was greater for midwives who had less good motivation compared with well-motivated midwives. After Chi-square test, there was a significant correlation between motivation and midwife's performance in KSPR charging, the percentage of poor midwife performance in charging KSPR was greater in midwife who had heavy workload compared with midwife who had light work load. After Chi-square test, there was no significant relationship between work load and midwife's performance in KSPR charging, the percentage of poor midwife performance in charging KSPR was greater for midwife who received poor supervision compared with well-supervised midwife. After Chi-square test, there was a significant correlation between supervision and midwife performance in KSPR filling.

### C. Multivariat Analysis

**Table. 3 Simple Logistic Regression Analysis**

| No | Variables | Ekp β | 95% CI (OR) | p | Masuk |
|---|---|---|---|---|---|
| 1 | Performance | 0.510 | 0.072-0.571 | 0.002 | + |
| 2 | Motivasion | 3.667 | 1.333-10.084 | 0.010 | + |
| 3 | Burden of works | 3.329 | 0.677-16.376 | 0.103 | + |
| 4 | Supervisi | 3.524 | 1.280-9.704 | 0.013 | + |
| 5 | Knowledge | 3.346 | 1.223 – 9.155 | 0.016 | + |

Based on the above table can be seen that there are all variables will go into full model with a value of p <0.25 (Mickey-Greenland, 1989).

**Table. 4 Multiple Logistics Analysis Full Form Model**

| Variables | B | SE | Wald | Sig | Ekp β | |
|---|---|---|---|---|---|---|
| Performance | -1.651 | 0.600 | 7.564 | 0.006 | 0.192 | |
| Motivation | 0.729 | 0.603 | 1.461 | 0.227 | 2.074 | |
| Burden of works | 1.355 | 0.908 | 2.226 | 0.136 | 3.877 | |
| Supervision | 0.967 | 0.620 | 2.430 | 0.119 | 2.629 | |
| Knowledge | 1.076 | 0.612 | 3.094 | **0.079** | **2.934** | |

Based on the above table it can be seen that there is 1 significant variable (p <0.05) to be included in the reduced model, ie attitude variable.

**Table. 5 Multiple Logistic Regression Forms Reduced Model**

Based on the results of multiple logistic regression analysis, the full model model is then performed multiple logistic regression model of the reduced model with Backward Stepwise (LR) method with the main effect, then selected 1 variable after it is controlled with another variable that is attitude variable.

In the table below it is seen that only one variable obtained from the reduced modeled analysis meant p <0.05, and therefore did not need to be included in the interaction test.

| Variables | B | SE | Wald | Sig | Ekp β | 95% CI |
|---|---|---|---|---|---|---|
| Attitude | -1.594 | 5.528 | 9.129 | 0.003 | 0.203 | 0.072 – 0.571 |
| Konstanta | 0.208 | 0.373 | 0.309 | 0.578 | 1.231 | |

Because no interaction test is performed, the fit model is the same as the reduced model. From the table above can be seen that the attitude is the variable that has the most influence on the performance of midwives where with a good attitude then the opportunity midwife to complete the KSPR complete

0203 times compared to the commitment of other variables.

**D. Triangulation Method**

**1. Input**

From the results of in-depth interviews with the informant results obtained that all puskesmas, especially midwife KIA program is sufficient and all activities in the KIA program has been done based on monthly reports of midwives. According to some informants, filling in the Poedji score is only done for risti pregnant women, not for all pregnant women because it can spend a lot of time. But in the Koto BaruSimalanggang health center, they do not use KSPR because early detection of high-risk pregnant women is still done manually. Facilities and infrastructure in the room KIA is sufficient. For medical equipment needs at the puskesmas are taken from BOK funds, including the procurement of Poedji scores. All midwives have been distributed evenly in each village or jorong with the average target of pregnant women owned by midwives, namely 5 to 16 targets.

**2. Process**

The results of in-depth interviews with informants obtained information that the information submitted by the midwife was not in accordance with the results of the study document and observation of the researcher. There is a difference of opinion about the frequency of monitoring and evaluation activities by leaders, from which the health office said that monev was conducted every 3 months. This is the same as what was said by the coordinator of the Piladang health center. While the midwife coordinator of the Taram health center, TanjungPati and the head of the Taram health center said that monev was only done once every 6 months, while the head of the PuskesmasPiladang and the head of the PuskesmasTanjungPati said supervision was only done during the monthly meeting of the coordinator midwife in the health department.

**3. Output**

The results showed that filling in the KSPR had not been fully filled by the midwife, even though there were still some that had not been filled or not done by the midwife to the patient so that the KSPR still looked empty. While the information obtained from the midwives and the head of the puskesmas said that the filling in of the KSPR was complete and had reached the target. However, the Koto BaruSimalanggang Community Health Center said that currently they do not use KSPR because early detection of high-risk pregnancies still uses manual methods. This is an incompatibility of information with the study documents and observations of researchers.

## IV. DISCUSSION

Based on the results of the study found that of 74 midwives as many as 49 people (66.2%) had poor performance in filling PoedjiRohyati score cards in early detection of high-risk pregnancies in the Lima Puluh Kota District Health Center.

The results of this study are almost the same as the research conducted by Sri Rulihari (2014), found that out of 99 midwives as many as 55 people (56.7%) midwives had poor performance in filling the PoedjiRohyati score card.

Performance is the result of work achieved by a person or group within an organization both quantitatively and qualitatively, in accordance with the authority and responsibility in achieving the organization's objectives legally, not violating the law, in accordance with morals and ethics. Defines performance as work performance or output (output) both quantity and quality achieved by human resources (HR) union period of time in carrying out their work duties in accordance with the responsibilities assigned to them.

Based on the description above, it can be seen that the work achieved by the midwife in charge of providing antenatal care at the Puskesmas is not only measured in quantity, but also the quality included in completing the PoedjiRohyati score card (KSPR) in an effort to early detection of high-risk pregnancies. The results of the study found that midwife performance in KSPR charging is still not good. This result was found after researchers conducted direct observations on the KSPR attached to the KIA book.

Attitude is the readiness or availability to act and not the execution of a particular motive. Attitude is not yet an act but a behavior. Attitude is a closed reaction that has 4 (four) levels, which are receiving, responding, respecting and responsible.[9]

Attitude is an intrinsic factor that arises from one's self and arises from the conscience to work well. When a midwife has a good attitude, a positive and responsible outlook on his duty will have an effect on the performance of the midwife in particular charging KSPR at the time the pregnant woman visits.[10]

In the results of the relationship obtained in this study, midwives generally agree with the standard antenatal care service, one of which performs a complete KSPR

filling in order to detect the risk of pregnancy can be known early and the midwife also agrees that KSPR describes the state of pregnant women whether the pregnancy is good or problematic. However, it would be better if the good attitude that arises in the midwife can be realized in the form of action in the field is to fill in the KSPR directly without delay and eliminate feeling lazy because the workload so that with the early detection of high-risk pregnancy, midwives can do the plan of pregnancy care and can make timely referrals so that the mother and fetus are healthy.[11]

Knowledge is the result of knowing and occurs after the person does the sensing of a particular object. Knowledge is the most important domain and is the initial factor for the formation of a person's behavior there is a positive relationship between the two variables. If behavior is based on positive knowledge, awareness and attitude, then the behavior will be lasting.[12]

Knowledge can form certain beliefs so that one can behave accordingly, including in full KSPR charging for early detection of high risk pregnant women. The charging of KSPR in early detection of high-risk pregnancy has been taught so it is assumed that midwives already have a basic knowledge of it.[13]

Heads of puskesmas and midwife coordinators have also received information on KSPR charging through training conducted by District Health Office and subsequently disseminated to all midwives in the working area of puskesmas. So through this socialization it is expected to increase the knowledge and awareness of the midwife to perform KSPR filling in the KIA book in accordance with the knowledge it possess.[14]Without knowledge, a person has no basis for making decisions and determining the action to the problems encountered.[15]

This research indicates that there are still many midwives who have low knowledge about KSPR so that the performance of midwife is less good in complete filling. The occurrence of a meaningful relationship illustrates that a low level of knowledge will affect the performance of midwives in charging KSPR.

Based on the results of in-depth interviews found information from informants that midwives have filled out KSPR at the time of action, in accordance with the SOP is determined. All antenatal care actions are performed and records are made on the KSPR and KIA books provided. Several informants also said that KSPR filling was only performed on high-risk pregnant women and even one of the puskesmas did not use KSPR for early detection of high-risk pregnancy.

While reviewing documents from the KSPR held by pregnant women, it appears that there are empty, unfilled fields. This happens because it is not checked or questioned or forgotten at the time of recording. Even there are pregnant women who do not get KSPR in their KIA book. The observation result shows that midwives do not take sequential action according to KSPR instructions, and some are not asked or done.

This observation is in line with quantitative research results that there are still many midwives who have poor performance in charging KSPR. Although the quantitative results obtained from the factors most associated with the performance of midwives in filling KSPR is an attitude, but it can not be ascertained because the midwife did not necessarily. Midwives know the benefits of charging KSPR but are hesitant to do because it is influenced by a low level of knowledge so it considers charging takes a lot of time.

Attitudes are the internal capabilities of a person based on good knowledge and information to define a stance firmly without hesitation. Attitude does not necessarily indicate a person's behavior because it is influenced by the strength of other factors so that attitudes do not appear as an act.[16]

Antenatal screening is a major component of the efforts of a strategic approach to risk in pregnancy, to be followed by the communication, information, education and communication (IEC) on a pregnant woman, her husband and family as a form of safe delivery planning and preparation carried out a planned referral when diperlukan.[17] Screening antenatal care must be performed repeatedly to determine risk factors early in pregnancy.[18]

According to the researchers' assumptions, all midwives in the puskesmas have been exposed to KSPR and know the benefits when filling of pregnant women. It's just that in its development, midwife has not fully carry out KSPR charging because previously it has been socialized and need to do mini workshop about KIA policy. Puskesmas also stated that the procurement of KSPR comes from BOK funds and midwives provide KSPR if only high risk pregnant women are met. In this regard, the policy of the puskesmas head is indispensable in the success of national policy as an effort to detect risky pregnancy and to prepare appropriate maternal referral patterns.[6]

Provision of complete facilities such as the procurement of KSPR by puskesmas through BOK funds is very supportive of the attitude and motivation of the midwife in performing the KSPR. If KSPR is provided at the time of service, midwives will make the task a responsibility that is a daily activity without thinking about increasing the workload. In addition to growing the good attitude and motivation of midwife, also needed a scheduled supervision of both District Health Office and the head of the health center and midwife coordinator about the KIA program including see the completeness of the document about charging KSPR. Through supervision, the leader can find out the problems found and obtain feedback and solutions to the problem.[10]

In this study, it is hoped that all midwives have good knowledge of charging KSPR in early detection of high-risk pregnancy as a step and effort to provide quality pregnancy services, preventing delay in relief and reducing maternal and fetal mortality.

Based on the interviews that have been conducted with all informants consisting of 4 puskesmas leaders and 4 coordinating midwives in 4 puskesmas namely Piladang Health Center, Koto BaruSimalanggang Health Center, Taram Health Center and TanjungPati Health Center, the results were found where each puskesmas had midwives who had enough, an average of 8 to 10 midwives plus a village midwife in a community health center and a poskesri in each nagari or jorong. From the interviews with informants, where all puskesmas already feel enough with the number of midwives that already exist. Each midwife has a different number of childbirth patients because of the different geographical conditions, the estimated target of pregnant women in a nagari or a range of 5 to 16 targets. All personnel in the MCH section are midwife educated.

Research that has been done through in-depth interviews found information from informants that midwives have filled out KSPR at the time of taking action, in accordance with the specified SOP. All antenatal care actions are performed and records are made on the KSPR and KIA books provided. Some informants also said that filling in the KSPR was only done for risti pregnant women and even one health center did not use KSPR for early detection of high-risk pregnancies.

Based on the observations also obtained good, where the observations have seen the number of personnel in the MCH program in the Puskesmas is sufficient, where all activities in the program have been carried out properly without any apparent lack of labor and the workload is not too heavy because service activities are routinely carried out. However, at the time of the observation, it was seen that the midwife did not take sequential actions according to the instructions of the KSPR, and some were not asked or done. This is very not recommended, because by filling in the KSPR we know whether a pregnant woman is at high risk, when to be referred and what action should be taken.

In addition, the procurement of KSPR is carried out by puskesmas with a limited budget derived from BOK funds, filling in the KSPR is only done on high-risk pregnant women only. Even one health center said that the detection of high-risk pregnant women still uses manual methods stored by midwives and risky pregnant women only.

In any organization or institution has two resources, namely human resources and non-human resources. In the organization puskesmas already have resources of energy, facilities and health budget. Organizational structure is an image that shows the type of organization, position and type of authority of officials, fields and work relations, command lines and responsibilities, range of control and organizational order systems. Leadership in the Puskesmas is given to the head of the puskesmas in influencing midwives - midwives who are under their supervision for the division of tasks and authorities in providing maternal and child health services in their working areas.[7]

The solution that needs to be considered is that the coordinating midwife should make a written division of work for each midwife in the MCH room and midwife in the field, so that the work will be more organized and have responsibilities. Inadequate midwife performance is caused by several factors such as low level of knowledge, lack of motivation and supervision activities that have not been done regularly. If there are still midwives who do not understand, training can be done so that the midwife is fully aware of how to fill in the KSPR, it is expected that midwives are able to apply directly to pregnant women every visit and are able to detect risk early.

According to the researcher's assumption, if the KSPR filling is done as expected then the midwife has actually done promotive and preventive effort as the main purpose of Puskesmas especially in detecting high risk pregnant women. So if found high risk pregnant women then midwives can do counseling pregnancy and place of pregnancy care as early as possible so the risk of late in handling high risk pregnant women cases can be avoided. If it can be done then not only the quantity of pregnancy services performed by the mother at the Puskesmas but also the quality expected from the beginning of the visit until delivery is done. Detection of high risk pregnant women is also a first step done by the midwife before the patient finally referred to a more complete service facility, so it is expected to reduce the incidence of maternal and fetal death.

Based on the results of the study found that some midwives have a low level of knowledge about filling in KSPR. This is very influential on filling in the KSPR in conducting early detection of high risk pregnancies because in each item has a risk group and an assessment of each risk group. The filling of the KSPR must be filled by the Puskesmas midwife every time the mother makes a pregnancy visit and conducts early detection of the condition of the mother's pregnancy before being referred.

Based on in-depth interviews (Indepth Interview) with several informants, it was found that filling in the KSPR conducted by the Puskesmas midwife had gone through a training process from the Lima Puluh Kota District Health Office. However, this activity was only followed by the head of the Puskesmas and the midwife coordinator of each Puskesmas and then socialized to all midwives in the field.

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early detection of the condition of the mother's pregnancy before being referred.

Complete KSPR filling must be carried out on all pregnant women during each visit as an effort to detect early high risk pregnant women. However, not all midwives understood how to fill in the KSPR because the activities carried out by the District Health Office and the head of the puskesmas only through the dissemination of the coordinating midwife to midwives in the field, causing some midwives to understand and some not without going through training activities on filling in KSPR. This result is in line with quantitative research, which is that the midwife's level of knowledge is still low about filling in the KSPR and a significant relationship is found between the level of knowledge and performance of midwives in filling in the KSPR.

While based on the study of researchers' documents for pregnant women there is a difference in information where there are still many uncomplicated KSPRs stored by pregnant women. The results of observations from researchers when antenatal care services by midwives did not take sequential actions and some were not filled or there were also no questions asked by the midwife to pregnant women. Completion of KSPR by midwives is still incomplete and has not been used, this is due to a low level of knowledge.

Every pregnant woman who makes a visit has a KIA and KSPR book. This screening tool is monitored by health workers, posyandu cadres and PKK mothers. The way to score PoedjiRohyati is: (1) Score 2, is a low risk pregnancy (CRR) for age and parity for all pregnant women as the initial score (2) Score 4, is a high risk pregnancy score (KRT) for each risk factor ( 3) Score 8, is a very high risk pregnancy score (KRST) for cesarean section, breech location, latitude, antepartum hemorrhage, severe preeclampsia / eclampsia.[6]

The completeness of filling in the KSPR is very important to be done by the midwife to find out whether pregnant women are at risk or not, to do proper counseling and when the mother should be referred. The expected outcome of this KSPR is to reduce the MMR in Kabupaten Lima Puluh Kota.

According to the assumption of the researcher, this caused the knowledge of midwives to be low in filling in the KSPR because the socialization was given in a short time and then directly carried out in the field so that not all midwives followed and understood in full the method of filling and scoring of KSPR. The head of the Puskesmas and the coordinating midwife should follow up on whether the KSPR is suitable and correct to do so if the problem is found the coordinating midwife can re-disseminate such as in mini workshop activities. To improve the knowledge of midwives, it can also be done by making posters and displayed in the KIA room as a guide for midwives in filling because it is in accordance with the theory that most of the knowledge is obtained by looking.

Based on research conducted through in-depth interviews found information from informants that the midwife had filled in the KSPR when taking action, in accordance with the specified SOP. All antenatal care actions are performed and records are made on the KSPR and KIA books provided. One of the informants also said that filling in the KSPR was only done on risti pregnant women and there were even puskesmas not using KSPR.

While based on the review of documents from the KSPR held by pregnant women, it is seen that there is still a blank field, and is not filled. It may not be checked or questioned or forgotten at the time of recording. Even there are still pregnant women who do not get KSPR in their KIA books. The results of the observations were that the midwives did not take sequential actions according to the KSPR guidelines, and some were not asked or done.

The low level of knowledge of midwives has a direct impact on the motivation of midwives in filling in the KSPR. Midwives who do not understand about how to fill an KSPR result in a low motivation to fill, a feeling of fear arises in filling in and hesitating to determine whether pregnant women are at risk and when to be referred.

Based on quantitative results also found a significant relationship between motivation and the performance of midwives in filling in the KSPR. The significance of these variables greatly determines the success of midwives in the early detection of high-risk pregnant women. Completion of the KSPR makes it easier for midwives to group risky and non-risky pregnant women, what actions are taken and determine the appropriate referral pattern.

Motivation is one of the psychological factors that can affect performance while for performance alone must be supported by complete facilities and infrastructure. The facilities and infrastructure of each puskesmas are good and complete, where the entire puskesmas has chosen a special room for the MCH program, and complete with health equipment.[11] Information obtained from informants that the procurement of medical devices such as the PoedjiRohyati score was carried out by each puskesmas according to the needs and taken from the Health Operational Assistance budget (BOK).

All the completeness of the facilities are available and regularly in the room MCH. So that there is no need to add more completeness, only in the MCH room is there no record that shows the amount and whatever facilities and infrastructure in the MCH room, so that the facilities and infrastructure are not structured, and the number and needs are unknown. Completeness of facilities and infrastructure will indirectly support the success of filling and completeness of MCH and KSPR books.

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## V. CONCLUSION

Based on the results of research and discussion on the analysis of factors related to the performance of midwives in charging KSPR at puskesmas of Kabupaten Lima Puluh Kota, it can be concluded that there is a significant relationship between the level of knowledge, attitude, motivation and supervision with the performance of midwives while the most related factors with midwife performance is attitude.

All Puskesmas especially KIA programs already have sufficient number of midwives. KSPR procurement means comes from BOK funds. Some informants said that KSPR should be filled, but there is for high risk pregnant women only. Monitoring is done as a whole as seen in the monthly report.

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