

# Title of the Study:

*An Evaluative Study on Medication Administration Process and Impact on Patient Experience*

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# Introduction

Medication errors are considered as one of the leading cause of patient harm in hospitalized patients. Nurse's role in entire process is suboptimal as they can prevent the occurrence as well as the prevention of medication administration error. maximum time (40%) of their shift in medication process, nurse represent the last safety check point of the chain of medication event that is why it is important to evaluate the medication administration process in the hospital. Unsafe medication practices and medication errors are one of the leading cause of injury and avoidable harm in health care systems across the world. Globally, the cost associated with medication errors has been estimated as \$42 billion USD annually. The WHO established safety in the administration of medicines as the next global challenge for patient safety in 2017. **'Medication without Harm'** aims to reduce severe avoidable medication-related harm by 50%, globally in the next 5 years.

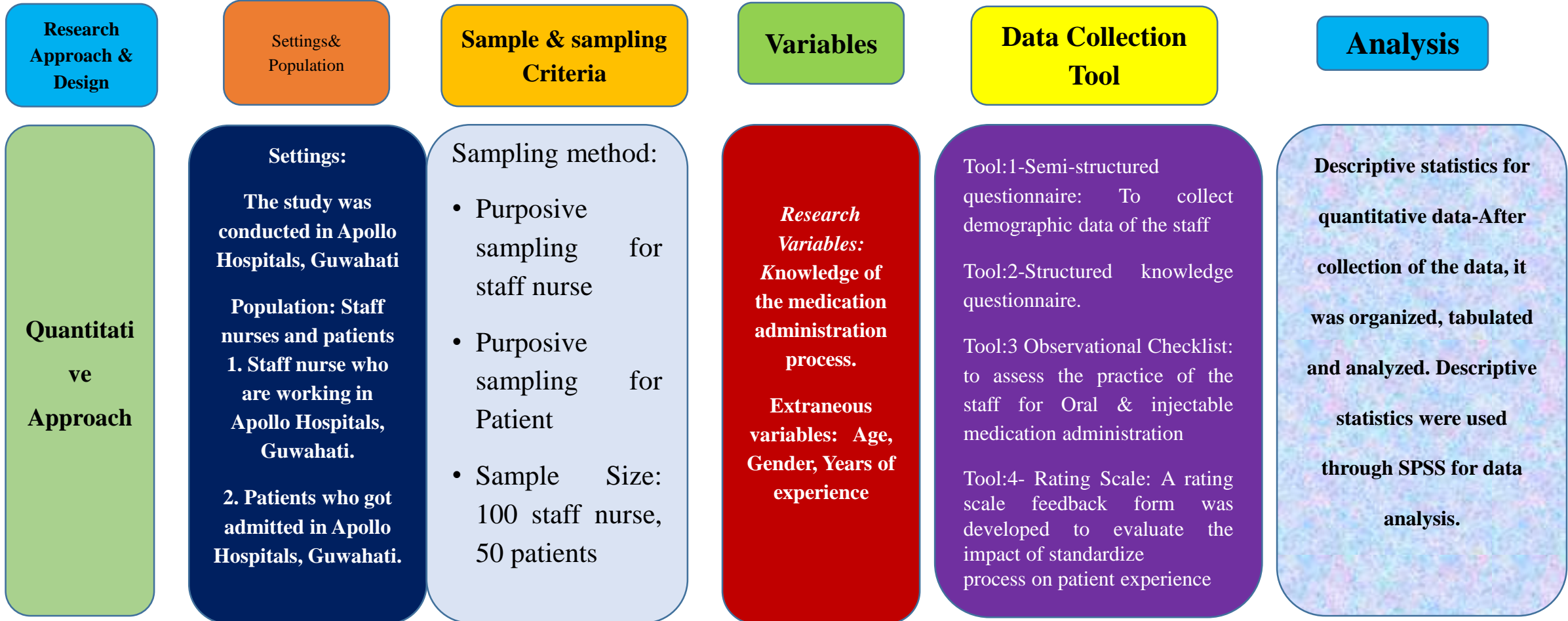
## **Title of the Study:**

- An Evaluative Study on Medication Administration Process and Impact on Patient Experience

## **Objectives of the study:**

- To assess the knowledge of the medication administration process.
- To assess the compliance to standardize medication administration process.
- To evaluate the impact of standardize process on patient experience.

# Research Methodology..



# Description of the Tool

**Tool 1 :** Semi-structured questionnaire: To collect demographic data of the staff. It covered 5 items i.e., age (in years), gender, educational qualification, years of experience (in years) and working unit.

**Tool 2:** Structured knowledge questionnaire: To assess the knowledge of the staff on medication administration process. It comprises of 20 multiple choice questions with a score of '1' against each correct answer. Level of knowledge score was graded as – Excellent above 17 Good (14-17), Fair(10-13), Poor <9 .

**Tool 3.** Observational Checklist: It consist of 2 checklist to assess the practice of the staff- a) Checklist for Oral medication administration: The checklist contains 16 points against which '1' score is given for compliance and '0' for non-compliance. b) Checklist for Injectable medication administration: The checklist contains 18 points against which '1' score is given for compliance and '0' for non-compliance.

**Tool 4:** Rating Scale: A rating scale feedback form was developed to evaluate the impact of standardize process on patient experience. It comprises of 5 rates- very satisfied (5), satisfied (4), neutral (3), unsatisfied (2), and very unsatisfied (1).

# Organization of the study findings

Section I: Findings related to demographic variables of the staff nurses

Section II: Findings related to knowledge score of the staff nurse regarding medication administration process

Section III: Findings related to compliance rate of the staff in practice of medication administration process.

Section IV: Findings related to patient experience towards standardized administration process.

## Section I: Findings related to demographic variables of the staff nurses

**Table 1: Frequency and percentage distribution of demographic data of the staff nurse**  
n=100

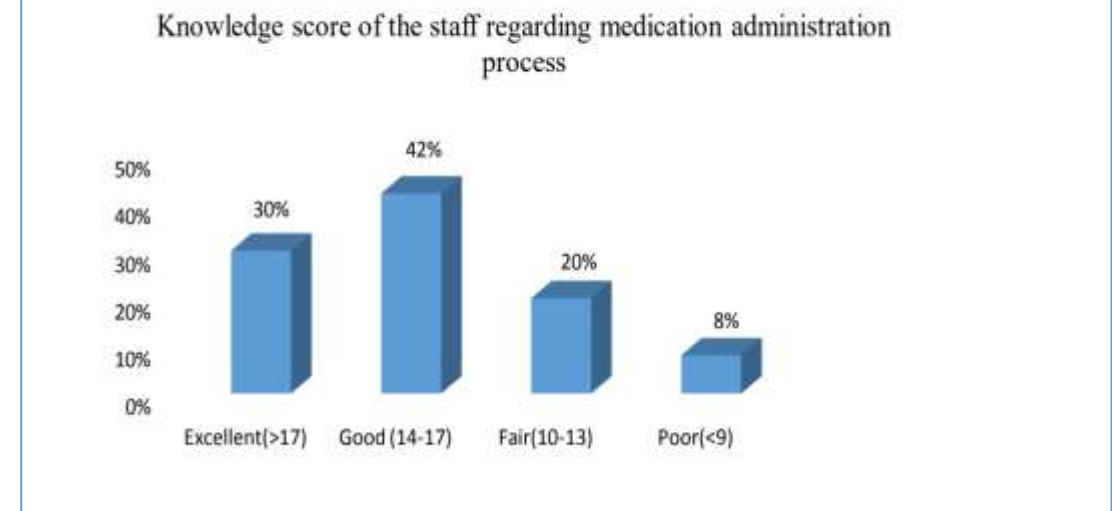
Sample characteristics	Frequency	Percentage (%)
Age(in years)		
21-25	54	54
26-35	43	43
36 and above	03	3
Gender		
Male	07	07
Female	93	93
Transgender	Nil	-
Educational qualification		
GNM	54	54
B.Sc. Nursing/post-basic B.Sc. (N)	55	55
M.Sc. Nursing	01	1
Years of experience(in years)		
0-2	57	57
3-5	25	25
6-10	17	17
11 years and above	01	1
Working Unit		
Critical care area	64	64
General ward	36	36

## Section II: Findings related to knowledge score of the staff nurse regarding medication administration process:

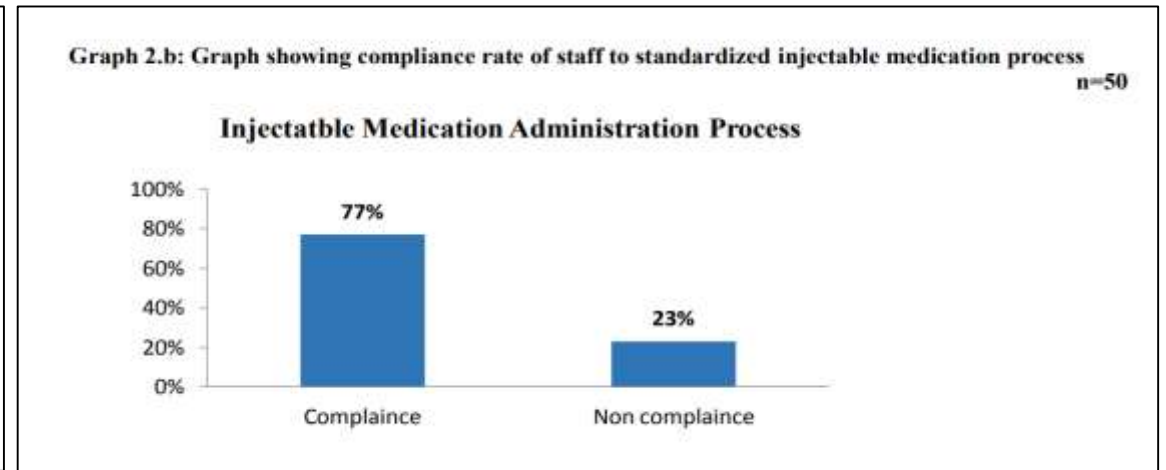
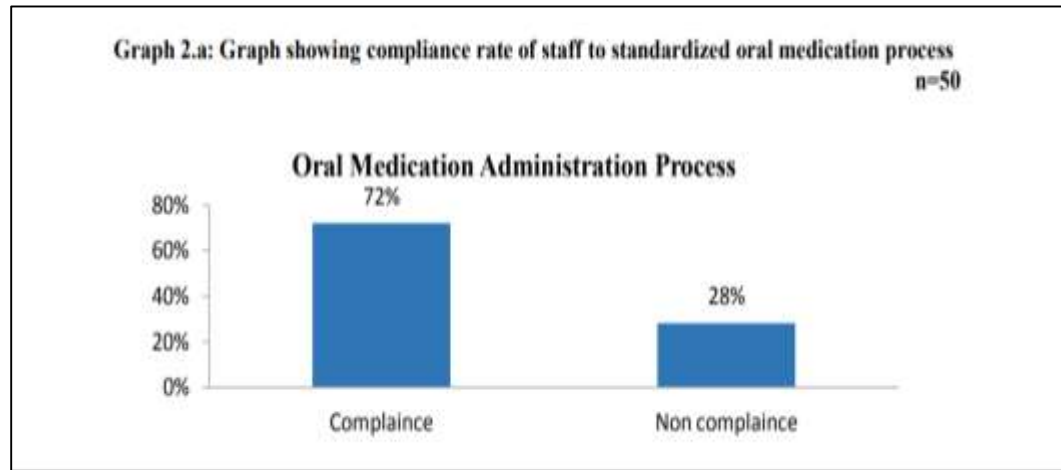
**Table 2: Distribution of range, mean, median and standard deviation of knowledge score of the staff regarding medication administration process**  
n=100

Variable	Range	Mean	Median	Standard deviation
Knowledge	5-20	14.72	15	2.91

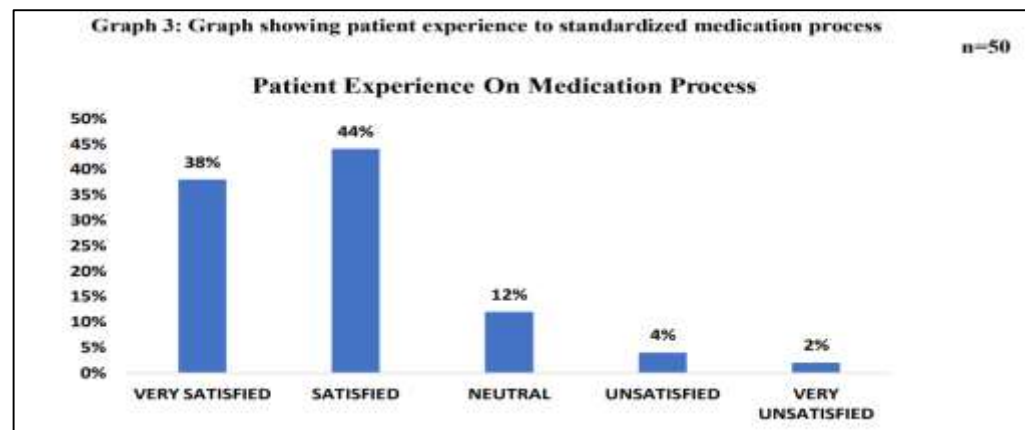
**Graph 1: Graph showing knowledge score of the staff regarding medication administration process**  
n=100



## Section III: Findings related to compliance rate of the staff in practice of medication administration process-



## Section IV: Findings related to patient experience towards standardized administration process...





## Discussion

The major findings of the study were discussed in relation to findings of the other studies.

The result of the present study showed that most of the staff 54% were at the age group of 21-25 years with majority 93% female staff. Almost half of the staff i.e. 55% were B.Sc. Nursing/ Post Basic B.Sc.(N) qualified.

Maximum, 57% staff were experienced for 0-2 with majority, 64% working in critical care area. These findings were supported by the results of the study conducted by Kaur A, Charan GS which revealed that majority of the staff 99% were at the age group of 21-40 years and more of female i.e. 98%. The results also showed 50% as B.Sc. Nursing/P.B B.Sc. Nursing qualification with majority 62% with less than 5 years of experience. As per clinical working status, most of the staff was found to be working in intensive care unit i.e.28%

In the present study, majority 42% had good knowledge about the subject, followed by 30% excellent knowledge, 20% had fair knowledge and 8% had poor knowledge.



# Discussion

These findings were consistent with the study findings of Devi AN, et al.<sup>10</sup> which showed majority 55% had moderate knowledge about drug administration, 32% had adequate knowledge and 13% had inadequate knowledge.

On the contrary, the finding of the study conducted by Elmageed EMA, Soliman HM, Abdelhamed M showed slightly less than two thirds (62.9%) of nurses have poor total knowledge score regarding medication administration.

Major findings of the present study revealed that the practice to standardized oral medication administration process showed 72% compliance with 28% non-compliance and that of injectable medication process, 77% compliance rate with 23% non-compliance.

Similarly, the study findings of Elmageed EMA, Soliman HM, Abdelhamed M<sup>11</sup> concluded that around half (46.4%) of the nurses have poor total practice score.

It was noted that majority of the patients i.e. 44% were satisfied with the medication administration process of the staff, 38% were very satisfied, 12% were neutral, 4% were not satisfied and 2% were not very satisfied. The findings of the study was also consistent with the findings of the study conducted by Kartika IR, Melani V<sup>12</sup> which showed that half of the respondents (50%) were satisfied with the nurses during medication administration.

# Conclusion

The findings of the present study concluded that majority of the staff had good knowledge regarding medication administration process but the practices carried out by the staff were not fully compliance towards standardized medication administration process. Most of the patients were satisfied with the standardized process followed by the staff. As medication administration plays a vital role for the safety of a patient, full compliance to the process is at the most priority. Therefore, further interventions and re-interventions are highly required so as to adhere to the standardized process and prevent errors in the near future.

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