

A Quantitative Analysis of Nursing Activities in a Medical Ward

Dr. (Prof). A. Tamilselvi, M.Sc (N), Ph.d (N).

Principal, Amity College of Nursing, Amity University Haryana, Gurugram, India

Abstract: *Quality of nursing care is defined as care that is provided according to job requirement and hospital standards. Adequate nurse staffing is essential to deliver quality patient care and improve nurses' retention. In wards, nurses also perform "indirect" patient related activities where there is no direct contact with the patients. Amount of time nursing personnel spent on various activities is very important information for nurse administrators to calculate number of nursing personnel required. Non participatory observation method was used and a snapshot of nursing activities was recorded at 10 minutes interval from 7 am to 7 pm for 7 days consecutively. The results revealed that a total of 1714 activities were recorded and was classified as Basic care activities (4.61%), complex care activities (62.60%), administration (7.23%), Education (1.23%), Clerical (4.43%), House Keeping(1.75%), Maintenance (1.63%), Off Station (0.23%) and non productive activities (16.28%). The proportion of complex care activities were more in the morning and continued throughout the day. The study concluded that more than half of the activities performed by nurses are complex care activities and all activities performed by nurses need to be considered for estimating staffing requirements.*

Keywords: (Nursing activities, Non participatory observation method)

1. Introduction

"Nurse: A Voice to Lead – Health is a Human Right"

Nurses have an important role in the health care organization. Safe staffing ratios are needed to ensure the safety of patients as well as nurses.¹ Nurse staffing reflects the number of patients cared by a nurse on a hospital ward.² Careful adjustment of nurse staffing levels and adequate skill mix to meet patients' nursing care needs are demanded for cost effective nursing care in any health care setting.³

Amount of time nursing personnel spent on various activities is very important information for nurse administrators to calculate number of nursing personnel required. It also provides evidence to maximize productivity by evaluating the appropriateness of staff deployment and skill mix.⁴ Understanding the amount of time spent by nurses to give direct nursing care is utmost important to assess nursing workload demands. In wards, nurses also perform "indirect" patient related activities where there are no direct contact with the patients such as ward rounds, goal planning and other multi disciplinary team meeting where nursing contribution is paramount important. In addition to that nurses in medical ward also participate in professional development and non clinical duties which form part of nursing workload in any setting.³

Adequate nurse staffing is very important to deliver quality nursing care to patients in clinical setting and to improve patients' satisfaction with nursing care. Nurses perform direct care activities as well as participate in other indirect care activities such as ward administration, management, and continued professional development activities which form part of the nursing workload in medical ward. Thus, it is necessary to understand the proportion of nursing workload assigned to other activities and trends of variation in nursing activities throughout the day in order to estimate the actual staffing requirements.

Objectives

- 1) To identify the proportion of workload in different categories of nursing activities.
- 2) To identify the time spent on various nursing activities at specific time points throughout the day.

2. Materials and Methods

This study was conducted over a week by using work sampling techniques which was developed by Tippettin in the year 1935. The medical ward is well equipped with central oxygen supply, suction facilities, emergency equipments and dressing trolley. Also the ward has laboratory and treatment room where minor procedures are performed. After getting formal permission and ethical clearance, a study team was formulated with one director and two observers for each shift. Observers were trained for 3 days with small trail runs of observation in order to solve the difficulties encountered and clarify the procedure for collecting data. Study director introduced herself and her team to the ward sisters and staff nurses and explained about the purpose of study which enabled the observer to familiarize with nursing staff and enabled nursing persons to become comfortable with the observer. This could reduce the "Hawthorne effect" and lead to an accurate recording of nursing activities by the observer. Informed consent was obtained from nursing persons and non participatory observation technique was used to record the activities performed by the nurses at 10 minutes interval in observation record for a period of seven days consecutively. The observer recorded all activities being undertaken by every nurse in each round of observation by using observation record. Raw data were analyzed by using descriptive statistics.

3. Results and Discussion

A total of 41 patients were admitted in the medical ward and 12 registered nurses were observed for a period of 7 days.

Table 1 show that a total of 1714 activities performed by nursing persons. Overall complex nursing activities accounted for 62.60% of total nursing activities followed by 16.28% of nonproductive and 7.23% of administrative activities performed by nurses were recorded. Education related activities are accounted for 1.23% and very minimal percentage of activities (0.23%) was related to off station activities. Bolton LB, Aydin CE, Donaldson N, Brown DS, Nelson MS and Harms D⁵ reported 55.2% of the activities were complex nursing care activities, 11.7% of clerical activities and only 9.3% were related to basic care. Contradictory results were found in another study revealed that half of the nurses time (50%) was invested in indirect care activities and only 20% of the time spent on direct care activities.⁶

throughout the day. It was also noted that non productive activities 16.28% of total activities were observed between 12 noon to 2 pm.

Table 1: Number and Percentage distribution of activities performed by staff nurses during day duty in a medical ward

S. No	Type of activities	Number of Activities	Percentage of Activities
1	Basic Nursing Care	79	4.61
2	Complex Nursing Care	1073	62.60
3	Administration	124	7.23
4	Education	21	1.23
5	Clerical	76	4.43
6	House Keeping	30	1.75
7	Maintaining Supplies and Equipments	28	1.63
8	Off Station	4	0.23
9	Non –Productive	279	16.28
	Total	1714	100.00

Figure 2 shows that greater percentage of complex care activities were observed in the morning shifts. Also complex care activities accounted for 62.60% of the total activities and these activities declined and continued in the afternoon. Nurses performed some clerical activities (4.43%)

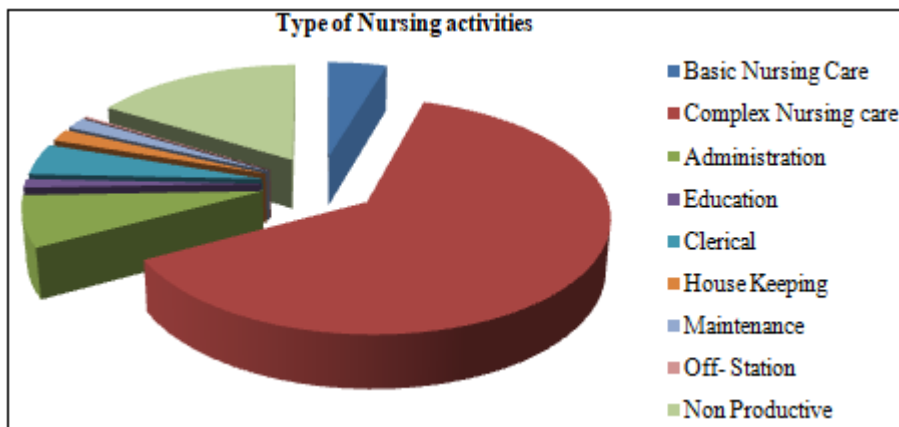


Figure 1: Percentage distribution of Nursing activities performed by staff nurses during day duty in a medical ward

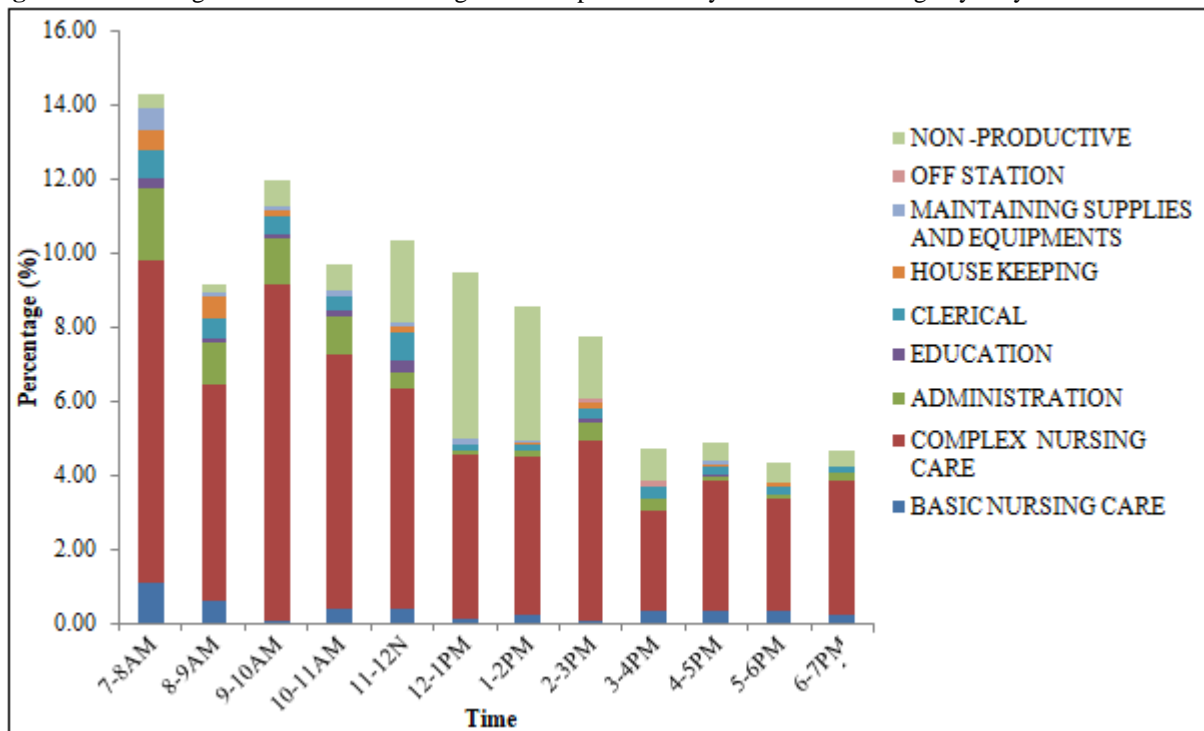


Figure 2: Percentage Distribution of Day Activities of Staff Nurses in Control Ward during Pre Test at specific points During the Week of the Study

4. Conclusion

It was concluded that more than half of the activities performed by nurses are complex care activities. Nurses perform direct and indirect care activities in the ward. Thus, this study gives valuable insight into nursing activities performed by nurses in a medical ward which in turn serve as a basis for calculating nursing man power.

5. Future Scope

Number of nurses required for a ward can be calculated based on time spent on nursing care per patient per day in that ward.

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Author Profile



Dr. A. Tamilselvi. M.Sc(N), Ph.D(N), R.N., R.M., Principal, Amity College of Nursing, Amity University Haryana Gurugram, Manesar. Haryana-122413. Her total publications are 8 and she guided more than 50 PG projects