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Knowledge and Practice among Nurses Regarding Prevention of Pressure Ulcer in Surgery Department of Mayo Hospital Lahore

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Original Research Article

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Abstract: Pressure ulcers are the major problem of bed case patients in all the hospitals. There are great chances to develop pressure ulcers in those patients who are in critical condition and admitted in the hospital for a long time. Due to prolonged stay in the hospital and negligence of health care provider pressure ulcers can be developed. Prevention is better than cure because if once pressure ulcer developed it is difficult to treat. So nurses should take precautionary measure to prevent from pressure ulcers. This study mainly focuses on knowledge and practice of nurses regarding pressure ulcers prevention if nurses have accurate knowledge regarding prevention of pressure ulcers they can manage it timely before its development .Pressure ulcers can be prevented by regular assessment while providing nursing care to the patients Maggi, 2010. The absence of pressure ulcers in bed ridden patients is generally known as measure of quality nursing care and performance of practice of nurses. Assessment of Knowledge & Practice among nurses regarding prevention of Pressure Ulcer in Mayo Hospital Lahore". The study was descriptive cross sectional and was conducted in Mayo hospital Lahore. The sample size was 87 nurses who were qualified nurses. This study has shown that nurses are aware of knowledge regarding prevention of pressure ulcer but their practices are poor due to business, over workload and lack of resources. Research also has identified that nurses have knowledge regarding prevention of pressure ulcer. This is found that lack of practice regarding prevention of pressure ulcer in Mayo Hospital Lahore. Results of this study indicate that knowledge can have a positive effect on nurse's practice toward prevention of pressure ulcer. The study was descriptive cross sectional and was conducted in Mayo hospital Lahore. The sample size was 87 nurses who were qualified nurses.77.3% staff nurses agree that routinely assessment is necessary regarding pressure ulcer prevention.19.3% strongly agree, 1.1% satisfied, 1.1% strongly disagree about routinely assessment.45.5% staff nurses agree that Repositioning techniques can be useful in preventing bed sores 48.9% strongly agree, 3.4% satisfied, 1.1% strongly disagree about this. 67% staff nurses agree that pressure sores a multidisciplinary problem 30.7% strongly agree, 1.1% strongly disagree about this.14.8% staff nurses agree that food and nutrients consume daily would help in healing bed sores 76.1% strongly agree, 5.7% satisfied,1.1% disagree and 1.1% strongly disagree about this. 20.5% staff nurses agree that a pressure ulcer can lead to death 14.8% strongly agree, 51.1% satisfied, 11.4% disagree and 1.1% strongly disagree about this. 11.4% staff nurses agree that Donut devices or ring cushions help to prevent pressure ulcers 71.6% strongly agree, 13.6% satisfied,1.1% disagree and 1.1% strongly disagree about this.34.1% staff nurses agree that A daily bath will prevent pressure ulcers 17.0% strongly agree,43.2% satisfied,3.4% disagree and 1.1% strongly disagree about this. .0% staff nurses agree that Staff nurses use any assessment or scoring systems for pressure sore in your unit 6.8% strongly agree, 38.6% satisfied, 36.4% disagree about this. 20.5%staff nurses agree that Erythema or redness on any patient documented/reported in your unit 6.8% strongly agree, 45.5% satisfied, 26.1% disagree about this.14.8% staff nurses agree that massaging a bony prominence (area) promotes circulation and prevents pressure ulcers 6.8% strongly agree, 38.6% satisfied, 38.6% disagree about this.12.5% staff nurses agree that do you change dressing and wound assessments in your unit 5.7% strongly agree, 11.4% satisfied, 69.3% disagree about this. 13.6% staff nurses agree that are you inspecting the skin after pressure is redistributed 2.3% strongly agree, 13.6% satisfied, 69.3% disagree about this.

Keywords: Nursing, Knowledge, Practice, Prevention, pressure ulcer.

INTRODUCTION

Pressure ulcers are the major problem of bed case patients in all the hospitals. There are great chances to develop pressure ulcers in those patients who are in critical condition and admitted in the hospital for a long time. Due to prolonged stay in the hospital and negligence of health care provider pressure ulcers can be developed. Prevention is better than cure because if once pressure ulcer developed it is difficult to treat. So nurses should take precautionary measure to prevent from pressure ulcers. This study mainly focuses on knowledge and practice of nurses regarding pressure ulcers prevention. The National Pressure Ulcer Advisory Panel [1] defines a pressure ulcer is an area of prolong pressure over a specific area, mostly over a bony prominence, resulting in ischemia, cell death and necrosis. If nurses have accurate knowledge regarding prevention of pressure ulcers they can manage it timely before its development .Pressure ulcers can be prevented by regular assessment while providing nursing care to the patients. Nurses can use sand bags, air bed, air cushions and air filled gloves to reduce pressure at target places. According to [2] Pressure ulcer prevention programmers' consist of different techniques including regular assessment, training and education, repositioning of the bed case patient, use of preventive measures and support surfaces. Pressure ulcer prevention programmer including education of nurses regarding preventive measures for significant reductions of pressure ulcer occurrence in the bed case patients, In Mayo Hospital patients are admitted for a long period of time with different diseases and Most of them are bed ridden. Due to prolonged immobility the pressure on the soft tissue increases and interferes with the tissue's blood supply, leading to decreased blood supply, decreased oxygen supply to the tissues and as a result cell death occurs. Pressure ulcers can develop within 24 hours if pressure on soft tissues prolonged but it take as long as a week to present themselves. The tissues that are nearest to bone die first, and as the pressure increases, routine blood and oxygen supply decreases, the tissue layers and surrounding skin begins to die. The damage skin looks like an iceberg, when only small amount of damage can be visible at the surface and a large amount of damage lie below the surface. There is main role of nurses in prevention of pressure ulcers. According to literature review by enhancing knowledge and practice of nurses regarding pressure ulcer prevention from pressure ulcer is possible. One of the risk factor for developing pressure ulcer is the pressure on bony prominences [3]. According to [4] on average, 60,000 people die each year worldwide due to pressure ulcer related causes. The rate of occurrence of pressure ulcers in European hospitals ranges from 47% to 66% in surgical wards Pressure ulcers usually occur over bony prominences such as the sacrum, ischium and heel. Other factors such as friction, poor nutrition, and incontinence also

contribute to the tissue damage. It is very much necessary to have knowledge to prevent from pressure ulcers among staff nurses. Knowledge about Skin assessment, skin hygiene, skin moisture maintenance, nutrition for healthy skin, positioning and repositioning, elimination of friction and mobilization is essential for prevention. According to D. Thayer [5] keeping the skin and beddings of the patient dry is another preventive intervention that implemented and this is consider as nursing activities or performance. This practice or performance reduces the occurrence of pressure ulcers. There should be educational programmers for nurses to refresh their knowledge regarding prevention of pressure ulcers and this will ultimately improve their practices .The knowledge of nurses regarding pressure ulcer prevention refers to the level of remembering and understanding of pressure ulcer prevention including factors causing pressure ulcers and educational programmers for patient and family. According to [6] the absence of pressure ulcers in bed ridden patients is generally known as measure of quality nursing care and performance of practice of nurses

The purpose of study

The purpose of this study is to assess the knowledge and practice of nurses regarding prevention of pressure ulcers in Surgery Department in Mayo Hospital Lahore.

METHODS SETTING

This Study was carried out at Mayo Hospital, Lahore.

RESEARCH DESIGN

A descriptive cross sectional survey design was used. A cross-sectional analytical study design was used to examine the knowledge, attitude and practice of staff nursing. A cross-sectional is that study that collects information from a population at specific time of period [7].

POPULATION

Specific population for this study was the Nursing staff of Mayo Hospital, Lahore

SAMPLING

Data was collected from 87 nursing staff through convenient sampling techniques. Those who meet the inclusion criteria will be included in the study and those who don't meet the criteria were not being the part of the study.

RESEARCH INSTRUMENT

A well-constructed close ended questionnaire was distributed among nursing staff of Mayo hospital, Lahore. In this project tool was questionnaire for

collecting information. Questionnaire was made by me under supervision of my supervisors.

DATA GATHERING PROCEDURE

Data will be collected from the nursing staff of Mayo hospital, Lahore. The data will be collected with the help of other colleagues within a specified timeframe. Data collection will be done vie an adopted comprehensive, self-structured questionnaire which sought such information as age, marital status, educational status, occupation.

METHODS USED TO ANALYZE DATA

Statistical analysis was carried out using SPSS for Windows version 16. The data was summarized by descriptive statistics using the frequency, percentage and tables for categorical variables. The relationship between variables scores and socio-demographic variables was tested by using linear regression. The significance level for all statistical analysis was set at 0.05.

STUDY TIMELINE

The data was collected from DEC, 2018 to MAY, 2018.

ETHICAL CONSIDERATION

Ethical principle was performed during research study Permission was taken from the Ethical committee. I was take permission from the stockholder of the hospital. Give complete information to the

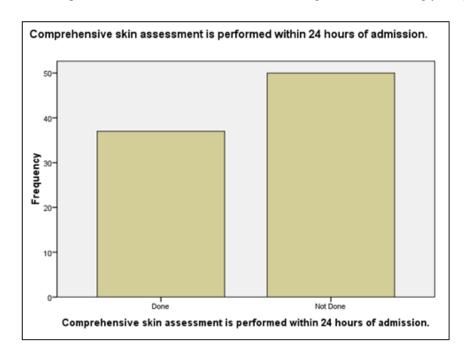
participant related to research. It makes sure that no harm was given to the participant. Study was beneficial. All participants were having open opportunity to participate in research. No one will be forced to participate in research. Informed consent was signed from the participants. Before signing consent participants was informed about purpose, methodology, risk and benefits of investigation.

Enough information of research was provided to participants with the help of full consent form and this will be achieved via a letter attach to the questionnaire. Confidentiality was considered by informing participants.

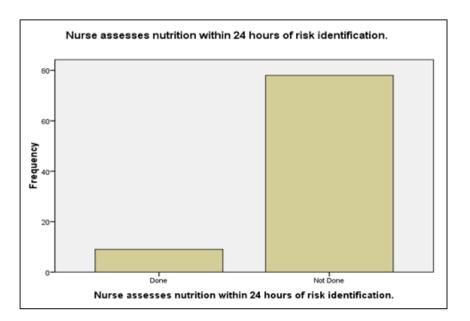
RESULTS

Routinely assessment is necessary regarding pressure sore prevention?

Frequency table show that 77.3% staff nurses agree that routinely assessment is necessary regarding pressure ulcer prevention 19.3% strongly agree, 1.1% satisfied, 1.1% strongly disagree about routinely assessment.45.5% staff nurses agree that Repositioning techniques can be useful in preventing bed sores 48.9% strongly agree, 3.4% satisfied, 1.1% strongly disagree about this. 67% staff nurses agree that pressure sores a multidisciplinary problem 30.7% strongly agree, 1.1% strongly disagree about this14.8% staff nurses agree that food and nutrients consume daily would help in healing bed sores 76.1% strongly agree, 5.7% satisfied, 1.1% disagree and 1.1% strongly disagree about this.



	Frequency	Percent
Agree	59	67.0
Strongly Disagree	1	1.1
Total	87	98.9
System	1	1.1
	88	100.0



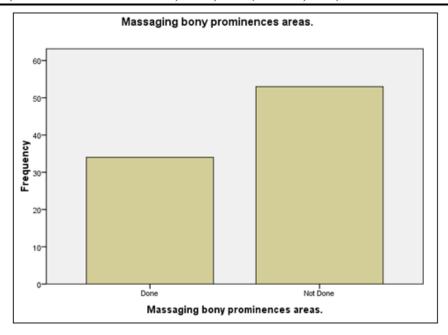
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strongly agree, 13.6% satisfied,1.1% disagree and 1.1% strongly disagree about this17.0% staff nurses agree that Staff nurses use any assessment or scoring systems for pressure sore in your unit 6.8% strongly agree, 38.6% satisfied,3 6.4% disagree about this.

	Frequency	Percent
Agree	30	34.1
Strongly agree	15	17.0
Satisfied	38	43.2
Disagree	3	3.4
Strongly Disagree	1	1.1
Total	87	98.9
System	1	1.1
	88	100.0

That 14.8% staff nurses agree that massaging a bony prominence (area) promotes circulation and prevents pressure ulcers 6.8% strongly agree, 38.6% satisfied, 38.6% disagree 12.5% staff nurses agree that do you change dressing and wound assessments in your

unit 5.7% strongly agree, 11.4% satisfied, 69.3% disagree about this. 13.6% staff nurses agree that are you inspecting the skin after pressure is redistributed 2.3% strongly agree, 13.6% satisfied, 69.3% disagree about this.



DISCUSSION

In this research it is concluded that nurses have knowledge about prevention of pressure ulcers but their practices are poor. They cannot apply their knowledge because of over burden and lack of resources. In this study 77.3% staff nurses agree that routinely assessment is necessary regarding pressure ulcer prevention.19.3 strongly

Agree, 1.1% satisfied, 1.1% strongly disagree about routinely assessment. 45.5% staff nurses agree that Repositioning techniques can be useful in preventing bed sores 48.9% strongly agree, 3.4% satisfied, 1.1% strongly disagree about this. 67% staff nurses agree that pressure sores a multidisciplinary problem 30.7% strongly agree, 1.1% strongly disagree about this.14.8% staff nurses agree that food and nutrients consume daily would help in healing bed sores 76.1% strongly agree, 5.7% satisfied,1.1% disagree and 1.1% strongly disagree about this. 20.5% staff nurses agree that a pressure ulcer can lead to death 14.8% strongly agree, 51.1% satisfied, 11.4% disagree and 1.1% strongly disagree about this. 11.4% staff nurses agree that Donut devices or ring cushions help to prevent pressure ulcers 71.6% strongly agree, 13.6% satisfied, 1.1% disagree and 1.1% strongly disagree about this. According to [8] up to date knowledge of nurses is very much essential regarding preventive measures and to apply it accurately in practices. 34.1% staff nurses agree that a daily bath will prevent pressure ulcers 17.0% strongly agree, 43.2% satisfied, 3.4% disagree and 1.1% strongly disagree about this. 0% staff nurses agree that Staff nurses use any assessment or scoring systems for pressure sore in your unit 6.8% strongly agree, 38.6% satisfied, 36.4% disagree about this. 20.5% staff nurses agree that Erythema or redness on any patient documented/reported in your unit 6.8%

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Limitations of study

Time period was very short for this study. Cooperation of staff nurses was not so good. There were some hurdles to conduct this study.

RECOMMENDATIONS

This study has shown that nurses have knowledge regarding prevention of pressure ulcer but their practices are poor due to business, over workload and lack of resources. Government should provide facilities in hospitals so that staff nurses can provide proper care to patients. Lack of practice can affect the standard level of nursing care. Programmers consist of different techniques including regular assessment; training and education should be conducted in different hospitals to enhance practice among staff nurses regarding patients care.

CONCLUSION

This study has shown that nurses are aware of knowledge regarding prevention of pressure ulcer but their practices are poor due to business, over workload and lack of resources. Research also has identified that nurses have nurses have knowledge regarding prevention of pressure ulcer. This is found that lack of practice regarding prevention of pressure ulcer in Mayo Hospital Lahore. Results of this study indicate that knowledge can have a positive effect on nurse's practice toward prevention of pressure ulcer.

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- All Faculty of UOL

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REFERENCES

- 1. Ulcer stages revised by NPUAP, P. (2008). National Pressure Ulcer Advisory Panel.
- Saleh, M. Y., Qaddumi, J. A. S., & Anthony, D. (2012). An interventional study on the effects of pressure ulcer education on Jordanian registered nurses' knowledge and practice. *Procedia-Social and Behavioral Sciences*, 47, 2196-2206.
- 3. Moore, Z., & Cowman, S. (2012). Pressure ulcer prevalence and prevention practices in care of the

- older person in the Republic of Ireland. *Journal of Clinical Nursing*, 21(3-4), 362-371.
- 4. Chou, R., Dana, T., Bougatsos, C., Blazina, I., Starmer, A. J., Reitel, K., & Buckley, D. I. (2013). Pressure ulcer risk assessment and prevention: a systematic comparative effectiveness review. *Annals of Internal Medicine*, *159*(1), 28-38.
- 5. Thayer, D. A., Jan, Y. N., & Jan, L. Y. (2013). Increased neuronal activity fragments the Golgi complex. *Proceedings of the National Academy of Sciences*, 110(4), 1482-1487.
- 6. Brem, H., Maggi, J., Nierman, D., Rolnitzky, L., Bell, D., Rennert, R., ... & Vladeck, B. (2010). High cost of stage IV pressure ulcers. *The American Journal of Surgery*, 200(4), 473-477.
- Boppana, S. B., Rivera, L. B., Fowler, K. B., Mach, M., & Britt, W. J. (2001). Intrauterine transmission of cytomegalovirus to infants of women with preconceptional immunity. New England Journal of Medicine, 344(18), 1366-1371.
- 8. Dahlstrom, M., Best, T., Baker, C., Doeing, D., Davis, A., Doty, J., & Arora, V. M. (2011). Improving identification and documentation of pressure ulcers at an urban academic hospital. *The Joint commission Journal on Quality and patient safety*, 37(3), 123-AP1.
- 9. O'Brien, J. (2009). An exploration of current practice in nursing documentation of pressure ulcer prevention and management. *European Wound Management Association Journal*, 9(3), 20.