KNOWLEDGE AND EXISTING PRACTICES OF PHYSICAL RESTRAINTS.

ABSTRACT

A study was undertaken to find out the knowledge of nursing personnel and an existing practice of physical restraints in the unit inselected hospital of Kolkata, West Bengal. The respondents were 60 nursing personnel and 60 patients of selected hospitals in Kolkata, West Bengal.Purposive sampling technique was adopted to select the respondents. The tools used for gathering necessary data were a structured knowledge questionnaire for knowledge assessment, an observation checklist for assessing existing practices in the unit.The findings of thestudy revealed that half of the nursing personnel (50%) had good knowledge regarding use of physical restraint scored between 60-80% in the knowledge questionnaire. In majority(75%) of the cases the practice of physical restraint was graded as fair. There was also a strong association found between knowledge of the nursingpersonnel with their age, professional qualification and years of experience in nursing.
Further studies can be conducted on different aspects related with this study which has implication in the field of nursing practice, nursing administration, nursing education and nursing research.

BACKGROUND OF THE STUDY

To date, the literature has provided an abundance of evidence on the adverse outcomes of restraint uses on patients. The topic of restraint reduction has been under intense scrutiny since the late 1980s, when it began with a public outcry in developed countries arising out of concern regarding the standard of care in long term settings. In Britain, the use of physical restraints on older people is often regarded as abuse. In the United States, a home reform law was enacted in 1987, resulting in an increasing number of studies on restraint use from then onwards. Almost two decades later, however, researchers still findnurses resistant to the notion of removing patients' restraints. Protecting patients from injuries such as falls and preventing treatment disruption are the most important reasons given for the use of physical restraints by all professional groups. Reportedly, nurses are most often the personnel who initiate restraint use[1].

Restraint should only be used as part of a holistic intervention plan. This plan should be developed and approved by the treating team in consultation with the person and their family and with the consent of a guardian or enduring guardian (where appointed with the relevant authority). Restraint should not be used for staff convenience or to overcome lack of adequate staff support and supervision. Residential facilities must be able to address the conditions and support the requirements of individual residents.

Complications of restraint can be serious including death resulting from medications or devices. Use of restraints should be reserved for documented indications, should be time

limited, and there should be frequent re-evaluation of their indications, effectiveness and side effects in each patient.

Restraints restrict the individual freedom, so their use has legal implication. The US Centre for Medicare and Medicaid Services published revised standards for use ofrestraints in 2001. Three standards apply to all health care organization and specific twostandards for applying restraints-behaviour standard management when client were in danger to self or others and when temporary immobilization of a client is required to perform a procedure[2]. Protection against the improper use of restraints is now included federal regulation governing hospital. The protection and standards are supported among health care providers of inherent risk of harm and death while physically restrained. Inaddition, patient and their families often view patient restraint negatively and as a traumatic event. As a result, improper use of restraints can lead to patient harm andpotential civil litigation[3].

In India, there is a lack of both studies and guidelines for the use of restraint, although a physical restraint is practiced. The practice of physical restraint on patients remainswidespread and appears to be accepted as inevitable.

Objectives of the study are-

- To determine the knowledge of nursing personnel regarding use of physical restraints on patients.
- To identify the existing practices of physical restraints on patients.

Non-experimental survey approach was adopted to accomplish the objectives of the study.

The research design was non-experimental, two-phase research design. The schematic presentation of the research design.

The population werenursing personnel who were working as a bed side nurse and patients who were placed in physical restraints

The sample were60 nursing personnel who were working as a bed side nurse and 60 patients who were placed in physical restraint during the period of datacollection.

In this study, sampling technique for the nursing personnel was done by non-probability, purposive sampling. All the staff nurses who were present during the period of data collection, worked as a bed side nurse and willing to participate were included. And for the patients, all the patients who were placed on physical restraint during the period of data collection were included as sample

Data Collection Tools and Techniques
the following data collection tools were selected to obtain necessaryinformation.
Table1 data collection tools and techniques

Tools	Technique	Reliability
Tool 1- Structured Knowledge Questionnaire to assess knowledge of nurses regarding use of physical restraints.	Paper-pencil test	r=0.77 by Kuder Richardson-20
Tool 2- Observation checklist on practices regarding physical restraints.	Observation	100% agreement By interrater method

RESEARCH FINDINGS

1. Demographic data

This section deals with the description of the demographic data of the nursing personnel such as age, professional qualification and years of experience in nursing.

Table2 Frequency and percentage distribution of nursing personnel according to their demographic data.

n=60

Sample characteristics	Frequency	Percentage
Age (years)		
20-30	30	50
31-40	16	26.66
41-50	09	15
Above 50	0	8.33
Professional qualification		
GNM	45	75
BSc Nursing	15	25
Years of experience in nursing		
1-10	35	58.33
Above 10	25	41.67

2. Knowledge questionnaire scoring

The maximum possible score on knowledge questionnaire regarding use of physicalrestraint is 25. After taking the frequency and percentage of the scoring of sixty nursing personnel on the knowledge questionnaire, the scores are graded as depicted in the table below.

Table 3 Frequency and percentage distribution of the level of knowledge of nursing personnel regarding use of physical restraint.

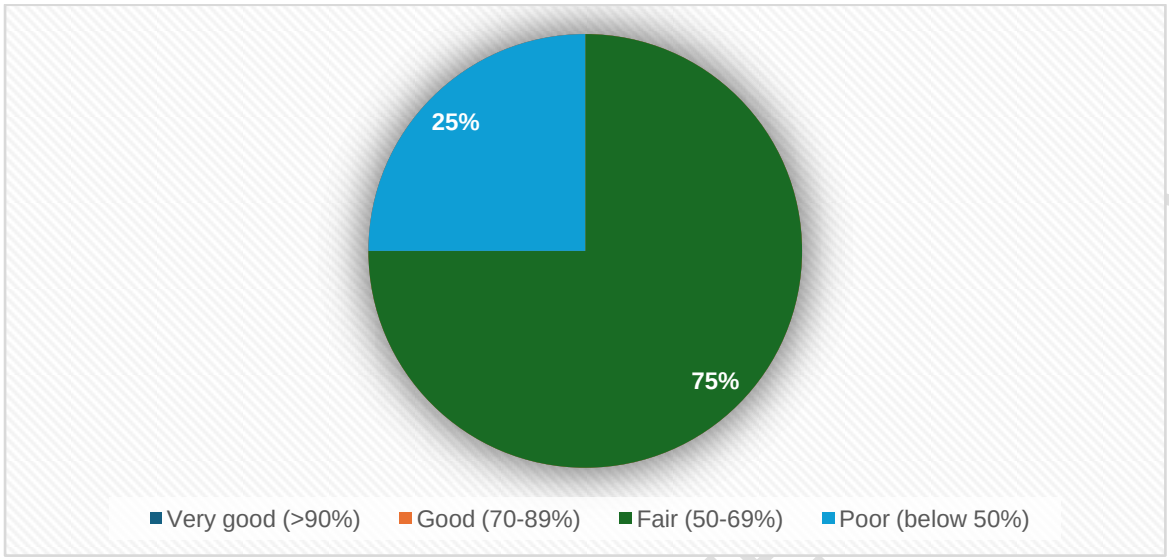
n=60

Score grading	Frequency	Percentage
Very good (80-100%)	21	35
Good (60-80%)	30	50
Fair (40-60%)	9	15
Poor (below 40%)	Nil	Nil

3. Observation checklist score

The maximum possible score on observation checklist regarding use of physical restraint was 12. After taking the percentage of the scoring on the observation checklist, the scores are graded as depicted in table below.

n=60



The pie diagram show that the practice of physical restraint in the units was fair in 75% of the cases and poor in 25% of the cases. None of the practices were good or very good

4. Findings related to association of demographic data and knowledge score of nursing personnel.

This section describes the analysis description and interpretation of association and relationship between demographic data of the nursing personnel and knowledge questionnaire score.

Tables 4: chi square test of association between professional qualification and knowledge score of nursing personnel

n=60

Professional qualification	Knowledge Score		Total	Chi square
	Below median	Median andabove median		
GNM	18	27	45	
BSc Nursing	12	03	15	7.82**
Total	30	30		

**$\chi^2(1)=10.83$ $p<0.01$

So it can be concluded that knowledge score of the nursing personnel of the present study regarding physical restraint was dependent on the professional qualification of the nursing personnel.

Table 5: Correlation co-efficient and their significance existing between knowledge score of nursing personnel and selected demographic data.

n=60

Variables	r-value	t-value
Age (in years) andknowledge questionnaire score	-0.55***	5.03***
Years of experience innursing and knowledge questionnaire score	-0.54***	8.72***

r(58)=0.408, p <0.001

t=3.46 df(59), p<0.001

The correlation coefficient value obtained from the above table showed that there were statistically significant relationships between knowledge score of nursing personnel and their age as well as knowledge score of nursing personnel and years of experience in nursing. As the r-value suggested, they were negatively co-related, so it indicate that more the age the knowledge level decreases, likewise, the knowledge level also decreases as the years of experience in nursing increases.

5. Findings related to association of knowledge of nursing personnel and existing practices of physical restraint in units.

Table 5 Correlation co-efficient and their significance existing between knowledge score of nursing personnel and existing practice regarding use of physical restraint.

n=60 + 60

Variables	r-value	t-value
Knowledge questionnaire score and existing practice score	0.15	1.66

T=1.98 df(120), p>0.05

It was seen from table 5 that there was no significant relationship found between the knowledge questionnaire score and existing practice score.

Conclusions

Based on the data analysed, the following conclusions can be drawn-

- The knowledge level of the nursing personnel was found to be adequate as determined by the structured knowledge questionnaire.
- The practice score on existing practices of physical restraint were not adequate as determined by an observational checklist.
- The knowledge of the nursing personnel was negatively co related with their age and years of experience in nursing.
- The knowledge level of the nursing personnel was dependent of their professional qualification.

- The knowledge level of nursing personnel was independent of the practice score.

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