Original Research Article

Knowledge and Practice on Pain Management among Nurses Working in Palliative Care Unit

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Abstract: Introduction: To provide quality care at the end of life of chronically sick patient's nurses must have good knowledge and practice about Palliative care because they are the key member of health team who typically has the greatest contact with patient's problem. When a patient enters the end stage of life threatening disease like Cancer, treatment of pain and other symptoms must be considered to preserve quality of life. Nurse's expertise is essential in providing physical and emotional care to the patient and family and in organizing the patient's environment to minimize burden and control of suffering. Nurses provide better care in all health care setting to all groups of peoples according to situation but there is scarce data on the relative field. **Aim of the study:** The aim of the study was to observe association of social characteristics with knowledge and practice of pain management among nurses. **Methods:** This descriptive cross-sectional study was conducted at the palliative care units of Dhaka Medical College Hospital (DMCH), National Institute of Cancer Research Hospital (NICRH), Bangabandhu Sheikh Mujib Medical University (BSMMU), and Ahsania Mission Cancer & General Hospital, Dhaka. The study duration was one year, from 1st January to 31st December, 2020. The study was conducted with a total of 112 nurses working at the palliative care Units of the study hospitals. **Result:** Among the participants, the mean age was 29.79, ($\pm$ SD 6.075), and majority were from the age group of 21-30 years. 88.4% were female 74.1% were graduates, 47% received training on pain management, 68.8% worked in government hospitals, 74.1% had less than 5 years of working experience. No significant association was observed between knowledge and social characteristics. The practice level of nurses was significantly associated with Age ($p=0.03$) and Training ($p=0.01$). **Conclusion:** The Palliative Care pain management aims to maximize the quality of life of patients suffering from life-limiting diseases. In this study majority of nurses had good knowledge however good practice was seen in relatively less number of nurses. The nurse's lack of adequate training in Palliative care pain management was one of the causes of suffering of patients.

Keywords: Palliative, Cancer, pain, Knowledge, Practice.

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INTRODUCTION

The basic concepts of Palliative care were developed between 1960 and 1990, mainly in the field of oncology. Palliative care is a term that comes from Latin 'Pallium' which means "a clock" and refers to specialized medical for Patient with severely ill. It is focused on providing patient with relief from the

symptoms, pain, and stress of a serious illness and allows them to lead a better life at the end of life [1]. The term "Palliative care" is increasingly used concerning diseases other than cancer such as chronic progressive pulmonary disorders, chronic renal diseases (CRD), chronic heart failure (CHF), HIV/AIDS, progressive neurological condition, sever non-

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communicable diseases (NCD), Alzheimer's and other dementias, cirrhosis of liver CLD), diabetes, multiple sclerosis, Parkinson's disease, rheumatoid arthritis, drug-resistant tuberculosis, Schizophrenia, congenital anomalies, Meningitis, blood and immune disorder and also older people [2]. It has been conventionally attributed to a variety of obstacles including Nurses, patients and health care system concerns. In developing countries, recently Palliative care is increasing because more people are living longer, often with complex needs as a consequence of chronic illness or cancer over long periods [3]. The purpose of palliative care is that patients should receive high-quality care, regardless of the illness or service received. To provide quality care at the end of life of chronically sick patient's nurses must have good knowledge and practice about Palliative care because they are the key member of health team who typically has the greatest contact with patient's problem. When a patient enters the end stage of life threatening disease like Cancer, treatment of pain and other symptoms must be considered to preserve quality of life. Nurse's expertise is essential in providing physical and emotional care to the patient and family and in organizing the patient's environment to minimize burden and control of suffering. Nurses provide better care in all health care setting to all groups of peoples according to situation but there is scarce data on the relative field. According to the research by NIPORT (2014), it was identified that there is gap in knowledge about pain assessment and documentation, inability to assess pain, and poor communication between the patient and the health care provider which lead to ineffective pain management [4]. A nurse is a key person who can improve the quality of pain management and who can provide nursing care sufficiently to meet the patient needs. Nurses with stronger knowledge and practice lead to better Pain assessment & documentation, to improved outcomes and higher patient satisfaction scores. In clinical settings, nurses play a vital role in pain management and must be knowledgeable regarding how to best assess and manage the pain. Inadequate pain management has shown to affect patient outcomes by potentially increasing hospital stay and delaying recovery; thus, the management of pain has major implications for nursing. This can affect patients physiological, and health safety. However, many nurses in general practice settings lack the knowledge about basic pain management principles, this also applies to the practice that nurses have towards pain and its assessment [5]. Pain management is an important aspect in the palliative care patients. Although palliative care pain can be controlled up to 90% of the cases through the use of appropriate methods, its prevalence has been reported to be as high as 64% among patients with advanced cancer and pain control was found to be in adequate for more than 40% of patients [6].

OBJECTIVE

General Objective

- To observe the knowledge and practice of pain management among nurses working in the palliative care unit

Specific Objectives

- To observe the association between social demographic and the knowledge and practice of pain management

METHODS

This descriptive cross-sectional study was conducted at the palliative care units of Dhaka Medical College Hospital (DMCH), National Institute of Cancer Research Hospital (NICRH), Bangabandhu Sheikh Mujib Medical University (BSMMU), and Ahsania Mission Cancer & General Hospital, Dhaka. The study duration was one year, from 1st January to 31st December, 2020. The study was conducted with a total of 112 nurses working at the palliative care Units of the study hospitals. Purposive type of non-probability sampling technique was applied for selection of the study participants. A semi-structured questionnaire was prepared according to the objective & variables of the study. For the assessment of the level of knowledge and practice on pain management among nurses working in the Palliative care units, a pre-tested semi- structured questionnaire was used. Ethical clearance of the study was obtained from the Institutional Review Board (IRB), NIPSOM, under BSMMU. Permission from the concerned authority of the selected institutes was taken prior to data collection. Prior to starting the collection of information, written informed consent was obtained from each of the selected research respondents. Following the questionnaire collection, face to face interview was taken for each respondent separately in maintaining privacy and confidentiality strictly.

Inclusion Criteria

All nurses working in the Palliative Care Units having at least six months' experience of working in Palliative Care Units and willing to participate were included in the study.

Exclusion Criteria

Nurses working in administration and student nurses were excluded from the study.

RESULTS

Among 112 nurses, the mean age was 29.79, ($\pm$ SD 6.075). Most of the nurses (68.8%) were within the age range of 21-30 years and only 9 (8.0%) nurses within the age range of 41- 50 years. Figure 1 shows that out of 112 respondents 99 (88.4%) were female and 13(11.6%) were male. Figure 2 shows that among of the 112 nurses' 83 (74.1%) completed graduation in nursing and 29 (25.9%) were post graduate in nursing.

The figure 4 pie diagram shows that among of 112 nurses 53(47.3%) received pain management training on Palliative care and 59(52.7%) did not receive any training. Among the participants, 74.1% had less than 5 years of experience, while 25.9% had at least 5 years of experience. 47.3% received practice regarding care in the palliative care unit on pain management, while 52.7% didn't receive any training. 68% of the participants were working on government hospitals, 10.7% in private hospital, and 20.5% were working in autonomous hospitals. The above table shows association between knowledge level and socio-demographic variables. No Statistically significant association was found with age ($p=0.51$), gender ($p=0.35$), educational qualification ($p=0.80$), working experience ($p=0.22$) and Training ($p=0.45$) with knowledge. The table shows that practice level of nurses was significantly associated with Age ($p=0.03$) and Training ($p=0.01$).

Table-1: Distribution of the nurses by age

Age group(years)	Number (n)	Percentage (%)
21-30	77	68.8%
31-40	26	23.2%
41-50	9	8.0%
Total	112	100%
Mean & SD	29.79±6.075

Fig-1: Distribution of nurses according to gender

Fig-2: Distribution of nurses by professional qualification

Fig-3: Distribution of nurses on the basis of training received on Pain management (n=112)

Table-2: Distribution of the nurses' by socio-demographic variables

Name of variables		Number (n)	Percentage (%)
Experience	<5 Years	83	74.1%
	≥5Years	29	25.9%
Training	Yes	53	47.3%
	No	59	52.7%
Working Place	Government	77	68.8%
	Autonomous	23	20.5%
	Private	12	10.7%

Table-3: Association between knowledge level regarding Palliative Care pain management and Socio-demographic characteristics of nurses' (n -112)

Name of variables		Knowledge Level			Chi-Square Test
		Poor knowledge	Good Knowledge	Total	
Age (Years)	21-30	20 (26.0%)	57 (74.0%)	77(100%)	P=0.51
	31-40	08 (30.8%)	18 (69.2%)	26(100%)	
	41-50	01 (11.1%)	08 (88.9%)	9(100%)	
Gender	Male	02 (15.4%)	11(84.6%)	13(100%)	P=0.35
	Female	27 (27.3%)	72 (72.7%)	99(100%)	
Educational Qualification	Graduate	21 (25.3%)	62 (74.7%)	83(100%)	P=0.80
	Post- graduate	08 (27.6%)	21 (72.4%)	29(100%)	
Working Experience	>5	19 (22.9%)	64 (77.1%)	83(100%)	P=0.22
	<5	10 (34.5%)	19 (65.5%)	29(100%)	
Training	Yes	12 (22.6%)	41 (77.4%)	53(100%)	P=0.45
	No	17 (28.8%)	42 (71.2%)	59(100%)	

Table-4: Association between level of practice on pain management and socio-demographic characteristics of nurses' (n-112).

Variable		Practice Level				P-value
		Inadequate	Moderate	Adequate	Total	
Age (Years)	21-30	14 (18.2%)	13(16.9%)	50 (64.9%)	77(100%)	0.03
	31-40	01 (3.8%)	10(38.5%)	15 (57.7%)	26(100%)	
	41-50	02 (22.2%)	0(0.0%)	07 (77.8%)	9(100%)	
Gender	Male	02 (15.4%)	3(23.1%)	08 (61.5%)	13(100%)	0.91
	Female	15 (15.2%)	20(20.2%)	64 (64.6%)	99(100%)	
Educational Qualification	Graduate	10 (12.0%)	16(19.3%)	57 (68.7%)	83(100%)	0.19
	Post- graduate	07 (24.1%)	07(24.1%)	15 (51.8%)	29(100%)	
=Working Experience	> 5	09 (10.8%)	19(22.9%)	55 (66.3%)	83(100%)	0.08
	< 5	08 (27.6%)	04(13.8%)	17 (58.6%)	29(100%)	
Training	Yes	04 (7.5%)	08(15.1%)	41 (77.4%)	53(100%)	0.01
	No	13 (22.0%)	15(25.5%)	31 (52.5%)	59(100%)	

DISCUSSION

The study intended to find out the knowledge and practice on pain management among nurses working in Palliative Care Units in selected hospitals of Dhaka city, and their association with age, Sex, professional qualification, working place, experiences and training on pain management. The current study revealed that, the majority of the nurses 68.8% (77), where between the age group of 21-30 years, and very few nurses were over the age of 40. This was similar to the findings of multiple other similar studies [7-10]. In the present study, 88.4% of the nurses were female and only 11.6% were male. This was supported by the general reality all over the world, that nursing is mostly a female oriented job. This was, however, different from the findings of a Chinese study, where male and female prevalence was similar among nurses [11, 12]. Qadre and Alkhalaieh observed higher male prevalence in their study, which was conducted in Jordan, one of the more conservative countries of the world [7]. The present study showed that out of 112 nurses 74.1% were graduate nurses and 25.9% were post-graduate nurses. Similarly, in Bangladesh a study in private hospital found that under graduate nurse were 59.5 %, graduate nurse 25.0%, and post-graduate nurse 15.5% [9].

Regarding working experience in the present study, majority of nurses (74%) had working experience of less than 5 years and rest of the nurses (26%) had experience of more than 5 years. This was completely contradicting to the findings of another Bangladeshi study, where the majority of nurses (79%) had more than 5 years of working experience [9]. These findings were however, similar to a 2014 study conducted at Cairo [13]. Specific training of nurses on management of palliative pain may enhance quality of palliative care. In this study among 112 nurses, 47.3% nurses received training on Palliative care pain management and 52.7% did not receive any training. This was much better compared to few other studies where the ratio of participants who received training went below 30% [12, 13]. A 2018 study conducted in Uganda showed much better ratios, where 89.6% had received training [14]. 68.8% of the present study participants worked in govt. hospitals, 10.7% in private hospital and 20.5% nurses worked in Autonomous hospitals. This was similar to the findings of Samara *et al.* [15] The present study recorded the knowledge of the nurses regarding factors such as pain management, pain grading, use of NSAIDS with measurements, risk of addiction to medicine, and such factors were correlated with the social-

demographic characteristics of the nurses. Similar correlation was done regarding practice of various factors with sociodemographic characteristics of the nurses. In the knowledge sector, good knowledge was observed in almost all sectors, but no statistical significance was observed between knowledge and sociodemographic characteristics. In the practice section, however, significance was observed between practice levels and age groups. Adequate practice was observed in majority of the participants of all age groups, but inadequate level of practice had higher prevalence in the oldest age group. Similarly, significance was also observed in practice levels and training. Moderate and adequate practice had high prevalence among those who received training, while inadequate level of practice was much higher among participants who did not received training, compared to those who did. Similar significance was observed between practice and working experience in the study of Morsy *et al.* [13]

Limitations of the Study

The study was conducted with a small sample size and in a short study period. Purposive sampling was applied so there was a chance of bias during data collection. Knowledge of all the domains of the pain management in Palliative Care Units was not assessed in this study.

CONCLUSION & RECOMMENDATION

The Palliative Care pain management aims to maximize the quality of life of patients suffering from life-limiting diseases. In this study majority of nurses had good knowledge however good practice was seen in relatively less number of nurses. The nurse's lack of adequate training in Palliative care pain management was one of the causes of suffering of patients. To improve adequate practice of palliative care nurses hands on training should be given on pain management by pharmacological and non- pharmacological methods and documentation. Adequate training of nurses is necessary to improve quality care to dying people.

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