

# Factors Related to Non-Nursing Tasks Among Staff Nurses in Provincial Hospitals in Aceh

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## Abstract

**Background:** Non-nursing tasks, frequently performed by nurses despite not requiring professional training, are common in healthcare facilities worldwide. These additional responsibilities increase workload, negatively affecting care quality, healthcare worker well-being, patient safety, satisfaction, and overall efficiency.

**Objective:** This study aimed to examine factors related to non-nursing tasks among staff nurses.

**Material and Method:** A cross-sectional study was conducted in three hospitals in Aceh Province from December 2024 to February 2025. A total of 244 nurses were selected using proportional sampling to ensure accurate representation of the nursing population in each hospital. The sample selection used accidental sampling, choosing odd-numbered nurses from the shift schedule, provided they met the inclusion criteria.

**Results:** The study found that 73% of nurses had performed non-nursing tasks, with the highest prevalence occurring during the night shift. The most frequently performed task was administrative duties (67.6%). Factors associated with non-nursing tasks included compensating the lack of resources, being pressed by the organizational culture, dealing unexpected clinical events, and protecting patients ( $p = 0.001$ ), with compensating the lack of resources being the most dominant factor ( $OR = 4.2$ , 95% CI: 1.99–8.85,  $p = 0.001$ ).

**Conclusion:** Compensating the lack of resources is the primary factor driving nurses to perform non-nursing tasks as an adaptation to workforce limitations, organizational culture, and unexpected clinical situations, ultimately impacting patient care quality and nurse well-being.

**Keywords:** Non-nursing tasks, nursing duties, nursing resources, staff nurses.

## Introduction

Non-nursing tasks refer to activities that do not require professional nursing training but

are frequently performed by nurses worldwide. Examples include answering phone calls unrelated to patient care, handling administrative documents,

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and assisting other staff with duties outside nursing responsibilities.<sup>1,2,3</sup> This phenomenon has been widely observed and affects both nursing care quality and patient outcomes. For example, a study conducted in Egypt reported an average score of 2.26 out of 5 regarding nursing tasks left incomplete due to non-nursing duties.<sup>3</sup> Additionally, research in Jordan found that 48% of nursing students witnessed nurses performing non-nursing tasks during clinical training, leading to disappointment and frustration toward the nursing profession.<sup>2</sup>

The negative impact of non-nursing tasks is evident for nurses, patients, and healthcare facilities. For nurses, these tasks increase workload, reduce patient interaction time, and contribute to stress and burnout.<sup>2,4</sup> Meanwhile, patients may experience reduced quality of care, increased risk of medical errors, and dissatisfaction with healthcare services.<sup>3,5</sup> Healthcare facilities may also face higher operational costs, reputational damage, and challenges in maintaining quality indicators and accreditation standards.<sup>2,4</sup>

Although previous studies have examined the prevalence and adverse impacts of non-nursing tasks in healthcare settings research specifically investigating the determinants of these tasks among nurses in Indonesia particularly within hospital settings in Aceh Province remains limited. Nurses often perform non-nursing tasks due to various factors, including staffing shortages in clinical units, institutional cultural pressures requiring nurses to be flexible in taking on responsibilities beyond their primary roles, increased workload due to unexpected clinical situations, and nurses' willingness to meet patient needs.<sup>6</sup>

This study aims to confirm the factors associated with non-nursing tasks performed by nurses at Hospital in Aceh Province. Identifying the factors contributing to non-nursing tasks is crucial for healthcare policy and hospital management, as it facilitates the development of strategies to optimize nursing workflows and improve the quality of patient care.

## Materials and Methods

### Research design and setting:

The research design was a cross-sectional study conducted at three hospitals in Aceh Province from

December 2024 to February 2025. These hospitals consist of general hospitals providing comprehensive medical services and regional referral hospitals receiving patient referrals. Accreditation ensures that each hospital meets quality standards in healthcare services, which may influence nurses' work patterns in this study.

### Population and sample:

The sample size was determined using Isaac & Michael's table<sup>7</sup>, considering a total population of 639 nurses, a confidence level of 95%, and a 5% margin of error ( $\alpha = 0.05$ ). Based on these parameters, the required sample size was 227 respondents. To anticipate possible refusals or absences during data collection, an additional 10% of 227 respondents was added, resulting in a final sample size of 250 nurses. The sample distribution for each hospital was determined using a proportional sampling method to ensure accurate representation of nurses across the three selected hospitals. Proportional sampling ensures an accurate representation of nurses across hospitals, while accidental sampling facilitates sample selection based on shift schedules without disrupting hospital operations, with the selection of odd-numbered shifts applied to minimize bias and ensure a more equitable distribution of participants. The inclusion criteria for this study consisted of team leaders and staff nurses, as well as nurses who had been employed for at least one year at one of the selected hospitals. Meanwhile, the exclusion criteria encompassed nurses working in administrative departments, those holding positions as ward head or deputy head of wards, and nurses who were absent or on leave during the data collection period.

### Procedure of study:

The data collection process began with obtaining ethical approval from the Ethics Committee of the Faculty of Nursing, Syiah Kuala University, Banda Aceh. Subsequently, the researcher submitted a research permit request to the directors of three hospitals in Aceh Province. After receiving approval from the hospital directors, the researcher sought permission from ward supervisors to conduct the study and distribute the questionnaires.

Nurses were selected as respondents based on their work schedule lists, with those assigned odd-numbered shifts being chosen if they met the inclusion criteria. Respondents were provided with an informed consent form, which was included in the questionnaire along with an explanation of the study's objectives. Upon granting their consent, respondents proceeded to complete the questionnaire and submitted it to the ward supervisor upon completion. The researcher expressed gratitude to all ward supervisors and nurses for their participation.

Once the data collection phase was completed, the researcher conducted a thorough review of all completed questionnaires to ensure accuracy and completeness. This process included verifying the informed consent forms and confirming that all questionnaire items had been fully answered. If the data met the research guidelines, the next step was data processing and statistical analysis.

## Results

The characteristics of the study respondents

indicate that the majority were female (68%), with an average age of  $34.14 \pm 7.34$  years. Most had a Nursing (Ners) degree (57%) and worked in Type B hospitals (85.7%), primarily in inpatient wards (50.8%). The most dominant job position was inpatient care team member (68%), with the most common work schedule involving morning, afternoon, and night shifts (60.2%). Regarding work experience, the average length of employment was  $10.02 \pm 8.52$  years, with overtime hours in the past three months averaging  $6.46 \pm 11.89$  hours. Nursing resource availability was rated at 75% available (48.8%), while only 24.2% of respondents reported full availability at all times.

In addition to their primary nursing duties, most respondents reported frequently performing non-nursing tasks, particularly during night shifts (41.8%). The most common types of non-nursing tasks involved administrative activities (67.6%) and medical support duties (67.2%). (Table 1)

**Table 1: Frequency Distribution of Respondent Characteristics (n=244)**

Respondents Characteristics	f	%	± SD
Age (Years)	-	-	34.14 ± 7.34
Gender			
Male	78	32	-
Female	166	68	-
Education			
Diploma in Nursing	97	39.8	-
Registered Nurse	139	57	-
Masters in Nursing	8	3.3	-
Hospital Type			
Type B	209	85.7	-
Type C	35	14.3	-
Workspace			
Inpatient	124	50.8	-
Outpatient	45	18.4	-
Intensive Care	54	22.1	-
Emergency Room	21	8.6	-
Position			
Inpatient Team Leader	26	10.7	-
Inpatient Team Member	166	68	-
Emergency Room/Outpatient Nurse	52	21.3	-

Last 1 Month Work Schedule			
Rotating Shift (morning, afternoon, evening)	147	60.2	-
Shift work (morning and night)	45	18.4	-
Work only morning or evening	7	2.9	-
Work from morning till evening	45	18.4	-
Availability of Nursing Resources			
100% available (always sufficient)	59	24.2	-
75% available (often adequate)	119	48.8	-
50% available (sometimes adequate)	41	16.8	-
25% available (rarely adequate)	25	10.2	-
Shift that most often Non-Nursing Tasks Occur			
In the Morning	62	25.4	-
In the Afternoon	14	5.7	-
At Night	102	41.8	-
Never	66	27,1	-
Types of Non-Nursing Tasks*			
Auxiliary Tasks	122	50	-
Administrative Tasks	165	67.6	-
Allied Care Professionals Tasks	120	49.2	-
Medical Tasks	164	67.2	-
Length of Service (Years)	-	-	10.02 ± 8.52
Overtime in the last 3 months (Hours)	-	-	6.46 ± 11.89

\*Each respondent could select more than one type of non-nursing task

The findings indicate that all factors contributing to the execution of non-nursing tasks by nurses at the Regional General Hospital of Aceh Province include

compensating for resource shortages, organizational culture, unexpected clinical situations, and meeting patient needs (p-value = 0.001). (Table 2)

**Table 2: Non-Nursing Task Factors (n=244)**

Non-Nursing Task Factors	Non-Nursing Task				f	%	p-value
	Ever		Never				
	f	%	f	%			
Compensating the lack of resources							
Compensating the lack of resources	136	87.2	20	12.8	156	100	0.001
Not compensating the lack of resources	42	47.7	46	52.3	88	100	
Being pressed by the organizational culture							
Being pressed by the organizational culture	153	88.4	20	11.6	173	100	0.001
Not being pressed by the organizational culture	25	35.2	46	64.8	71	100	
Dealing unexpected clinical events							
Dealing unexpected clinical events	149	88.2	20	11.8	169	100	0.001
Dealing unexpected clinical events	29	38.7	46	61.3	75	100	
Protecting patients							
Protecting patients	144	84.2	27	15.8	171	100	0.001
Not protecting patients	34	46.6	39	53.4	73	100	

Compensating for the lack of resources is the most influential factor associated with non-nursing tasks, with a p-value of 0.001 and an odds ratio (OR) of 4.20 (95% CI: 1.99–8.85). These results indicate

that compensating the lack of resource increase the likelihood of nurses performing non-nursing tasks by 4.20 times in government hospitals in Aceh. (Table 3)

**Table 3: Multivariate Analysis**

Variables	p-value	OR/Exp (B)	95% CI
Compensating the lack of resources	0.001	4.20	1.99 – 8.85
Being pressed by the organizational culture	0.030	2.93	1.11 – 7.76
Dealing unexpected clinical events	0.004	4.07	1.56 – 10.61
Protecting patients	0.007	2.84	1.32 – 6.11

### Discussion

The prevalence of non-nursing tasks among nurses reached 73% in the past three months, which is lower than the 94.5% reported in other studies.<sup>6</sup> This difference may be attributed to a more balanced task redistribution due to an increase in support staff or a reduced frequency of nurses performing non-nursing tasks. These tasks were most frequently performed during night shifts (41.8%), differing from other studies that reported a higher prevalence during morning shifts (54.5%).<sup>6</sup> The limited availability of support and administrative staff during night shifts at provincial hospitals in Aceh requires nurses to take on additional tasks, including logistics, documentation, medication retrieval, and communication with patients' families, particularly in critical situations requiring intensive monitoring.

Administrative tasks were the most common non-nursing responsibilities, consistent with findings showing a 72.4% prevalence.<sup>6</sup> However, retrieving supplies and equipment is also a frequently performed task due to inadequate hospital support services.<sup>8</sup> Additionally, demographic factors influenced engagement in non-nursing tasks. Female nurses (74.1%) were more likely to perform non-nursing duties than male nurses (70.5%), possibly due to multitasking abilities.<sup>9</sup> Nurses with a Diploma in Nursing had the highest engagement rate (80.4%) compared to those with a Ners degree (68.3%) and Master's in Nursing (62.5%), suggesting that higher education enhances awareness of professional role boundaries.<sup>10</sup> Furthermore, nurses in Type C hospitals

reported a higher prevalence of non-nursing tasks (80%) compared to those in Type B hospitals (71.8%), possibly due to resource limitations, which require nurses to take on additional responsibilities.<sup>11,12</sup>

Staffing shortages force nurses to handle administrative tasks and extra responsibilities, negatively impacting healthcare service quality and job satisfaction, as described by the Job Characteristics Model.<sup>1,13,14</sup> Additionally, increased workload and stress resulting from non-nursing responsibilities influence nursing students' perceptions of the profession, potentially affecting future nurse recruitment.<sup>2,15</sup> Frequent involvement in non-nursing tasks also diminishes nurses' understanding of their core responsibilities, reducing motivation.<sup>16,17</sup> Ineffective workforce allocation, particularly during night shifts, exacerbates this issue.<sup>18</sup>

Being pressed by the organizational culture plays a crucial role in the prevalence of non-nursing tasks, as observed at the Regional General Hospital of Aceh Province (p-value = 0.001), where overlapping responsibilities between nurses and other healthcare staff contribute to deviations from primary nursing duties. In some cases, nurses are expected to take on additional tasks to meet managerial expectations. However, other studies did not find a notable correlation between organizational culture and non-nursing tasks (p-value = 0.500), indicating variability across institutions.<sup>6</sup> The imbalance in workforce allocation, especially with administrative staff primarily active only during night shifts, forces nurses to perform non-nursing tasks to maintain

hospital operations, increasing workload and stress, consistent with the Job Characteristics Model. This situation reflects how institutions compensate for resource shortages through inefficient workload distribution, which affects nurses' job satisfaction and effectiveness.<sup>21</sup>

Dealing with unexpected clinical events plays a crucial role in nurses performing non-nursing tasks at the Regional General Hospital of Aceh Province (p-value = 0.001). Nurses frequently take on these tasks in response to emergencies, urgent patient needs, and operational demands.<sup>6,21</sup> Data indicate that 73% of nurses have been involved in non-nursing tasks, primarily administrative tasks (67.6%) and medical tasks (67.2%), with the highest frequency occurring during night shifts (41.8%), likely due to high patient influx and limited staff in emergency units.

Protecting patients is another key factor influencing non-nursing task engagement (p-value = 0.001), as nurses often assume additional responsibilities to ensure a safe environment and assist with administrative processes. There is a strong correlation between non-nursing tasks and patient safety, with nurses frequently managing logistics and isolation unit arrangements to protect patient well-being.<sup>15,22</sup> A total of 73% of nurses reported performing non-nursing tasks, primarily administrative duties (67.6%) and medical-related activities (67.2%), which often become necessary during urgent clinical situations.<sup>6</sup> Additionally, nurses take on logistics and administrative roles to support patient safety, demonstrating the need for flexibility in nursing workflows.<sup>15</sup> In unpredictable conditions, nurses must quickly adapt and take on additional roles beyond their primary duties to maintain service quality.<sup>22</sup>

Among all influencing factors, compensating the lack of resources are the most dominant determinant of non-nursing task execution at the Regional General Hospital of Aceh Province (OR = 4.20, 95% CI = 1.99–8.85, p-value = 0.001). Limited resources compel nurses to take on extra responsibilities, increasing workload and affecting patient care quality and hospital efficiency.<sup>24,25</sup> The phenomenon of "rationing of nursing care" occurs when resource constraints prevent nurses from prioritizing core nursing duties, forcing them to perform non-nursing

tasks to sustain continuity of care.<sup>24,26</sup> Many nurses rely on personal resources, such as time and energy, to compensate for system inefficiencies, emphasizing the need for strategic human resource management to reduce workload and enhance nurse well-being.<sup>25,27</sup> Effective workforce allocation, appropriate staffing, and managerial support can improve operational efficiency and integration in the workplace, ensuring optimal healthcare service delivery.

The findings of this study highlight the need for structured healthcare policies, hospital management, and workforce optimization to reduce the burden of non-nursing tasks on nurses, enhance healthcare service efficiency, and ensure that nurses remain focused on patient care to improve safety and service quality.

## Conclusion

Non-nursing tasks are influenced by several factors, including compensating the lack of resources, being pressed by the organizational culture, dealing with unexpected clinical events, and meeting the needs of protecting patients. The generalizability of the findings may be affected by variations in hospital types; however, a comprehensive overview of nurses' experiences across different healthcare systems has been provided through the employment of proportional sampling to ensure balanced representation and trends that accurately reflect real-world conditions. Staff shortages have been identified as the primary issue, increasing the likelihood of responsibilities beyond nursing roles being assumed by nurses by 4.20 times. To mitigate this challenge, enhanced support in the provision of facilities and resources must be ensured by hospital management, along with clear task distribution among healthcare personnel. Workforce allocation strategies should be structured to optimize nursing efficiency and minimize role overlap, enabling nurses to focus on their core duties without unnecessary burden.

**Ethical Clearance:** The study was approved by the Ethics Committee of the Faculty of Nursing, Universitas Syiah Kuala, Darussalam, Banda Aceh, under research code 112002210924.

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