

Time spent by nurses on nursing care activities in a medical unit of a tertiary care center

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World Journal of Advanced Research and Reviews, 2025, 26(02), 963-967

Publication history: Received on 28 March 2025; revised on 05 May 2025; accepted on 08 May 2025

Article DOI: <https://doi.org/10.30574/wjarr.2025.26.2.1713>

Abstract

Background: Nurses dedicate a substantially greater amount of time to patient care than other healthcare professionals. Their responsibilities encompass a broad spectrum of tasks, including offering personal and emotional support to patients, evaluating and recording patient conditions, as well as performing indirect duties such as managing units and coordinating care activities with other members of the healthcare team. Nurses spend significantly more time in providing patient care compared to the other health care workers.

Materials and Methods: A descriptive study was done in the medical wards, high dependency unit and intensive care unit of a tertiary care hospital to observe the nursing care activities of the registered nurses. One hundred patients were chosen using convenience judgmental sampling technique and nursing care activities performed for the patient over 24 hours was captured using a self-reporting proforma. The activities were analysed and categorized into 8 major domains.

Results: The study found that 85.44% of nursing activities were dedicated to direct patient care, while 14.56% involved indirect care tasks. The majority of the direct care activities focused on therapeutic interventions (59.32%), with only a small portion of time allocated to patient counselling and education (1.3%).

Conclusion: Patient assessment and medication administration were prioritized, with nurses dedicating the majority of their time to these tasks. In contrast, psychological support and preparation for home care received the least attention. To enhance the quality of life for patients, it is essential for nurses to allocate more time to emotional care and home care readiness.

Keywords: Nursing Care Activities; Self-Reporting; Direct Patient Care; Quality of Life; Quality Nursing Care

1. Introduction

Nursing care activities are those actions performed by a nurse during the duty hours. It includes planning, assessment, performing procedures and teaching to ensure comfort and health of the patient¹. The three types of nursing care activities are independent, dependent and collaborative². According to Eustace et al. nursing interventions are classified as family, behavioural, basic physiological, complex physiological, community, safety and health system related nursing interventions³. Nurses spend more time in providing direct patient care than other health care professionals⁴. Effective time spent by nurses with patient improves the patient outcomes and results with fewer errors⁵. Assessing time spent by nurses on the various activities will reveal the nurses' time management, identify gaps in nursing care, and help in recommending ways to improve the nursing care activities in order to gain good patient outcomes⁶. Examining how time is allocated across nursing care activities can guide staffing strategies, alleviate burnout, and enhance the quality

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of care. This study seeks to conduct a thorough evaluation of time distribution among various nursing tasks in a tertiary care medical unit, with the goal of pinpointing opportunities for improvement.

2. Material and Methods

A cross-sectional descriptive study was done in the medical wards, medical high dependency unit (MHDU) and medical intensive care unit (MICU) of a tertiary care hospital in South India to quantify the time spent on nursing care activities and to evaluate the time spent on direct and indirect nursing care activities. The nurse patient ratio was 1:4 to 1:8 in the general wards and 1: 1 to 1:2 in the HDU and ICU. The registered nurses including the Charge Nurse and the Nurse Manager working in the unit were explained about the study. Informed consent was obtained from the Nurses willing to provide self-reporting of the nursing care activities. Patients were selected using judgmental sampling to ensure proportionate representation of medical conditions. Patients who were expected to stay over 24 hours were included in the study. The selected patients were explained about the procedure and informed consent was obtained. A self-reporting proforma was placed in the chart of the selected patient. Nursing care rendered to the patients were captured on the self-reporting proforma for 24 hours. The nursing activity, time of starting and ending the activity and the signature of the staff were captured on the self-reporting proforma. Patient details such as diagnosis, age, and sex were also noted.

3. Data analysis

The collected data were analyzed to determine the actual time spent on each nursing activity, as well as the frequency of each activity. The average time allocated to each task was also calculated. A total of 54 nursing care activities were documented using self-reporting forms. These activities were grouped into eight distinct categories, including admission, discharge, and transfer; assessment and planning; assisting with diagnostic procedures; comfort care; health education and counselling; hygienic care; recording and reporting; and therapeutic nursing care. The data were processed using SPSS version 20 (SPSS Inc., Chicago, IL), with frequency and percentage calculations used to illustrate the proportion of time dedicated to each activity.

4. Results

The study included 100 patients with 40 different medical conditions grouped under 7 major disorders admitted in the ward, HDU and ICU of the medical unit. Table 1 gives the patient information. Majority of the patients belong to the age group of older adults (39%), were male (60%) and predominantly had metabolic and respiratory disorders (42%).

Table 1 Demographic profile of the patients

S.no	Characteristics	No.	%
1	Age		
	18 – 39	30	30
	40 – 59	31	31
	60 & above	39	39
2	Sex		
	Male	60	60
	Female	40	40
3	Unit		
	Ward	80	80
	HDU	10	10
	ICU	10	10
4	Disease condition		
	Cardiac and blood disorders	16	16

	Metabolic disorders	22	22
	Respiratory disorders	20	20
	Infectious diseases	21	21
	Electrolyte imbalance	5	5
	Neurological disorders	5	5
	Poisoning	11	11

The study revealed that the maximum time was spent for the direct nursing care activities (85.44%) (see Figure 1). Major proportion of the time was used for therapeutic nursing care (59.32%) and minimal time was spent on educating and counselling (1.35%) the patients (see Figure 2).

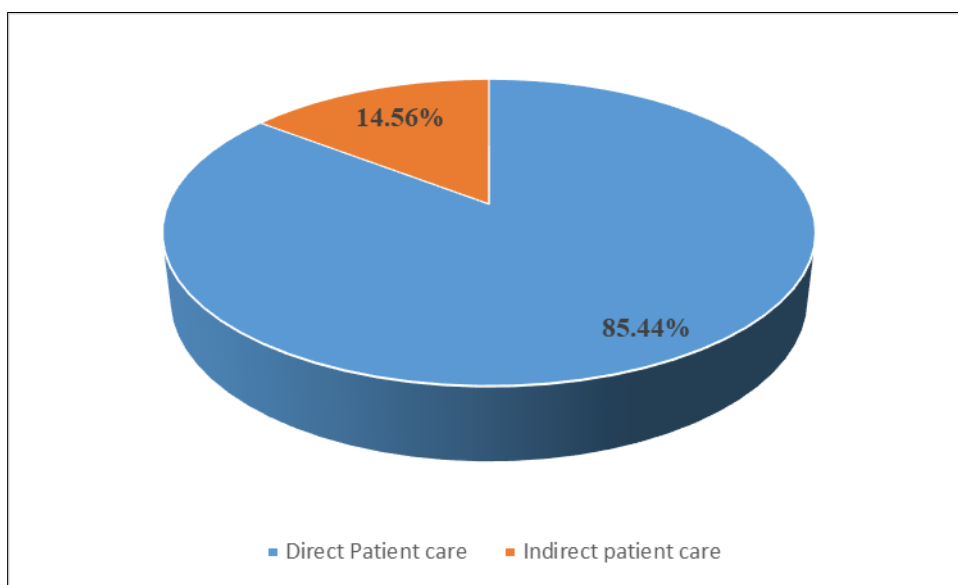


Figure 1 Time spent on direct and indirect nursing care activities

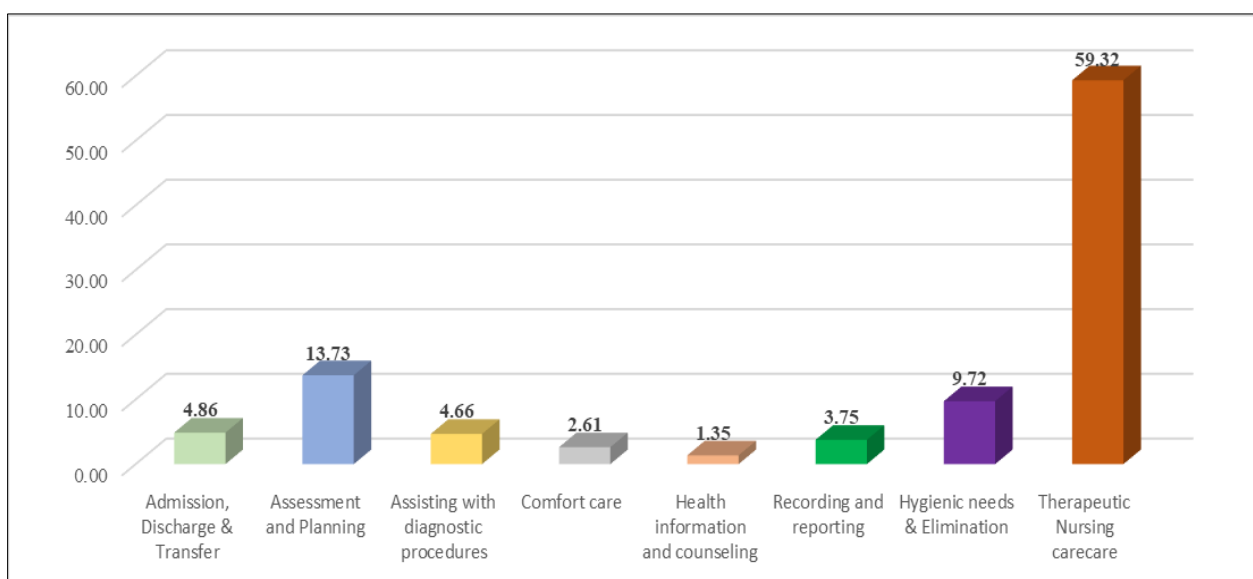


Figure 2 Time spent on various nursing care activities

5. Discussion

The proportion of time nurses spend on direct patient care versus indirect care activities can vary based on factors such as the healthcare environment, the specific nursing role, and patient requirements. However, research consistently indicates that direct patient care typically accounts for a smaller share of nursing time compared to indirect tasks like documentation, coordination, and administrative duties. Contrary to these findings, this study revealed that 85.44% of nursing time was spent on direct patient care activities, which diverges from existing literature. For instance, a study by Aiken et al. (2019) found that only 30% to 40% of nursing time in hospital settings was dedicated to direct patient care, with the remaining 60% to 70% allocated to indirect tasks such as administrative work, documentation, care coordination, and communication with other healthcare providers⁷. Similarly, Esteban et al. (2017) observed that in intensive care units (ICUs), where care is more hands-on, 45% of nursing time involved direct patient care, while 55% was spent on indirect activities like documentation, interdisciplinary communication, and managing critical care equipment and supplies⁸.

It is important to note that the current study did not account for certain indirect activities, such as care coordination and administrative tasks, as it focused solely on nursing activities involving direct and indirect patient interactions. Additionally, many studies classify only therapeutic nursing care as direct care, and in this context, the findings of this study (59.32%) align with existing research. Studies by Lake and Friese, McHugh et al., and others in general hospital settings and ICUs have shown that nurses typically spend approximately 30% to 50% of their time on direct care activities^{7,8,9,10}.

6. Conclusion

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Compliance with ethical standards

Disclosure of conflict of interest

This article is part of the Ph.D study which was approved by the IRB (min. No. 15106 (OBSERVE) dated 21.12.2022)

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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