Nurses’ Attitude, Practice and Barriers toward Cancer Pain Management, Addis Ababa, Ethiopia

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Abstract

Introduction: Even though establishing good pain control is an important priority for patients with cancer, there are barriers for under treatment including poor attitudes towards pain and opioid analgesia and barriers which exist within the professionals. So, this assessment is conducted to assess the attitude, practice of nurses’ and barriers regarding cancer pain management at selected health institutions offering cancer treatment in Addis Ababa city, Ethiopia, 2013.

Methods: Cross-sectional study design was conducted. Anonymously structured self-administered questionnaire and focus group discussion was carried out among 82 nurses. Nurses’ Knowledge and Attitudes Survey Regarding Pain (NKARSP) questionnaire was used for data collection. Epi info version 3.5.4 and SPSS version 20 statistical software was used for data entry and analysis. to identify factors associated with attitude towards cancer pain management bivariate and multivariate logistics regression was computed. P-value and 95% confidence interval was used to determine the association.

Results: 45 (54.9%) of the study participants were from the governmental hospital and the rest 37(45.1%) respondents were from private heath institutions. More than half, 53.7%, of the nurses’ have a negative attitude, towards cancer pain management. Similarly 65.9% of nurses’ had poor cancer pain management practice. Lack of courses related to pain in the under graduate classes, lack of continuing training, patient and work overload, role confusion, lack of motivation including salary were the identified barriers for adequate pain management. Monthly income of greater than 1500 Ethiopian Birr (ETB) were found to be associated with attitude towards cancer pain management (AOR=0.16, 95% CI=0.03-0.78).

Conclusion: Negative attitude of nurses regarding cancer pain management were observed. The practice of nurses’ was also poor. The main barriers which hinder good cancer pain management were lack of motivation including salary, role confusion, and lack of continuing training. An effort to improve educational development of nurses’ like in service trainings on cancer pain management and familiarization with WHO guidelines should be given to nurses who are working in cancer units.

Keywords: Nurse; Attitude; Practice; Barrier; Cancer pain management

Introduction

The International Association for the Study of Pain (IASP) defines pain as ‘an unpleasant sensory and emotional experience, associated with actual, or potential, tissue damage, or described in terms of such damage’ [1]. Pain is a common symptom experienced by patients who has cancer, and its management is the use of pharmacological and non-pharmacological interventions to control the patient’s identified pain [2-4]. In addition pain management is related with the patient’s quality of life, his/her ability to work productively, to enjoy recreation, and to function in a normal condition within society [4].

Currently, 12.5% of all deaths are caused by cancer, which is more than HIV/AIDS, tuberculosis, and malaria combined [5]. By 2020, the International Agency for Research on Cancer, predicts 16 million new cases of cancer per year with cancer overtaking heart disease to become the world’s number 1 killer [6,7]. By 2050, three quarter of all cancer deaths will be from low income developing countries [8].

Nurses are important member of the health care team in the treatment of cancer pain, since they spend more time with their patient [9-11]. Even though establishing good pain control is an important priority for patients and clinicians, there are barriers for such huge numbers of under treatment which exist within the professionals and centre on lack of knowledge or poor attitudes towards pain and opioid analgesia [12].

Cancer pain management includes the use of opioids by the patients, correct management of the side effects and regularly assessing the pain [13]. Proper use of therapeutic approaches concurrent with appropriate assessment techniques results in pain control of from 70 to 95% of patients. But unfortunately, cancer pain still remains grossly undertreated throughout the world [2,13-15].

Ethiopia morphine consumption in 2003 was 0.0005 mg per capita, which is one of the lowest compared with the global mean consumption of 5.85 mg. The low consumption of morphine in...
The cancer prevalence is increasing from time to time its burden is more common in low and middle income countries [17-19]. So, this study is aimed to assess nurses’ attitude, practice and barriers regarding cancer pain management at selected health institutions offering cancer treatment in Addis Ababa city, Ethiopia, 2013.

Methods

Study area, population and sample size

The study was conducted in one governmental and four private health institutions that provide cancer treatment in Addis Ababa, the capital city of Ethiopia. The population of the city is estimated to be over 3 million (3,038,096) with annual growth rate of 2.1 [15]. The city has 14 governmental and 35 private hospitals. It also encompasses 56 health centers and 83 different clinics. The study populations were all nurses who were working in cancer treatment offering centers of Addis Ababa (one public teaching hospital and four private health institutions). A total of 82 nurses; government (n=45) and private (n=37) nurses were included in the study.

Study design, data collection tool and procedure

Cross sectional study design was conducted. Both quantitative and qualitative data collection tools were used. A self-administered structured questionnaire was used to collect quantitative part of the study and focus group discussion (FGD) was used to conduct the qualitative part of the study. The instrument was adapted from N KarSP [14,20], and for the FGD, guidelines were adapted from several literatures [10,17-19]. The attitude part of the questionnaire consists of 12 questions, each with a 5 score likert scale, and it consists of questions related with distraction from pain, opioid addiction, side effects of opioid treatment, pain endurance, real and non-real pain assessment. There were 6 questions for practice related to cancer pain management. Practice related questions include the use of pain assessment tool, frequency of pain assessment, use of non-pharmacologic interventions for pain management, health education and documentation habit.

Prior to the data collection period, the principal investigator met with all of head nurses and administrators of the selected health institutions and time was arranged for the data collection. Five nurse data collectors were chosen from each health institution. Three supervisors were selected from Black Lion hospital (governmental hospital). The principal investigator (PI) gave the training for data collectors and supervisors on the data collection methods before and after the pretest. A total of 22 nurses were included in three focus group discussions. Each FGD consisted of six to eight participants, a total of 22 nurses. The discussants were randomly selected from all of the selected health institutions. And the PI, the two supervisors and two data collectors were moderating the FGD.

Data quality control

The questionnaire was tested before the actual survey within a pilot survey to ensure its clarity, ordering, and consistency. It was done among nurses who were working in an oncology unit before the actual data collection period. During the data collection process each questionnaire was checked daily by the supervisor and PI for its completeness and accuracy.

Data processing and analysis

The collected data was coded, entered, cleaned and Epi Info version 3.5.4 was used for entering data and SPSS version-20 for analysis. Descriptive statistics such as frequencies and percentages was used to describe the sample characteristics and the response of nurses to the questionnaire items. To identify factors associated with attitude towards cancer pain management, bivariate and multivariate analysis was computed. P-value and 95% confidence interval (CI) was used to determine the association. The qualitative part was analyzed following the focus group discussion (FGD). It involved full transcripts and notes from a moderator. The analysis process was on a daily basis. The conversation was recorded during the FGD, and it was read, commented on it and looked for ideas which led to several thematic areas.

Operational definition

Positive attitude: Respondents who scored above 5 (the mean of correct answers) for attitude towards cancer pain management related questions.

Negative attitude: Respondents who scored below 5 (the mean of correct answers) for attitude towards cancer pain management related questions.

Good practice: Respondents who scored above 2 (the mean of correct answers) for practice towards cancer pain management related questions.

Poor practice: Respondents who scored below 2 (the mean of correct answers) for attitude towards cancer pain management related questions.

Ethical considerations

Ethical clearance and permission was obtained from the Ethical Review Committee of Addis Ababa University, college of Medicine and Health Sciences, School of nursing and midwifery. Informed consent was obtained from the study participants after explaining the objective and procedure of the study. Confidentiality of the study participants was maintained.

Results

Socio demographic characteristics

A total 82 study participants completed the questionnaire, with response rate of 100%. From the five health institutions included in the study, 45(54.9%) of the study participants were from the governmental hospital and the rest 37(45.1%) respondents were from private health institutions. Majority of the respondents, 64(78%), were female nurses. More than half of the respondents, 42 (51.2%) were within age group of 25 to 29 years and the range was 22 to 60 years, with the mean, median and standard deviation (SD) of 29.12, 27.5 and 7.04 years respectively.

Almost two third, 66(80.5%), of the respondents’ monthly salary was above 1,500.00 ETB with the mean, median and SD of 2197.72, 2250, and 975.9 ETB respectively. More than half of the respondents, 44(53.7%), were within a group of 2 to 9 years of work experience and range was ½ to 41 years, with the mean, median and S.D of 5.7, 3 and 7 years respectively. Regarding level of education, 51.2% of the respondents were diploma holders whereas bachelor degree accounts for 40 (48.8%) (Table 1).

Attitude of nurses regarding cancer pain management

From the 12 pain attitude questions assessed, the mean number of correctly answered questions was 5 (SD =1.64), with a range from 2 to
Barriers to cancer pain management

Many points regarding barriers that hinder nurses to address adequate pain management were described by the study participants during FGDs. Lack of courses related to pain in the under graduate classes, lack of continuing training, patient and work overload, lack of human resource, inadequate knowledge or information gap, role confusion, fear of side effects of cancer treatments, absence of specialized nurse in oncology nursing, lack of equipment’s, lack of motivation including salary were the identified barriers for adequate pain management.

“....we got the same salary as those nurses who are working in other units of the hospital while we are in burden of life threatening risks during chemotherapy.” (Focus group 2)

“I was eager to join the oncology unit in order to know how to administer chemotherapy and other pain management measures. But now, after hearing and reading about the side effects of cancer therapies on health professionals, I wish to disappear from this ward if the schedule to administer chemotherapy is mine.” (Focus group 1)

Discussion

The current study assessed the attitude and practice of nurses' towards cancer pain management. Accordingly, less than half, 46.3%, of the respondents had a positive attitude towards cancer pain management. The high level of negative attitude can be due to; the lack of motivation due to low salary, lack of knowledge, and can also be due to the role confusion of nurses from other health care providers of motivation due to low salary, lack of knowledge, and can also be due to the role confusion of nurses from other health care providers of motivation due to low salary, lack of knowledge, and can also be due to the role confusion of nurses from other health care providers of motivation due to low salary, lack of knowledge, and can also be due to the role confusion of nurses from other health care providers of motivation due to low salary, lack of knowledge, and can also be due to the role confusion of nurses from other health care providers of motivation due to low salary, lack of knowledge, and can also be due to the role confusion of nurses from other health care providers of motivation due to low salary, lack of knowledge, and can also be due to the role confusion of nurses from other health care providers of motivation due to low salary, lack of knowledge, and can also be due to the role confusion of nurses from other health care providers.
With WHO guideline in the current study area.

In the current study, 11 (13%) of the nurses used the standard pain assessment tool, and only 28 (34.1%) performed regular and ongoing assessment for patients with cancer pain. However, the current study found that, only 28 (34.1%) performed regular and ongoing pain assessment for their patients. Of these who performed, only 11 (13%) of them used the correct time interval of pain assessment. This could be due to the lack of courses related with cancer pain management, and lack of familiarity with WHO guideline in the current study area.

Since opioids are central to effective cancer pain management and access to opioids in the community may be an additional barrier faced by patients [26], non-pharmacological interventions of pain management should be included in the management of patient with cancer. Accordingly, Twenty four (29.3%) of the respondents from the current study demonstrated non-pharmacological interventions.

Nurses should document pain assessment regularly and routinely on standardized forms that are accessible to all clinicians involved in care [10]. But, our study identified that 65 (79.3%) of nurses did not document their daily pain management activities. Almost all of the three groups of FGD said that they did not document their daily activities as well as progress of their patient's pain level. The low documentation in the current study area could be due to the lack of familiarity with WHO guidelines.

Lack of courses related to pain in their under graduate classes, lack of continuing training, patient overload, lack of human resource, work over load, inadequate knowledge or information gap, role confusion, fear of side effects of cancer treatments, absence of specialized nurse in oncology nursing, lack of equipments, low salary were the identified barriers that hold back nurses to deal with adequate cancer pain

Table 2: Attitude of nurses regarding cancer pain management at selected public and private health institutions in Addis Ababa city, Ethiopia, 2013.

| Variables | Positive Attitude | COR 95% CI | AOR 95% CI | P value |
|-----------|-------------------|------------|------------|--------|
| In service training | Yes | 13 (68.4%) | 0.60 (0.12-1.11) | 0.075 |
| | No | 25 (39.7%) | 0.3 (0.1-0.9) | 0.6 (0.05-0.78) | 0.024* |
| Type of Health Institution | Governmental | 26 (57.8%) | 5.9 (1.48-3.75) | 0.60 |
| | Private | 12 (32.4%) | 25 (67.6%) | 1 |
| Salary/month (ETB) | 500-1500 | 3 (13.3%) | 0.2 (0.05-0.78) | 0.16 (0.03-0.78) | 0.024* |
| | >1500 | 35 (53%) | 31 (47%) | 1 |

Table 3: Bivariate and multivariate analysis showing factors affecting attitude of nurses regarding pain management at selected public and private health institutions in Addis Ababa town, 2013.

| S.No. | Items | Correct answer rate |
|-------|-------|---------------------|
| 1 | Utilization of a standard pain assessment tool (Yes) | 32 | 39 |
| 2 | Do you perform regular and ongoing assessment for a patient with cancer pain? (Yes) | 28 | 34.1 |
| 3 | Frequency of pain assessment per day (6 times or every 4 hours) | 11 | 13 |
| 4 | Demonstration of non-pharmacological interventions for pain management (Yes) | 24 | 29.3 |
| 5 | Education for patient and family on cancer pain. (Yes) | 60 | 73.2 |
| 6 | Documentation habit (Yes) | 17 | 20.7 |
management. Similar findings were also observed in studies conducted in Sirilanka, Turkery, Thailand, and South Korea [18,25,27-29].

**Conclusion**

Negative attitude of nurses regarding cancer pain management were observed. The practice of nurses' was also poor. The main barriers which hinder good cancer pain management were Lack of courses related to pain in the undergraduate classes, lack of continuing training, role confusion, and lack of motivation including salary. An effort to improve educational development of nurses' like in service trainings on cancer pain management and familiarization with WHO guidelines should be given to nurses who are working in oncology units.

**Recommendations**

- The existing syllabus of nursing curriculum should be reviewed and comprehensive program and culturally sensitive component of cancer pain management should be included.
- Medical units and hospital administrators should be committed to effective pain management by developing standard guidelines for pain management for staff nurses who are working in oncology ward. In addition, they should promote the use of tools for pain assessment, and should improve the process of assessing and treating pain.
- More in service training should also be organized to enhance nurses’ competence in cancer pain management.
- In addition, additional research should be done to assess the knowledge, attitude and practice of nurses on cancer pain management, and the barriers and to observe possible improvement in the same hospitals.

**Implication for Practice**

The existing nursing curriculum should be modified and should incorporate topics on opioid addiction and pharmacologic and non-pharmacologic methods of cancer pain management. Nurses in oncology ward should be familiar with updated informations on cancer pain management from the WHO, cancer societies and other organizations.

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