

An Exploratory study to assess the level of knowledge regarding Prevention of pressure ulcer in childrens among Staff nurses in selected hospital of Hapur, U.P.

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Abstract

Background : Pressure Ulcer (PUs) are frequently occurring health issues in the healthcare system all over the world . PUs now are defined as “localized damages to the skin and/or underlying soft tissue usually over a bony prominence or related to medical or other devices, caused by sustained pressure (containing pressure associated shear). The injury can present as intact skin or an open ulcer and may be painful”. Children are at high risk for PUs regardless of age or development level, especially pediatric hospitalized patients . Pediatric age is a broad life stage, spanning from birth to adolescence, and variations in the biological development of the skin, as well as anthropometric growth-related changes, must be taken into account when managing pressure injury development.

Material and method : The objectives of the study were to assess the level of knowledge regarding management of Pressure ulcer in children among staff nurses and to find the association between level of knowledge regarding management of Pressure ulcer and selected demographic variables. A survey research approach was used and the research design adopted for the present study was Descriptive Research Design. The target population for the study was staff nurses in selected hospitals of Hapur. Sample size was 157 data analysis was done by the basis of objective and hypothesis of study. The obtained data was analyzed based on objective and hypothesis by using descriptive and inferential statistics and hypothesis were tested at 0.05 level of significance.

Result : The results of the study says that level of knowledge regarding Prevention of Pressure ulcer in children among 157 staff nurses that 51 (32.5%) had good knowledge, 103 (65.6%) had a average knowledge and 3 (1.9%) had a poor knowledge. There was no significant association between knowledge and demographic variable such as staff nurse age ($p=0.42$), education ($p=0.79$), gender ($p=0.67$), religion ($p=0.37$), experience ($p=0.60$), working place ($p=0.77$) and source of information ($p=0.69$).

Conclusion: The study concluded that majority of the nurses have average knowledge that others regarding Prevention of Pressure ulcer . The findings highlight that the health care providers can play a significant role to educate the nurses regarding importance of early detection, management and prevention of Pressure ulcer .

Key words: PUs : Pressure Ulcers, knowledge, Prevention, staff Nurses

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I. Introduction

Pressure ulcer is an area of the skin break down due to unrelieved pressure in one position without shifting weight for long or small duration of time against the skin which reduce blood supply to that area follow by tissue necrosis or cellular death. Pressure ulcer can be caused by immobility, loss of sensation, age, disease, lack of nutrition ,infection, injury, friction, which may can cause in decrease in blood flow which can increase the risk of tissue damage. In hospital setting there is more risk of chances in intensive care unit, orthopedics unit, surgery unit. Prevalence of pressure ulcer in hospitalized patient is 4.94% in 2012.

Pediatric age is a broad life stage, spanning from birth to adolescence, and variations in the biological development of the skin, as well as anthropometric growth-related changes, must be taken into account when managing pressure injury development. In this respect, it should be noted that neonate skin is immature at both the epidermal (decreased stratum corneum, increased skin permeability and almost neutral pH) and dermal levels (decreased collagen, a tendency to edema and diminished perfusion, diminished dermo-epidermal cohesion, lower melanin production, immature sweat glands, immature dermal circulation and vasomotor system) and in hypo-dermis distribution (reduced or even absent), although during the first weeks of life it will begin to mature rapidly and functions will be optimized. By the age of 8, the skin will have become structurally similar to adult skin.

Meanwhile, changes in body proportions can explain why pediatric injuries are found in different locations from those observed in adults. With less than 1 m² body surface, pressure on sacrum and scapulae is lower than in the occiput area. For children under 3 years old, the occipital area and ears are the most affected areas, compared with the sacral area and heels in the over 3s. By 6–10 years old, body proportions and consequently PI locations mirror those of adults.

Another facet to consider is the presence of risk factors associated with admission to critical care units, such as the use of therapeutic and diagnostic devices, restricted mobility due to sedative or paralytic medication, prolonged intubation and hypo tension or hypoxaemia.

II. MATERIAL AND METHODS

Research setting- The setting is the location where the study is conducted. The study was conducted in Saraswathi institute of medical science of Hapur. This hospital is Tertiary care hospital in Hapur in U.P approximately 500 staff nurses are working in the hospital.

Population - The population referred to is the target population, which represents the entire group or all the elements like individuals or objects that meet certain criteria for inclusion in the study. In this study the population includes nurses who all are functioning in hospital setting.

Sample - The term “sample” refers to a subset of the population that has been chosen to take part in the research. The sample for the research study consist of nurses working in SIMS hospital.

Sample size- In the research study the sample is calculated by base on the pilot study findings using the formula :
Sample size: $n = 4pq / d^2$

n = required sample size

p = 0.62 (proportion of sample with high knowledge level)

q = 1 - p (1-0.62)

d = degree of error of proportion

$\alpha = 1.96$ (non response rate 40%)

Total required sample days 6, data was collected, 157 samples were available during data collection period

Sampling Technique- In this study convenient sampling technique was used for data collection.

SAMPLING CRITERIA

The following criteria were selected for the sample selection.

- Staff nurses who all are working in hospital setting.
- Staff nurses who all knows reading of english.

III. RESULT

Description of demographic variables-

In the present study, the majority of the sample 102 (65%) have 20-24 years of age, 80 (51%) of the sample were male, 77 (49%) of the sample were female, majority of the sample 111 (70.7%) were GNM, 112 (71.3%) belonged to Hindu religion, most of the samples were have experience below 1 year is 78 (49.7%), 49 (31.2) sample are working in ICU and Majority of the sample were getting information from health care team members.

Description of staff nurses knowledge regarding management of Pressure ulcer in Children-

In the present study, Level of knowledge regarding management of Pressure ulcer in Children among staff nurses assessed by using of structured knowledge questionnaire. The questionnaire compressed of 22 items. The majority 103 (65.6%) of staff nurse have average knowledge, 51 (32.5%) of staff nurses had good knowledge and 3 (1.9%) of staff nurses had a poor knowledge regarding management of bad ulcer.

Association between the staff nurses level of knowledge regarding management of Pressure ulcer in Children and selected demographic variables.

The result revealed that there was no statistically significant association found between staff nurses knowledge regarding management of Pressure ulcer and selected demographic variables such as staff nurse age ($p=0.42$),

education ($p=0.79$), gender ($p=0.67$), religion ($p=0.37$), experience ($p=0.60$), working place ($p=0.77$) and source of information ($p=0.69$).

IV. DISCUSSION

The result of the study obtained were A majority of the staff nurses 65% have 20 to 24 years age. 51% of the majority were male. 49% were female. Most of the staff nurses 70.7% GNM had educational status. The majority of staff nurses 71.3% were Hindu religion. Majority of staff nurses 49.7% have experience below 1 year. The majority of staff nurses 65.6% have average knowledge. 32.5% of staff nurses have good knowledge. 1.9% of staff nurses had poor knowledge. The result is that, no significant association between the variable.

Result of the study has supported by a similar descriptive study was conducted by Ipek Kos (et.al.) in adult intensive care unit of university hospital located in Adana/ Turkey. The aim of the study is to identify the knowledge of nurses working in intensive care unit in relation to preventive intervention for pressure ulcer. Total 73 nurses were participated in the study the data were collected through personal information form, pressure ulcer treatment quick reference guide, the result of the study shown that there is no statistically significant difference were detected between nurses, mean score for knowledge about preventive intervention for pressure ulcer & variables such as age, education, experience & duration of working in ICU ($p>0.05$) the finding of the study shows that majority of participants have good knowledge about preventive interventions for pressure ulcer.

V. CONCLUSION

The study concluded that to assess the level of knowledge regarding prevention of pressure ulcer in Children. This study shown that the majority of knowledge about management of Pressure ulcer is 65.6% have average knowledge, 32.5% of staff nurses have good knowledge and 1.9% of staff nurses have poor knowledge. And there is no significant association between the variable.

Conflict of interest- The authors have no conflict of interest regarding the investigation.

Ethical Clearance- Ethical clearance is obtained from the ethical committee of SIMS.

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