The Correlation of Social Support with Childbirth Readiness in Third Trimester Pregnant Women in Purwakarta Regency

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ABSTRACT

Social support and delivery readiness play a role in the process of adapting to the mother's role. Social support can prevent maternal mental health which can become negative during the perinatal period. The purpose of this study was to analyze the relationship between social support and delivery readiness in third trimester pregnant women in Purwakarta Regency. Methods: research using mixed methods with a concurrent embedded mixed-method strategy approach. The measuring instrument used a labor readiness questionnaire that had been tested for validity and reliability. Quantitative data retrieval technique using simple random sampling from 20 health centres in Purwakarta Regency was carried out randomly, taking 3 health centres and qualitatively by purposive sampling. The subjects of this study were pregnant women in the third trimester. Results: logistic regression analysis, namely the value of the R2 model (0.1732). Emotional support p (0.054), instrumental support p (0.274), informational support p (0.516). On the characteristics of the mother’s age p (0.043). The results of the qualitative FGD and In-depth Interviews were influenced by aspects of antenatal care, service comfort, delivery experience, costs, education and social support. Conclusion: There is a relationship between social support, namely the dimensions of emotional support, age characteristics with delivery readiness in third trimester pregnant women in Purwakarta Regency.

KATA KUNCI:
Dukungan Emosional
Kehamilan
Kesiaian Persalinan

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INTRODUCTION

Pregnancy is a natural process, but it is possible that during pregnancy there are changes not only physical but also psychosocial changes, such as a tendency to depend on and require attention and social needs. (Simarmata et al., 2019) Every pregnant woman faces the risk of an unexpected pregnancy, which can threaten the healthiness of pregnant women. (S. L. Martin et al., 2020) One in five pregnant women has a fear of giving birth. With a percentage of 6-13% of women experiencing high fear, it can have a psychological impact such as depression, anxiety, and negative mood after childbirth. (S. L. Martin et al., 2020) 8.4% of women experience major depressive disorder during pregnancy.

Antenatal depression is a problem that is not given much attention and postpartum depression is more likely to be seen to be treated. Meanwhile, according to previous research, Antenatal depression (AND) is one of the predictors of the occurrence of Post Partum Depression (DPP). (Downe et al., 2018) For this reason, it is possible for health services to raise awareness of the relatively newer diagnosis of antenatal depression. As long as antenatal care is provided with additional clinical care, midwives need to recognize that postnatal depression (DPN) may be a continuation of AND.

Antenatal depression is one most closely related to the health of pregnant women, if not handled properly it can have a negative impact on the health of the mother and baby. Antenatal depression contributes to the burden of disease in both developed and developing countries. DPN can have an impact on premature birth, pre-eclampsia, stunted fetal growth, and disorders of the baby. (Tesfaye & Agenejew, 2021) Globally 40% of pregnant women experience obstetric problems. According to the World Health Organization (WHO) in developing countries, there are obstetric problems that have an impact on morbidity during pregnancy and childbirth. (Downe et al., 2018) This can be prevented if pregnant women comply with antenatal care. (Sosa et al., 2018) The Maternal Mortality Rate (MMR) in Indonesia in 2017 according to Supas is 305/100,000 KH. (Kesehatan & Indonesia, 2019) In West Java in 2019 based on District/City health profile reporting as many as 684 cases. (Province Jawa barat, 2019) In Purwakarta Regency in 2020, 33 mothers died during childbirth. (Dinas Kesehatan Kabupaten Purwakarta, 2020)

Various efforts have been created to reduce the MMR by the government. Efforts to reduce MMR are one of the targets of the Ministry of Health. (Susiana, 2019) Efforts to reduce MMR will not be effective if they only rely on programs from the government without the participation of all parties. (Dede Nurhasanudin, 2019) Lack of maternity readiness and emergency preparedness is one of several factors that contribute to maternal mortality. Birth Preparedness (BP) / Complication Readiness (CR) is a global program as an important component of programs for safe maternal delivery readiness. This program aims to prevent maternal mortality by reducing the delays that occur when mothers experience obstetric complications during childbirth. This strategy is made not only for women but also for families, communities, health care providers and policymakers need to be made and prepared. (Watson et al., 2020)

It is important to give information related to birth readiness about factors that related to maternal readiness and readiness of pregnant women for complications, which is very necessary for designing labor cost planning programs and to prevent complications during pregnancy and childbirth that can have an impact on maternal death if not treated early. (Idowu, 2015) According to Indonesian health profile data, K4 coverage is the number of pregnant women who have received antenatal care in accordance with the standard at least four times according to the recommended schedule in each trimester, compared to the target number of pregnant women in one work area within a year has reached 80%. (Dejirmencı & Vefikuluçay Yılmaz, 2020)

However, according to the research, there are still 74% of pregnant women when contacting their midwife are not always given the help they need, 20% reported that they do not have confidence and trust in the staff who care for them in childbirth, and 18% of women stated that when they raised concerns about childbirth, they felt it was not taken care seriously. In a national survey of women’s experience in maternity care in the UK, 36% of women did not consult with the same midwife all the time or almost every time they were pregnant. (Che, 2017) Another study found that in pregnancy 78% reported some level of stress and 6% reported higher levels of stress and limited social support. (Moseson et al., 2018)

Maternity care should be designed to meet and provide personal and socio-cultural beliefs and expectations. During childbirth care there is still a lack of care for pregnant women, this is one of the treatments that should be given with full care for women and does not discriminate against every pregnant woman. This makes the importance of individual midwifery support in childbirth very important because it is associated with readiness for delivery in pregnant women and increased birth outcomes. Pregnant women want a positive birth experience, feel comfortable and psychosocial well-being, and are equally valued. (Sheferaw et al., 2017)

The social support is given to women during pregnancy, childbirth and the postpartum period has a positive effect on the process of adapting to the role of motherhood. Having good social support helps mothers to be more sensitive to their babies and facilitates relationships with relatives. Social support can be obtained from the surrounding community, especially partners. It is known that women, especially with the support they receive from their social environment, have a more positive pregnancy and postpartum period so that they adapt more quickly to their roles and experience the postpartum period more smoothly. (Homa & Avioli, 2020)
By providing support during pregnancy, it can reduce the level of depression in women and affect the fetus and can prevent postpartum depression. Pregnant women with low socioeconomic status are more vulnerable to challenges during pregnancy and can affect their readiness for delivery. (Eapen et al., 2019) For this reason, social support can minimize the impact of adverse life situations. Providing adequate social support requires addressing the various dimensions of the social support and reinforcement provided. (Moshki & Cheravi, 2016)

Social support should be increased to prevent maternal mental health which can become negative during the perinatal period. The support provided is not only on the quantity but also on the quality of the support. Applied social support refers to the actual support provided by others to reduce stress or solve problems and perceived social support refers to the subjective evaluation of the prevailing social support. Adequate partner support early in pregnancy has been found to be the most important aspect in preventing psychological distress, depression, and low self-esteem during the postnatal period. (Kita et al., 2020)

Antenatal social support is social support given to pregnant women during pregnancy that is enforced and perceived in which every type of social support is applicable and can be assessed. As in emotional support (emotional support) “how many people understand your feelings and worry about you”, instrumental support (Tangible support) “How many people have supported you by helping with household chores, daily tasks, and finances” informational support (informational support) “how many people provide advice or information when needed” and Appraisal support “how many people help solve problems and make you feel helped”. (Kita et al., 2020)

METHODS

This research design uses a mixed methods research design with a concurrent embedded mixed-method strategy approach, namely a mixed strategy that applies data collection at the same time between qualitative and quantitative data collection. (John W Creswell, 2018) In this research, qualitative data relates to quantitative data to prove research results by presenting data in the form of numbers described by words. Qualitatively performed using cross-sectional. (Prof. Dr. dr. Sudigdo Sastroamoro, 2014) Qualitative research was conducted to understand the phenomenon, illustrate the meaning and explain a view that occurs on the readiness of childbirth in third trimester pregnant women in Purwakarta Regency. The approach used is an interpretative general approach which is based on efforts to understand, interpret and interpret the phenomena that occur. (Johnny Saldana, 2013) The paradigm used is interpretivism, which emphasizes understanding the meaning of social activities in society so that it can give birth to an interpretation of the readiness for delivery of pregnant women. (Oxford University, 2014)

The subjects in this research consisted of quantitative and qualitative research subjects, where quantitative subjects were pregnant women in the Purwakarta Public Health Center, Koncara Health Center, and Munjul Jaya Health Center. The subjects of the qualitative research were pregnant women, midwives, and doctors at the Purwakarta Public Health Center. Inclusion criteria for quantitative are pregnant women at 28–40 weeks of gestation, pregnant women having an MCH handbook, and pregnant women who perform ANC examinations at least 4 times. Exclusion criteria were pregnant women who had complications during pregnancy. The inclusion criteria in qualitative were pregnant women in the third trimester, midwives, and doctors. The drop-out criteria are pregnant women who resign as respondents and do not participate in a comprehensive series of research.

Determination of the sample in quantitative research using simple random sampling. Determination of the sample in qualitative by purposive sampling based on the saturation of the data obtained. The sampling technique used was random sampling from 20 Puskesmas in Purwakarta Regency to obtain 3 representative Health Centers based on the north, west, and south regions of Purwakarta Regency. There is a list of respondents, namely pregnant women in the third trimester, then adjusted according to the inclusion and exclusion criteria. Simple random sampling was conducted based on odd numbers on the list of pregnant women, the odd numbers were taken to meet the predetermined sample size.

Quantitative sample size can be calculated using the sample formula:

\[ N = \left[ \left( Z_{\alpha/2} + Z_{\beta} \right) \cdot \frac{\sigma}{\delta} \right]^2 + 3 \]

(Stephen B. Hulley, MD, MPH, 2013)

Based on the calculation and considering dropping out, 130 people were found. Identification of variables, namely independent variables or independent variables in this research is emotional support, instrumental support, and informational support in third-trimester pregnant women. The dependent variable or dependent variable is labor readiness in third-trimester pregnant women. The confounding variables are planned pregnancy, class of pregnant women, and the characteristics of the variables are age, parity, education, occupation, income.

The quantitative instrument used a social support questionnaire, namely the QFSSS (Quisioner on the Frequency of and Satisfaction with Social Support) (García-Martín et al., 2016) and labor readiness using the preparation for labor and birth questionnaire. (Neerland et al., 2020) Prior to use, the validity of the questionnaire was tested using confirmatory factor analysis (CFA) using the STATA version 14 application. Meanwhile, the reliability test used the Rasch Model.

The qualitative instrument is an interview guide from previous journal literature. (Eapen et al., 2019). The results of the validity and reliability test of the questionnaire from each dimension are shown in Figure 1.

Figure 1 shows the results of the validity test and the reliability test of the questionnaire from 30 respondents in each dimension. For validity test with confirmatory factor analysis, the result is valid based on figure the validity test above, from 30 respondents. The results of the validity of the questionnaire were declared valid, namely the coefficient value of \( \geq 0.3 \) for acceptance of social support coefficient the validity value is 0.83, 0.08, 0.77, 0.81, 0.73, 0.90, 0.66, 0.29 and the support satisfaction coefficient values are 0.78, 0.65, 0.62, 0.76, 0.71, 0.85, 0.39, 0.34. some invalid numbers have been re-validated on the meaning of the words. In addition to explaining variations in items or indicators and explaining error factors. Based on the figure 1. validity on each dimension of labor readiness is valid, and the social support dimension is valid.
Table. 1
Result of Person Reliability, Item Reliability and Cronbach Alpha of each dimension

<table>
<thead>
<tr>
<th>Variable</th>
<th>Person Reliability</th>
<th>Item Reliability</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Criteria</td>
<td>Value</td>
</tr>
<tr>
<td>Delivery readiness</td>
<td>0.76</td>
<td>Good</td>
<td>0.99</td>
</tr>
<tr>
<td>Emotional support</td>
<td>0.83</td>
<td>Good</td>
<td>0.98</td>
</tr>
<tr>
<td>Instrumental support</td>
<td>0.65</td>
<td>Poor</td>
<td>0.70</td>
</tr>
<tr>
<td>Informational support</td>
<td>0.75</td>
<td>Poor</td>
<td>0.95</td>
</tr>
</tbody>
</table>

Table. 1 explains the results of person reliability and item reliability for the delivery readiness questionnaire, especially for the item reliability and for person reliability of the delivery readiness questionnaire. The dimension of emotional support is good for person reliability and special for item reliability. The dimension of instrumental support is weak criteria for person reliability and item reliability with sufficient criteria. The dimension informational support for person reliability is poor and for item reliability excellent. Overall, the reliability of the questionnaire is good.

RESULT OF STUDY

Based on Table 2 it explains that there are variations in the characteristics of respondents, namely for the age of pregnant women with reproductive age of 20-35 years, there are 113 people with a percentage (86.92) and there is still 1 pregnant woman with an age of <20 years (0.77). Furthermore, for maternal education there are 101 people with secondary education level (SMP-SMA) with a percentage (77.69), with 105 people not working (80.77). As for the pregnant class, only 47 people (36.15) took part in the pregnancy class, and 40 people or (30.77) pregnant women did not plan this pregnancy.

Table 2
Characteristic Pregnant Women In Third Trimester

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;20 Years</td>
<td>1</td>
<td>0.77</td>
</tr>
<tr>
<td>20 - 35 Years</td>
<td>113</td>
<td>86.92</td>
</tr>
<tr>
<td>&gt; 35 Years</td>
<td>16</td>
<td>12.31</td>
</tr>
</tbody>
</table>
DISCUSSION

The previous research related to social support can explain that 13% of maternal readiness in the context of antenatal mental well-being in pregnant women. (Ginja et al., 2018) This percentage is more or less in accordance with our study of 17% in the context of social support and characteristics to explain delivery readiness in third-trimester pregnant women. From our research, the most contributing to social support is emotional support because it is important to help someone overcome the stress they feel. In social support, there is emotional support that helps mothers in dealing with fear, by giving attention and sympathy to mothers. (Kita et al., 2020)

In previous research related to birth trauma, it was stated that unfulfilled emotional support (eg feelings) had an effect on psychologically in pregnant women with multiparity. (Thomson & Downe, 2016) In previous pregnancy experience studies, 40% of pregnant women had negative emotions after giving birth because they did not have the opportunity to discuss the worries and confusion they felt. (Fenech, G., Thomson, 2014) In line with our research for labor readiness, emotional support can be given since pregnancy, so that it can overcome negative emotions in the mother after giving birth. (C. J. H. Martin et al., 2020) Uncontrolled negative emotions can refer to stress, namely external (social or environmental), internal challenges (emotional or psychological) that require a person to adjust his behavior pattern. (Evertz, 2012) These results support the results of FGD interviews with pregnant women who stated that they needed attention from their partner, family, and friends, but difficult to do. These results can be seen in Table 3 qualitative results.

Table 3
Result Correlation of Social Support with Childbirth Readiness

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Odds Ratio</th>
<th>CI 95% Value</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Readiness for Birth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional Support</td>
<td>.215067</td>
<td>1.239945</td>
<td>.9967298</td>
<td>1.542508</td>
</tr>
<tr>
<td>Instrumental Support</td>
<td>.1120513</td>
<td>1.11857</td>
<td>.9150791</td>
<td>1.367313</td>
</tr>
<tr>
<td>Informational Support</td>
<td>-.1141526</td>
<td>.8921218</td>
<td>.632358</td>
<td>1.258593</td>
</tr>
<tr>
<td>Parity</td>
<td>.5918492</td>
<td>1.807327</td>
<td>.9277173</td>
<td>3.520935</td>
</tr>
<tr>
<td>Age</td>
<td>-.1391973</td>
<td>.8700563</td>
<td>.7592188</td>
<td>.997075</td>
</tr>
<tr>
<td>Education</td>
<td>1.114328</td>
<td>3.047519</td>
<td>.7906871</td>
<td>11.74595</td>
</tr>
<tr>
<td>Profession</td>
<td>-.8658318</td>
<td>.206931</td>
<td>.0996592</td>
<td>1.775879</td>
</tr>
<tr>
<td>Income</td>
<td>.8130286</td>
<td>2.234726</td>
<td>.8771293</td>
<td>5.835863</td>
</tr>
<tr>
<td>Pregnancy Class</td>
<td>-.6205767</td>
<td>.537643</td>
<td>.1089076</td>
<td>1.45219</td>
</tr>
<tr>
<td>Planned Pregnancy</td>
<td>.5405173</td>
<td>1.716895</td>
<td>.5631209</td>
<td>2.534627</td>
</tr>
<tr>
<td>Constant</td>
<td>-.6277616</td>
<td>.0011974</td>
<td>9.15e-06</td>
<td>.1566297</td>
</tr>
</tbody>
</table>

*Regression Logistic STATA

Psychosocial health which is considered important during pregnancy for mother and baby is caused by many factors such as age, income, education level, and history of miscarriage in previous pregnancies. In our study, younger mothers were more prepared to prepare for childbirth. The characteristics in our study were mothers aged 20-35 years. Supporting previous literature review research states that pregnant women aged 25-35 years can optimize their pregnancy and prepare for childbirth. Preparation for motherhood during pregnancy as a process and awareness can be influenced by cultural and social contexts that support lifestyle changes to optimize physical and psychological preparation. (Osorio-castaño, 2017) In line with the results of FGDs on pregnant women aged 37 years the older the mother is, increasingly afraid to prepare for childbirth. Can be seen in table 3 qualitative results.

Readiness for the birth that pregnant women can prepare is taking pregnancy classes, in our study only 36.15% of pregnant women took pregnancy classes. This class of pregnant women is a means to learn together about health

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for pregnant women, in the form of face-to-face with groups. (Departemen Kesehatan Republik Indonesia, 2009) In another study, distance education in childbirth preparation classes was more effective in promoting the mental health of pregnant women than with face-to-face education. (Rahmanian, Farideh; Seifi, Fatemeh; Tafazoli, Mahin; Tatari, 2021) In our research, pregnant women did not take pregnancy classes because they did not know there would be a pregnancy class but the mother had her pregnancy checked according to the standard. Implementation of ANC at least 8 times for every pregnant woman is highly recommended. (meta, n.d.) The quality of ANC antenatal care can contribute to reducing maternal and infant morbidity and mortality. (Mhajabin et al., 2020) This is in line with WHO expectations for pregnant women globally and newborns can receive quality care during pregnancy, delivery, and after delivery. (WHO, 2016)

Table 4
Qualitative results of FGD themes for pregnant women, in-depth interviews of doctors and midwives

<table>
<thead>
<tr>
<th>No</th>
<th>Theme</th>
<th>Keyword</th>
</tr>
</thead>
</table>
| 1 | Childbirth Readiness | a. Physical readiness is the readiness to check her pregnancy  
b. Psychological readiness is the mother’s personal readiness to believe that the mother is ready to give birth safely  
c. Previous labor experiences were negative or memorable experiences for the mother  
d. Unwanted pregnancy is a pregnancy that occurs due to certain circumstances |
| 2 | Social Support | a. Emotional support includes feelings that the mother receives from her partner, family, and surroundings, such as feelings of sympathy and affection.  
b. Information support, which contains advice given to mothers  
c. Husband’s support is an encouragement to strengthen the mother  
d. Appreciation support is positive feedback given to mothers |
| 3 | Service convenience | a. 5S, namely smile, greeting, greeting, polite and courteous to clients  
b. The service standard is service quality |
| 4 | Education | a. Pregnancy Class  
b. Mobile health |
| 5 | ANC Checkup | a. Danger signs of pregnancy  
b. Pregnancy complaints are what the mother feels according to the gestational age  
c. The risk of pregnancy, namely the identification of further complications  
d. Pregnancy plans are to help prepare for childbirth  
e. Identification of complications is the readiness for complications  
f. Physical examination includes pregnancy check-up |
| 6 | Cost | a. Health insurance  
b. Administration |

In readiness for delivery, there are still mothers who do not plan their pregnancy. In a previous study, it was found that 23.3% of pregnant women who did not plan their pregnancy had feelings of confusion at the beginning of their pregnancy. (Barton et al., 2017) In our study, there was no significance between delivery readiness and planning for pregnancy because planning for pregnancy of pregnant women in Purwakarta Regency 69.23% planning this pregnancy. A previous study with respondents of early trimester pregnant women stating that unplanned pregnancies were associated with low social support received by pregnant women. (S. et al., 2020) Pregnant women who did not plan their pregnancies were associated with unwanted pregnancies. (Moseson et al., 2018) In addition to pregnancy planning, it is important to plan preconception so as to ensure the health of future generations. (Hill et al., 2020)

The characteristics of this study, namely parity, education, occupation, income, are not related to social support for pregnant women in preparing for childbirth. Whereas in previous studies, characteristics were related to the social support received by mothers during pregnancy and after childbirth. (Kim et al., 2014) In our study, there was no correlation between parity, education, occupation, and income due to differences in characteristics with previous studies. In addition, based on the results of FGD pregnant women with multiparity parity can better prepare for childbirth because of the mother’s level of knowledge. Women who have many children are associated with anxiety because increasing the number of children affects the mother’s psychosocial. (Deşirmenci & VefikuluşLu Yilmaz, 2020) In our study, mothers with secondary education level, parity multipara, income according to the minimum wage, but health workers provide information assistance related to health insurance so that mothers can prepare for childbirth

Limitation of The Study
This study did not explore more deeply related to mental health problems (stress, anxiety), psychosocial in pregnant women and after childbirth. This study focused on childbirth readiness and social support received by pregnant women.

CONCLUSION
There is a correlation between social support and readiness for delivery in pregnant women because there are major contributions of emotional support and age. There is a relationship between emotional support on the dimensions of social support and readiness for delivery in pregnant women because it plays a role in maternal psychology. Factors that affect delivery readiness include antenatal care, the convenience of service, delivery experience, cost, education, and social support.
Practical Advice:

For Health Workers

Can pay attention to delivery readiness in pregnant women with age at risk, namely age > 35 years, and provide support to mothers in preparing for childbirth.

For Health Center

Can provide information related to pregnancy classes to maximize mother's knowledge regarding pregnancy and preparing for childbirth.

For the Department of Health

Can provide support to pregnant women and health workers in an effort to maximize the class of pregnant women and optimize ANC examinations

REFERENCES


