



## **IMPLEMENTATION OF THE NURSING THEORIES “NEED FOR HELP WIEDENBACH” AND “CONSERVATION LEVINE” IN NURSING CARE FOR PREGNANT WOMEN WITH PREECLAMPSIA**

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| <b>ABSTRACT</b>   | <b>Keywords</b>  |
|---|--|
| <p>Preeclampsia is a leading cause of maternal death during pregnancy, childbirth, and postpartum. The consequences of preeclampsia include HELLP syndrome, cardiovascular disorders, lung, kidney, and liver failure, coagulopathy, placental abruption, and cerebral hemorrhage. The consequences for the fetus include Intra-Uterine Growth Retardation (IUGR) and Intra-Uterine Fetal Death (IUFD). A comprehensive approach is needed in providing nursing care to mothers with preeclampsia. The aim of this study was to apply Wiedenbach's "Need for Help" and Levine's "Conservation" theories to the practice of nursing care for pregnant women with preeclampsia. The research method used was a case study with a focus on the application of Wiedenbach's "Need for Help" and Levine's "Conservation" theories to the practice of nursing care for pregnant women with preeclampsia. This theory was applied to two patients. Wiedenbach's theory emphasizes the importance of nurses' sensitivity in recognizing the comprehensive needs of pregnant women, including physical, psychological, and educational. Levine's theory reinforces this intervention with the principle of preserving patient integrity, which includes energy, structural, personal, and social aspects. The integration of these two theories strengthens the role of nurses as therapeutic agents who are able to manage risks, educate, and empower patients, especially pregnant women with preeclampsia.</p> | <p><b>Pre eclampsia; Need For Help Wiedenbach ; Conservatio n Levine</b></p> |

### **INTRODUCTION**

Preeclampsia is a group of complications that arise during pregnancy, childbirth, and the postpartum period, characterized by the existence of

hypertension, edema, and proteinuria. Currently, preeclampsia is the main reason for death. That happened during pregnancy, childbirth, and postpartum. Global prevalence of preeclampsia reaches 2 – 10%

of all pregnancies and results in more than 50,000 maternal deaths every year (1). In Indonesia, the incidence of preeclampsia is estimated to reach 128,273 cases per year, or about 5.3% of all pregnancies. These conditions not only threaten the safety of the mother and fetus but also give rise to significant psychological and social impacts (Ministry of Health, 2022).

Until moment this case of preeclampsia is not yet known the cause in a way sure, but scientists and experts agree that the case of preeclampsia started from a disturbance in blood flow. Other factors that can increase the risk of preeclampsia include being primigravida, a history of preeclampsia in pregnancy, malnutrition, pregnancy with twins, and suffering from certain conditions like hypertension, diabetes, kidney disorders, prolonged pregnancy, and so on. The consequences that can occur in cases of preeclampsia are HELLP syndrome, which consists of Haemolysis, Elevated liver Enzymes, and Low Platelet count, eclampsia, cardiovascular failure, lungs, kidneys, and liver, coagulopathy, placental abruption, as well as bleeding in the brain. Possible consequences that occur in the fetus include Intra Uterine Growth Retardation (IUGR) and Intra Uterine Fetal Death (IUFD) (Dini et al., 2023).

In facing the complexity of preeclampsia, approach-based nursing theory becomes important to ensure holistic, adaptive, and patient-centered interventions. Implementation theory of nursing, particularly Wiedenbach's "Need for Help" and Levine's Conservation, can give a comprehensive approach to nursing care for mothers with preeclampsia. Wiedenbach's theory focuses on fulfilling the needs of patients through observation, action, and evaluation, whereas Levine Conservation emphasizes the importance of guarding the balance of energy in patients in the face of a crisis like preeclampsia (Levine, 1973; Wiedenbach, 1964).

Application theory nursing “ *Need for Help Wiedenbach* ” to overcome an emergency condition. This theory also explains that the steps to solve a problem are through four stages: identification, selection

(administration), validation, and coordination (Elvia, 2021).

Stage further after resolving the condition, the emergency patient needs to be given care nursing to maintain his life with the implementation of Levine's theory. A person's energy is determined by comparing intake energy and output energy. This theory consists of conservation energy, structural integrity, personal and social integrity. Nursing process based on theory. This consists of assessment, trophicognosis (diagnosis nursing), hypothesis, intervention, and evaluation (Juwita et al., 2022 ).

## METHOD

The method used is a case study focused on the implementation of the nursing theory "Need for Help Wiedenbach" and "Conservation Levine" in the practice of nursing care for pregnant women with preeclampsia to improve quality, holistic, and responsive interventions. Implementation theory. This was conducted on 2 pregnant women with preeclampsia (maternal age 30-35 years, pregnancy 24-28 weeks, PEB) at RSI Sakinah Mojokerto. Ethical Approval No: RK. 095/KEPK/STIK/I/2025

## RESULTS

### Report 1

Mrs. A, 31 years old, MRS on September 5, 2025 at Hospital X with a diagnosis of G3P1011 UK 25/26 weeks + PEB + Latitude.

The patient reported experiencing swollen feet for two weeks. She also reported feeling weak, dizzy, and experiencing double vision. She decided to see a doctor. She was then referred to an obstetrician due to her condition and blood pressure of 170/110 mmHg. She reported undergoing blood and urine tests, as well as an ultrasound. The blood tests revealed anemia. Assessment revealed a blood pressure of 144/95 mmHg, heart rate of 106 x/mt pulse rate of 36.8°C, respiratory rate of 20 x/mt, GCS of 456, and heart rate of 135 x/mt.

Medical history: The patient had a history of hypertension since entering the second trimester of pregnancy. The doctor

recommended iron tablets, vitamins, and calcium therapy. Her mother's family had a history of chronic diabetes mellitus.

Psychosocial aspects: The patient said she was worried because of a history of miscarriage in a previous pregnancy. The patient also reported frequent dizziness and fatigue after light activity. Swollen feet made activities difficult. Inspection Physical: good, composmentis, T = 144/95 mmHg, CRT > 3 seconds, cold extremities, pale skin. BMI = 32.5. Leopold: location latitude, head is on the left, fetal heart rate = 135x/mt, estimated fetal weight = 1860 grams, skin turgor decreased. Lab results: Hb 9.7 g/dl, albumin = 2.5 g/dl, Hct = 36.3%, urine protein = +2.

Nursing Diagnosis :

1. Ineffective peripheral perfusion due to increased blood pressure
2. Risk of fetal injury due to increased blood pressure
3. Activity intolerance due to body weakness
4. Hypervolemia due to changes in regulatory mechanisms

#### CASE REPORT 2

Mrs. P 35 years old with G 3P 10 1 1 UK 27- 28 WEEKS + PEB + IUGR+ BSC.

Main complaints: stomach feels tight, vaginal discharge, dizziness, nausea, and headache. Inspection physical : GCS: 456, blood pressure blood pressure 177/119 mmHg, Pulse: 114x/ minute, fetal heart rate 148/doppler, examination Leopold 1 fundus height 21 cm with age 27-28 weeks of pregnancy, No contractions, visible black striae, estimated fetal weight = 1100 gr. Skin color Pale, anemic conjunctiva , PO2 = 69.5 mmHg, RR = 18 x/ mt, SpO2 99% with O2 mask 8 lpm, Ph 7.413

Condition: weak, swollen legs, bed rest. Examination: Hb 10.10 g/dl, creatinine 0.5 mg/dl, albumin 2.24 mg/dl, GDA = 70 mg/dl, PO2 = 69.5 mmHg. USG results + IUGR grade 3-4 AFI 4.4 cc

Therapy: MgSO4 40% syringe pump 2.5 cc/hour, dexamethasone 6 mg/im, Adalat 30 mg/ ral,

Nursing diagnosis :

1. Gas exchange disorders due to changes in the alveolar-capillary membrane
2. Risk of injury to the mother due to increased blood pressure
3. Risk of fetal injury due to increased blood pressure
4. Nutritional deficit due to insufficient intake

Second case condition patient own Lots of similarities with time close examination time. From both results diagnosis is obtained, implications Wiedenbach's Need for Help and Levine's Conservation Theory are as follows:

**Table 1 Matrix Implications of the Model for Problem Nursing**

| Nursing Problems              | Wiedenbach Model: Need for Help  | Levine Model: Conservation  |
|-------------------------------|--|---|
| Impaired Peripheral Perfusion | Technical assistance: left lateral position, extremity monitoring Education about danger signs           | Energy: rest Structural: position, prevention of edema and spasms                             |
| Hypervolemia                  | Technical assistance: intake-output monitoring, diuretic collaboration Education about fluid restriction | Structural: stabilization of fluids and blood pressure Energy: conservation of organ function |
| Impaired Gas Exchange         | Technical support: oxygen administration, semi-Fowler's position Education on effective breathing        | Energy: Optimize oxygenation Structural: Support lung function and circulation                |
| Risk of Fetal Injury          | Prescriptive support: maternal education,  | Structural: Stabilize maternal  |

|                      |  |   |
|----------------------|--|---|
|                      | collaboration with physician   | hemodynamics<br>Personal:<br>Involve the mother in decisions                                    |
| Activity intolerance | Coordination of fetal monitoring<br>Prescriptive assistance:<br>Validating the condition of body systems.<br>Coordinating with the family. | Personal:<br>Support efforts and repair of body systems<br>Social:<br>Support rest and exercise |
| Nutritional deficits | Prescriptive assistance:<br>Nutrition education for PEB.<br>Discussing diet patterns and providing nutritious food.                        | Technical:<br>Monitor weight and diet.<br>Personal:<br>Consult a nutritionist                   |

**Table 2 Interventions integrated based on both models**

| Dimensions                | Nursing Interventions  |
|---------------------------|--|
| Prescriptive (Wiedenbach) | Education about preeclampsia and danger signs and fluid restriction<br>Validation of maternal concerns<br>Discussion of the birth plan   |
| Technical (Wiedenbach)    | Left lateral position<br>Oxygen administration<br>Monitor blood pressure, reflexes, heart rate, saturation, and intake and output<br>Collaboration in administering magnesium sulfate (MgSO <sub>4</sub> ), antihypertensives, and diuretics |
| Coordinative (Wiedenbach) | Involve the family in education<br>Coordinate with the medical team and provide referrals if necessary   |

|                                  |   |
|----------------------------------|---|
| Energy Conservation (Levine)     | Bed rest, adequate nutrition, stress management                             |
| Structural Conservation (Levine) | Seizure prevention, optimal positioning, monitoring edema and lung function |
| Personal Conservation (Levine)   | Education, empathetic communication, strengthening the mother's role        |
| Social Conservation (Levine)     | Involve the family, facilitate social and spiritual support                 |

## DISCUSSION

Preeclampsia is a frightening condition during pregnancy because it can develop suddenly and cause systemic complications for both mother and fetus. This condition usually appears after 20 weeks of pregnancy, characterized by increased blood pressure and the presence of protein in the urine (Black, 2014).

Early in pregnancy, the placenta should develop well-developed blood vessels and be able to support fetal growth. In preeclampsia, this process is disrupted. Placental blood vessels become narrow and unresponsive, resulting in inadequate blood flow. As a result, the placenta experiences hypoxia and releases substances toxic to the mother into the circulation. Substances such as sFlt-1 and endoglin disrupt endothelial vessel function, triggering vasoconstriction, increasing capillary permeability, and causing organ damage (Chaemsaihong, 2022; Gallo, 2014).

Indirectly, pregnant women with preeclampsia will exhibit symptoms such as sickle cell disease, visual disturbances, epigastric pain, and edema. High blood pressure can damage the kidneys, liver, and brain, even leading to eclampsia. Meanwhile, in the fetus, it can cause stunted growth, prematurity, and even perinatal death (Karmilah, 2024).

The main challenge in managing preeclampsia is early detection and appropriate treatment. When preeclampsia is diagnosed, nurses must monitor blood pressure, organ function, and fetal well-being. Administering magnesium sulfate to

prevent seizures and antihypertensives to control blood pressure is standard protocol. If weight gain occurs, delivery must be accelerated to save the life of both mother and baby (Mosimann, 2020).

Management of preeclampsia involves medical, emotional, and educational support for the mother and family. Fear, anxiety, and uncertainty often accompany this diagnosis. Therefore, a holistic approach that combines clinical, psychological, and social aspects is key to successful care.

In this context, nursing theories such as Wiedenbach's "Need for Help" and Levine's "Conservation" are highly relevant to support nursing practice that is oriented toward the needs and maintenance of patient integrity (Nuryani, 2015; Ranti, 2022).

Wiedenbach views nursing as the art of assisting individuals experiencing difficulties in meeting their needs. This theory focuses on identifying the need for assistance, implementing nursing interventions empathetically and skillfully, and validating the effectiveness of patient-specific interventions. In cases of preeclampsia, the mother requires assistance, including controlling blood pressure, preventing seizures, managing anxiety, and receiving education about danger signs.

The nurse acts as a responsive facilitator to change the mother's condition, conducting close monitoring to monitor blood pressure and proteinuria, and providing emotional support, strengthening the mother's readiness to face the possibility of preterm labor or a medical emergency. Validation is performed through clinical therapy evaluation and communication, ensuring that interventions comprehensively meet the mother's needs.

#### Components of the Theory

- a. Primary Goal: A nurse's primary goal is to help individuals in need achieve well-being.
- b. Prescription: Actions designed to meet the patient's physical, emotional, and social needs.

- c. Reality: Factors influencing the implementation of nursing interventions, including the nurse, the patient, the environment, equipment, and assistance.

#### Practical Mechanisms

1. A nurse must identify the patient's assistance needs holistically.
2. Interventions are delivered using empathy, skills, techniques, and communication therapy.
3. Evaluation is conducted through patient validation of the interventions provided.

#### Clinical Implementation

To help pregnant women with preeclampsia:

1. Recognize danger signs such as hypertension, edema, and headaches.
2. Provide education and emotional support.
3. Take action, implement preventive measures such as administering magnesium sulfate and monitoring blood pressure, and provide ongoing education and care

Whereas Levine's Conservation Theory focuses on the preservation of the integrity individual in the face of stress and disease. Levine stated that nursing aims to help individuals adapt to the environment while maintaining their integrity.

#### Four Principles Conservation

1. **Energy Conservation:** Maintaining balanced metabolism and preventing fatigue.
2. **Conservation Integrity Structural:** Maintain the function and structure body.
3. **Conservation Personal Integrity:** Respect the identity and autonomy patient.
4. **Conservation Integrity Social:** Maintaining social and supporting family.

#### Mechanism Practical

1. The nurse must **identify areas of integrity that are threatened.**
2. Intervention directed to **minimize stress and maintain function body.**
3. Maintenance done with **notice values and culture patient.**

## Implementation Clinical

To the mother pregnant with preeclampsia, this theory helps nurses:

1. Give Rest structured and nutritious.
2. Monitoring the function kidney and liver.
3. Involving family in maintenance for integrity social.
4. Guard respectful communication identity Mother

For a pregnant mother with preeclampsia, conservation of energy and structure are very important to prevent complications like eclampsia and organ disorders.

### Integration of theory in practice

Second theory. this can be integrated in the care nursing pregnant mother with preeclampsia through :

1. **Assessment holistic:** Combining identification needs assistance and conservation areas.
2. **Intervention directed:** Education, monitoring, emotional support, and preservation of body function.
3. **Evaluation multidimensional:** Validation responses and sustainability integrity.

## CONCLUSIONS

Second integration theory ( "Need for Help" from Wiedenbach and "Conservation" from Levine), this in care nursing preeclampsia not only increases the quality of intervention, but also strengthens the role nurse as an agent of therapy that is capable of managing risk, educating, and empowering patient. Approach this in line with the paradigm of modern safety-oriented nursing patients, collaboration interprofessional, and respect to values individual.

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