KNOWLEDGE AND PRACTICE OF STAFF NURSES REGARDING PAIN ASSESSMENT AND MANAGEMENT OF POST-OPERATIVE PATIENTS

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1. ABSTRACT

Knowledge and Practice of staff nurses regarding Pain Assessment and Management of Post-operative patients

The Objectives of the study were.

1) To assess the knowledge of staff nurses regarding pain assessment and management of post-operative patients.

2) To assess the practice of staff nurses regarding pain assessment and management of post-operative patients.

3) To find out the correlation between knowledge and practice of staff nurses regarding pain assessment and management of post-operative patients.

4) To find out the association between knowledge of staff nurses and selected demographic variable.

5) To find out the association between practice of staff nurses and selected demographic variable.

Quantitative research approach was used with Non- experimental Descriptive Survey research Design. The investigator has selected 60 samples, by Non-probability Convenient sampling technique. A Structured Knowledge Questionnaire and Structured Observational Checklist was used as a data collection tool. Reliability of the Structured Knowledge

Questionnaire was determined by test-retest method and Structured Observational Checklist was determined by inter- rater method. Descriptive and inferential statistics was used to analyse the data. The distribution of samples by age in years, majority of samples 50 (83.4%) belong to the age group of 21-30 years. As regard to gender 36 (60%) of the samples were female. According to professional qualification, the majority of sample 37 (61.7%) belongs to GNM. As regard to duration of working experience, the majority of sample 52 (86.7%) belongs to 0-5 years. According to training programs attended, the majority of the Sample 51 (85%) have attended the training programs. The knowledge scores of the staff nurses on pain assessment and management of post-operative patients. Out of 60 staff nurses, the majority of the staff nurses 35 (58.33%) had average knowledge and 17 (28.33%) had Good knowledge.8 (13.33%) had Poor knowledge. The Practice score of the staff nurses on pain assessment and management of post-operative, 34 (56.70%) had average practice and 20 (33.30%) had Good practice and 6 (10%) had Poor practice. Thus the investigator concluded that there was Average knowledge and practice of staff nurses. The knowledge mean score is 10.76 and SD is 3.12, whereas in practice the mean score is 9.31 and SD is 2.0 and the correlation coefficient (r) between knowledge and practice is 0.89, which shows the positive correlation between the knowledge and practice. Investigator concluded that there was significant association between knowledge score and demographic variable for Duration of working experience at 0.05 significance of level. Significant association was found between practice score and selected demographic variable for Duration of working experience at 0.05 significance of level.

2. KEYWORDS: Assess, knowledge, practice, pain assessment, pain management.

3. INTRODUCTION

"Pain is what the patient says it is, and exists whenever the patient says it does".

Pain is a subjective and complex phenomenon. It is difficult to define since pain is an individual and personal experience. The World Health Organization and According to International Association for the study of Pain, Pain is defined as "an unpleasant sensory and emotional experience arising from actual or potential tissue damage or described in terms of such damage" **(International Association for the study of Pain 2012 as stated in Wuhrman and Cooney 2015).** Pain can be experienced as acute, intermittent or chronic pain and surgical operations are classified among four largest causes of pain **(Goldberg and McGee, 2015).**

Postoperative pain is an acute pain following surgery and is the one of postoperative complications; it may be due to tissue incision and/or dissection, manipulation of organs and traction **(Masagati and Chilonga, 2014)**; tissues that are commonly injured include skin, bone, muscle, ligaments, tendons and viscera and pain information is transmitted from the injured tissue to the central nervous system (nociception) which sensitize the peripheral and central neuronal structures to intensify and prolong postoperative pain **(International association for the study of pain, 2016)**

In terms of maximum management, pain should be assessed in comprehensive manner and documented as a **"fifth vital sign"** for enhanced management of acute pain **('Pain management guidelines', 2015).** In addition, using uni-dimensional measures of pain such as numerical rating scale, visual analogue pain **(Francis, Vitals and Thikra, 2016)** and multidimensional measures of pain such as McGill Pain Questionnaire, **(Brief pain Inventory Francis, Vitalis and Thikra, 2016)** among others, helps in management of pain as it transforms the subjective nature of pain to standard measures that can guide the management. For better management of pain, nurses should have adequate knowledge and practice of pain assessment and management.

4. MATERIAL AND METHODS

Research approach

Research approaches refers to the overall plan for obtaining answers to the research questions and for testing the hypotheses. **(polit, d.f. and beck, c.t., 1995),** for this study, the investigator selected the quantitative descriptive research approach.

rationale: a quantitative descriptive research approach will be considered most suitable for the study as the aim was to assess the knowledge and practice of staff nurses regarding pain assessment and management of post-operative patients in selected hospitals of udaipur city. this approach will be helpful in gathering the data that will be most beneficial in fulfilling the objectives of this study. descriptive approach provides great deal of information in a fairly economical manner.

RESEARCH DESIGN

According to **burns, nancy, (2007)** research design is investigation's overall plan for obtaining answer to the research questions. research design selected for the present study is non- experimental descriptive survey research design.

research design used for the proposed study was non- experimental descriptive survey to assess the knowledge and practice of staff nurses regarding pain assessment and management of post-operative patients in selected hospitals of udaipur city.

Variables

Variables are measurable characteristics or attribute of an object or event that may fluctuate in quantity or quality from one object to another.

the present study includes.

Research variable: knowledge and practice of staff nurses regarding pain assessment and management of post-operative patients.

Demographic variable: age, gender, professional qualifications, duration of working experience, training programs attended.

Research setting

the setting for the study will be under-taken at selected hospitals of udaipur city.

rationale

the rationale for selecting these hospitals is with the settings, availability of samples, and feasibility of conducting the study. the investigator had conducted the study in hospitals of hcg hospital, zydus hospital, rajasthan hospital and shalby hospital of udaipur city. these hospitals have staff nurses who are working in post-operative area.

Target Population

"Population is any group of individuals that have one or more characteristics in common and area of interest to the researcher." "Target population refers to the population that the researcher wishes to study the population about which the researcher wishes to make generalization."

(polit, d.f. and beck, c.t. 2008)

in this study, the population consisted of the staff nurses who all are working in selected hospitals of udaipur city.

Sample size and sampling technique

sample size and sampling technique **polit and beck (2010)** said that "sample" is a portion of population selection for observation and analysis. sampling is process of selecting a portion of the population to represent the entire population.

Sample Size

sample size is defined as the number of items to be selected from the universe to constitute a sample.

in present study, sample size selected are **60** staff nurses working in selected hospitals of udaipur city.

sampling technique

sampling technique is the method used in drawing sample from a population usually in such a manner that the sample will facilitate determination of some assumptions concerning the population.

in the present study the investigator used non-probability convenient sampling technique.

criteria for sample selection

inclusion criteria

- staff nurses who are working in selected hospitals of udaipur city.
- staff nurses who are present at the time of data collection.
- staff nurses who are willing and are ready to participate in the study.

exclusion criteria

- staff nurses who are absent at the time of data collection.
- staff nurses who are not willing to participate in the study.

5. RESULTS AND DISCUSSION

The data is analyzed and presented under the following sections.

1. Analysis and interpretation of demographic variables of samples.
2. Analysis and interpretation of data related to knowledge of staff nurses regarding pain assessment and management of post-operative patients.
3. Analysis and interpretation of data related to practice of staff nurses regarding pain assessment and management of post-operative patients.

4. Analysis and interpretation of data related to correlation between knowledge and practice of staff nurses.

5. Analysis and interpretation of data related to association of knowledge score with selected demographic variables.

6. Analysis and interpretation of data related to association of practice score with selected demographic variables.

Analysis and interpretation of demographic variables of samples.

Sr. No.	Demographic variables	Frequency (f)	Percentage (%)
1	Age in years A. 21-30 B. 31-40 C. 41-50 D. Above 50	50 9 1 0	83.4 15 1.6 0
2	Gender A. Male B. Female	24 36	40 60
3	Professional Qualification A. GNM(N) B. B.Sc (N) C. M.Sc (N) D. Any other	37 22 1 0	61.7 36.7 1.6 0
4	Duration of working experience A. 0-5years B. 6-10years C. 11-15years D. Above 15years	52 5 1 2	86.7 8.3 1.7 3.3
5	Training programs attended A. Yes B. No	51 9	85 15

Analysis and interpretation of data related to knowledge of staff nurses regarding pain assessment and management of post-operative patients.

level of knowledge	frequency (f)	Percentage (%)
poor (1-6)	8	13.33%
average (7-13)	35	58.33%
good (14-20)	17	28.33%
total	60	100.00%

Analysis and interpretation of data related to area wise mean score and mean pertcentage of knowledge score of the sample.

sr. no.	area of content	maximum score	mean score	MEAN %
1	Definition	1	0.33	33.00
2	Causes	1	0.7	70.00
3	Types	2	0.75	37.50
4	Sign and Symptoms	1	0.31	31.00
5	Duration of pain	3	1.41	47.00
6	Scales used to measure pain	2	0.9	45.00
7	Management	10	6.3	63.00
	Total	20	10.77	53.85

Analysis and interpretation of data related to practice of staff nurses regarding pain assessment and management of post-operative patients.

level of practice	frequency (f)	percentage (%)
poor (1-5)	6	10%
average (6-10)	34	56.70%
good (11-15)	20	33.30%
total	60	100%

Analysis And Interpretation Of Data Related To Correlation Between Knowledge And Practice Of Staff Nurses.

Variables	Mean	SD	r Value
Knowledge	10.76	3.12	r = 0.89
Practice	9.31	2.0	

Analysis and interpretation of data related to association of knowledge score with selected demographic variables.

Sr. No.	Demographic variables	f	Chi Square X^2 Calculated Value	Table Value	Degree Of freedom	Level of Association
1	Age in years A. 21-30 B. 31-40 C. 41-50	50 9 1	3.2	9.49	4	Non Significant
2	Gender A. Male B. Female	24 36	1.38	5.99	2	Non Significant
3	Professional Qualification A. GNM(N) B. B.Sc (N) C. M.Sc (N)	37 22 1	1.498	9.49	4	Non Significant
4	Duration of working experience.	52	14.84			

			Calculated Value	Table Value	Degree Of freedom	Level of Association
	A. 0-5years B. 6-10years C. 11-15years D. Above 15 years	5 1 2		12.59	6	Significant
5	Training programs attended. A. Yes B. No	51 9	2.238	5.99	2	Non Significant

Analysis and interpretation of data related to association of practice score with selected demographic variable

Sr. No.	Demographic variables	f	Calculated Value	Table Value	Degree Of freedom	Level of Association
1	Age in years A. 21-30 B. 31-40 C. 41-50	50 9 1	2.7	9.49	4	Non Significant
2	Gender A. Male B. Female	24 36	0.56	5.99	2	Non Significant
3	Professional Qualification A. GNM(N) B. B.Sc (N) C. M.Sc (N)	37 22 1	2.998	9.49	4	Non Significant
4	Duration of working experience A. 0-5years B. 6-10years C. 11-15years D. Above 15 years	52 5 1 2	13.147	12.59	6	Significant
5	Training programs attended A. Yes B. No	51 9	0.015	5.99	2	Non Significant

DISCUSSION

The present study was conducted to assess the Knowledge and practice of staff nurses regarding pain assessment and management of post-operative patients in selected hospitals of Udaipur city. Analysis revealed that out of 60 staff nurses, 35(58.33%) had Average Knowledge related to pain assessment and management of post-operative patients with score of 07-13, 17 (28.33%) of respondents had good knowledge related to pain assessment and management of post-operative patients with the score of 14-20, 8 (13.33%) had poor knowledge regarding pain assessment and management of post-operative patients with the score of 1-6. In practice 34(56.70%) of staff nurses had average Practice regarding pain assessment and management of post-operative patients with the score of 6-10, 20(33.30%) had good practice regarding pain assessment and management of post-operative patients with

the score of 11-15, 6(10%) had poor practice regarding pain assessment and management of post-operative patients with the score of 1-5.

The present study can be supported with a descriptive survey approach conducted byKaur Karamjeet, (2017)**.** The study was conducted to evaluate the knowledge of staff nurses. A self structured tool was used to collect the data. Convenient sampling was used to select 50 staff nurses. This study revealed that the majority of the respondents i.e. 33(66%) had average knowledge, 10(20%) had poor knowledge and only 07(14%) of respondents had good knowledge related to pain assessment and management. The total mean knowledge score was 16.18. The majority of the respondents i.e. 33 (66%) had average knowledge related to pain management with score of 15-20, 10 (20%) had poor knowledge related to pain management with the score of 0-15, and only 07 (14%) of respondents had good knowledge related to pain management with the score of 20-25.

7. CONCLUSION

This chapter deals with analysis and interpretation of data collected from 60 samples, knowledge and practice of staff nurses regarding pain assessment and management of post-operative patients in selected hospitals of Udaipur city. Descriptive and inferential statistics methods were used to analyze data. Majority of sample having Average knowledge (58.33%) and majority of sample having average practice (56.70%) towards pain assessment and management that leads to different demographic variables.

The association between the knowledge score and demographic variables was tested using the chi square test. There was significant association found between knowledge score and Duration of working experience. There was significant association found between practice score and Duration of working experience.

Thus, it was concluded that there was significant association between knowledge score and the demographic variable(Duration of working experience) and also significant association found between Practice score and the selected demographic variable (Duration of working experience). There was perfectly positive correlation between knowledge and practice of staff nurses.

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