

CHAPTER 3

METHOD

This chapter explains the methods used in this nurse's scientific work , including the research design used, location, research time, research subjects and data collection.

3.1. Method

The final scientific paper of nurses is a form of descriptive research using a case study approach. Descriptive research is a study whose purpose is to present a complete picture of an existing phenomenon and is studied to explore it by describing variables . Phenomena can take the form of activities, characteristics, changes, relationships, similarities, and differences (Tumurang, 2024) . A case study is a method or strategy in a research to raise a specific case intensively, integrated, and in-depth. Research using the descriptive case study method explains a problem or disease in the community based on the characteristics of the patient, place, and time. The approach used is a nursing care approach consisting of assessment, nursing diagnosis, intervention, implementation, and evaluation (Wicaksono, 2022) .

3.2. Location and Time

3.2.1. Location

The location of this research was in the Gatotkaca room at Jombang Regional Hospital.

3.2.2. Time

Nursing care for pneumonia patients was carried out from March 26 to April 28 , 2026.

3.3. Subject

The subjects in the preparation of this Final Scientific Paper for Nurses are patients with pneumonia in the Gatotkaca room at Jombang Regional Hospital who meet the inclusion and exclusion criteria described as follows:

1. Inclusion Criteria

Inclusion criteria are the criteria for research subjects from a population to be studied (Tumurang, 2024) . The criteria for compiling this final nursing scientific paper are as follows :

- a. Patients with a medical diagnosis of pneumonia confirmed by a doctor based on clinical and/or radiological examination .
- b. Patients experiencing **ineffective airway clearance nursing problems** according to the SDKI criteria.
- c. Patients who experience accumulation of secretions are characterized by ineffective coughing, rhonchi , wheezing , or sputum that is difficult to expel.
- d. Patients with stable hemodynamic conditions (blood pressure, pulse, and oxygen saturation within tolerable limits for chest physiotherapy).
- e. Patients who are able to follow instructions during chest physiotherapy and peppermint inhalation therapy .

2. Exclusion Criteria

- a. Pneumonia patients who experience severe respiratory distress and require invasive mechanical ventilation .
- b. Patients with contraindications to chest physiotherapy, such as:
 - hemoptysis .
 - Untreated pneumothorax .
 - Unstable rib fracture or chest trauma.
 - Uncontrolled increase in intracranial pressure.
- c. Patients who have a history of allergy or hypersensitivity to peppermint essential oil .
- d. Patients with severe impaired consciousness (GCS < 13) who are unable to participate in research procedures.
- e. Patients with other lung diseases that predominantly affect airway clearance (e.g. active tuberculosis, or acute exacerbation of severe COPD).
- f. Patients who refuse or discontinue participation during the data collection process.

3.4. Data collection

this nursing final project was conducted through an approach to the subjects who would receive the intervention. The data collection method used

structured interviews and observations. A list of questions was prepared prior to the interview and asked sequentially. Structured observations involved the researcher carefully defining what would be observed through careful planning. Interviews and observations conducted with patients and their families included biographical data, chief complaints, past medical history, family medical history, physical examination, and vital signs. The research mechanisms in this nursing final project included:

1. Interviews are conducted based on the patient's anamnesis, including identity, chief complaint, current and past medical history, and family history, activity patterns/needs, and other data. Data sources: patient, family, or others.
2. Observation and physical examination. Observation and physical examination are conducted to complete patient data based on the results of the anamnesis. The physical examination is conducted through a study of documentation.
3. The study of patient data documentation is sourced from the results of diagnostic examinations and other data relevant to pneumonia cases.