

# Analysis of Nursing Workload in the General Inpatient Department of Bhayangkara Hospital Gorontalo Police

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**ABSTRACT**

Nurses are the main component in health services in hospitals, especially in the general inpatient department, with a high intensity of interaction with patients and families. The high ratio of pay-to-nurse triggers an excessive workload. This study aims to analyze the ratio of patients to nurses, the number of patients per shift, the special role of nurses, the level of stress and fatigue experienced, the use of technology and tools in supporting the duties of nurses, to complaints or complaints from patients at the Bhayangkara Hospital of the Gorontalo Police. This study uses a descriptive qualitative method to deeply explore the experiences and perceptions of 11 informants, consisting of employees and patients of the Gorontalo Regional Police Bhayangkara Hospital with data collection through observation and interviews using questionnaires. The results of the study showed that the ratio of patients to nurses in the inpatient unit exceeded WHO standards, triggering high levels of stress and nurse burnout, the ratio of nurses to special roles was still low, the implementation of technology was not optimal due to limited training and infrastructure, as well as patient complaints related to delays in services and lack of staff coordination. In conclusion, the nursing workload of the general inpatient department of Bhayangkara Hospital is still excessive so that the hospital's services are not optimal

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## 1. INTRODUCTION

Nurses are one of the components that play an important role in health services for hospitals that have the highest intensity of interaction with patients and families in providing health services (Gatchel, 2018). Without a strong role of nurses, the quality of service in hospitals can be significantly affected. The workload of healthcare workers is a serious problem in many countries around the world. Health workers including doctors, nurses, laboratory technicians, pharmacists and other health workers often face very high workloads and complex demands in carrying out their duties (Durairaj, 2021).

Technology in the development of health science also affects the workload of health workers which requires them to at least be forced to adapt to new ways of working. They must continue to learn to keep up with the latest developments in the health sector. Mental and emotional tension is also often a workload suffered by medical personnel, including delivering bad news to patients or caring for patients in critical condition. This can lead to high mental and emotional stress.

Based on the initial survey conducted at the Bhayangkara Hospital of the Gorontalo Police, there are several problems obtained, namely the increasing workload where the number of nurses is not proportional to the number of patients who come to

visit. This nursing workload analysis is important for planning nurse staffing needs, distributing tasks efficiently, and ensuring that nurses have enough time to pay attention to patients.

## **2. METHOD**

This research was carried out at the Gorontalo Regional Police Bhayangkara Hospital in December 2024. The sample of this study consists of 11 people consisting of hospital employees and patients. Data collection uses observation, interview, and

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documentation methods. This study uses descriptive qualitative research where an in-depth analysis is carried out to explore the experiences and perceptions of 11 informants.

### 3. RESULTS AND DISCUSSION

#### Results

**Table 1. Interview Results of Workload Analysis of Rotating Work Nurses in the General Inpatient Section of Bhayangkara Hospital, Gorontalo Police**

| No | Questions  | Director's Answer   | Deputy Director's Answer   |
|----|--|---|--|
| 1  | How do you assess the current efficiency in general inpatient departments in terms of patient handling?  | "Efficiency is currently quite good, but there is still room for improvement, especially in terms of nurse response times and more equitable distribution of work." | "Efficiency is already running, but the pressure of nurses' work sometimes makes the service not as fast as expected."                       |
| 2  | Do you feel that the current ratio of patients to nurses is optimal, or do you think there is still room for adjustment? Why?                    | "The ratio of patients to nurses is still far from optimal. Additional nurses are needed to meet good service standards."   | "It is not optimal. We often receive complaints from nurses about the heavy workload, especially on the night shift."                        |
| 3  | How do you ensure that the number of patients per shift in the inpatient unit remains in line with the capacity and capabilities of the nurses?  | "We use a strict work shift system to manage schedules, but because the number of nurses is limited, sometimes the workload becomes unbalanced."                    | "Our current system is not fully adequate, as there is still a gap between the number of patients and the available nurse capacity."         |
| 4  | Does management have a specific strategy in place to optimize the patient-to-nurse ratio during peak times or when there is a surge in patients? | "We are considering hiring more nurses and increasing the use of technology to help record and manage patient data."  | "Our strategy involves training nurses to improve multitasking, as well as a more flexible rotation flow during times of surge in patients." |

*Source: Primary Data, 2024*

The results of interviews with the Director and Deputy Director regarding the efficiency and ratio of patients to nurses in the general inpatient department show that there are challenges in handling patients that need more attention. According to the Director, the efficiency in this unit is quite good, but there is still room for improvement, especially related to nurse response time and uneven distribution of work. While the Deputy Director stated that although efficiency has been running, the work pressure of nurses, especially on night shifts, can affect the speed of service.

**Table 2. Interview Results of Workload Analysis of Nurses with Special Roles in the General Inpatient Section of Bhayangkara Hospital, Gorontalo Police**

| No | Questions  | Answer from the Head of the Administrative Subdivision   | Answer from the Head of the Planning Subdivision  | Answer from the Head of the Medical Services Subdivision   |
|----|--|--|---|--|
| 1  | Do nurses with special roles have responsibilities that require lower or higher patient-to-nurse ratios compared to general nurses? Why? | "Nurses with special roles need a lower ratio because their responsibilities are more in-depth, such as dealing with patients with critical conditions." |   | "Specialty nurses need a lower ratio because they handle complex procedures that require more time and special attention."                               |
| 2  | Are there any specific policies or guidelines that support nurses with specific roles in achieving the desired patient-to-nurse ratio?   |  | "We are drafting internal regulations to support specialist nurses, especially regarding facility support and the ratio of patients to nurses." | "The guidelines are already in the service standards, but implementation is often hampered due to the limitation of nurses with special qualifications." |
| 3  | What are some of the specific challenges faced by nurses with specific roles in achieving  | "The main challenge is the lack of a number of nurses with special qualifications and the  |   | "The biggest challenge is the unpredictable surge of patients and the uneven distribution of   |

or maintaining an optimal patient-to-nurse ratio? administrative burden that often distracts from the focus of nurses." time. In addition, further training for special nurses is still limited."

Source: Primary Data, 2024

The results of the interpretation of the interview with the Head of the Administrative Planning Subdivision and the Head of the Medical Services Subdivision showed that there was a common view regarding the need for a lower patient-to-nurse ratio for nurses with special roles. Both agreed that nurses with specialized roles, who deal with patients with critical conditions or complex procedures, require more intensive attention and longer time in providing care. Therefore, a lower patient-to-nurse ratio is considered more appropriate to ensure optimal service quality. Even the results of the interpretation of the answers given by the Director and the four nurses show a clear agreement regarding the need for a lower patient-to-nurse ratio for nurses with special roles. All parties, both from a managerial and practical perspective, agree that nurses who deal with patients with critical conditions or special needs require more intensive attention and longer time to provide optimal care.

**Table 3. Interview Results of Nurses' Stress and Fatigue Levels in the General Inpatient Section of Bhayangkara Hospital, Gorontalo Police**

| No | Questions   | Nurse's Answer 1   | Nurse's Answer 2   | Nurse's Answer 3  | Nurse's Answer 4  |
|----|---|--|--|---|---|
| 1  | Do nurses feel overwhelmed by excessive workload and how can this contribute to stress levels?                                      | "Yes, the excessive workload often makes me feel stressed, especially during the surge of patients. This has an impact on the quality of service." | "The high workload makes it difficult to focus on each patient optimally. This obviously increases stress levels."                   | "I feel that sometimes too much workload reduces rest time and increases physical and mental fatigue."              | "Stress often occurs because many patients with different needs have to be treated in a short period of time."                    |
| 2  | Does the scheduling system or job rotation affect nurse fatigue levels?   | "Less flexible scheduling affects fatigue levels, especially if the night schedule is too frequent."   | "Poorly organized work rotations make fatigue even more pronounced, especially when there is a sudden change."                       | "An overly busy schedule with no breaks is quite clearly affecting our stamina and fatigue levels."                 | "An unfair rotation system, for example back-to-back night schedules, causes significant fatigue."                                |
| 3  | Do you feel that the nurse who cared for you or your family has served to the fullest? Or are there any shortcomings that you feel? | "In my opinion, the service is quite optimal, but sometimes there are technical obstacles such as a lack of adequate equipment."                   | "Our service is trying our best, but often limited time and resources make us feel like we are not giving our best."                 | "I feel that the service is good, but the lack of nurses at some time makes the service look less than optimal."    | "There is maximum effort from nurses, but with a large number of patients, some patient needs may not be addressed quickly."      |
| 4  | What are the main factors that can cause stress among nurses in general inpatient units?  | "The surge in patients, the shortage of nurses, and administrative demands are the main factors causing stress."                                   | "Lack of rest, less effective communication between teams, and pressure from patients or their families are often causes of stress." | "Uneven workload, conflicts with coworkers, and lack of recognition for our hard work are major sources of stress." | "Limited time to care for patients, additional administrative burden, and lack of resources are factors that often cause stress." |

Source: Primary Data, 2024

Based on the answers from the nurses involved in the interview, it can be interpreted that excessive workload is a major factor affecting stress levels among nurses. All nurses admit that the high workload, especially when there is a surge in patients, increases their stress levels. This can have a negative impact on the quality of services provided to patients. Stress experienced by nurses is

also closely related to physical and mental fatigue, which is further exacerbated by a less flexible scheduling or rotation system. Some nurses mention that too frequent night schedules or poorly organized work rotations make fatigue even more pronounced, which in turn affects their stamina and performance in caring for patients.

**Table 4. Interview Results of the Use of Technology and Nurse Aids in the General Inpatient Section of Bhayangkara Hospital, Gorontalo Police**

| No | Questions  | Nurse's Answer 1  | Nurse's Answer 2   | Nurse's Answer 3   | Nurse's Answer 4  |
|----|--|---|--|--|---|
| 1  | How do nurses in general inpatient units use technology to support patient documentation and records?  | "We use a simple app to record the patient's condition, but there is still a lot of manual work to be done."        | "Technology is very helpful, although it has not been fully implemented in all aspects, so sometimes we still use physical documents."       | "There is a system to support documentation, but it needs to be updated and training to be more effective."        | "We use manual and digital systems. Technology is very helpful, but sometimes there are technical constraints that slow down the work." |
| 2  | Is there an electronic health information system at the Bhayangkara General Hospital of the Gorontalo Police?  | "There is, but it is still limited. The system is not fully integrated between the inpatient unit and other units." | "Electronic information systems exist, but their use has not been maximized because infrastructure is still limited."                        | "It already exists, but the management needs to be updated to better support work efficiency."                     | "The system is already in place, but it still needs development to handle larger, integrated data."                                     |
| 3  | Is there any special training for nurses regarding the use of technology?  | "The training has been held, but it has not been in-depth enough for all aspects of the technology available."      | "There is training, but it is less intensive. Many nurses learn independently to understand the technology."                                 | "Training is more in the form of an initial introduction to technology, there is no intensive follow-up learning." | "There was training, but the schedule was limited so not all nurses could keep up."   |
| 4  | What are your experiences and impressions of nurses' skills in handling patients? For example, the installation of infusions and the use of assistive devices. | "The skills of nurses are already good, but some need an update in terms of the latest technology and techniques."  | "Most nurses are already skilled in the insertion of infusions and the use of assistive devices, but there is room for additional training." | "Skills are up to standard, but with new technology, updates are constantly needed."                               | "Technical skills are good, but more training on new tools would go a long way in boosting nurses' confidence."                         |

*Source: Primary Data, 2024*

Based on interviews with nurses in general inpatient units, several important things related to the use of technology in supporting patient documentation and records, as well as the training provided to nurses. It can be concluded that all nurses agree that technology, although very helpful in their work, has not been fully implemented or optimal. Most nurses use manual systems, with applications or information systems that are still limited to a few functions, such as recording patient conditions, but are not fully integrated between units or support the entire patient administration process. The current electronic health system is still limited in its functionality, with the need for development to reach all hospital units and improve work efficiency.

**Table 5. Interview Results of Complaints or Complaints from Patients in the General Inpatient Section of Bhayangkara Hospital, Gorontalo Police**

| No | Questions  | Patient 1   | Patient 2  |
|----|--|---|--|
| 1  | How do nurses in general inpatient units use technology to support patient documentation and records?                                    | <i>"I see nurses using electronic devices such as computers to record my condition, but not all processes are done with technology. Sometimes they also write on paper."</i>              | <i>"I see nurses using computers quite often, but sometimes manual note-taking is still done for some things."</i>   |
| 2  | What are the most common types of complaints received from general inpatients to hospital management? How is this overcome?              | <i>"The complaint that I often hear is the delay in service, especially during busy hours. However, the nurse always tries to give an explanation and apologize if there is a delay."</i> | <i>"Complaints are usually related to waiting times for medication or nurses' responses when they are busy. However, the nurses tried to serve well even though it was crowded."</i> |
| 3  | How are efforts being made to improve communication between patients, nurses, and staff in general inpatient units to reduce complaints? | <i>"The nurses often check my condition and ask if there are any other needs. It makes me feel cared for, but communication with the management staff is still rare."</i>                 | <i>"The nurses' communication with the patients is quite good, they often ask about my needs, but for communication with the management staff I don't feel it too much."</i>         |

*Source: Primary Data, 2024*

The results of the interviews with patients showed an overview of the use of technology, patient complaints, and communication between nurses, patients, and management staff in general inpatient units. First, related to the use of technology, the two patients revealed that although nurses use electronic devices such as computers to document the patient's condition, there are still some processes that are done manually, such as taking notes on paper. This shows that although there are efforts to use technology in health services, its application has not been fully maximized and still relies on traditional methods in some aspects.

## Discussion

### Analysis of the Workload of Per-Shift Nurses in the General Inpatient Section of Bhayangkara Hospital, Gorontalo Police

The results of the interviews show that efficiency in handling patients in the general inpatient department still faces challenges, especially related to the ratio of patients to nurses that is not optimal. This problem reflects findings that have also been revealed by a number of studies in recent years. According to research by Ross et. al (2023), a high ratio can lead to an increased workload for nurses, which in turn can affect the quality of patient care, prolong response times, and potentially decrease patient satisfaction (Ross et al., 2023).

In the context of this interview, the statement that the work pressure of nurses, especially on night shifts, can affect the speed of service. The decline in nurse performance on night shifts is often influenced by fatigue and lack of workforce, which can hinder the effectiveness of services. In addition, challenges in the uneven distribution of work are also an important factor in determining operational efficiency in inpatient units. According to research by Copanitsanou et al. (2021), unfair management of labor distribution can cause tension between medical staff, reduce job satisfaction, and ultimately impact the quality of service (Copanitsanou et al., 2017).

Overall, these interviews reflect the real challenges of improving service efficiency in general inpatient units, which are faced by many healthcare institutions. Improving the patient-to-nurse ratio, a more equitable distribution of work, the application of technology, and training nurses to develop multitasking skills are some of the important steps that can be taken to address this problem.

### Analysis of Nurses' Workload with Special Roles in the General Inpatient Section of Bhayangkara Hospital, Gorontalo Police

Regarding the ratio of patients to nurses with special roles, it shows a clear agreement that nurses who treat patients with critical or complex conditions need a lower ratio. This is important to ensure that nurses can give more intensive attention and more time to patient monitoring and care. According to Moore et al. (2020), nurses with specialized roles, such as those who treat patients in the intensive care unit (ICU) or patients with chronic diseases, have more complex duties than general nurses (Moore et al., 2020).

The main challenges faced by nurses with specialized roles are limited human resources and administrative burdens that interfere with the focus on patient care. Research by Kieft et al. (2020) shows that nurses are often burdened with administrative tasks that reduce their time to interact directly with patients (Kieft et al., 2014). This causes nurses to have difficulty in providing

quality care, especially for patients with complex conditions that require more attention. Therefore, reducing administrative burdens and increasing the number of nurses with special qualifications are urgently needed to achieve an optimal ratio of patients to nurses.

### **Stress and Fatigue Levels of Nurses in the General Inpatient Department of Bhayangkara Hospital, Gorontalo Police**

The overworkload and stress experienced by nurses in general inpatient units are the main problems affecting the quality of health care. This unbalanced workload has a direct impact on the physical and mental well-being of nurses, which can ultimately affect the quality of patient care. Prolonged stress can also lead to burnout, which worsens the nurse's ability to properly care for patients, as they do not have enough time for rest and recovery. This is in line with findings in interviews that show that high workloads, especially during patient surges, increase stress among nurses.

In addition, the setting of work schedules or rotations that are not flexible is also one of the factors that cause stress. A study by Peršolja (2023) states that a poorly organized work rotation system, including frequent night schedules, can worsen the physical and psychological fatigue of nurses (Peršolja, 2023). Lastly, pressure from the patient or the patient's family is also a significant factor that causes stress in the nurse. Research by Purdy et al. (2010) explains that nurses often feel pressured to provide the best service even though they sometimes face complaints or high expectations from patients and their families (Purdy et al., 2010).

### **Use of Technology and Nurse Aids in the General Inpatient Section of Bhayangkara Hospital, Gorontalo Police**

The use of technology at the Bhayangkara General Hospital of the Gorontalo Police is still in the development stage and is not fully optimal. The technology used, while helpful, has not been fully integrated into all aspects of medical services. This is in line with research conducted by Addo and Agyepong (2024), which shows that the use of technology in health services can improve the efficiency and accuracy of medical records (Addo & Agyepong, 2024).

More intensive and ongoing training is urgently needed to ensure that nurses not only understand the technology at hand, but can also take advantage of advanced features to support their work more effectively. Regarding the technical skills of nurses, the interviews showed that although most nurses are already skilled in basic procedures such as infusion insertion and the use of assistive devices, they feel the need for updates in terms of the latest technology and techniques. Research conducted by Harmini et al. (2024) states that nurses' technical skills must be constantly updated and nurses must continue to be trained by providing training to ensure optimal service quality (Harmini et al., 2024).

### **Level of complaints or complaints from patients in the General Inpatient Department of Bhayangkara Hospital, Gorontalo Police**

The results of the interviews with patients describe the common situation in general inpatient units regarding the use of technology, patient complaints, and communication between patients, nurses, and management staff. The use of technology in patient documentation and records, although it has been implemented, still encounters obstacles in terms of full implementation. As revealed by the patient, even though nurses use electronic devices such as computers, there is still manual recording that is carried out. This reflects the challenges in the application of technology in hospitals, where complex patient care requires faster and more efficient adaptation of technology. According to a study by Viegas (2024), although information technology in the health sector can improve the quality of services, many hospitals still face obstacles in the use of fully integrated technology, especially in congested units such as inpatients (Viegas, 2024).

In addition, complaints that are often submitted by patients, such as delays in services, indicate gaps in time management and high nurse workloads. Research by Adriani et al. (2022) found that excessive workload for nurses in hospitals can increase stress and affect the speed and quality of service to patients (Adriani et al., 2022).

Regarding communication between nurses and patients, both patients revealed positive experiences in which nurses actively checked their condition and inquired about other needs. A study by Adriani et al. (2022) suggests that poor communication between management and nurses can cause coordination problems and reduce the quality of services in hospitals (Adriani et al., 2022). Therefore, it is important for hospital management to establish a more structured and transparent communication mechanism to address patient complaints and improve service quality.

## **CONCLUSION**

The ratio of patients to nurses and nurses with special roles is still low, so adjustments are needed to ensure optimal services. In addition, the use of technology that has not been maximized as well as stress and fatigue factors that affect services in the hospital so that it can increase patient complaints about the services obtained.

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