

Medical students attitude towards pressure ulcer: a cross sectional study from Iran

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Abstract

Background and aim: Knowledge about medical student's attitude toward pressure ulcers prevention and management is very important. However study about medical student's attitude toward pressure ulcers is limited. In present study, we examined attitude of Iranian medical students about pressure ulcers.

Methods: This cross sectional descriptive study conducted between Aprils to July 2015 in Shahrekord, South west of Iran. All medical interns' (semester 8 and higher) were invited to participate. The data were collected, using a questionnaire with items relating to demographic data and an attitude questionnaire. All statistical analyses were performed using SPSS software (v17.0; PASW Statistics).

Results: The mean age of students was 23.2±2.5. The mean of attitude score were 31.6±5.3 (range 20 to 55). In total, 48% of students reported that in their courses not received any education regards to pressure ulcer prevention, care and treatment. Of 52% that received education, 84.9% reported that their education were not enough. About 70% of students reported that needs to more education with regards to pressure ulcer.

Conclusion: Educating medical students with regard to pressure ulcers first requires a primary assessment of attitude of the topic. Results of present study revealed that Iranian medical students have not positive attitude regards pressure ulcers. Further study in this regards recommended strongly.

Key words: Pressure ulcer, medical education, attitude, wound management

I. Introduction

A pressure injury is a wound as a result of high pressure to the skin [1]. Factors that cause pressure ulcers include age, dehydration, medication, being underweight, low level of hemoglobin, friction and shear and some medical conditions that includes neurologic problems, severe and chronic pulmonary disease, heart failure, stroke, diabetes mellitus, high blood pressure, thrombosis, fracture and surgery especially in long bone such as femur, paralysis, limb edema, cancers, nutrition problems, some bone disease, incontinence and infections in urinary system [2, 3, 4, 5]. Currently, pressure ulcers are a real challenge for many healthcare systems [6]. The rate of pressure ulcer in patients in hospitals settings is related to the type of clinical area and the methods that researcher and clinician use it for detection and recording pressure ulcer [7]. The prevalence of all grade of pressure ulcer in Europe countries reported about 18 % [8]. The prevalence of pressure ulcers in Iranian hospitals setting is higher and ranges from 5 to 46% [4, 9, 10, 11, 12, 13, 14, 15].

Although pressure ulcer prevention requires a multidisciplinary approach, however the prevention and management of pressure ulcers in hospital settings usually determined as an important task of clinical nurses [16]. Clinical nurses usually are responsible for the patients risk assessment and detection of patients who are in higher danger of pressure ulcer development, select best evidence from literatures for pressure ulcer prevention and, if pressure ulcer occurs, accurate staging of the pressure ulcer with using international staging system and treatment of this with best available evidence [16]. Previous study about pressure ulcer among healthcare team members usually focused on clinical nurses and nursing students. Although there are enough information about

clinical nurses and nursing students with regards to knowledge and attitude toward pressure ulcers there is a little study and information about physician and medical student's knowledge of pressure ulcers. For medical student's education about pressure ulcers, we need to base information about their attitude. So present study designed and conducted with this aim that examined medical students attitude towards pressure ulcer.

II. Methods

This cross sectional descriptive study conducted between Aprils to July 2015 in Shahrekord, South west of Iran. Study received permission from the head of medical school in Shahrekord University of Medical Science. All medical interns' (semester 8 and higher) were invited to participate. In Iran, duration of medical education programs is 7 years. The students were approached in classroom settings during regular university hours. They were informed in their own language both verbally in writing about the study, its purpose and method, and were also informed that participation was voluntary. The questionnaire was anonymous in order to ensure confidentiality, so that no student could be identified in the data or in the final report. Time to complete the questionnaire was estimated to be 40 minutes. The data were collected, using a questionnaire with items relating to demographic data and an attitude questionnaire [17]. Attitude questionnaire developed by Moore et al in English language. This questionnaire has 11 items that scored from 1 to 5. Final score in this questionnaire is between 11 to 55 that lower score indicate more negative attitude toward pressure ulcer. In present study we translated this questionnaire to Persian language according to methods that proposed by nursing research books. Face and content validity was determined for questionnaire validity. To assess the reliability of questionnaire, alpha coefficients of internal consistency were used. The alpha coefficient for questionnaire was 0.81. So totally, translated questionnaire showed good level of validity and reliability.

All statistical analyses were performed using SPSS 17.0, with using descriptive statistic (mean and standard deviation), Pierson correlation test, one sample t test and one way ANOVA. $P < 0.05$ considered significant.

III. Results

The mean age of students was 23.2 ± 2.5 . Of them, 79 (73.2%) were female and the rest were male. Mean of educational semester were 10.1 ± 2.2 (rang between 8 to 24 year). In total, 58% of students reported that have previous history of caring of patients with pressure ulcers. In total, 48% of students reported that in their courses not received any education regards to pressure ulcer prevention, care and treatment. Of 52% that received education, 84.9% reported that their education were not enough. About 94% of students reported that have not experience of participation in any workshop related to pressure ulcer. About 70% of students reported that needs to more education with regards to pressure ulcer. In total, 84% of students reported that prevention, care and treatment of pressure ulcer not are duty of nurses. The mean of attitude score were 31.6 ± 5.3 (range 20 to 55). Students responses to questioner items presented in table 1. Mean score of attitude were similar between male and female students (31.0 vs 31.7) ($p=0.405$). Mean score of attitude were similar between students who have experience of caring of patients with pressure ulcer and who have not (31.3 vs 32.0) ($p=0.581$). Mean score of attitude were similar between students who educated about pressure ulcer and who not (31.6 vs 31.5) ($p=0.981$).

IV. Discussion

Pressure ulcers are common problem in all hospital settings and cause a large amount of emotional and physical stress for patients and their relatives [2, 18, 19, 20]. High rate of pressure ulcers in clinical settings may be sign of poor nursing care that affect patients' quality of life negatively and increase rate morbidity and mortality [2, 21]. The aim of present study was to examine medical student's attitude toward pressure ulcers. According to finding of present study, Iranian medical student have not positive attitude toward pressure ulcer. Previous study that examined medical students' attitude toward pressure ulcers is limited to one study. In this study that conducted in 2012, Suen et al., examined attitude of 42 internal medicine interns and residents toward pressure ulcers with using similar questionnaire [22]. The mean of attitude score in Suen et al., study were 43.8 and 38.8 for intern and residents respectively that is better than mean score of students in present study (31.6). Overall, internal medicine interns and residents in Suen et al., study showed a favorable attitude toward pressure ulcer prevention that is different from finding of present study. This difference could be related to different in educational systems. In our country, medical student usually not received enough education regards pressure ulcers. In other hand, prevention and management of pressure ulcer is duty of nurses and most education are focused on nurses and nursing stunts and medical students usually received more attention in this regards. Our search also showed that study about attitude of nursing students about pressure ulcers also limited to one study. In this study that preformed in Italy, Simonetti et al., examined nursing students' attitude about pressure ulcer guidelines. Most of the participants in Simonetti et al., reported high attitude pressure ulcers [6]. With regards to medical student's knowledge about pressure ulcers, our search also showed one study. In this study that conducted in 2012, Levine et al., examined medical residents knowledge about pressure ulcers [23]. For

achieving this aim, they used two tools: the Pieper Pressure Ulcer Knowledge Tool (PPUKT) and a wound photograph test. Most participants in Levine et al., study showed low level of knowledge about pressure ulcers. They concluded that physician should well educated about pressure ulcer risk assessment and prevention protocols, staging pressure ulcer according to international staging systems, and treatment protocols. In our country Iran, we not found similar article. However in previous study we examined nursing students' knowledge about pressure ulcers. In this study we examined knowledge of all final-year bachelors nursing students with using PPUKT. Results of our study showed that nursing students had insufficient knowledge of pressure ulcers prevention, classification and evaluation [24].

V. Conclusion

Study about medical students attitude regards pressure ulcers is very limited. Results of present study revealed that medical students have not positive attitude regards pressure ulcers. Medical education systems of undergraduate medical students should be aware and consider this in your planning and curriculum development. Further study in this regards recommended strongly. Also study about medical student's knowledge about pressure ulcers and its relationship with their attitude recommended for future studies.

Limitation

This study has two important limitations. First, we used convenience sampling method for sample selection. Risk of selection biased increased by using this method of sampling that should be considered by readers. Furthermore, using questionnaires alone for data collection, risk of overestimation of some of the findings due to variance increased that should be considered by readers.

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Tables

Table 1: students' response to questionnaire items

Items	strongly agree	agree	not	strongly disagree	Disagree
1) All patients are at potential risk of developing pressure ulcers	18(17.1%)	35(33.3%)	13(12.4%)	38(36.2%)	1(1%)
2) Pressure ulcer prevention is time-consuming for me to carry out	4(3.8%)	15(14.3%)	24(22.9%)	55(52.4%)	7(6.7%)
3) In my opinion, patients tend not to get as many pressure ulcers nowadays	4(3.8%)	12(11.4%)	18(17.1%)	56(53.3%)	15(14.3%)
4) I do not need to concern myself with pressure ulcer prevention in my practice	2(1.9%)	6(5.8%)	5(4.8%)	61(57.1%)	30(28.8%)
5) Pressure ulcer treatment is a greater priority than pressure ulcer prevention	62(59.6%)	27(26%)	6(5.8%)	7(6.7%)	2(1.9%)
6) Continuous assessment of patients will give an accurate account of their pressure ulcer risk	19(18.3%)	41(39.4%)	32(30.8%)	11(10.6%)	1(1%)
7) Most pressure ulcers can be avoided	26(25%)	59(56.7%)	16(15.4%)	3(2.9%)	0(0)
8) I am less interested in pressure ulcer prevention than other aspects of care	6(5.8%)	17(16.3%)	29(27.9%)	45(43.3%)	7(6.7%)
9) My clinical judgment is better than any pressure ulcer risk assessment tool available to me	5(4.8%)	35(33.7%)	47(45.2%)	14(13.5%)	3(2.9%)
10) In comparison with other area of care, pressure ulcer prevention is a low priority for me	6(5.8%)	16(15.4%)	12(11.5%)	64(61.5%)	6(5.8%)
11) Pressure ulcer risk assessment should be regularly carried out on all patients during their stay in hospital	36(34.6%)	56(53.8%)	8(7.7%)	2(1.9%)	2(1.9%)

Note: 11 item in this table copied from original questionnaire.