

## IMPLEMENTATION OF JEAN WATSON'S CARING THEORY IN NICU NURSING PRACTICE FOR FAMILIES OF LOW BIRTH WEIGHT INFANTS (LBW)

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### ABSTRACT

The increase in infant mortality rates is largely attributed to cases of low birth weight (LBW). This is supported by the high incidence of LBW cases reported in various hospitals. Low birth weight infants require prolonged and intensive care due to their susceptibility to multiple health complications. Such conditions often trigger varying levels of anxiety among family members. One of the interventions that can be applied to support families during the hospitalization period is Jean Watson's Theory of Caring. To explore and describe the experiences of families with low birth weight (LBW) infants hospitalized in the NICU, and to examine how Jean Watson's Caring Theory is implemented by nurses in supporting family adaptation and reducing anxiety during the hospitalization process. A qualitative descriptive phenomenological design was employed. The study involved eight participants selected through purposive sampling. Data were collected through behavioral observations and in-depth interviews with the participants. The findings revealed four main themes of caring consistent with Jean Watson's perspective: emotional reactions, anxiety responses, caring during treatment, and family expectations. From the experiences of parents of LBW infants in the NICU, four caring themes emerged—emotional reactions, anxiety responses, caring during treatment, and family expectations. These findings were then integrated into the development of a Caring Guideline Book for the care of LBW infants based on Jean Watson's Theory of Caring.

**Keywords:** Low Birth Weight (LBW), Jean Watson's Caring Theory, Family Anxiety, Length of Hospitalization.

### INTRODUCTION

Low Birth Weight (LBW) refers to infants born with a birth weight of less than 2,500 grams. Infants with low birth weight are more vulnerable to illness and infection, and if not managed properly, they are at risk of delayed motor development and learning difficulties (UNICEF, 2022). The leading cause of neonatal death in Indonesia was Low Birth Weight (LBW). LBW remains one of the most common problems in neonatal cases,

and its incidence is unpredictable (Kemenkes, 2020). According to the World Health Organization (WHO), an estimated 15-20% of all births worldwide are LBW, representing more than 20 million infants annually. In 2019, the global prevalence of LBW was 14.9% of all live births, which declined slightly to 13% in 2020 and 12.7% in 2021 (WHO, 2022).

The prevalence of LBW in Central Java Province was 3.9% (Kemenkes RI, 2022). According to the Central Java Statistics Bureau (2022), the number of LBW infants in Kudus Regency reached 489 cases, indicating that LBW remains a significant health problem (Dinkes Jateng, 2023). A preliminary study conducted at RSUD dr. Loekmono Hadi Kudus using interviews with 10 mothers of LBW infants revealed that 8 mothers experienced severe anxiety, expressing emotional distress such as crying, tension, restlessness, and fear that something bad would happen to their babies. Meanwhile, 2 mothers reported mild anxiety, as they trusted the medical team to take care of their infants' health.

Parents of LBW infants often experience varying levels of anxiety, which requires special attention from nurses in the neonatal care unit. Family anxiety during a child's stay in the Neonatal Intensive Care Unit (NICU) calls for a caring attitude from nurses (Agustin et al., 2019). Prolonged anxiety can negatively affect family health, causing symptoms such as fatigue, fainting, or other psychological consequences (Ibrahim & Ridwan, 2022). Given the frequent anxiety among mothers during the prolonged and unpredictable NICU treatment period, it is crucial to address this issue through appropriate nursing interventions (Nengsih & Lestari, 2023).

Similarly, research by (Intani et al., 2023) found a significant association between nurses' caring behavior and family anxiety levels in the ICU ( $p = 0.004$ ). Improved caring behavior among nurses is associated with reduced anxiety levels in patients' families (Sugiyarto et al., 2021).

One nursing model applicable to LBW cases is Jean Watson's

Theory of Human Caring, which emphasizes that nursing focuses on health promotion, disease prevention, patient care, and recovery. Watson conceptualized caring as addressing both stress management and conflict resolution (Pardede et al., 2020). Caring involves showing genuine concern for others, respecting human dignity, and committing to maintaining health and preventing deterioration (Mirayani et al., 2021). Applying Jean Watson's Caring Theory comprehensively to the families of LBW infants is expected to reduce their anxiety levels during the uncertain course of hospitalization (Wahyuni et al., 2020).

The purpose of this study is to explore the experiences of families with LBW infants hospitalized in the NICU based on Jean Watson's Caring Theory, with the aim of developing a Caring Guideline Book for LBW infant care.

## LITERATURE REVIEW

Caring plays a central role in nursing and should be evident in every nurse-patient interaction. It should not be neglected due to workload or poor management systems. The implementation of caring behavior enhances the quality of nursing care, improves the public image of nurses, and strengthens the professional identity of nursing as a compassionate healthcare discipline (Anitarini et al., 2020). A study conducted in the intensive care unit at RSUD dr. Soehadi Prijonegoro Sragen found that most nurses demonstrated moderate caring behavior (86.7%), while 83.3% of family members experienced moderate anxiety levels (Agustin, 2020). Another study confirmed a significant relationship between

caring behavior and parental anxiety (Pardede & Simamora, 2020).

## RESEARCH METHODS

This study employed a qualitative approach with a descriptive phenomenological design. This design was chosen to identify and explore in depth the experiences of families of infants with low birth weight (LBW) who were hospitalized for extended periods in the Neonatal Intensive Care Unit (NICU), as well as the application of Jean Watson's Caring Theory by nurses in managing family anxiety. The study was conducted at RSUD dr. Loekmono Hadi Kudus from December 8, 2024, to January 24, 2025. This hospital was selected because it is a referral center equipped with comprehensive and intensive NICU facilities.

Ethical approval was obtained from the Health Research Ethics Committee of RSUD dr. Loekmono Hadi Kudus (Letter No. 050/KEPK/XI/2024, dated November 25, 2024) and a Letter of Ethical Eligibility from the Ethics Committee of Universitas Karya Husada Semarang (No. 164/KEP/UNKAHA/SLE/X/2024, dated October 16, 2024). All participants were provided with detailed information sheets and signed informed consent forms prior to participation. Confidentiality, anonymity, and the right to withdraw at any stage were guaranteed in accordance with ethical standards for qualitative research.

The participants in this study were parents (mothers or fathers) of LBW infants who were admitted to the NICU for more than seven days. Purposive sampling was used to select participants who met the inclusion criteria and possessed relevant experiences concerning the

studied phenomenon. A total of eight parents participated in the study. The inclusion criteria were:

1. Parents of LBW infants hospitalized in the NICU for more than seven days,
2. Willingness to participate voluntarily,
3. Ability to communicate effectively, and
4. Willingness to share their experiences openly.

Data were collected using non-participant observation and in-depth semi-structured interviews. Observations were conducted to capture natural interactions between nurses and family members during care provision. The in-depth interviews explored family experiences, perceptions, and meanings of caring behaviors received, as well as the manifestations of anxiety during hospitalization. The researcher served as the primary instrument (human instrument), supported by an interview guide developed based on the study objectives and theoretical framework. Instrument validity was ensured through expert judgment involving specialists in psychiatric and pediatric nursing. The first author designed the research protocol, obtained ethical approvals, conducted the interviews, and performed initial coding. The second and third authors refined the interview guide, validated the instrument, reviewed the transcripts and coding for consistency, led thematic analysis discussions, and finalized the manuscript following the required citation format.

Data were analyzed using Colaizzi's seven-step phenomenological method, which included; reading all interview transcripts thoroughly, extracting significant statements related to caring and anxiety experiences,

formulating meanings from these statements, organizing meanings into clusters of themes, developing an exhaustive description of the phenomenon, identifying the fundamental structure of the experience, and conducting member checking by returning findings to participants to validate the accuracy of interpretations.

To ensure the rigor and trustworthiness of the study, criteria of credibility, dependability, confirmability, and transferability were applied.

1. Credibility was established through prolonged engagement, triangulation of data sources (observation and interview), and member checking.
2. Dependability was ensured by maintaining detailed documentation of the research process and audit trails.
3. Confirmability was achieved through peer debriefing among research team members to avoid researcher bias.
4. Transferability was supported by providing rich, thick descriptions of the research context, participants, and findings to enable applicability in similar settings.

## RESEARCH RESULTS

This study, conducted at RSUD dr. Loekmonohadi Kudus, explored the lived experiences of families with low birth weight (LBW) infants admitted to the Neonatal Intensive Care Unit (NICU) through the lens of Jean Watson's Caring Theory. The participants' ages ranged from 22 to 39 years, and most of the infants were first-born children. Through thematic analysis, four major themes were identified; emotional processes experienced by mothers of LBW Infants in the NICU, anxiety during the hospitalization period,

nurses' caring behaviors to reduce anxiety and parents' hopes for their child's recovery and NICU services.

### Theme 1: Emotional Processes Experienced by Mothers of LBW Infants in the NICU

This theme comprises four categories representing emotional stages: shock and sadness, anger, anxiety, and acceptance. The following excerpts illustrate these emotions:

#### 1. Shock and Sadness

Mothers expressed feelings of disbelief, sadness, and guilt after learning that their infants were born with low birth weight and required intensive care.

(P2) "I felt shocked and sad; my baby was born weighing less than normal."

(P3) "I was surprised and anxious because this situation was not what I had expected."

(P4) "I felt very worried and sad. I didn't expect this to happen, and I felt guilty."

(P5) "I was very shocked and confused, not ready at all."

(P6) "I felt sad and confused, afraid something bad might happen to my baby."

(P8) "I was shocked and sad. I was confused why this happened."

#### 2. Anger

Some mothers experienced frustration and self-blame regarding their perceived role during pregnancy.

(P4) "I felt angry and guilty, wondering if I had taken good enough care of my health during pregnancy."

#### 3. Anxiety

Mothers described feelings of helplessness and fear about their child's condition and treatment outcomes.

- (P1) "I often felt helpless because I couldn't be by my baby's side all the time."  
 (P4) "I was anxious and worried whether the treatment would be enough to save my baby."  
 (P5) "Will my baby recover?"  
 (P6) "I felt like I failed as a parent."  
 (P8) "I was afraid my baby wouldn't recover and worried she wouldn't go home like the others."

#### 4. Acceptance

Over time, several participants began to accept their situation and place trust in the medical team.

- (P1) "I felt a bit calmer because my baby is in a place that provides the best care."  
 (P2) "I tried to stay calm; maybe this is the fate I must face."  
 (P3) "I tried to accept this situation."  
 (P7) "I know this is the best step to ensure my baby receives proper treatment."  
 (P8) "I believe this treatment is the best for my baby."

#### Theme 2: Anxiety During the Hospitalization Period

This theme consists of three categories: deep anxiety, anxiety about NICU procedures, and anxiety due to prolonged hospitalization.

##### 1. Deep Anxiety

Mothers expressed constant fear about their infants' survival and the possibility of complications.

- (P1) "What I fear most is the possibility of complications or worsening conditions. Every day I feel anxious, afraid of bad news."  
 (P2) "I'm most worried about whether my baby will survive or not."

- (P3) "I was afraid of unexpected things, especially death or health complications."

- (P5) "Can my baby survive with all these tubes attached? Will my baby recover?"

- (P7) "I worry about possible complications."

- (P8) "I'm scared that my baby won't recover."

##### 2. Anxiety About NICU Procedures

The intensive medical equipment and clinical environment were sources of distress.

- (P4) "Seeing my baby treated with so many medical devices made me scared."

- (P5) "I was afraid because my baby was attached to so many tubes."

- (P6) "I was scared my baby wouldn't recover."

- (P7) "I was worried about possible complications."

##### 3. Anxiety Due to Prolonged Hospitalization

Mothers also felt distress when their infants remained in the NICU longer than expected.

- (P1) "Feelings of anxiety and sadness arose. I kept wondering why my baby wasn't allowed to go home."

- (P5) "I was anxious that my baby wouldn't be able to leave the NICU."

- (P6) "I felt sad and jealous. I wondered why my baby wasn't allowed to go home yet – was the condition worse?"

- (P7) "I was worried about my baby's recovery process and whether she could go home like other babies."

##### Theme 3: Nurses' Caring Behaviors to Reduce Anxiety

This theme includes three categories: emotional caring,

informational caring, and professional caring.

#### 1. Emotional Caring

Participants described the nurses' empathy, emotional support, and reassurance during the hospitalization process.

(P1) "They helped me understand my baby's medical situation better."

(P3) "I felt professionalism and empathy from the nurses caring for my baby."

(P4) "The nurses always updated us on my baby's progress and gave emotional strength."

(P8) "They were also attentive to me as a family member."

#### 2. Informational Caring

Providing clear and understandable information helped parents cope with uncertainty.

(P1) "The nurses were very kind and explained my baby's condition clearly."

(P2) "They provided information in a simple, easy-to-understand way."

(P6) "They often talked with us about the baby's condition, which made me feel supported."

#### 3. Professional Caring

Parents perceived the nurses as competent, confident, and trustworthy.

(P1) "I felt that the nurses were very skilled in caring for my baby."

(P2) "The service provided by the nurses was excellent."

(P3) "The nurses were very professional in performing their duties."

(P4) "They looked very professional and gave us confidence."

(P5) "Some nurses were confident and friendly."

(P6) "The nurses were friendly and appeared professional."

(P7) "Most of the nurses looked professional and confident."

(P8) "Most of the nurses showed professionalism and confidence."

#### Theme 4: Parents' Hopes for Their Child's Recovery and NICU Services

This theme consists of two categories: hopes for the child's health and hopes for NICU service improvement.

##### 1. Hopes for the Child's Health

(P1) "I hope my baby recovers completely and grows healthy."

(P2) "I hope my baby can recover soon and be discharged from the NICU."

(P3) "My hope is that my baby achieves optimal health."

(P4) "I wish my baby could recover and go home."

(P5) "I hope my baby can leave the NICU in good health."

(P6) "I want my baby to get better quickly and go home."

(P7) "I hope my baby grows strong and healthy."

(P8) "I hope my baby can leave the NICU soon in good condition."

##### 2. Hopes for NICU Services

(P1) "I hope my baby receives the best possible care and recovers soon."

(P2) "I hope all the care provided helps my baby grow and develop well."

(P3) "I hope to stay involved and give my best support to my baby."

(P4) "I hope the healthcare team continues to give the best attention to my baby."

(P5) "I wish for more communication from the nurses so I can feel calmer."

(P6) “I hope the doctors and nurses keep helping us until my baby is fully recovered.”

(P7) “I hope the healthcare team continues providing informative support.”

(P8) “I hope my baby receives the best care and recovers perfectly.”

The results of this study were analyzed thematically as follows:

**Table 1. Summary of Thematic Data Analysis**

| Theme  | Category                                 | Keywords   |
|--|--|--|
| Emotional Responses of Parents with Infants Hospitalized in the NICU | Rejection and Sadness Response           | 1. Sadness<br>2. Denial<br>3. Anxiety<br>4. Fear   |
|  | Anger Response                           | Anger  |
|  | Anxiety Response                         | 1. Helplessness<br>2. Feelings of Failure<br>3. Distrust   |
|  | Acceptance Response                      | 1. Calmness<br>2. Acceptance<br>3. Trust   |
| Anxiety During NICU Care   | Deep Anxiety                             | 1. Complications<br>2. Survival Concerns<br>3. Death   |
|  | Anxiety Related to NICU Treatment        | 1. Medical Equipment<br>2. Possibility of Recovery   |
|  | Anxiety Due to Prolonged Hospitalization | 1. Envy<br>2. Wondering<br>3. Concern About Recovery   |
| Nursing Caring Behavior  | Emotional Caring                         | 1. Helping<br>2. Empathy<br>3. Encouragement<br>4. Attention   |
|  | Informational Caring                     | 1. Providing Explanations<br>2. Communication  |
|  | Professional Caring                      | 1. Steadfastness<br>2. Professionalism<br>3. Confidence  |
| Family Expectations  | Expectations for the Child’s Health      | 1. Recovery<br>2. Health<br>3. Discharge from Hospital<br>4. Leaving the NICU<br>5. Complete Healing                     |
|  | Expectations for NICU Care               | 1. Optimal Care<br>2. Assistance<br>3. Accompanying the Infant<br>4. Attention<br>5. Communication<br>6. Informativeness |

## DISCUSSION

The first theme revealed that the emotional responses expressed by parents reflected shock, denial, sadness, anxiety, fear, and even anger. These initial emotional reactions emerged because parents were unprepared to accept the reality that their infants required intensive care. This unpreparedness may be attributed to a lack of antenatal education, expectations of a normal birth, and limited information regarding the possibility of having a low birth weight (LBW) infant. Kübler-Ross's *Grief Theory* illustrates five emotional stages in coping with loss or crisis—denial, anger, bargaining, depression, and acceptance. The early emotional reactions of denial and anger are highly consistent with the initial stages of this model (Watson, 2021).

Mishel's *Uncertainty in Illness Theory (UIT)* explains that uncertainty in the context of illness can disrupt an individual's ability to comprehend and manage a situation, ultimately influencing coping and adaptation processes that lead to anxiety (Firmansyah et al., 2019). Within the intensive care setting such as the NICU, uncertainty regarding an infant's prognosis and a lack of clear information may exacerbate parental stress (Alviyanti & Nurlaila, 2024).

The second theme identified was *anxiety during NICU care*, which reflects an emotional shock commonly experienced in critical situations, especially when parents lack sufficient information or mental readiness to face such conditions. Previous studies have reported that parental role changes—such as feeling unable to protect or care for their baby—serve as major stressors in the NICU (Utario et al., 2021). According to Jean Watson's *Theory of Human Caring*, emotional, spiritual, and interpersonal

dimensions must be integral components of nursing practice. The parents' early emotional reactions represent critical moments that require the nurse's presence as an empathetic, comforting, and understanding figure (Sanjaya et al., 2023). Through *therapeutic communication* and *authentic presence*, nurses can assist parents in managing their emotions and fostering hope during this highly stressful period (Nurlaila et al., 2023).

The third theme, *nursing caring behavior*, aligns strongly with Jean Watson's *Human Caring Theory*, particularly the concept of *transpersonal caring relationships*. Watson emphasizes that caring extends beyond the physical dimension, encompassing spiritual and emotional connections between the nurse, the patient, and the patient's family (Anitarini et al., 2020). Nurses who provide care not only address physical needs but also establish emotional bonds, offer psychological support, and empower parents of LBW infants (Marwah et al., 2020), (Aeni & Indrayati, 2024). The nurse's attention extends beyond the patient to include the family members who long for positive updates regarding their baby's condition in the NICU (Ngaisah & Rahman, 2020). Supporting this, prior studies have shown that nurses' emotional intelligence positively correlates with the quality of nursing care. Nurses with higher emotional intelligence are better able to build therapeutic relationships, enhancing patient satisfaction and trust in healthcare services (Shetty et al., 2024).

Based on these phenomenological findings, the researcher argues that *caring practices* in neonatal intensive care

units are not supplementary aspects of healthcare but essential components that determine holistic and positive outcomes for both infants and their families (Wahyuni et al., 2020). This reinforces the idea that nurses hold dual roles: as clinical caregivers and as providers of crucial psychosocial support. It is important to recognize that *caring* is not an innate trait but a skill that can be developed through education, ongoing training, and self-reflection (Intani et al., 2023).

The fourth theme, *family expectations*, revealed that families desired to be actively involved in their infants' care—through touching, speaking to, and directly interacting with their babies. Parental involvement strengthens emotional bonding and enhances parents' confidence in caring for their infants, fostering collaboration between healthcare professionals and families in supporting LBW infant care (Aeni et al., 2019). Families wished not merely to be observers but to play an active role in their baby's recovery process (Anggraini et al., 2023). Such involvement can be facilitated through *Family-Centered Care (FCC)* approaches in perinatal settings, such as *skin-to-skin contact* and direct breastfeeding (Dary et al., 2019).

Hildegard Peplau's *Interpersonal Relations Theory* provides an essential framework, emphasizing that the therapeutic relationship between nurses and families is built upon open, empathetic, and professional communication. Previous studies highlight that effective communication between NICU staff and families is crucial in helping parents understand their infants' conditions and feel supported throughout hospitalization (Aeni et al., 2019). Psychosocial support from

nurses is vital for parents of premature infants, providing them with a sense of safety and hope during NICU care (Duri & Ilmiasih, 2024). Moreover, nursing care grounded in emotional intelligence and professional caring approaches has been shown to significantly reduce family anxiety (Marwah et al., 2020). In summary, families' expectations for LBW infants and NICU care encompass infant safety, active parental involvement, transparent communication, and continuous emotional support from healthcare providers.

This study has several limitations that should be acknowledged. First, the research was conducted at a single site—RSUD dr. Loekmono Hadi Kudus—which limits the generalizability of the findings to other healthcare settings that may differ in service characteristics, organizational culture, or nursing approaches. Second, the number of participants was limited to eight parents of low birth weight (LBW) infants admitted to the NICU, thus the representation of family experiences may not fully capture the diversity of social, economic, and psychological backgrounds. Finally, the emotional condition of the parents, who were still experiencing anxiety during their infants' hospitalization in the NICU, may have influenced the depth of information provided, potentially resulting in some important aspects not being fully revealed.

## CONCLUSION

This study concludes that the experiences of parents with low birth weight (LBW) infants hospitalized in the NICU, viewed through the lens of Jean Watson's Caring Theory, generated four major themes. These include: (1) the initial

emotional reactions of participants, encompassing sadness, anger, anxiety, and eventual acceptance; (2) anxiety experienced throughout the NICU care process; (3) caring behaviors of nurses that help alleviate parental anxiety; and (4) parental hopes concerning both their child's recovery and the quality of care provided.

Based on these findings, the study recommends the development of a *Caring Guideline Book* for LBW infant care grounded in Jean Watson's perspective. This guide aims to support nurses in implementing consistent, holistic caring practices and to help families adapt emotionally and manage anxiety during their infant's hospitalization in the NICU. Furthermore, healthcare institutions are encouraged to adopt and institutionalize caring-based instruments for both patients and their families. Such tools can enhance the quality of family-centered care, foster emotional resilience, and strengthen the therapeutic relationship between nurses and parents in the NICU environment.

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