Original Research

The Relationship Of Family Centered Care Implementation With Mother's Stress And Satisfaction With Services In The Edelweiss Room (Perinatology) At Regional Hospital Of Balung Jember District

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ABSTRACT

Introduction: Neonatal intensive care causes high maternal stress, and low interaction between mother and baby are suspected to be a stressor. The role of the mother needed to participate in neonatal care. However, mothers want to monitor the condition of neonates during treatment. This purpose of study to analyze the correlation between family center care, stress and maternal satisfaction in the Edelweiss (Perinatology) at RSD Balung Jember.

Methods: A cross-sectional study was conducted among 124 post partum mothers whose babies were treated in the perinatology room with consecutive random sampling. Family center care, stress, and maternal satisfaction questionnaires were used. A Chi-square test was used to analyze to answer the research

Results: The results among respondents had high levels of family centered care implementation (63.7%), low maternal stress (51.6%), and high levels of maternal satisfaction (58.1%). There is a correlation between between family centered care implementation with maternal stress ($X^2 = 8.14; p-value = 0.004$), and stress with maternal satisfaction ($X^2 = 19.3; p-value = 0.00$). Mothers with high levels of family centered care implementation will prevent 0.2 times experiencing stress ($OR = 0.16; 95\% CI = 0.07-0.38$), and if maternal satisfaction is high then 3 times will tend to have low stress ($OR = 2.89; 95\% CI = 1.38-6.06$). However, there isn’t correlation between family centered care implementation and satisfaction mother ($X^2 = 0.83; p-value = 0.36$). Perhaps, maternal characteristics to be a factor.

Conclusion: Family center care services can meet the needs of parents and improve the quality of nursing care in the perinatology room for babies, parents and families so as to increase satisfaction with the services provided.

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1. INTRODUCTION

Neonatal intensive care is required for infants with worrisome conditions in the first days of life. Parents are often worried about their child’s condition, so they often ask health workers about their child’s condition (Ilham et al., 2018). This often causes physical and psychological stress to the mother due to changes in the baby’s health status. Whereas the role of the family is needed in the infant care phase in the intensive room to provide support, strength, and determine the baby’s therapeutic options. Family centered care services that are not implemented cause various problems for parents that affect satisfaction with services in the intensive room (Kegler et al., 2019).

Recent studies show that most parents with high stress (76.45%) are caused by their ignorance about how to treat their children’s illnesses while they are hospitalized (Erlinda, 2015). The results of research that was conducted on 30 respondents regarding factors related to parents’ stress levels in their children who were treated in the Perinatology room of Arifin Achmad Hospital Pekanbaru, obtained data from 16 female parents (53.3%) and male parents, 14 people (46.7%), the majority of parents are in the early adulthood age range of 25 people (83.3%), most of the parents’ education is secondary education as many as 25 people (83.3%), most of the mothers did not work as many13 people (43.3%) (Mohamed et al., 2019). Meanwhile, the level of parental satisfaction in the research results of Kusuma (2016) stated that parental satisfaction with nursing services in the NICU was 63.6 with a standard deviation of 14.5.

Not a few parents with babies undergoing treatment with special conditions experience stress. Stress on mothers and babies can be caused by care for the baby, the inability to protect the baby from pain, the use of technology, as well as tools in the intensive and critical condition of the baby (Ivones et al., 2016). The emergence of stress in mothers who have just given birth with babies undergoing special care will have an impact on parents. Mothers have experiences of stress, feeling anxious, depressed, post-traumatic (Kawafha, 2018). This happens because, psychologically parents are not ready to deal with crisis illnesses in their babies (Kegler et al., 2019). Parents may feel disappointed, failure, hopeless, angry, helpless, and lose self-esteem because they feel unable to care for their baby even when they meet their baby feels difficult (Kawafha, 2018). To minimize stress on parents, parents need to be involved in the care of their babies. Parents will be pleased if they are involved in the care of their baby so that parents feel satisfied and can know the development of the baby's condition (Tanaem et al., 2019).

Parental satisfaction is a feeling of satisfaction and pleasure for parents because the baby's needs for nursing services are provided while being treated in the neonatal care room (Nurhidayah et al., 2018). Parents are satisfied when they know that their baby gets optimal care during treatment (Ludyanti et al., 2015). Studies reveal that the lack of information from health workers can cause parents to feel dissatisfied with services (Julianti et al., 2018). Thus, information related to the condition of the baby is very important. Effective communication in room policy needs to be informed to parents so that it does not cause conflict (Tanaem et al., 2019). The involvement of parents in the care of their babies will positively impact the recovery of their babies, so the role of the family becomes important.

2. METHOD

2.1 Design

This research is a correlational analysis using a cross-sectional approach to postpartum mothers whose babies are undergoing treatment in the Edelweiss Room (Perinatology), one of Jember Hospital.

2.2 Population

2.2 Population, Samples, and Sampling

This research was conducted from
January-February 2020 at Balung Jember Hospital. The sampling method is Consecutive sampling with the criteria of being willing to be a respondent (given informed consent) with a total of 124 respondents. The inclusion criteria for this study were mothers who had babies for at least two days undergoing treatment in the perinatology room for approximately 2 days, while the exclusion criteria for this study were postpartum mothers who experienced an emergency, did not visit the child for approximately 2 days, experienced physical or mental limitations.

2.3 Instruments

Instrument data on respondent characteristics consisted of age, education, occupation, ethnicity, sex of the baby, birth weight, gestational age, medical diagnosis, length of hospitalization, and the APGAR score was filled in as respondent’s demographic data. Family center care instruments, stress, and maternal satisfaction with services were measured using an empowerment questionnaire consisting of 116 questions. The Linkert scale interpretation of scores consists of scores of 1: never, 2: rarely, 3: sometimes, 4: often, and 5: always. The level of family empowerment, stress and maternal satisfaction are categorized into two categories, namely low and high. Categorization of data is categorized based on the cut of point from the mean/median, it is said to be low if the total score is less than the mean/median and said to be high if the total score is more than/equal to the mean/median.

2.4 Procedure

This study’s data was collected by giving a questionnaire about mother’s empowerment, stress, and satisfaction. The questionnaire used has been tested for validity and reliability before. Previously, an explanation of the purpose and duration of the study was carried out, then the respondent signed an informed consent which contained the patient’s consent to become a research respondent. The researcher gave the opportunity to the respondents to fill out the questionnaire sheet with a time span of about 10-15 minutes (if it was not possible to do it for two sessions). If the respondent has difficulty, the researcher helps to read the questionnaire and fill in the answers according to the answers determined by the respondent.

2.5 Analysis

Data analysis was carried out using SPSS 20 software application, categorical data was presented in the form of numbers and percentages. Data were taken according to the inclusion and exclusion criteria and then analyzed using SPSS 20. Bivariate analysis in this study used the Chi-square test to determine the relationship. When analyzing data, the researcher applies research ethics by maintaining the confidentiality of the respondent’s identity so that it is not known to others. Confidentiality in this study is by not including identity in the documentation and providing a code on the data collection sheet. Documentary interests such as photos and the identity of the respondent are disguised.

3. RESULT

Based on table 1, it can be seen that the characteristics of the participants in this study were that the age of the participants had a median value of 28.5 with a range of 25-75 percentiles, namely 24 to 34. Most of the participants in this study had the last elementary education (47.6%). The majority of participants’ occupations are housewives (83.9%). The ethnic characteristics of the participants were mostly Madurese (71.8%), while for the sex of the baby, the majority of the participants were women (66.1%), and the majority of the medical diagnoses of infants undergoing treatment in the Perinatology room were EOS (95.5%). The birth weight of the participants in this study had a median value of 3100 grams with a range of 25-75th percentiles, namely 2800 grams to 3670 grams. The length of stay of the participating infants in this study had a median value of 3 days with a range of 25-75th percentile, 2 days to 4 days.

Based on table 2, it can be seen that the description of the level of family empowerment consists of two levels, namely low and high, so that from 124 participants, the proportions are based on the level of family empowerment of each participant. The proportion of family empowerment received by mothers with babies undergoing treatment in the perinatology room of RSD Balung, namely high empowerment (63.7%) and low family empowerment (36.3%).
Based on table 2, it can be seen that the stress on the participants is categorized into two levels, namely low stress and high stress. The stress of each participant is proportioned by looking at the value of the participants. As for the proportion of mothers with stress, the majority have high stress levels (51.6%), some are identified as mothers with low stress (48.4%). Based on table 2, it can be seen that the satisfaction of the participants is categorized into two levels, namely low and high. The satisfaction of each participant is proportioned by looking at the value of the participants. The proportion of satisfaction of mothers with babies undergoing treatment in the perinatology room of RSD Balung has a high level of satisfaction (58.1%).

Based on table 3. This is evidenced by the Chi-Square test results, which results are mothers who have a high level of empowerment experience low stress (83.3%). Based on these results, it can be concluded that there is a relationship between family empowerment and stress on mothers and babies undergoing treatment in the perinatology room of RSD Balung (X2 = 19.362; p-value = 0.00). If family empowerment is high, it will prevent 0.166 times the occurrence of stress in mothers with babies who are cared for in the Perinatology Room (OR = 0.166; 95% CI = 0.072-0.383).

Based on table 4, it can be seen that there is no difference between the level of family empowerment and the level of satisfaction of mothers and babies undergoing treatment in the perinatology room of RSD Balung. The results of the Chi-Square test evidence this. Based on these results, it can be concluded that there is no relationship between family empowerment and satisfaction for mothers and babies undergoing treatment in the perinatology room of RSD Balung (X2 = 0.831; p-value = 0.362).

Based on table 5, it can be seen that there is a difference between the level of satisfaction of the mother and the level of stress on the mother and the baby undergoing treatment in the perinatology room of RSD Balung. This is evidenced by the Chi-Square test results, which are mothers who have a high level of satisfaction experienced low stress (70.3%). Based on these results, it can be concluded that there is a relationship between maternal satisfaction and stress on mothers and babies undergoing treatment in the perinatology room of RSD Balung (X2 = 8.148; p-value = 0.004). If the mother’s satisfaction is high, then three times will tend to experience low stress (OR=2.895; 95% CI=1.38-6.062).

Table 1. Distribution of Characteristics of Respondents Based on Age, Education, Occupation, Ethnicity, Baby’s Sex, Birth Weight, Gestational Period, Length of Hospitalization, Infant Medical Diagnosis, and APGAR Score (n=124)

| Characteristics                          | N  | %   |
|------------------------------------------|----|-----|
| Age                                      |    |     |
| M±SD                                     | 28,94±6,35 |
| Md (P25-P75)                             | 28,5 (24-34) |
| Education                                |    |     |
| Elementary                               | 59 | 47.6|
| Junior High School                       | 36 | 29.0|
| Senior High School                       | 29 | 23.4|
| Job                                      |    |     |
| Farmer                                  | 7 | 5.6 |
| Trader                                  | 13 | 10.5 |
| Housewife                               | 104 | 83.9 |
| Ethnic                                   |    |     |
| Java                                    | 35 | 28.2|
| Madura                                  | 89 | 71.8|
| Baby Gender                              |    |     |
| Male                                    | 42 | 33.9|
| Female                                  | 82 | 66.1|
| Characteristics            | N (%)                        |
|---------------------------|------------------------------|
| Birth Weight              |                              |
| Mean±SD                   | 3130±510.15                  |
| Median (P25-P75)          | 3100 (2800-3670)             |
| Gestation                 |                              |
| Mean±SD                   | 37.3±0.71                    |
| Median (P25-P75)          | 37 (37-38)                   |
| Baby Care Time            |                              |
| Mean±SD                   | 2.88±0.97                    |
| Median (P25-P75)          | 3 (2-4)                      |
| Medical Diagnosis         |                              |
| Jaundice                  | 38                           |
| EOS                       | 85                           |
| 7-8                       | 53                           |
| 8-9                       | 71                           |

Table 2. Description of the level of family empowerment, stress level, and mother's level of satisfaction with the services of mothers with babies undergoing treatment in the perinatology room of RSD Balung

Table 3. Relationship between Family Empowerment and Stress in mothers and babies undergoing treatment in the perinatology room of RSD Balung (n=124)

| Family Empowerment | Stress |          |          | X² (Significance) | OR | 95% CI Min-Max |
|--------------------|--------|----------|----------|------------------|----|----------------|
|                    | Low    | High     |          |                  |    |                |
|                    | N      | %        | N        | %                |    |                |
| Low                | 10     | 16.7     | 35       | 54.7             | 19.36² | 0.166          | 0.072-0.383 |
| High               | 50     | 83.3     | 29       | 45.3             | (0.00) |                |              |

Note: n(%) = Number of Participants (Presentation); OR = Odd Ratio; X² = Pearson Chi Square; a = Significant with Pearson Chi Square test; 95% CI = 95% Confidence Interval

Table 4. Correlation between Family Empowerment and Satisfaction among mothers and babies undergoing treatment in the perinatology room at Balung Hospital (n=124)

| Family Empowerment | Satisfaction |          |          | X² (Significance) | OR | 95% CI Min-Max |
|--------------------|--------------|----------|----------|------------------|----|----------------|
|                    | Low          | High     |          |                  |    |                |
|                    | N            | %        | N        | %                |    |                |
| Low                | 12           | 26.7     | 25       | 34.7             | 0.831² | 1.019          | 0.48-2.13   |
| High               | 33           | 73.3     | 47       | 65.3             | (0.362) |                |              |

Note: n(%) = Number of Participants (Presentation); OR = Odd Ratio; X² = Pearson Chi Square; a = Significant with Pearson Chi Square test; 95% CI = 95% Confidence Interval

Source: Research Primary Data, January 2020
Table 5. Relationship of Satisfaction with Stress in mothers and babies undergoing treatment in the perinatology room of RSD Balung (n=124)

| Mother’s Satisfaction | Satisfaction | X² (Significance) | OR | 95% CI Min-Max |
|-----------------------|--------------|-------------------|----|----------------|
| Low                   | Low          | 33 55.0           | 19 29.7 | 8.148^          | 2.895 1.38-6.062 |
| Low                   | High         | 45 70.3           | 27 45.0 |

Note: n(%) = Number of Participants(Presentation); OR= Odd Ratio; X²= Pearson Chi Square; a= Significant with Pearson Chi Square test; 95%CI= 95% Confidence Interval
Source: Research Primary Data, January 2020

4. DISCUSSION

4.1 Respondents Characteristic

Based on the study results, it was found that most of the aged mothers and children who were treated in the Perinatology Room of RSD Balung Jember were between 24-34 years old. Age is seen as a condition that forms the basis of a person’s reproductive maturity. This is following previous research, the older a person is, the level of reproductive maturity (Chen et al., 2017). Havigurst revealed that the developmental tasks of early adulthood are getting married, managing the household, educating or raising children, assuming responsibilities as citizens, making relationships with certain groups in doing a job (Mbana et al., 2019). Age is a determinant of maturity in baby care, especially in newly married couples.

Most of the last education of mothers with children who were treated in the Perinatology Room at Balung Jember Hospital, the majority had their last education in elementary school. The results of the study found that most of them had elementary school education. Studies show that respondents with higher education are better able to cope with stress by using effective coping than someone with low education stress (Maulidia et al., 2016). In the research results related to stress, it was found that most women experienced mild stress compared to men.

The majority of mothers with children treated in the Perinatology Room at Balung Jember Hospital are Housewives. Work is a part that plays an important role in human life, which can provide satisfaction, and challenges can also be threats and disturbances (Kusuma, 2016). This result is due to the fact that the main companion of the child is the mother, where most of the mothers do not work, so they can accompany the children more often than the father, who acts as the breadwinner. Another study revealed that housewives have a higher risk of experiencing stress due to household burdens (Ivones, J & Rofii, 2013).

Based on the study results, it was found that the majority of the ethnic groups of mothers with children who were treated in the Perinatology Room of RSD Balung Jember were Madura. Parenting styles between Javanese and Madurese may be different, and this is due to differences in the culture of each tribe. The results of this study prove that cultural values and community views are closely related to the mother’s ability to care for herself and take care of her baby. The Madurese have a complex character in parenting, different from Javanese parents (Hodikho & Setyowati, 2015).

For the most part, the sex of the babies treated in the Perinatology Room at Balung Jember Hospital was female. So far, there are no known references or cases that state that the sex of the baby affects the birth of a baby with LBW. Studies show that the sex of the baby can be a stressor for parents. Parents may expect a certain gender at the birth of a child (Susilowati et al., 2016).

Babies treated in the Perinatology Room of RSD Balung Jember have an average weight of 3130 grams. Birth weight is the weight of the neonate at the time of birth which is weighed within one hour or after birth (Khayati & Sundari, 2019). Average Birth Weight (BBLN) is one indicator of the health of newborns. Adequate birth weight babies are babies with a birth weight of more than 2500 grams. LBW is a baby born weighing less than 2500 grams regardless of the gestation period. Studies reveal that most newborns receive exceptional care in the perinatology room (Hartiningrum & Fitriyah, 2019). One of the factors that cause stress in postpartum mothers is babies born with low birth weight (Ratnasari et al., 2017).
Based on the research, it was found that the average gestation period for babies treated in the Perinatology Room of RSD Balung Jember was 37.3 weeks (Wormald et al., 2015). The gestation period is influenced by several factors, one of which is healthy during pregnancy in the mother. Babies treated in the perinatology room with special conditions are usually caused by a short gestation period (Chen et al., 2017).

Based on the research, it was found that the average length of stay for babies treated in the Perinatology Room at Balung Jember Hospital was three days. According to research conducted by Rahmawati (2013), it was found that the length of stay of the baby depends on the baby's weight, so it was found that the smaller the birth weight and gestational age, the longer the length of care for the baby. The length of stay of the baby may be a stress factor for the mother. The longer the baby is cared for, the higher the stress level on the mother (Rakhmadi et al., 2018).

Medical diagnosis based on the research, it was found that the majority of the babies treated in the Perinatology Room of RSD Balung Jember were EOS. The incidence of EOS can be influenced by various factors such as maternal factors (preterm birth, surgical delivery, fever in the mother), environmental factors, and most importantly, factors from the neonates themselves, such as gender, twin status, invasive procedures, preterm infants and birth weight (Khayati & Sundari, 2019). The incidence of EOS or sepsis cannot be determined with certainty, but maternal factors can determine it.

Based on the research of APGAR Score, it was found that the APGAR score of infants treated in the Perinatology Room of RSD Balung Jember was AS 7-8 for 53 infants (42.7%), and AS scores 8-9 for 71 infants (57.3%). The results of this study are not in line with the research of Azka et al. (2016), where the AS value of 4-6 is 3.4% and the AS value of 7-10 is 96.6%. The APGAR assessment was carried out one minute 37, and five minutes after the baby was born and was used to determine whether the baby had asphyxia or not. Infants with an APGAR score < 7 within two minutes should be further (Ratnasari et al., 2017). Several factors that can affect the APGAR score are maternal hypoxia, maternal age less than 20 years or more than 35 years, parity, maternal vascular disease, impaired contraction of the mother, placenta (thin, small, not perfectly attached), placental abruption, babies born prematurely, low birth weight, fussy, and disorders of the umbilical cord (Hartinigrum & Fitriyah, 2019).

4.2 Family Empowerment (Family Center Care)

The level of family empowerment received by the mother in the perinatology room of RSD Balung is high empowerment. The results of this study are in line with the research of Sarjiyah et al. (2018) The level of empowerment (family center care) carried out by nurses in the perinatology room is in the excellent category. Other research explains that the application of family center care that involves parents in caring for babies such as the kangaroo method, wound care, nutrition, and teaching bathing babies for families who have children for the first time, the existence of an inner bond between mother and child can accelerate the baby's healing. (Nurhidayah et al., 2018). In contrast to other studies, it is explained that families are not involved in baby care because the intensive room for babies is a particular room and to prevent infection in infants (Susilowati et al., 2016). Baby care in the intensive room can cause stress, anxiety, depression, and posttraumatic stress in parents (Mohamed et al., 2019). This can be influenced by separation from the newborn, the inability to care for, assist, and care for the baby from the pain that the baby may experience, the technology and equipment in the intensive care unit, and the critical condition of the baby (Cleveland in Hendrawati, 2017). Therefore, it is concluded that family center care is essential to help reduce psychological problems in parents such as stress, anxiety, and depression and to increase the bond between parents and their children.

4.3 Mother's Stress

The stress level of mothers whose babies are undergoing treatment in the Edelweiss (Perinatology) room at Balung Hospital, Jember Regency, the majority have high-stress levels. Another study conducted by Rahayuningsih (2016) found that parents with low stress levels have less interaction with their babies. As long as the baby is undergoing treatment in the intensive care
unit, the role of the family is minimal because the condition of the closed room makes visiting time-limited so that communication between patients and families, as well as families and nurses, is reduced (Palma I. et al., 2017). Baby care in the intensive room has a significant impact on parents, such as fear, guilt, stress, and anxiety, this may be caused by the condition of the baby's disease (Mohamed et al., 2019). Another study revealed that parents experience stress for babies being treated in the NICU related to the sound and sound of medical devices being a source of stress (Musabirema et al., 2015). However, there are other factors that become stress factors such as parental age, education level, occupation, and baby's birth weight (Kawafha, 2018). So it can be concluded that the possible causes of stress in mothers with babies who are treated in the Perinatology Room at Balung Hospital, Jember Regency, are caused by lack of information related to the condition of their babies and minimal interaction with babies. Low interaction causes parents, especially mothers, to experience low stress, this is because mothers do not know the condition of their babies during treatment, while mothers who have high stress tend to have high interactions with their babies, this is because mothers know the condition of their babies which causes stressors—increased in the mother.

4.4 Mother’s satisfaction with service

The level of satisfaction of mothers who have babies in the Edelweiss (Perinatology) room at Balung Jember Hospital results in a low level of satisfaction. Parental satisfaction is a feeling of satisfaction and pleasure for parents because the baby's needs for nursing services are provided while being treated in the neonatal care room (Ludyanti et al., 2015). Parental satisfaction in the intensive care room is essential as one of the basics in determining the quality and service system. Parental satisfaction can occur when there is parental involvement in caring for the baby with the guidance and direction of the nurse (Kawafha, 2018). Based on these results, it can be concluded that there is no relationship between family empowerment and satisfaction for mothers and babies undergoing treatment in the perinatology room of RSD Balung (X² = 0.831; p-value = 0.362). This is in line with previous research on parental satisfaction with nursing services for premature babies in the neonatal intensive care room feeling disappointed and dissatisfied with nurses during the care of premature babies because nurses ignore and do not listen to complaints from parents, especially mothers ibu (Mohamed et al., 2019). Based on research that has been carried out in the Edelweiss room of RSD Balung Jember, it was found that there is no relationship between the level of satisfaction and empowerment because there are factors that are not directly related, namely stress. This may be influenced by factors from the respondent's characteristics such as the level of education, where it is explained that the majority of the respondents' education level is elementary school; studies reveal that the higher a person's education level, the higher the level of people's understanding of something (Rahayu & Nurhayati, 2016). However, there may still be other contributing factors.

The level of satisfaction and empowerment in the Edelweiss room of RSD Balung Jember has positive results. In line with previous research, a high level of treatment, and follow-up as well as facilities and financing that are easily obtained. This shows that the higher the satisfaction obtained by the mother, the lower the level of stress felt by the mother when the baby is in the treatment room.

4.5 The relationship between family empowerment and stress and maternal satisfaction with services for mothers with babies undergoing treatment in the perinatology room of RSD Balung

Parental satisfaction is a feeling of satisfaction and pleasure for parents because the baby's needs for nursing services are provided while being treated in the neonatal care room (Nurhidayah et al., 2018). Parental satisfaction in the intensive care room is vital as one of the basics in determining the quality and service system. Parental satisfaction can occur when there is parental involvement in caring for the baby with the guidance and direction of the nurse (Kawafha, 2018). Based on these results, it can be concluded that there is no relationship between family empowerment and satisfaction for mothers and babies undergoing treatment in the perinatology room of RSD Balung (X² = 0.831; p-value = 0.362). This is in line with previous research on parental satisfaction with nursing services for premature babies in the neonatal intensive care room feeling disappointed and dissatisfied with nurses during the care of premature babies because nurses ignore and do not listen to complaints from parents, especially mothers ibu (Mohamed et al., 2019). Based on research that has been carried out in the Edelweiss room of RSD Balung Jember, it was found that there is no relationship between the level of satisfaction and empowerment because there are factors that are not directly related, namely stress. This may be influenced by factors from the respondent's characteristics such as the level of education, where it is explained that the majority of the respondents' education level is elementary school; studies reveal that the higher a person's education level, the higher the level of people's understanding of something (Rahayu & Nurhayati, 2016). However, there may still be other contributing factors.
satisfaction with services can minimize parental stress levels (Kawafha, 2018). This can occur due to the condition of their children being treated in the perinatal care room with or not installed with assistive devices, lack of access to meet children, lack of information, and lack of fulfillment of parents caring for their children with health workers, which raises the level of parental concern so that the level of parental satisfaction is high. Low service and high-stress levels result in ineffective treatment carried out in the room (Kegler et al., 2019). Based on the results of the study above, it was found that there was a relationship between maternal satisfaction and stress on mothers and babies undergoing treatment in the perinatology room of RSD Balung (X 2 = 8.148; p-value = 0.004). The level of satisfaction of mothers in the high category will tend to experience low stress 3 times (OR=2.895; 95% CI=1.38-6.062).

Parental satisfaction is a basic step in determining the quality of nursing services (Galanis et al., 2016). Previous studies have shown that family-centered care can increase parental satisfaction and reduce the re-admission of premature babies (Erlinda, 2015). In addition, reducing anxiety increases parental closeness and affection with infants (Butt et al., 2013). The application of family-centered care involves parents from taking a passive role to playing an active role to be involved in the care of their children (O’Brien et al., 2013). Based on various research results, it was found that family center care is a relatively safe and easy-to-apply model that is proven to increase baby weight, reduce stress in infants, improve mother and baby welfare, and make parents feel more confident and competent in caring for their babies. After returning home (Butt et al., 2013). Parents' needs can be adequately identified, so nurses can provide appropriate support for parents in meeting these needs. By fulfilling the needs of parents, it can improve the quality of care provided by nurses in the neonatal intensive care room, both to children, parents, and their families so that the level of satisfaction of parents with services is obtained well.

5. CONCLUSION

The application of family centered care in the neonatal intensive care unit is related to the stress experienced by the mother. In addition, the low stress conditions experienced by mothers can increase maternal satisfaction. But in this study the application of family centered care did not have a significant relationship with service satisfaction to mothers. The application of family centered care is needed by parents to reduce the time when the baby is undergoing intensive care. This is beneficial for the physical and psychological health conditions of mothers and babies because it can provide opportunities for parents to care for children during the hospitalization process with supervision from nurses in accordance with applicable regulations and increase independence so that an increase in quality of life can be achieved. Further research is expected to examine the factors related to parental satisfaction with services in the neonatal intensive care unit.

6. ACKNOWLEDGEMENT

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7. CONFLICT OF INTEREST

The Authors declare that there is no conflict of interest.

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