



Research

Success Stories of Caring for Premature Babies from the Experiences of Indonesian Nurses: A Qualitative Descriptive Study

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A B S T R A C T

Background: Premature birth is still a crucial problem for children worldwide. In Indonesia, the fifth highest preterm birth rate country, many studies have been conducted on the success of treating premature babies, but more often, research on an intervention to address a specific problem faced by premature infants and their families. Rarely does the research examines qualitatively how health workers, including nurses, take careful measures to address all the health problems of premature babies at the same time until they are successful in caring for premature babies.

Purpose: This study aims to dig deeper into the success of Indonesian nurses in caring for premature babies.

Methods: This qualitative descriptive study uses focus group discussions (FGD) to obtain data from 17 nurses in the nursery who have experience caring for premature babies. Data from the two FGD groups were recorded, transcribed, and analyzed using thematic analysis.

Results: Four themes were obtained which described the success of nurses in caring for premature babies, namely (1) the various feelings of nurses when caring for premature babies, (2) the attitude of nurses to work, (3) the support of nurses to families (4) the work output of nurses.

Conclusion: Success in caring for premature babies from a nurse's perspective is booming in returning the baby to a healthy condition and staying healthy while being treated at home without rehospitalization. The success of caring for premature babies requires cooperation between nurses and families. Nurse support for the family will enable the family to participate actively during care and be able to care for premature babies at home.

INTRODUCTION

Premature birth is still a crucial problem for children worldwide (Cao, Liu and Liu, 2022). In developing countries, the problem of premature babies is a burden on the country's development (Kassabian *et al.*, 2020). To reduce this burden, a solution to the problem of premature babies is needed. Intervention innovations that are always evolving are needed to address the problem of premature babies (Cao, Liu and Liu, 2022). The success of premature infant intervention in developing countries can be seen from the average birth rate and average premature infant mortality rate (Sefidkar *et al.*, 2021).

The global premature infant mortality rate decreased by 47.71% from 1.27 million in 1990 to 0.66 million in 2019 (Cao, Liu and Liu, 2022). The neonatal mortality rate in Indonesia has also decreased from 19 per 1000 live births to 15 per 1000 live births in 2017 (Kemenppa RI, 2018). This reduction in mortality is comparable to the success of treating premature babies in hospitals, especially in the NICU room (Dance, 2020).

In Indonesia, a developing country and the 5th highest country with premature birth rates, many studies have also been conducted on the success of treating premature babies. Research on the success of treating premature infants more often examines an intervention to address a specific problem faced by premature infants and their families such as kangaroo mother care (KMC) for baby temperature conservation, developmental care for stimulation of infant development, breastfeeding to address nutritional problems, and early initiation to overcome bonding problems (Edmond, 2022). However, there are very few studies, especially in Indonesia, that examine qualitatively how health workers, including nurses, take care measures to address all health problems of premature babies at the same time to successfully treat premature babies. Qualitative research in Indonesia has existed is exploring the ethical experiences of nurses in invasive actions while caring for premature babies (Anggari, Kurniawan and Lamak, 2022). In general, qualitative research explores the experience of mothers caring for premature babies (Wang *et al.*, 2021). Therefore, researchers are interested in conducting the first qualitative investigation in Indonesia that digs deeper into the success of caring for premature babies from a nurse's perspective.

METHOD

This research is qualitative descriptive research. The study occurred at two national referral pediatric hospitals in Jakarta, Indonesia. Seventeen nurses participated in the inclusion criteria as follows: currently actively serving in the perineal room or NICU, have experience caring for premature babies for at least one year, and are willing to become participants. The exclusion criterion was that the participants did not fully participate in the FGD. Data were obtained by FGD consisting of two FGD groups. The first FGD group consisted of ten nurses, and the second FGD consisted of 7 nurses. Internal validation (credibility) is carried out by checking members. External validity (transferability) was achieved by listing FGD questions and detailed reports. Dependability is achieved by auditing the entire research process, from determining problems, data collection, and data analysis to concluding data. Data analysis using thematic analysis.

RESULT DAN DISCUSSION

This research has received ethical approval from the Faculty of Nursing Ethics Committee, University of Indonesia, as evidenced by a certificate of passing the ethical review Number: KET-185/UN2.F12.D1.2.1/PPM.00.02/2022. Fifteen categories and four themes were obtained, namely (1) nurses' various feelings when caring for premature babies, (2) nurses' work attitudes, (3) nurses' support for families (4) nurses' work output.

1st Theme. Various feelings of nurses when caring for premature babies.

The three categories combined form 1st Theme, namely 'the various feelings of nurses when caring for premature babies'. The three categories are feelings of awe towards tiny babies, feelings of being challenged to be able to care for tiny babies, and feelings of fear and burden. The nurse was amazed when she first encountered a premature baby. They see babies who are very small, fragile, and unique because they are different from other babies in general. This feeling of awe developed into a feeling of being challenged to be able to help babies through their critical periods.

"So it was amazing when I first entered the perineal room; it turned out that I found many new things, including one of which was a premature baby." (P2)

"... the uniqueness of premature babies is that we all know that premature babies are tiny, frail, so what is the name and how different it is from the other babies." (P1)

2nd Theme. Nurse's work attitude.

The six categories are combined into 2nd Theme, namely the work attitude of nurses. According to the nurse's perception, the work attitudes needed to care for premature babies are (1) strict, thorough, careful, and detailed supervision, (2) sensitive to the baby's condition, (3) patient attitude, (4) nurse must have the skills to care for premature babies, (5) providing special nursing care for premature babies, and (6) a continuous learning process. The fascination with the first Theme encourages nurses to develop a work attitude that focuses on helping babies through their critical periods. Nurses are challenged to be able to care for premature babies. Even though they were afraid at first, nurses felt they had an obligation to be able to handle the emergency problem of premature babies. Caring for premature babies who are frail and feel obligated to be able to care for them makes nurses feel a burden.

"... it is a challenge for me as a nurse to take care of him." (P3)

"Eee, because we are already in the intensive care unit with the skills we have with experience too, we are required to be able to handle babies when they are experiencing respiratory distress..." (P10)

"... at first I was afraid to hold small babies who are very small and fragile... So it was indeed heavy" (P2)

The unstable condition of premature babies and rapid changes occasionally make nurses have to carry out close supervision. Nurses also tend to care for premature babies with care. Nurses also pay more attention to premature babies by paying close attention to any changes in their condition. Thus nurses become more sensitive and quick to respond to changes in the baby's condition.

"... we have to be sensitive anyway... Yes, respond quickly, respond quickly like that..." (P12)

"... we have to be aware of changes every second... So we have to be careful there." (P5)

The length of stay (LOS) for premature babies is usually long because their condition is unstable, so it requires patience to care for premature babies for a long time. In addition to patience, good skills are also needed to support effective treatment. This skill is different from the skill of caring for a term baby. Term babies tend to be stable, so they do not need a lot of invasive interventions. In contrast, premature babies experience many health problems requiring invasive and non-invasive interventions. Thus premature babies need special and comprehensive nursing care. Premature baby care constantly evolves because nurses discover new things every time they care for babies. These discoveries made nurses think a lot and have a lot to learn.

3rd Theme. Nurse support for the family

3rd Theme is a combination of two categories, namely (1) paying attention to mothers' problems: anxiety and fear and (2) providing support and education to mothers. While caring for premature babies, nurses interact with families, especially mothers. The nurse sees the baby's mother feeling anxious and afraid. Nurses also pay attention to the problems faced by parents of premature babies.

"... mothers who give birth to premature babies are afraid on average because the baby is small, so they do not even dare to hold it." (P4)

"... the emotional and psychological problems of parents also, of course, become what is called concentration for nurses in dealing with parents' unpreparedness to accept their baby eee born so quickly." (P3)

The nurse explained that supporting the family was an action to overcome the mother's anxiety. Nurses provide support so that mothers are brave and willing to accept premature babies. Nurses also educate mothers to strengthen the belief that mothers can care for their babies.

"...so that you are not afraid to hold your baby because you are not confident.... for eee what to inspire confidence in these parents and convince them that they will be able to take good care of their children." (P5)

"... it is the parents that we have to strengthen mentally so that the parents can care for their babies at home." (P7)

4th Theme. Nurse work output

Four categories were combined into 4th Theme, namely the work output of nurses. Success in caring for premature babies, according to the nurse's perspective, is booming in returning the baby to a healthy condition. Nurses feel happy when they see nursing actions positively affect babies. A positive effect is seen when the baby grows and does not have an infection. Nurses also hope the baby will stay healthy at home and not undergo rehospitalization.

"...repatriating premature babies is one of the successes of nurses..." (P2)

"... the joy of caring for premature babies is when they see the rapid growth and development of premature babies, especially eee what is the weight like that when they improve well then their immunology is getting better there is no infection ... sending them home with various system problems in the baby which has been completed is also a joy for us." (P3)

Nurses find it truly amazing to experience caring for premature babies. All participants agreed that a feeling of amazement arose for the first time when they met a premature baby. They see babies who are very small and different from babies in general. The tiny baby looked so fragile that the nurse grew a feeling of pity and worry. They are worried about everything, including the actions nurses take on babies that can injure or worsen their condition. However, the nurse is unwilling if this baby does not survive. Nurses try to make this baby survive and grow well during treatment. This nurse's business is by the recommendations of the *World Health Organization* (WHO) for the care of premature babies, namely helping babies survive without disabilities (WHO, 2015).

The condition of this vulnerable premature baby indeed places the baby at critical risk that threatens his life (Silva *et al.*, 2020). Nurses feel a responsibility to help babies get through this critical period. Nurses develop the skills to deal with infants who fall into critical conditions. The skills nurses develop when caring for premature babies include critical thinking skills, procedural skills, interpersonal skills, and the ability to work in teams. The skills nurses need are the results of Ali's research in 2019, which examined the skills of nurses in the NICU room (Ali *et al.*, 2019). The nurse's ability to identify early signs of danger in infants and determine quickly the actions that need to be taken is a feature that nurses develop critical thinking skills. These characteristics of nurses' critical thinking skills follow Cupit's research, 2021, which explores how nurses make decisions in the NICU room, where situations change rapidly regarding the condition of infants and families of infants (Cupit *et al.*, 2022). Nurses become more sensitive to any changes in the condition of premature babies, which, if not treated quickly and appropriately, will develop into critical conditions.

Even though they have to work quickly, the nurse still works carefully and thoroughly because every action will impact the premature baby's condition. This careful and thorough work attitude follows the results of a study by MacTier, 2020, which found that the condition of premature babies can change every second, so care and caution are needed in caring for them so as not to cause new health problems (MacTier *et al.*, 2020). The many health problems of premature babies cause premature babies to need a long treatment time, so nurses need patience during hospitalization.

While caring for premature babies, nurses admit that there is a lot to think about, including the physiological condition of the baby and the psychology of the baby and his family. Nurses find different conditions between one premature baby and another, so they always find new things to learn. Therefore, nurses' knowledge about the care of premature babies is continuously developing from time to time. Developing knowledge from this way of learning illustrates continuous learning, a criterion for nurses (Vandali, 2017). Thus the description of work attitudes conveyed by nurses in this study is a description of the professional work attitude of a nurse when dealing with premature baby clients.

In addition to paying attention to the problems of premature babies, nurses also pay attention to parents of premature babies. The nurse's observations showed that the parents of premature babies had emotional and psychological problems. The results of this nurse's observation follow the results of Palomares' research, 2021, which found that 86.8% of parents are afraid

to touch their babies (Jiménez-Palomares *et al.*, 2021). Nurses see that most mothers who give birth to premature babies feel insecure about being able to care for these tiny babies. Veronez's research field supports this nurse's observation notes in 2017, which found that mothers felt insecure about bringing their babies home (Veronez *et al.*, 2017). The nurse strengthens the mother's mentality so that the mother dares to hold and accept the baby. Mothers get support and health education from nurses who teach continuously about what knowledge and skills are needed to care for premature babies. The nurse reassured the mother that she could care for the baby well. The nurse said she would do anything to support the parents of premature babies, especially mothers. This is in line with Im's research, 2021, which received the recognition that mothers of premature babies feel the support provided by NICU nurses (Im & Oh, 2021). Nurse support and health education follow the research results examining various strategies for nurses to provide emotional and practical support (Maleki *et al.*, 2022). This collaboration between nurses and parents ultimately makes parents mentally solid and confident in their characteristics so that they can participate actively during the hospitalization of premature babies. Parents' active participation during hospitalization will support the success of premature baby care (De Bernardo *et al.*, 2017).

The nurse's perception of success in caring for premature babies is to return the baby to a healthy condition. This definition of success follows the opinion of Prescott, who researched the care of premature babies in the early 20th century (Prescott & Hehman, 2017). Nurses are essential in caring for premature babies (Prescott & Hehman, 2017). Nurses have worked with various health professions, working with various medical devices and dealing with and overcoming the health problems of premature babies. Given the many health problems and length of premature babies' hospitalization, returning home in good health is a satisfaction and success for nurses. This success is expected to continue when the baby is cared for at home. The nurse hopes that what has been taught while in the hospital can be continued by the mother at home. Good habits such as washing hands, KMC, and breastfeeding properly can still be practised by mothers when caring for babies at home. The nurse's hopes were not fulfilled when the nurse got the baby back into the hospital with a bad health condition. Nurses feel disappointed because their efforts while caring for them are wasted. The nurse feels that they have put out their best abilities and efforts during the baby's hospitalization, but when the baby is cared for at home usually and in the end, the growth and development are not as expected. Therefore it is necessary to prepare for discharge that supports the transition of premature babies from the hospital to home (Green *et al.*, 2021). Thus increasing the chances that treatment goals can be achieved.

Premature baby care aims to keep the baby alive and maintain quality. The achievement of this goal is in line with the results of research by Yanhong, 2020, which successfully treated premature babies to be healthy without defects (Yanhong *et al.*, 2020). Nurses are disappointed and judge that the goals of treating premature babies are not achieved when caring for still-alive babies but lack quality in the future. To avoid this disappointment, the nurse exerts all her best efforts during hospitalization to return the baby to good health and not undergo rehospitalization.

CONCLUSION

From a nurse's perspective, success in caring for premature babies is booming in returning the baby to good health and staying healthy while being treated at home without rehospitalization. The success of caring for premature babies requires cooperation between nurses and families. Nurse support for the family will enable the family to participate actively during care and be able to care for premature babies at home. To maintain successful treatment, the researcher suggests further research to examine the effective hospital-to-home transition program for premature infants in Indonesia.

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