CHAPTER 3

RESEARCH METHODS

3.1 Research Methods

The research design used in this study is a descriptive case study with a nursing care approach. This case study method was chosen to explore in depth and comprehensively the nursing care of patients with generalized tetanus with a focus on Range of Motion (ROM) administration interventions to overcome the problem of impaired physical mobility. The nursing care approach applied includes all stages of the nursing process, starting from a holistic assessment, formulation of nursing diagnosis, action planning, implementation of nursing implementation, to the stage of evaluation of action results.

3.2 Research Location and Time

This case study was carried out in the Yudistira Room of the Jombang Regency Regional General Hospital. The implementation time of this case study began on March 2-7, 2026.

3.3 Research Subject

The research subject chosen in this nursing case study was one patient with a medical diagnosis of generalized tetanus in the Yudistira Room of Jombang Regency Hospital.

3.3.1 Inclusion Criteria

The inclusion criteria in this study are:

1. Generalized tetanus patients with physical mobility problems
2. Patients with generalized tetanus who are not in the acute phase

3. Patients with generalized tetanus who are not under the influence of anesthesia.

3.3.2 Exclusion Criteria

The exclusion criteria in this study are:

1. Patients with generalized tetanus who are in the acute phase
2. Patients with generalized tetanus who are under the influence of anesthetic drugs

3.4 Data Collection

Case study data has several techniques in the data collection process, but what is more used in case research is observation, interviews, and documentation analysis. The author, as a research instrument, can adapt the way of data collection to the problem and the research environment, and can collect different data simultaneously.

3.4.1 Interview

Data collection through the interview method was carried out to obtain subjective data on the patient's medical history chronologically. Given that patients with generalized tetanus often experience trismus (jaw stiffness) or are under the influence of high doses of sedatives, the interview technique used is dominated by alloanamnesis, which is a structured interview with the patient's immediate family (such as husband, wife, parents, or children). Direct interviews (autoanamnesis) with patients are still carried out on a limited basis if the patient is in a composing level of consciousness and is able to communicate through gestures or short words.

3.4.2 Observation and Physical Examination

The observation method and physical examination were carried out directly by the author to collect objective data regarding the patient's clinical condition. Observations were made visually to monitor the appearance of paroxysmal muscle spasms, the patient's facial expression (risus sardonicus), posture (opisthotonus), and the use of breathing apparatus. Furthermore, the physical examination is carried out comprehensively with a head-to-toe approach and special emphasis on the neurological and musculoskeletal systems.

The author made observations of muscle strength, in tetanus patients it is also necessary to measure the level of muscle stiffness (muscle tone) generally measured using Modified Ashworth Scale (MAS). This scale is used to measure how much muscle resistance is when the limb is moved (Harb et al., 2025)

3.4.3 Documentation Studies

Documentation studies are used as complementary methods to strengthen the validity of data obtained from interviews and physical examinations. The author searched the patient's medical records and nursing care files while in the hospital. The data obtained through this documentation study included integrated patient development records (CPPT), complete blood laboratory test results, germ culture results in wounds (if any), records of the administration of drug therapy from doctors (such as the type and dose of antibiotics, HTIG/ATS, and diazepam/midazolam doses), vital signs monitoring reports, and nursing documentation sheets from the room nurse before case management was taken over by the author.