

ORIGINAL ARTICLE

Family Support Related to Information, Comfort, Economy and Spiritual in Preeclamptic Pregnancy Care: Qualitative Exploration

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ABSTRACT

Introduction: Preeclampsia is emergencies in obstetrics, where pregnant women experience health conditions that can be life-threatening and can occur during pregnancy, natal, and postnatal. If this obstetric emergency is not treated immediately, it can result in death for the mother and the fetus. Understanding pregnant women's care needs with preeclampsia is essential for families because most pregnant women and their families lack understanding and information about high-risk pregnancy care for this disease. **Objectives:** This research aims to explore the needs of families in the care of preeclampsia. **Methods:** This research used qualitative descriptive to obtain answers related to individual opinions, responses, and perceptions with exploring family needs for care pregnant with preeclampsia. **Results:** There were seven themes related to family needs in pregnancy care with preeclampsia: 1) Description of family knowledge about pregnant with preeclampsia, 2) Information needs, 3) Comfort needs, 4) Economic / financial needs, 5) Spiritual needs, 6) Needs for support from other family members, 7) Need for support from health workers. **Conclusions:** The importance of the family and surrounding environment's involvement as a source of strength for pregnant with preeclampsia allows better care for mothers and their babies and reduces the consequences of advanced preeclampsia. Health workers are expected to involve families in the care of pregnant women with preeclampsia as a promotional, preventive and curative effort.

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1. Introduction

Preeclampsia is one of the emergencies in obstetrics, where pregnant women experience health conditions that can be life-threatening and can last during pregnancy, birth, and after delivery. If not treated immediately, this obstetric emergency condition can result in death to the mother and the fetus (Direkvand-Moghadam et al., 2012). According to Shamsi et al. (2013), preeclampsia can also be defined as a condition-specific only pregnancy that increases maternal and fetal mortality and morbidity. Preeclampsia diagnosis is made with a blood pressure cut-off of 140/90 mmHg, and proteinuria must be present. According to Ghulmiyyah & Sibai (2013), preeclampsia is a clinical syndrome characterized by a new onset of hypertension and proteinuria after 20 weeks of gestation in previously normotensive women. Preeclampsia currently still provides maternal and perinatal morbidity and mortality, especially in developing countries.

According to Han et al. (2014), the prevalence of preeclampsia incidence is around 5% - 15% of all pregnancies globally, where hypertension cases in pregnancy, including preeclampsia, are found in an increasing number, yet are the most common medical complications in pregnancy. According to Staff et al. (2014), approximately 70% of women diagnosed with hypertension in pregnancy are preeclampsia. The complications of preeclampsia cause an estimated 50,000 maternal deaths each year. In developing countries with limited access to adequate maternal

health care, the maternal mortality rate can reach 15% compared to developed countries around 0 - 1.8%. According to the [Indonesian Ministry of Health \(2018\)](#), in Indonesia, 30-40% of preeclampsia cases cause death for pregnant women, and 30-50% are a cause of perinatal death. Quoting data from the 2012 Indonesian Health Demographic Survey (IDHS), the Maternal Mortality Rate (MMR) in Indonesia is still high, 359 per 100,000 live births. The most common cause of death for pregnant women is preeclampsia, and most of it is also caused by delays in family decision making to bring high-risk pregnant women to referral centers. There are three delays that cause pregnant women to be at risk of being helpless, namely: late family decision making, late arriving at the referral point, and late receiving treatment. Based on preliminary studies through interviews and literature studies that the author has conducted, it shows that there are many quantitative studies on preeclampsia that describe the treatment, causes, medical management, and experiences of mothers with preeclampsia. However, research that looks from a family perspective based on their needs in caring for pregnant women with preeclampsia written scientifically through qualitative studies is still not visible. Therefore, it is necessary to have research studies that can explore families' needs in caring for mothers with preeclampsia based on family experiences in caring for their daily lives.

Based on a preliminary study through interviews conducted at the UPTD Puskesmas Dukuhwaru to health workers holding the MCH program (Maternal and Child Health), it is said that the visits of pregnant women with preeclampsia each month can reach five pregnant women. The interview results with the husband who escorted his wife to an ANC (Ante Natal Care) visit showed a lack of knowledge about his wife's preeclampsia, so that the family needed further information in pregnant women's care with preeclampsia. According to [Istikhomah \(2018\)](#), family needs for pregnant women with preeclampsia are limited to solving physical problems experienced by pregnant women and psychologically. Education about the problems faced by families related to the risk factors experienced by pregnant women is expected that the family will solve the problem using resources from the family, and the family can make promotive efforts.

According to [Værland et al. \(2016\)](#), patients with preeclampsia and their families sometimes do not know for sure about the disease they suffer, where this ignorance can cause their anxiety regarding what will happen to pregnant women and their future fetuses. Mothers and families often experience confusion and anxiety due to a lack of knowledge about diseases. Thus there can be a worse impact/effect for the mother so that the baby's safety is also threatened. According to [Rastegari et al. \(2019\)](#), the mother's care program with preeclampsia at home allows the family to care for pregnant women in their neighborhood. According to [Amorim et al. \(2017\)](#), there is a need for further, more comprehensive studies by considering social, cultural, and family aspects in providing quality care for pregnant women at high risk and their families to prepare health services as a form of family support for pregnant women at high risk.

According to qualitative research conducted by [Emha et al. \(2017\)](#), the need for family participation is a source of strength. Families who actively provide support, especially those closest to them, namely husbands and mothers. According to [Rastegari et al. \(2019\)](#), the program for treating pregnant women with preeclampsia at home allows assistance from families in caring for pregnant women in their neighborhood. Besides, routine examinations of mother and fetus require family support, and a health education program involving the family will be sufficient for the health of both mother and fetus. Home care of pregnant women with preeclampsia can play a critical role in improving health status and reducing maternal and infant morbidity and mortality, especially in high-risk pregnancies.

Qualitative study research by exploring families' needs in caring for pregnant women with preeclampsia is needed because the family is the closest person to the patient, and the family is expected to carry out its function in caring for sick family members. The large number of treatments that only focus on pregnant women and their problems, making the family the closest person to pregnant women, does not understand the problems experienced by pregnant women with preeclampsia, especially in their daily care. Therefore, it is necessary to explore the needs of families in the care of pregnant women with preeclampsia so that promotional, preventive, and curative efforts for pregnant women with high risk, especially preeclampsia can be carried out by involving the family.

Exploring family needs in caring for pregnant women with preeclampsia helps understand what families need in caring for pregnant women with preeclampsia. The purpose of this study was to explore the extent to which the family needs in caring for pregnant women who are at risk of experiencing pregnancy emergencies that can lead to further complications, both the mother and the fetus, so that the family can help care for pregnant women with preeclampsia. The importance of understanding the needs of families in caring for preeclamptic patients can be due to the inability of family members to ask questions (they may not have social skills).

2. Methods

The approach in this research uses descriptive qualitative methods. In this study, the use of descriptive qualitative aims to obtain answers by exploring what family needs in the care of pregnant women with preeclampsia. Participants in this study were families who have experience in caring for pregnant women with preeclampsia. Participants in this qualitative study were determined using purposive sampling. This study's sample was families who have experience treating pregnant women with preeclampsia in their daily lives. The total number of participants in this study were ten families who cared for pregnant women with preeclampsia.

Researchers use the use interviews to encourage participants to talk about their perspectives in-depth about the research topic. The research was carried out at the UPTD Puskesmas Dukuhwaru in April-June 2020. The data analysis process in this study was carried out simultaneously with the data collection process. The data analysis process in this study used thematic analysis. According to [Braun & Clark \(2012\)](#) and [Vaismoradi et al. \(2013\)](#), thematic analysis is a method as an independent qualitative descriptive approach mainly described as a method for identifying, analyzing, and reporting (themes) in a data.

3. Results and Discussion

Participants in this study were the families of pregnant women with preeclampsia totaling 10 participants with the age category 18 - 65 years consisting of biological mothers (3 participants), husband (4 participants), 1 (brother-in-law), 1 (younger sibling), and 1 (child). Based on this study, seven themes were found, including a description of family knowledge about pregnant women with preeclampsia, information needs, comfort needs, economic/financial needs, spiritual needs, support needs from other family members, and health support workers.

Table 1. Overview of Family Knowledge About Pregnant Women With Preeclampsia

Keywords	Category	Theme
<i>"His blood is high, yes, more than usual, the health care center said if my wife is more than 140, her name has high blood pressure during pregnancy. There is also a history of heredity "(P3)</i>	High blood pressure due to hereditary history	
<i>"As long as I have high blood pressure, usually there is swelling like my wife's legs are swollen, she often gets dizzy and gets tired easily ... "(P6)</i>	Signs of increased blood pressure	Family perceptions of high blood pressure in pregnant women
<i>"My child's previous experience also had a high tension when she was pregnant with her first child, so if you have problems or thoughts, you immediately feel dizzy. He said he had to have a cesarean section, but thank God the birth was normal ... "(P7)</i>	History of high blood pressure in a previous pregnancy	
<i>... It turned out that the pressure was high, and my child got a referral for examination at the hospital. The blood pressure is up to 150. I am worried, because when I was pregnant the first child also had a high tension but my child felt you, he said you were dizzy, you were swollen "(P1)</i>	Pregnant women do not feel symptoms	

Table 2. Information Needs

Keywords	Category	Theme
<i>"Want to know how to anticipate it like what ... What to do with a mother with high blood pressure, what to do ?. Given an understanding, what should you do about pregnant women with high blood pressure? (P1).</i>	Prevention curiosity	
<i>"Especially with regards to what you can eat, what you can do .. For example, my wife doesn't know if a mother with high blood pressure can drink coffee, my wife loves coffee. In fact, the tensile strength after drinking coffee is high ... Even this just knows now "just this ..." (P8).</i>	Disobedience to the fulfillment of nutrition	The importance of information needed by the family in everyday life
<i>"If we know what the handling is like, of course we will know .. Suppose what the prohibition should be ... At least we know, usually we are told not to eat salty food ... "(P9)</i>	Handling disobedience and restrictions	

Table 3. Convenience Needs (Physical and Psychological)

Keywords	Category	Theme
<i>"I always tell my child to take a nap, take a rest so that he is more relaxed .. The problem is that the nausea and vomiting he experiences see the time. You have to be in the morning. What's more when I finish cooking, the smell is ... (P5).</i>	Rest is relaxing	
<i>"Just pay attention to your mother, sometimes you like thoughts, thinking about my sister who sometimes goes home late at night .. Mom is not sleeping at night ... You wake up and get dizzy back and forth "(P2).</i>	The mind becomes dizzy	Comfortable physically and psychologically
<i>"Actually, it's not only pregnant women who need comfort, all families need it, because if we, our families feel there is a problem, it will definitely affect pregnant women too .. Definitely think too. So the tensine went up ... "(P4).</i>	Family problems become problems for pregnant women	

Table 4. Economic / Financial Needs

Keywords	Category	Theme
<i>"Since there was this corona, sometimes there was also a family income, because I was selling ... Obviously, my wife went to a health center with a high tension and got a referral ... For USG, we currently don't have a specialist ... So yes worry, worry ... "(P6).</i>	Limited family income	
<i>"Calm mind, money is there mba ... For family needs, yes the mother is calm in mind. Wong, her husband is odd, so if you have money, check with a specialist, if you have one, wait for money ... If you have gas, go to the puskesmas, check ... "(P7).</i>	Check if you have money	Family finances and income determine ANC visits
<i>"If there is a trade surplus, try to check it so you know how the baby is and the position is not yet established. If you have money right away, go to the puskesmas first so you can get vitamins ... "(10)</i>	Excess income for check	

Table 5. Spiritual Needs

Keywords	Category	Theme
<i>"Usually we have four months, mba, as well as pray together for the health of mothers and babies in particular, let the best be given ... "(P4</i>	Culture of pregnant women	
<i>"I said to my child, pray more so that the mother and baby are healthy until the mother and baby are born healthy. God willing, if you pray a lot, you will do it. Have tried routine pregnancy checks "(P5)</i>	Confidence	Suggestion of prayer and effort as an effort to obtain health
<i>"Always pray at any time, especially after prayer ... My wife always asks me and my family to pray for both from my wife and me, like my parents and in-laws ... After my efforts, I give up ... "(P10).</i>	Surrender	

Table 6. Support Needs From Other Family Members and Health Officers

Keywords	Category	Theme
<i>"So far, her husband has been sailing, so if there is anything we are a family living together which is a hassle. Usually the parents-in-law deliver the check to the puskesmas or to a specialist doctor ... "(P1).</i>	Husband's substitute family	
<i>"My hope is that the health workers provide complete information about my wife's illness, by knowing what to avoid, of course the family will help as much as possible to prohibit mothers from doing .. "(P3).</i>	Hope for health workers	There is support from other family members and health workers
<i>"When my sister checked it was also sometimes asked why did you check it .. Healthy .. Then reminded often to take medication and routine control .. "(P9).</i>	Healthy motivation from health workers	

Overview of Family Knowledge About Pregnant Women With Preeclampsia

The description of family knowledge about pregnant women with preeclampsia shows several symptoms found in mothers with increased high blood pressure during pregnancy, whether they are felt directly or not. Most families admit that the increase in high blood pressure in pregnant women is a genetic history, and some occur in previous pregnancies. According to [Trisari et al. \(2020\)](#), in mild preeclampsia, the subjective symptom is not felt by pregnant women, so that some pregnant women do not limit physical activity, and pregnant women who work continue to do work activities like ordinary pregnant women. [Oktavianisya \(2016\)](#) said that preeclampsia does not produce symptoms that can be felt by the patient at the initial stage, so an early diagnosis can only be made with antenatal care. If the mother-to-be makes weekly visits to the prenatal clinic during the last 4-6 weeks of her pregnancy, there is an opportunity to do a proteinuria test, measure blood pressure, and check for signs of edema. After an early diagnosis is known, it is necessary to treat it to prevent eclampsia immediately.

According to [Vaerland et al. \(2016\)](#), mothers and families often experience confusion and anxiety due to a lack of knowledge about the disease. Thus, worse impact or effect for the mother so that the baby's safety is also threatened. [Moroz et al. \(2016\)](#) found that promotive, preventive, and curative efforts can prevent preeclampsia. Nurses can make promotional efforts by providing education on preeclampsia and providing counseling on evidence-based interventions. Preventive measures that can be done are to carry out early pregnancy management to identify at-risk mothers and early detection of the disease by routine ANC (Ante Natal Care) visits. Early treatment of pregnancy includes examination through history taking, physical examination, and laboratory examination. At the same time, curative efforts are carried out by taking antihypertensive drugs to control blood pressure. This prevention effort can involve the family as the person closest to pregnant women with preeclampsia.

Information Needs

According to their families, the need for information about diseases experienced by pregnant women who experience high blood pressure (preeclampsia) is essential. This condition was conveyed by all families caring for pregnant women with preeclampsia. With the information obtained by the family, the family hopes to make efforts to prevent complications in the mother and baby. According to [Mardiyarningsih & Setyoningrum \(2012\)](#), most pregnant women and their families are not exposed to antenatal care information because of insufficient knowledge. Patients with preeclampsia and their families sometimes do not know for sure about the disease they suffer, where this ignorance can cause their anxiety regarding what will happen to pregnant women and their future fetuses. [Vaerland et al. \(2016\)](#) found that mothers and families often experience confusion and anxiety due to a lack of knowledge about the disease. Thus, a worse impact or effect for the mother might occur so that the baby's safety is also threatened.

[Amorim et al. \(2017\)](#) also stated that providing information through health education about the care of high-risk pregnant women and their partners is very important. The nursing profession must care about pregnant women's condition and explore the mother and partner's condition as their prominent role in the care of the pregnancy and birth process so that the family can make prevention efforts. Based on [Shojaeian et al. \(2020\)](#) research, needs-based information through health education for high-risk pregnant women and their families is a factor that has a positive impact on increasing family knowledge in reducing stress. The best prevention of preeclampsia/eclampsia is by monitoring the blood pressure of pregnant women. Combine a diet low in fat and increase the supply of calcium, vitamins C and A, and avoid stress. Apart from bed rest, pregnant women also need to drink a lot to reduce blood pressure and proteinuria levels, according to doctor's instructions. Then, to reduce swelling, pregnant women should reduce salt and rest with their feet raised. If pregnant women's blood pressure is high since the beginning of pregnancy, it means that pregnant women must be careful with their diet ([Tristanti et al., 2019](#)). According to [Saftlas et al. \(2010\)](#), it has been reported that pregnant women who eat chocolate more than one to three times a week have a 50% or more reduced risk of preeclampsia. Preeclampsia (4.5%) occurs in pregnant women who do not eat chocolate regularly in the first or third trimester. According to [Carolia et al. \(2016\)](#), consuming dark chocolate rich in flavonoids and theobromine can prevent preeclampsia in pregnant women. Furthermore, most if consumed regularly and with sufficient doses.

Comfort Needs (Physical and Psychological)

According to the family, the need for comfort both physically and psychologically is necessary for pregnant women with preeclampsia. A pregnant woman must get enough rest because adequate rest will prevent a pregnant woman from stress conditions. After all, during stress conditions, the hormone adrenaline production will increase and cause narrowing of blood vessels so that pregnant women's blood pressure increases. A pregnant woman should sleep 8 hours at night and 1 hour during the day. The quality of sleep in pregnant women will affect increasing blood pressure to have the potential for preeclampsia. It is necessary to support the environment around pregnant women, such as family and health workers. As health workers, they should provide information to pregnant women and their families to create quality sleep for pregnant women, such as information about sleeping positions. The state of low sleep quality increases the risk factors for preeclampsia. For this reason, family participation is also needed in meeting the mother's sleep needs by creating a comfortable environment so that the mother's need for rest and comfort is met ([Bustami et al., 2016](#)).

Problems experienced by a family can create psychological problems for pregnant women. This condition may happen in pregnant women can lead to increased blood pressure and affect the mother and her future baby's psychological health status. Also, psychological stress on pregnant women will increase and the severity of the family problems in them. In some pregnant women, bed rest is needed to overcome it. Therefore, the need for comfort is needed for his family ([Janighorban et al., 2016](#)). Families who received support from their social environment experienced lower levels of stress than those who did not. This situation illustrates the

importance of nurses' role as counselors to direct families in using positive coping strategies (Allender et al., 2013). According to Sihotang et al. (2016), adequate rest can prevent pregnant women from stressful conditions because during stress, the hormone adrenaline production increases, causing constriction of blood vessels. This condition can undoubtedly cause high blood pressure in pregnant women.

Economic / Financial and Spiritual Needs

Meeting the family's economic/financial needs is one of the essential needs in the care of pregnant women with preeclampsia. According to Akeju et al. (2016), the husband's role in preventing preeclampsia is emphasized, especially the importance of emotional and financial support for pregnant women. Qureshi et al. (2020) found in their research revealed the importance of husbands and mothers-in-law as the closest people to pregnant women with preeclampsia and as decision-makers in the use of health services. The availability of transportation and financial constraints will limit mobility and create barriers for pregnant women with preeclampsia to seek care. Financial barriers will affect access to transportation and affordability in health services and in redeeming medicines prescribed to mothers with preeclampsia. According to Meo (2019), most of the informants in their research said that they did not pay for antenatal examinations. However, the mother must incur additional costs, including transportation costs and ticket counter fees, for those who do not have health insurance. Mothers who do not have their source of income are very dependent on their husband's income. The mother needs the husband's consent to visit ANC services because it is related to the costs that must be borne every time she accesses ANC services. Most of the pregnant women in this study, according to their families, are housewives and do not have income, so that decision making related to family financial problems must be with the husband's consent as the head of the family.

Families need spiritual needs in caring for pregnant women with preeclampsia. The family carries out this spiritual need by providing support through prayer to keep pregnant women and their babies healthy. Spiritual wellbeing is one of the basic concepts that help a person deal with problems and stress caused by illness. Spiritual wellbeing is also a health dimension. Spiritual wellbeing is defined as an attachment to certain religious beliefs, which means that a person finds meaning in life. Religion as a source of support, such as prayer, will create inner peace through the hope of sickness. Thus, seeking God's help is necessary to reduce mental health disorders (Ahmadinezhad & Akbarzadeh, 2019).

The pregnant mother and family believe that God will save her life under good care. Combining religious/spiritual care with prayer and physical/medical care with traditional ingredients is believed to better pregnancy. Pray or give thanks to God to fulfill the religious and spiritual needs of pregnant women. Also, respondents said they actively used prayer as a supporting tool for pregnant women during pregnancy and childbirth (Ohaja et al., 2019). Each woman identifies an aspect of her spirituality and conducts her day-to-day, enabling her and her family members to better cope with the stress of experiencing a high-risk pregnancy, affecting intrauterine babies (Amorim et al., 2017).

According to Mutmainnah & Afiyanti (2019), the form of support for pregnant women at risk is not only in the form of physical and psychological care but also in spiritual support from the husband other family members. Spirituality will provide strength, peace of mind, and positive coping mechanisms. Spiritually also helps them in starting difficult times in pregnancy and childbirth. Spirituality will affect the behavior of a woman in caring for their pregnancy. They believe that by praying, God will better facilitate pregnancy and childbirth.

Other Family Support Needs and Health Worker Support

The need for support from other family members is needed in the care of pregnant women with preeclampsia. According to Permenkes (2014), integrated antenatal health services provided by health workers from the first contact to help pregnant women in overcoming problems or dealing with complications can be done by carrying out effective communication, information, and education (KIE), including counseling involving husbands or family of pregnant women. The information needed by mothers and families about preeclampsia includes danger signs in

pregnancy, nutritional counseling, dietary food for hypertension in pregnancy, suggesting re-examination within two days if blood pressure increases, referral, and information about emergency conditions due to preeclampsia if found the condition of the mother with hypertension accompanied by facial or lower leg edema and proteinuria (passive). According to [Abdollahpour et al. \(2015\)](#), it is recommended that couples and families support pregnant women who experience pregnancy complications to participate in health education programs for their husbands and families designed in such a way as to help prevent complications and as an effort to promote a healthy pregnancy. [Andrianti \(2015\)](#) states that the role of the husband in caring for the wife with hypertension pregnancy includes providing transportation facilities and the role of the husband in the physical preparation of the wife with hypertensive pregnancy by helping to do light exercise, the role of the husband in psychology by providing support and motivation.

Support for pregnant women is done by husbands and their families and needs support from health workers, especially pregnant women at risk, such as experiencing preeclampsia. A nurse approaches family nursing care is needed. Family nursing is a community health service level centered on the family as the smallest unit in society to provide services and care to prevent a disease ([Friedman & Jones, 2010](#)). According to research done by [Amorim et al. \(2017\)](#), understanding the needs of high-risk pregnant women and their families will help nurses improve the quality of care for women, provide guidance on care, stress management, and plan stress-reducing interventions for high-risk pregnant women by involving their families.

4. Conclusion

Based on the study results and the previous discussion descriptions, the researcher concluded that seven themes had been identified as family needs in the care of pregnant women with preeclampsia, namely: pregnant women with preeclampsia who have the symptoms directly and some are not. The information needs to be needed in the form of care and prevention in the daily life of pregnant women with preeclampsia, especially related to the nutritional diet and comfort needed by preeclamptic mothers and their fetuses, including spiritual needs that help create inner peace for mothers and families by praying for the health of mothers and their fetuses. Support from other family members, including financial support and support from health workers, is also needed to monitor pregnant women and their babies' health.

Ethics approval and consent to participate

Researchers have paid attention to ethical considerations since compiling a research proposal until the research process is complete. Therefore, before conducting the research, the authors conducted an ethical test at the Health Research Ethics Committee of the Kendal Islamic Hospital and obtained Ethical Decent Information in a statement letter No. 23 / KEPK / RSI / II / 2020.

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