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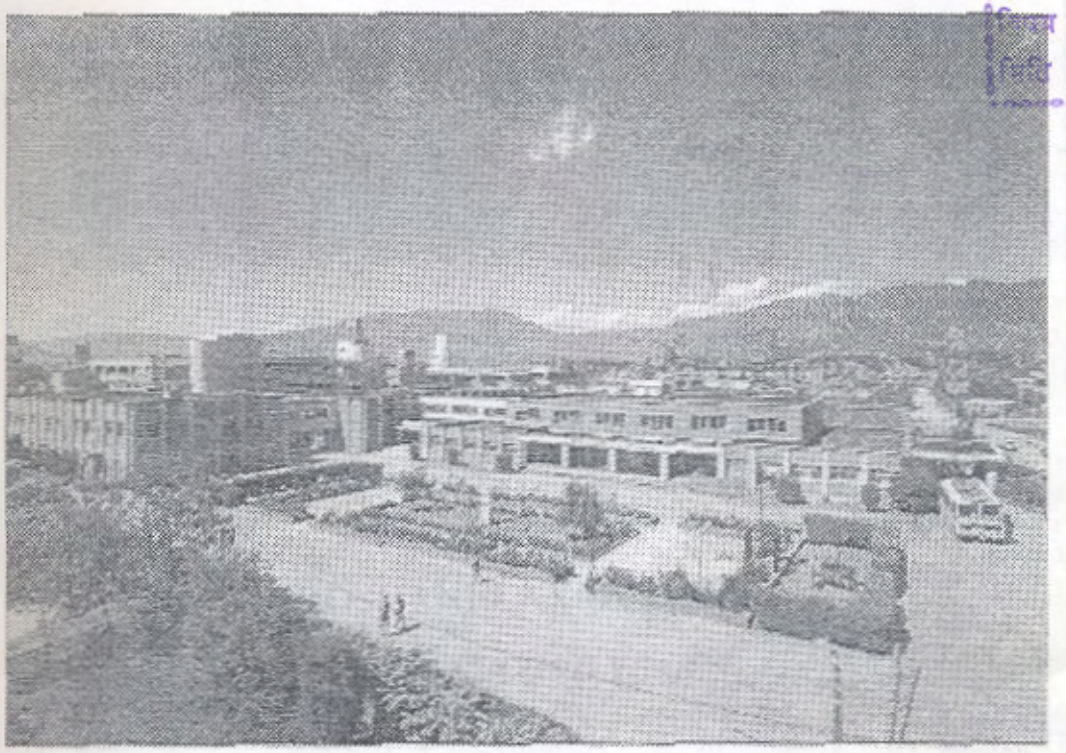

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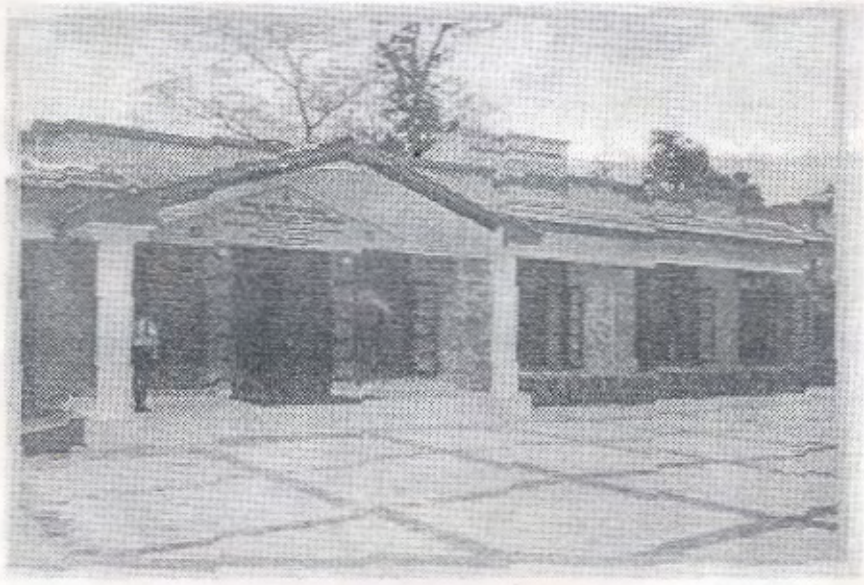

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A Research report

SUBMITTED TO

TRIBHUVAN UNIVERSITY, INSTITUTE OF MEDICINE
NURSING CAMPUS, MAHARAJGUNJ

FOR

The partial fulfillment of requirement for
Bachelor degree in hospital nursing

BY:

Roshani Laxmi Tui Tui

ADVISOR

Prof. Mrs. KAMALA TULADHAR
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Bachelor of nursing program
In Hospital Nursing

Submitted in partial fulfillment of
the requirement for the degree of
Bachelor of Nursing Program from
Tribhuvan University, Institute of Medicine
Nursing Campus, Maharajgunj

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ABBREVIATIONS

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TU :	Tribhuvan University
TUTH:	Tribhuvan University Teaching Hospital
IOM:	Institute of medicine
BCCC:	Bhaktapur Cancer Care Centre
WHO:	World Health Organization
PCL:	Proficiency certificate level
BN:	Bachelor in Nursing
MN:	Master in Nursing
Nsg:	Nursing
PHCC:	Primary Health Care Centre
HP:	Health Post
SHP:	Sub health Post
HMG:	His Majesty Government
MOH:	Ministry of Health
NCRS:	Nepal Cancer Relief Society

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This small scale study is not only the result of single mind, there are so many helping hands behind it; so the investigator wants to acknowledge all of them for their kind suggestion, guidance and help throughout the study period. The investigator also hopes that the finding of this study will be useful to the planners, institution and individuals concerned with cancer patients and their pain management.

First of all, the investigator likes to express her sincere appreciation and thanks to Tribhuvan University, Institute of Medicine, Nursing Campus, Maharajgunj for providing the golden opportunity to carryout this study as partial fulfillment of the requirement for bachelor degree in hospital nursing.

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- Roshani Laxmi Tui Tui

ABSTRACT

Introduction

The pain affect on patient's quality of life and degree of pain control depends on knowledge and attitudes of caregivers so study must be done on this topic.

Title: Nurses' knowledge and attitudes towards cancer pain management.

Objectives: To explore the present knowledge and attitudes of nurses about cancer pain management.

Design: Exploratory descriptive survey.

Setting: 2 urban hospitals where cancer patients are treated.

Sampling technique: Non-probability purposive sampling.

Sample size: 50 nurses working minimum of one year in TUTH & BCCC.

Instrumentation: Self administered structured questionnaire, 15 MCQ to assess knowledge and 15 Likert scale statement to assess attitudes. Pretest, expertise, advisor suggestions taken to maintain validity & reliability.

Research variables: Knowledge, attitude. Educational level, working experience & work with cancer patient. The findings are analyzed & statistical test done by 'Z' test 't' test & standard deviation.

Result

More than 50% answered correctly about cancer pain management. Major knowledgeable areas are pain assessment, role of nurses on pain management, psychological pain management and frequency of analgesic introduction. The least knowledge was on use of medication, pain scale and WHO analgesic ladder. In response to knowledge, 98% of nurses assess pain level before giving analgesic. Only 38% had known about pain scale and 8% known about WHO analgesic ladder.

The mean knowledge score was 8.44 with standard deviation 2.1892 and mean attitude score was 9.36 with standard deviation 1.897. Statistically, there are significance differences in nurses' knowledge according to working area ($Z = 6.27$; $t = 5.476$),length of working experience ($Z = 2.23$; $t = 2.20$) & difference in attitude score according to level of knowledge score ($Z = 2.64$; $t = 2.966$), but no significant difference was found according to educational background ($Z = 0.1779$; $t = 0.216$).

Implications of nursing practice

Further research is needed regarding pain management practice and effect of pain intervention package. There also need to give training on cancer pain management.

Key words: Nurse, Knowledge, Attitude, Cancer pain.

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CHAPTER -I

INTRODUCTION

1.1 Background of the study

Nepal is a developing and landlocked country situated between two large countries; China and India. The total population of the country is 2,31,52,432 with 53.74% literacy rate, 220-234 US $ per capita income and 0.46% disabled people.(CBS 2002,5th Baishak 2059)

The Ministry of health is the main body for providing health services to the people. Until fiscal year 1999/2000, there were 7 Health division, 5 special Center, 5 Central hospitals, 2 Regional hospitals, 11 Zonal hospitals, 59 District hospitals, 149 PHCC, 739 HP, 3152 SHP and 2 Special Cancer hospitals(BP Memorial Cancer Hospital and Bhaktapur Cancer Care Center). All of these institutions provide service for cancer patients.

Cancer is the most prevalent disease all around the world. The American Cancer Society estimates that at least 1,170,000 Americans were diagnosed each year with a cancer affecting one of the various body site with incidence of 2,44,000(Male, highest in Prostate cancer) and 1,82,000(Female, highest in Breast cancer). India recieved 10 lakhs new cancer patients each year (Jain P.N., Cancer pain : An overveiw)[8]. In Nepal, A rough estimate shows that about 50-60 thousand people are suffering from malignant with prevalence of 2.3-2.8/1,00,000 populations. The hospital based statistics revealed 18% of case in 1989, which increased to 23% in 1993 with high in men than women. (Sharma A. K. Cancer profile of Nepal 2001)[48].

It is estimated that 60-96% all individual with progressive malignant disease experience pain, pain is a very important symptom in cancer due to its pain frequency(30% in metastatic patient and 80% in advanced cases), its impact on quality of life and because of its treatment is still given low priority(Cleeland et. al. 1994). Another statistical data suggest approximately 60-80% patients when they were diagnosed, are advanced cases and hence incurable. Often their major symptom is moderate to severe pain.

WHO(1996) has estimated approximately one third of patient receiving cancer treatment and more than two third of patients in the advanced stages of

cancer experience pain.[21] The suffering associated with pain often can interfere with daily living activities, adversely affect quality of life and exacerate fear among patient with cancer(Ingham & Foley, 1998;Mc cabe, 1997).

Pain is a comprehensive, multi-dimensional and holistic (Mc. Guiro, 1995; Melzack and wall 1982). It is an individual experience of an aversive sensation of varying intensity, duration and quality.[57]. As defined by Mc. Caffery, "pain is whatever the experiencing person says it is existing whenever the experiencing says it does."(Mc. Caffery & Beebe,1989). Unrelieved pain affects quality of life in all direction including physical, psychological and spiritual well-being and social concern (Ferrell et. al. 1991)[43]

The management of cancer pain was until recently a neglected area of medical and nursing practice. During the past 25 years, Research and education has improved pain care in developing and developed countries, although pain management is a problem in many countries of the world. In 1992, the agency for Health care policy and Research (AHCPR) published guidelines for the management of acute pain.

Patient with cancer reported that the prevalence of pain requiring analgesics varies, but has been estimated between 20-50% of patient with advanced stage cancer (Bonica, 1990; Foley, 1997; Payne et. al. 1992)[6] but pain is well controlled by oral analgesics in 90% of cancer. Unfortunately, about 25% of all patients with cancer die with unrelieved pain because of patient, care provider and family misconception and fear. (Diana Ruzicka, Rose A, Fink R. M. Pain management)[43]. Research indicates that patient continue to experience pain in spite of their pain management regimen (Austrin, Eyres, Hefferin & Kanner, 1985). Because of cancer pain is a problem of international scope, WHO has urged that every nation give high priority to establish a cancer pain relief policy (Jain P. N.; cancer pain: An overview).[7]

Managing chronic cancer pain can be a complex and overwhelming experience for many health care providers, particularly if opioid tolerance is involved. Fear of addiction, doctor's lack of expertise using narcotics and negative attitude by nurses towards patient in pain lies behind this problem.

Although, many team members, including physician, nurses and patient influence pain management. Nurses are in a central position to manage pain (Jacox et al. 1994)[26]. When patients are in pain, nurses assess and manage that

pain. When patients are reluctant to take pain medication, nurses are in position to teach. When physicians are reluctant to prescribe appropriate types or doses of analgesics, nurses can provide assessment data and advocate for their patients. Thus, although, nurses don't have complete control over patient's pain management regimen, they are in a position to significantly influence it.

The ideas that knowledge and attitude guide behaviors are well established (Rokeach, 1970)[42]. Research indicates that nurses' decision about pain management and pain related problems are influenced more by their own attitude and misconception about pain than by a thorough assessment of their patient's current pain status (Dalton, 1989; Rankin & Sniden, 1984; Weiss sriwatanakul, Alloza et al 1983).[12] Because of nurses are the first health care professionals patient encounter, they must be thoroughly familiar with assessment strategies and have a broad understanding of common cancer pain issue and their treatment (Cady J. 2001).[13] Nurses' lack of knowledge about pain and its treatment, fear of addiction, tolerance and respiratory depression related to narcotics are barrier to effective cancer pain management. Understanding what nurses know and believe about pain management is the first necessary step in finding ways to change their behavior. The purpose of this study provide baseline information that can be used to plan intervention intended to increase nurses' knowledge and competence in caring of cancer patient with pain.

1.2 Title of the study

"A study on knowledge and attitudes of nurses' towards cancer pain management in hospital setting"

1.3 Statement of the problem

Many research studies suggested that nurses' don't have adequate knowledge and good attitudes towards cancer pain and its management. Nurses must have sufficient knowledge and better attitudes towards cancer pain and its management for effective pain management in their practical setting.

1. What is the present knowledge and attitudes of nurses towards cancer pain management?

1.4 Objectives of the study

General objectives :

To find out the knowledge and attitudes of nurses' about cancer pain management.

Specific objectives :

1. To explore the present knowledge of nurses' about:
   - The assessment method of cancer pain.
   - The use of medication for cancer pain management.
   - The knowledge about analgesic ladder provided by WHO.
   - The other approaches to cancer pain management.
2. To explore the present attitudes of nurses' about cancer pain management.

1.5 Statement of hypothesis

1. Nurses' who have more working experience will have higher knowledge score on cancer pain management than those nurses with less experience.
2. The knowledge score on cancer pain management of the nurses with higher educational background will be significantly high than those nurses with lower educational background.
3. Nurses working in cancer unit will have higher knowledge score on pain management than those working in other units.
4. Nurses having higher knowledge scores have higher (better) attitudes scores towards cancer patients.

1.6 Rationale of the study

Pain is the multidimensional phenomenon; therefore it is difficult to define. It is a personal & subjective experience with few or no objective measurements; pain is best viewed as an experience, not merely as symptoms. Cancer patient have severe pain due to multiple sources and site of pain as direct tumors (65-80% of patients).Anticancer therapy (25%) Unrelated cancer therapy (3 – 10% of the patients)[44]

Pain management is an important aspect of nursing care. Nurse's knowledge and attitude affect how effectively she manages the patient with pain. Rokeach (1970) postulated that a minimum of two attitudes is necessary to activate behavior. He theorized that "Attitude towards object &attitude toward situations"

are involved in behavior change.[42] Thus, according to this theory, Nurses' knowledge and attitude about patient in pain and the use of narcotics will affect their behavior related to pain management so this study focuses to shed light on exploration of present knowledge and attitude of nurses toward cancer pain management which will contribute to determine how much knowledge they have and how will nurses have been managing the patient with cancer pain. It also guides to develop pain educational intervention and give recommendation for continuous education for nurses to improve their pain assessment and management skill.

Pain is the fifth vital sign in cancer patient so its management is a crucial thing. Several researchers found that nurses have inadequate pain assessment and management skill because they have too little education in their nursing curricula. In Nepal, staff nurses are mainly concerned with patient care but they did not have sufficient education about cancer, pain caused by cancer and its management in their course, even though, they try to manage patient in pain according to their experiences. A lack of knowledge and negative attitude about pain management was the most frequently cited barrier to good pain management. So researcher wants to explore the knowledge and attitude of nurses about cancer pain and its management.

1.7 Significance of the study

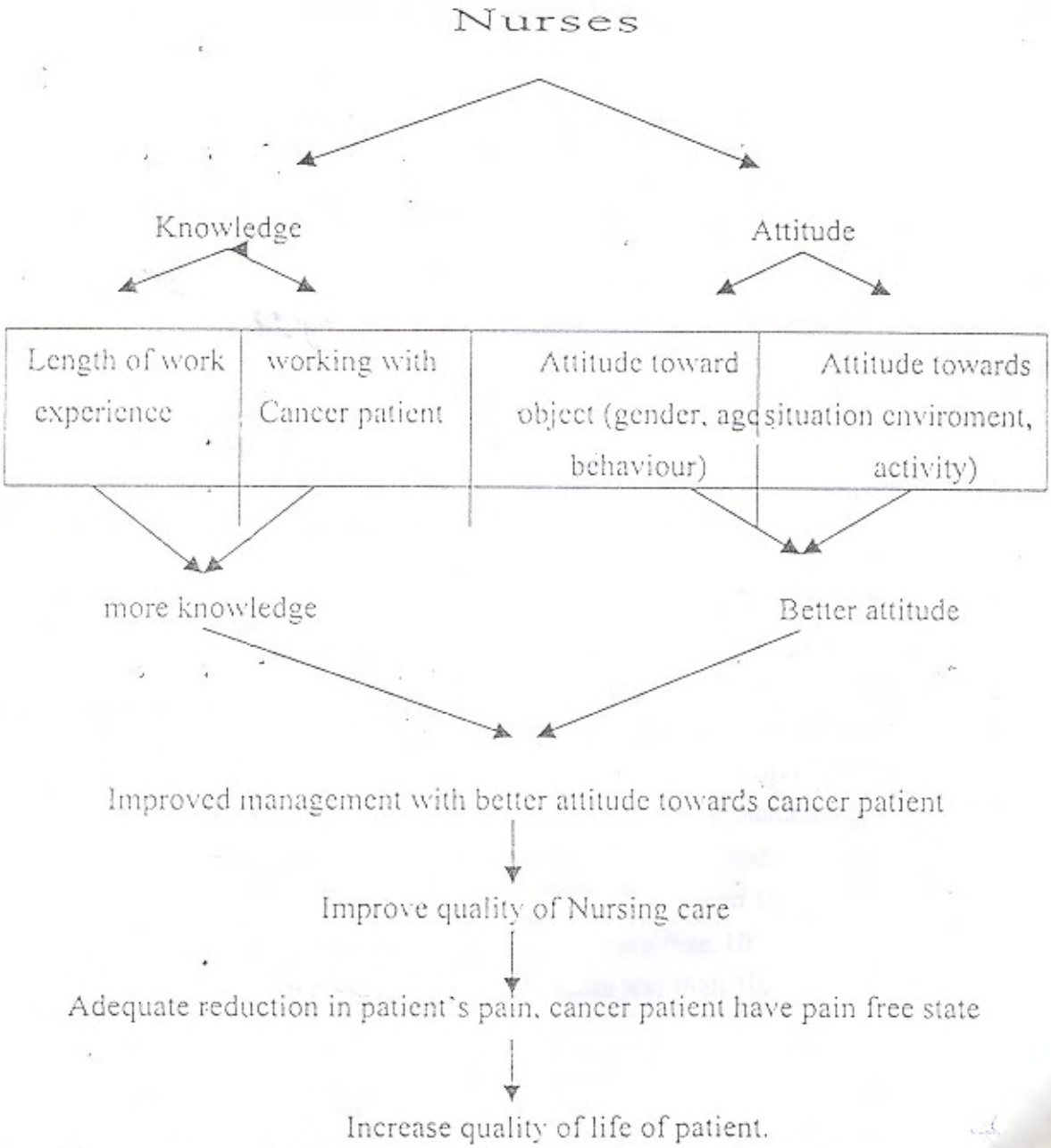
1. This study helps the authorities of cancer hospital and other hospital for development of educational intervention and training package for their staffs to improve their knowledge.
2. This study provides recommendation for planner and curriculum developer about the need to modify and add cancer related subject in their curriculum according to learner and situation need.
3. It helps the other B.N. student conducting for the research on this topic regarding comparative and interventional study.
4. The finding of the study will be helpful to the national policy maker to formulate policies and plan program for the effective control of cancer pain with cancer pain relief policy.
5. It plays a vital role in modifying the behaviour and performance of nursing personnel regarding management of patient with cancer pain.

From the above-mentioned points; Nurses, patients and care provider will be directly and indirectly benefited from this study.

In Nepal, the researcher thinks it is first step to describe the current status of nurse's knowledge about cancer pain management.

1.8 Conceptual framework

Attitude theorist Rokeach(1970) described the relationships among knowledge and behavior . Attitude has been defined as "a relatively enduring organization of belief around an object or situation predisposing one to responds in some preferential manner". Each belief within this organization is speculated to have three components: Cognitive, affective, and behavioral. Theoretically knowledge and attitude about pain should influences pain management behaviors.



The conceptual framework helps to understand the study " nurses with longer work experience and working with cancer patient have more knowledge;

and attitude towards object and attitude towards situation have better attitude towards cancer pain management", which change the nurses' pain management attitude and behavior so that adequate analgesic will be given according to need and cancer patient is keep in pain free so that quality of nursing care is improved with increased in quality of life of patient.

1.9 Variables of study

1. *Dependent variable:* Knowledge and attitude of nurses about cancer pain management.
2. *Independent variable:*
   a. Length of work experience ,
   b. Working with cancer patient (cancer unit)
   c. Educational background ,

1.10 Operational definition

1) **Nurses**:- Refers to those who are working minimum of one year in Hospital with cancer patient (cancer, Medical, Surgical unit)after completing PCL Nursing.
2) **Knowledge**: Refers to possession of facts on various aspect of cancer pain and cancer pain management.
3) **Attitude**:-Refers to psychological representation of societal and cultural thinking and feeling towards cancer pain and its management.
4) **Cancer pain:** Refers to any kind of sensation or discomfort caused by cancer, which is perceived and expressed by the patient.
5) **Working experience:**
   i) **More working experience:** The number of working years more than five years in medical, surgical, or cancer ward.
   ii) **Less working experience:** The number of working years less than five years in medical, surgical, or cancer ward.
6) **Special training:** Training on cancer (pain management)
7) **More knowledge:** Knowledge score of 10 and more than 10.
8) **Less knowledge:** Knowledge score less than 10.
9) **Better attitude:** Attitude score more than 10.
10) **Negative attitude:** Attitude score less than 10.

1.11 Delimitation of the study:

The study will have limitations to :-

a) Limitation on topic: The researcher willnot able to findout present practice of cancer pain management in their practical setting.

b) Limitation on study area: Limitated upto TUTH and BCCC staffs only.

c) Limitation on sample size: The study was limited up to 50 samples so that it was difficult to generalize.

d) Limitation on time: The duration of study was limited to 7 weeks.

e) Limitation on content: The instrument willnot develop on specified area as physiology of pain, pharmacology of opioid, indication and contraindication of medications.

f) Limitation on method: Non-probability purposive sampling technique was used in this study. It could be biased. Investigator was unable to use random technique.

g) It is limited only up to exploration of knowledge and attitudes.

h) There is insuffient current literature in relation to Nepal.

i) The data was collected by self-administered questionnaire, so finding of the study depend upon respondent's honesty only.

CHAPTER—II

LITERATURE REVIEW

2.1 Review of related literature

a. Definition of cancer:

Cancer is a disease of the cell, in which the normal mechanism of growth and proliferation are disturbed. This results in distinctive morphologic alteration in tissue patterns.

It is also known as uncontrolled and abnormal growth of cells, which proliferate abnormally, ignoring growth-regulating signals in the environment surrounding the cell.

b. Cancer pain:

"Pain is whatever the experiencing person says it is, existing whenever the experiencing person says it does" (Mc caffery and Beebe, 1989). It is an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage. (IASP, 1980)

Unrelieved pain affects quality of life in all dimensions, including physical, psychological, and spiritual well being and social concerns (Ferrell et. Al.,1991).[16] Cancer patients have multiple sources and sites of pain due to :-

- Direct tumor involvement and related pathology (65-80% of patients).
- Anticancer therapy and invasive diagnostic or therapeutic procedures (25% of patients).
- Unrelated to cancer or therapy; prior or concurrent painful condition (3-10%of patients).

c. Cancer pain assessment:-

Patient assessment needs to be ongoing, individualized and documented so that everyone involved has an understanding of the problem. Recent studies of health care professionals identified poor pain assessment, lack of knowledge and insufficient time as the greatest barriers to adequate pain treatment. The American Pain Society currently has a campaign to mal.e pain assessment the fifth vital sign. In addition to assessment of pain; characteristics, psychosocial

and thorough physical and neurological evaluation are necessary, as is a review of other symptoms. Cultural and ethical background also may influence pain expression and behavior, however, patient should not be stereotyped. An easy way to assess pain is to incorporate the **WILDA** strategy:-

W: Words to describe pain i.e. aching, throbbing

I: Intensity (0-10)

L: Location (where is your pain)

D: Duration: is the pain always there? Does the pain come and go?

A: Aggravating and alleviating factors.

Hovi, S.L., Lauri, S. (1999) conducted a study to examine hospitalized cancer pain and nurses assessment of patient's cancer pain and to compare them. The intensity of pain was measured with a visual analogue scale (VAS) and the Finnish version of the McGill pain questionnaire (FPQ). The results showed that the differences between patient and nurses' assessment were statistically significant for most intensive pain and for acceptable pain. In both cases, nurses' assessments of the intensity of pain were lower than patient's assessment. Nurses with poor knowledge underestimated the patient's most intensive experiences of pain. The difference was statistically significant.[25]

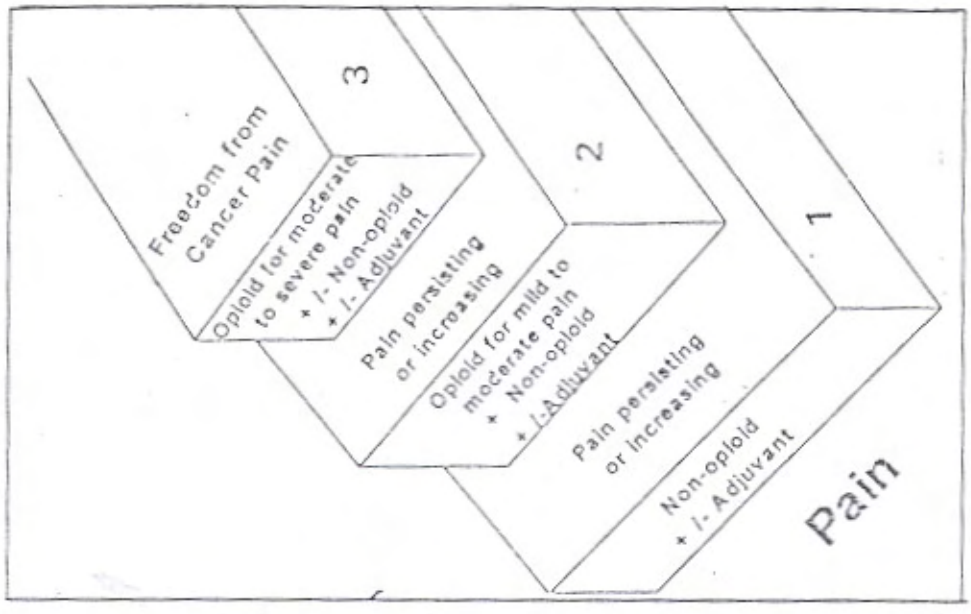
An interventional study conducted by Howell D. et al (2000) on nurses knowledge, attitude and practice in pain assessment and management over 3 months among 53 nurses. It found that interventions was effective in changing the knowledge, attitude and behaviors of nurses in the study but the effect was not maintained over time so it suggest that further educational and organizational support is needed for effective practice in assessment and management.[24]

D. Knowledge about WHO analgesic ladder:-

Danies, J., Mc vicar, A. had done literature review on issues in effective pain control. From assessment to management identifies that inadequate pain control continue to be a problem and assessment issues apart, suggests that a lack of knowledge of analgesic pharmacology and patients are major features. This article provides an overview of the rational for the use of analgesic by considering their biological action, how the drugs fit into the analgesic ladder (WHO, 1994) and how they relate to the principle of managing chronic pain. This review finalized that nurses have a pivotal role in pain assessment and it suggest education must play a role in the development of genuine inter-

professional working which will allow nurses to have more influence in formatting the care strategy and subsequent action.[13]

WHO Analgesic Ladder



The World Health Oraganization has adopted a "ladder" approach to cancer pain management that relies exclusively on the administration of oral agents.

A descriptive study conducted by Sabatawski R.(2000) nation-wide survey among physicians on the pain management in Germany. This resulted that the majority of the physicians (93%) reported knowledge about the WHO recommendations for the treatment of cancer pain, more than 15% of the participating physicians rated transdermal fentanyl as a weak opioid or even as a non-opioid. A negative pain management index in 15% of the patients gave evidence of poor quality in pain management. The majority of patients (84%) did not receive immediate release analgesics for the treatment of breakthrough pain. Continuous medical education is still necessary before a further alleviation of regulations will help to reduce the under treatment of patients suffering from cancer pain in Germany.[46]

A questionnaire study was performed by Warncke T.(1994) in order to clarify knowledge and practice of cancer pain treatment in Norway among 1655 physicians by using 8 multiple-choice and 13 open questions. The results show that only 25% of Norwegian physicians treating cancer patients appear to have knowledge of the principles of the World Health Organization analgesic ladder strategy. However, the majority (86%) of the physicians were prepared to

prescribe strong opioid analgesics, but in the illustrative cases where strong opioids were appropriate, 44% prescribed too small doses and often preferred neuroleptic drugs instead of increasing the analgesic to a sufficiently large dose. Patients needing step two on the analgesic ladder, in Norway often (49%) are treated with a standard combination of paracetamol and codeine. Two hundred seventy-four (97%) of the physicians said they experienced problems when treating cancer pain, ranging from inefficient pain relief (52%) to side effects of opioid analgesics (32%), most often sedation, in combination with nausea and constipation. Only 13% of the physicians had a correct understanding of opioid drug dependence. As many as 72% of Norwegian physicians thought their education in cancer pain treatment was insufficient.[54]

E. Knowledge according to working with cancer patient:-

1. **An exploratory descriptive study conducted by O'Brien S et al (1996)** on knowledge and attitude of experiences oncology nurses regarding cancer related pain among 1400 RNs, Which highlighted that nurse who have cared for patients with cancer are more knowledgeable and have more liberal attitude towards pain management from nurses who have not cared for the patients with cancer. North Carolina nurses report knowledge and perception of barriers to pain management similar to those of Wisconsin nurses.[38]

2. **Ryan. (1994)** conducted research on knowledge of attitude towards and perceived barrier to pharmacology management of cancer pain were compared between oncology nurses(N =128)and long term care facility (LTCF)nurses (N =72)using item questionnaire .The oncology nurses were significantly more knowledgeable about pharmacologic management of cancer pain than were the nurses in LTCFs. However the two group did not differ in their attitude toward pain management with the exception that nurses in LTCFs were more likely to believed that patient over report their pain LTCF nurses were more likely than the oncology nurses to believe that inadequate assessment of pain, Lack of equipment and lack of skill to used equipment were impediments to pain management.[45]

3. **Bruneier, Carson and Harrison (1995) and Clarke et al (1996)** reported that nurses from hospital oncology units were more knowledgeable about pain than nurses from other hospital units.[4]

4. **Fothergill-Bourbonnais and Wilson-Barnett (1992)** examined pharmacological as well as non pharmacological pain relief knowledge among 100 hospice and hospital unit nurses in England . The hospice

nurses had significantly more pain knowledge ($p<0.001$) with a mean of 67.5% correct compared to the hospital nurses who had a mean of 55.3 % correct. However no significant pain knowledge difference were found related to years of experiences .In addition 86% of the nurses reported that basic formal education regarding pain was inadequate and approximately half of each group incorrectly answered a question about addition.[18]

5. **A comparative study conducted by Hollen CJ et al (2000) on Hospice and Hospital oncology unit nurses** about knowledge and attitude about cancer pain found that Hospice nurses scored significantly higher than hospital oncology unit nurses regarding over all pain management knowledge, opioids scheduling and liberalness. Hospice nurses also repeated more pain education and a higher frequency of pain guideline review requirements than hospital oncology unit nurses.[21]

6. **In a random sample survey of R.N., Vartherm, Ryan and Ward (1992)** observed overall knowledge deficits particularly regarding opioids. Using the Wisconsin Pain intensity (WPI) tool, the mean knowledge score was 56.4% correct and the mean score for opioids was 37.3% correct only 16% of the nurses know that the incidence of psychological dependents on patients and cancer is less than 1 in 1000patients. The researchers also noted that caring for patient and cancer was associated with greater knowledge and liberalness about pain.[52]

F. **Knowledge according to educational background:-**

1. **Man Worren, C.B.(2000),**found that the master's degree prepared nurses scored significantly higher (mean =31.5%) than nurses with all other level of educational preparation .Pain management knowledge deficiencies were identified including assessment, pharmacologic management with opioids non opioids and adjuvant medication, risk of respiratory depression, risk of addiction, non pharmacologic pain intervention and cancer pain and procedural pain, surgical pain and cancer pain. [33]

2. **Skauge, m.,et al, (1998)** Conducted a survey of self evaluation of knowledge and competence with regards to the treatment of pain .It shows that nurses' scored lower than the doctors on knowledge and competence in relations to Nociceptive and neuropathic pain (32% &18% respectively) and higher on treatment of the psychological and social aspects of pain (44% & 36% respectively). Many of the doctors

and nurses evaluated their knowledge as fairly poor or very poor with regards to non-pharmacological treatment methods. In both professions 80%answered that depression was seen fairly often or very often among these patients.[51]

3. **A comparative study done by Furstenberg C.T. et al (1998)** among physician, nurses and pharmacists about knowledge and attitude towards cancer pain management indicated that nurses were the most knowledgeable and pharmacists the least knowledgeable about pain assessment. Physician were the most knowledgeable regarding opioid pharmacology but seemed the least committed to providing optional pain belief. Further small group analysis identified continuing need for board based educational program on cancer pain management and for new initiation focused on practitioners who see relatively few cancer patient and may have difficulty accessing traditional educational program.[20]

4. **Ferrell et al (1993)** surveyed knowledge and belief regarding pain have documented that nurses and other health care professionals are inadequately prepared to care for patients in pain. Several reassume have been identified including inadequate in nursing and medical education, absence of curriculum content related to pain management and faculty attitude and belief related to pain.[17]

5. According to Fothergill et al (1992) concluded that more than half of the respondent had received no pain management education in their nursing programs. A large majority of nurses (86% n =100) in a 1992 study stated that they did not believe that their basic nursing Education proposed them adequately to care for patient in pain. [14]

6. **Wells, M. et.al.(2001)** conducted a study to findout the cause of cancer pain management as widespread problem with deficiencies in knowledge and inappropriate attitudes towards the use of opiates as partially. The study assessed the knowledge and attitudes of 135 nursing and medical staffs before and after working in hospital palliative care team. Result indicated that the knowledge and attitides of doctors and nurses had improved after working with the team. The study provides a useful method of identifying deficiencies in knowledge and attitudes among staffs and helped to raise awareness of the cancer pain management.[56]

7. **Rawal, N., Hylander, J., Arner, S.** had conducted nationwide survey to evaluate the extent of pain problem in Sweden on 1993. Another aim was to evaluate the level of knowledge of physicians and nurses &

to assess their educational needs regarding management of cancer pain. The result shows that almost all physician follow the analgesic "ladder" principle recommended by WHO; prefer the oral route for morphine administration, prescribe opioid analgesics as a regular "by the clock" basis and in unrestricted doses. However, about 30% of physicians believe that all patients have moderate to severe pain at the time of their death. Upto 78% of physicians and nurses believe that periodic severe pain is common in terminal cancer patients. In general, physicians don't evaluate different pain type nor do they use any instrument for measurement of pain intensity. Surpringly, intermittent subcutaneous (S/C) or intramuscular (I/M) injections for morphine are preffered to contineous S/C, intravenous infusion or to intermittent S/C administration through an indwelling butterfly needle. More than 50% of physicians and nurses admit that they have inadequate knowledge about pain evaluation techniques, newer analgesics and need for better physician and nurses education.[41]

G. According to length of working experience:

1. **Fothergill, B. & Wilson, B. (1992)** conducted a survey on knowledge of cancer pain management among hospice and hospital units. This study concluded that there is no significant pain knowledge difference found in relation to years of experience.[18]

H. Knowledge about cancer pain management:

1. **Mc Caffery, M. Ferrel, B.K. (1995)** Conducted surveys of nurses' knowledge of cancer pain management in five countries; Australia, Japan, Spain, Canada, and the United State. The results reveals that, in all countries, serious knowledge deficit exist that could adversely affect the care of patient with cancer pain. It appears, however, that the longer a country has been engaged in effort to educate health care professionals and the public and to establish palliative care program, the more likely are nurses from that country to possess correct information about cancer pain.[36]

2. **O' Brien et al,(1996)surveyed 340 North Carolina nurses** about pain knowledge, more than 75% of the respondent incorrectely answered questions about the incidences of psychological dependents drug scheduling for steady state analgesia , tolerance and the impact of anxiety or depression on pain. [39]

3. **Lebovits et al,(1997)** studies that examine practicing nurses' knowledge of pain and pain management appear to confirm the lack of

preparation, practicing nurses don't have adequate knowledge about pain or pain management.[30]

4. **Kubeeka KE et al (1996)** conducteddescriptive study of 123 RN, which found that the overall pain management knowledge score was 67.4%. The finding indicates a knowledge deficit specially related to the behavioral indicators of pain, classification of opioid analgesic, properties of opioid analgesics and adjuvant medication and incidence of addiction. This sample of rural nurses demonstrates similar pain management knowledge compared to the reported scores of urban nurses.[29]

5. **Ferrell, Ferrell, Rhiner and Grant (1991)** evaluated knowledge level of family givers of OPD with cancer, Although no significance difference were found in patient and family caregiver's knowledge about pain management, both groups possesses extremely limited knowledge mean scores were 58.9 for patient and 57.3 for caregiver's on a 0-100 scale.[21]

6. **Marties, E.J., Dernond Rainne, DW et al (2000)** concluded that the used of simple method such as numeric rating scale together with pain education for nurses is effective in improving the administrations of analgesic by nurses. These are important result because nurses play an essentia, role in helping patient to cope with their pain.[34]

7. **Lohri, A., Herrmann, R.** Studied the different modalities for treatment of cancer associated pain in the terminally ill patient. They concluded that patient, nurses and doctor need proper knowledge about these modalities. The three steps ladder proposed by the WHO remain the backbone of pain treatment. Adjuvant drug may add to the analgesic effect and medication to relief opioid side effect should routinely be prescribed. Local irradication remains one of the mainstrays in painful bone metastasis.[31]

8. **Wallace, K.G** conducted a study to investigate staff nurses' perception of barrier to pain management including lack of educational preparation, inadequacy of clinical practice, skills and certain legal/political, financial and ethical problem by using four point likert scale. Nurses rated their educational preparation (mean = 2.6; S.D. = 0.05) and knowledge of legal/political issue(mean = 3.5; S.D. =0.05) and financial issues were rated as inadequate (mean = 1.9;SD = 0.06), knowledge of ethical issues was adequate (mean = 3.1;SD = 0.03).[53]

I. **Nurses attitudes about cancer pain:**

1. **According to Dalton (1989)** Conducted a study involving 67 nurses, found that only half of the respondent believed that patients should be pain free. Further, most of these nurses confirmed that their own believe about pain influenced their assessment of patient.[10]

2. **Short, Burnett, Egbert and Parks (1990)** Concluded that patient gender is reported to affect some nurses' decisions about pain, some nurses believe that females requested more pain medication than males.[50]

3. **Dalton (1989)** found that patient's facial and verbal expressions influences nurses attitudes towards patient in pain .[12]

4. **Short et al, (1990)** concluded that the sample of 52 nurses carrying for terminally ill pt with cancer felt that young adult request more pain medication than elderly patient.[49]

5. **Mc Caffery and Ferrell (1991)** surveyed 359 nurses attending pain workshops. They found that the nurses were more willing to believe the pain reports of older patient but were less willing to increase the dose. For this group, a significant factors in the under medication of elderly patient appeared to be concern about respiratory depression.[35]

j. **Nurses knowledge and attitudes about cancer pain management:**

1. **Dalton JA et al (1998)** conducted an interventional study of nurse's attitude and management practice among 29 female RN resulted that nurse's attitude, belief, intention and expectation about pain management influenced nurse's patient care and educational attitude. Nurses who believed that patient should be pain free and nurses who focused on both the dimensions and treatment of pain implemented more pain management activities. In general nurses who had high intention and expectation performed more pain management activities.[11]

2. **Du. Pen,A.R., Du. Pen, S.et al (2000)** conducted an interventional study to operationalized the guidelines for cancer pain management. A total of 105 patient of trained and untrained care providers were accrued and assessed over 4 months. Patient of trained providers had a significant reduction in usual pain over the 4 months of data collection composed with patient of untrained providers($t = 2.0$; $p = 0.05$). Improvements were modest in the prescription of opioid analgesics and dramatic in the prescription of co-analgesic for neuropathic pain. The most significant effect occured within the first 140 days after the

intervention and was followed by a gradual return to baseline practice.[15]

3. **Class SJ (1996)** conduct a survey of nurses knowledge and experiences of 280 qualified nurses about pain and elderly patient, concluded that many nurses harbuored misconception about the pharmacological treatment of pain and exaggerated the risk of opioids induced respiratory depression. Nurses from acute surgical areas tended to have a better knowledge of issues related to pain in elderly people than those from care of the elderly wards.[9]

4. **A descriptive study conducted by Alley LG (2001)** that nurses knowledge of pain management and their perceived accountability for pain management were significantly related to knowledge of the organization's chronic pain management policy .Correlations were lower than expected based on theoretical relationship proposed in the open system study framework.[1]

5. **A survey conducted by Janjan NA (1994)** to evaluate the knowledge and attitudes of radiotherapy residents toward cancer pain management by using National Cancer Pain Initiative Role Model Programs. The result shows that residents from the training program scored significantly higher in K ($p < 0.005$) and A/K ($p < 0.04$) than did the residents across the nation. No difference in scores evaluating A were detected ($p = 0.26$). Compared with the baseline knowledge of physicians in practice who had attended a workshop on cancer pain management, the national XRT residents had significantly lower scores in A ($p < 0.006$) and K ($p < 0.001$); however, no difference was found in A/K scores. After the workshop, the physicians in practice had significant gains in cancer pain management skills ($p < 0.006$). When the post-instruction survey was compared with the national XRT resident scores, there were marked differences in A ($p < 0.00001$), K ($p < 0.00001$) and A/K ($p < 0.01$).[27]

6. **A survey conducted in 1999 by Sapir R. among 236 medical practitioners** in Isarel where 57.7% of physicians stated that 76-100% of patients could achieve a satisfactory outcome from analgesic therapy, only 17.2% of respondents reported that > 75% actually achieve a satisfactory outcome in their own experience. Unsatisfactory outcome was ascribed to inadequate pain relief (59.7%), or excessive central nervous system (CNS) side effects (43.3%). According to the responding physicians, the major barriers to effective relief include inadequate assessment of the pain and pain relief (65.3%), inadequate

knowledge of pain therapy (57.9%), and physician reluctance to prescribe opioids (49.1%). Questions evaluating physician knowledge identified widely prevalent knowledge deficits in pain physiology, risk of addiction, use of adjuvant analgesics, opioid dosing, and treatment of side effects. Specialists in oncology tended to evaluate their knowledge more highly than others ($P < 0.05$). Despite this, there was no significant knowledge difference between oncologists and non-cancer specialists[47]

7. **A quasi experimental study done by de. Rond ME in 2000** about nurses knowledge about pain and pain management. The results show that nurses have knowledge deficits and prejudices with regard to pain and pain management. Age and additional pain courses in pain partly predict nurses' pain knowledge. After nurses were educated, the average score on the Pain Knowledge Questionnaire increased from 69.1% (SD = 13.2) at pretest to 75.8% (SD = 11.5) at post-test ($P < 0.001$). Nurses' attitudes changed with regard to their level of knowledge and skills in relieving pain, willingness to assess pain on a daily basis, and attention to patients' pain complaints. It can be concluded that the PMP is effective in improving nurses' knowledge of pain management and focusing nurses' attention to patients' pain complaints.[14]

8. **A study was done by Katsma DL(2000)** to determine the knowledge base of long-term care nurses regarding pain assessment and management in the elderly among 89 nurses.Results indicated that nurses were more likely to believe and document the grimacing patient's self-report of pain than the smiling patient. Older nurses with more experience were less likely to believe or document their patient's self-report of pain than younger nurses with fewer years of experience. Less than half of the nurses would increase the analgesic dose for either patient scenario. Nursing implications include the importance of ongoing pain assessment and management education tailored to the geriatric population and long-term care.[28]

2.2 Summary of literature review

The above literature describe that there is number of deficiencies found in knowledge and attitude towards cancer pain management especially misconception about pain, assessment of pain, pharmacology of analgesics, fear of addiction about opioids, WHO analgesic ladder, pain scale and have narrow

(negative) attitudes towards cancer pain. These studies found knowledge deficit & inconsistent response in several areas. These studies highlighted, that nurses should have sufficient knowledge & liberal attitudes towards cancer pain for its effective management.

Different comparative and descriptive studies shows nurses working with cancer patient and oncology & hospice unit have significantly higher knowledge than others. Different interventional study shows the higher knowledge score and liberal attitudes after educational package. Different comparative study also shows that nurses have lower knowledge score on pain management than doctor but have more knowledge on client assessment & least knowledge on pharmacology of opioid, non-pharmacologic approach & others. These studies also concluded that higher educational background have more knowledge than lower educational background, though they have no learning content in their nursing curriculum. There are different attitude about cancer pain according to gender, age, mood and others. By reviewing the above literature, the investigator wants to explore the present knowledge and attitude of Nepalese nurses towards cancer pain management. Investigator used all these literatures to develop concept & nature of the present study.

CHAPTER-III

Research methodology

This chapter includes the research design and procedure used in this study. It contained the research design, study area, population & sample, sampling technique, instrumentation used in study, Measures of proving validity and realibility of instrument, ethical consideration & statistical tool used for data analysis.

3.1 Research design:

Simple descriptive study was used to findout the present knowledge & attitudes of nurses about cancer pain & its management. Descriptive survey method involves the description, recognition, analysis and interpretation of certain phenomena that currently exist.

3.2 Study area:

The study was done at TUTH and BCCC among 50 nurses working with minimum of one year. TU, IOM was established in 1972 with major resposibility of training all categories of heaith manpower needed in the country. It has 7 campuses with 29 different programmes and one Teaching Hospital. The TUTH was established in monument of Japan Nepal Friendship (JICA). It has collaboration with Hyogo College of medicine, Japan, Foothills hospital and University of Calgary, Canada. It was constructed in 1983 and OPD service was started in 14th july 1983(30th ashad 2041) and indoor service started in 24th feb 1983(13th falgun 2041)with 300 beds. It was inaugurated by His majesty King Birendra Bir Bikram Shah Dev in 1986. Another 100 beds were added in 1993 including ICU,CCU and others. Now TUTH have 428 beds standing the biggest hospital in the country. It is now supporting 8 undergraduate degree programme, MBBS, BMLT, and others including nursing programme (PCL, BN, MN).

TUTH has 402 nursing staffs range from Matron to ANM. It is central and referral hospital with all tertiary level facilities so it provides all health service including preventive, promotive, curative and rehabilitative services by 22 units. Most of the cancer patients were also admit here and get treatment in medical and surgical ward by oncology specialist.

BCCC was the first established cancer hospital and 2nd specialized cancer hospital in Nepal. It was established in 1995 in association with HMG MOH, Rotary International and NCRS. Besides BCCC, the center was initially established within the renovated Bhaktapur hospital building with support of Shahid Smrity Cancer Care unit along with NCRS. NCRS itself was set up in 1982 with HRH Princess Jayanti Shah as chairperson. The goal of this center was to conduct pioneering activities with relation to cancer detection and treatment in the kingdom and it evolved into the country's first comprehensive cancer center. There are altogether 25 beds with 4 Oncology consultants, 5 Medical officers, 14 Nursing staffs, 3 Medical physicists and 3 Therapy radiographers. BCCC provides a complete range of cancer treatment through chemotherapy, surgery and radiotherapy by cobalt 60 Uranium. It also has cancer library, which is the first library in Nepal, established with the support of the Nepalese Doctor Association in the UK.

3.3 Population and sample:

i) **Target population:** Staff nurses working in different hospital after completing PCL nursing.

ii) **Study population:** Staff nurses working in TUTH and BCCC with minimum of one year experience.

iii) **Sample population:** Staff nurses working in cancer unit of BCCC and Medical/Surgical ward of TUTH. They should have PCL completion with minimum of one year experience with cancer patient.

iv) **Inclusion criteria:**

a. Nurses who are working with the cancer patient at least for one year.

b. Nurses after completion of PCL, B.N. and M.N.

c. Nurses should be still in working state.

v) **Exclusion criteria :**

a. ANM and Nurse aids are excluded.

b. Nurses who are working in other ward except medical/surgical ward.

c. Nurses who are physically and mentally unhealthy.

v) **Sample size:** 50 nurses working in above mentioned ward/units.

vi) **Sampling technique:** Non probability purposive sampling technique was used in this study because of availability & accessibility of the sample. It was easy to apply & it saves time & money.

vi) **Working shift:** Morning. evening & night shift.

3.4 Measurement

i) **Measuring instrument:** The investigator (researcher) on the basis of literature review developed the structured questionnaire. The questionnaire consists of 15 MCQ to assess knowledge on pain assessment, use of medication and nursing management of cancer pain. Likert scale was used to measure attitude & there was 15 questions related to attitudes. The instrument consists of three parts.

Part I- Demographic information

Part II- Knowledge related questions

Part III- Attitudes related questions

ii) **Pretest:** The instrument was pre-tested in 10% (5) staff nurses of sample size working in TUTH and BCCC. Instrument was modified according to pretest & suggestion of advisor & expertise of related field.

iii) **Validity and realibity of the instrument:-** The questionnaire was developed as per objectives and hypothesis of the study. For this, Some questions were extracted from books & most of questions were drawn from different journals. Content and construct validity was the major focus of the study to ensure that the instrument adequately cover the content & it was maintained through examination by consulting expertise, teachers, advisor & colleagues.

- The reliability of instrument was maintained by using thoroughly pre-tested instrument in the sample area for assessing the understandability and accuracy of instrument. Researcher herself collected data by using self-administered questionnaire.

iv) **Measures to reduce bias:**

a. Anonymous structured self administered questionnaire was used to collect data.

b. There was no discrimination on ethnicity, socio-economic condition of the subject.

c. Questionnaire were left over night to obtain their actual knowledge and prevent them from being observed and consult by others.

3.5 **Procedure of data collection:** Structured type of self-administered questionnaire was used to collect data by taking formal permission from authority of study area by submitting an official letter. Verbal consents were taken from subjects after reading written consent agreement.

3.6 **Ethical consideration:** The permission for data collection was obtained from Director and Nursing director of TUTH and BCCC after submitting an official letter from campus. The investigator herself obtained verbal permission from the Nursing director & ward in-charge of all wards of TUTH & BCCC. Verbal consent was obtained from all respondent after reading consent agreement. Nobody was forced for participating in the study. The individual anonymity & confidentiality was maintained during data collection.

3.7 **Data analysis and Presentation:** All collected data were analysed and categorized on the basis of research objectives and hypothesis, which was presented on table, pie chart, bar graphs and frequency polygon.

3.8 **Statistical procedures:-** Collected data were analyzed and tested according to:

- Number and frequency distributions
- Percentage
- Mean, median and mode
- Standard deviation

'Z'-test and 't'- test was used to test hypothesis and its significant. The tabulated Z value is 1.96.

CHAPTER- IV

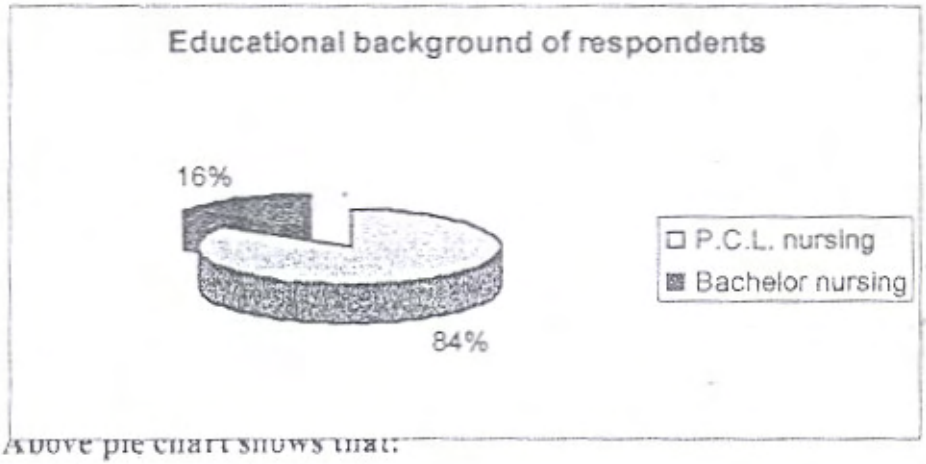
Analysis and interpretation of data

This chapter deals with the analysis and interpretation of raw tabulated data obtained from questionnaire. The data were collected from nursing personnel working in medical, surgical and general cancer ward of two hospitals regarding knowledge and attitudes towards cancer pain management. The total number of respondents were fifty. The collected data were compiled and tabulated in dummy table manually, then analysis and interpretation was done on the basis of stratistical tools e.g. number, frequency, percentage, mean, standard deviation, table, pie chart, bar diagram, and frequency polygon. For hypothesis testing 'Z value' and 't' test was used, which was presented below.

4.1 Demographic characteristics:

Pie chart No. 1

Number and percentage distribution of respondents according their level of education

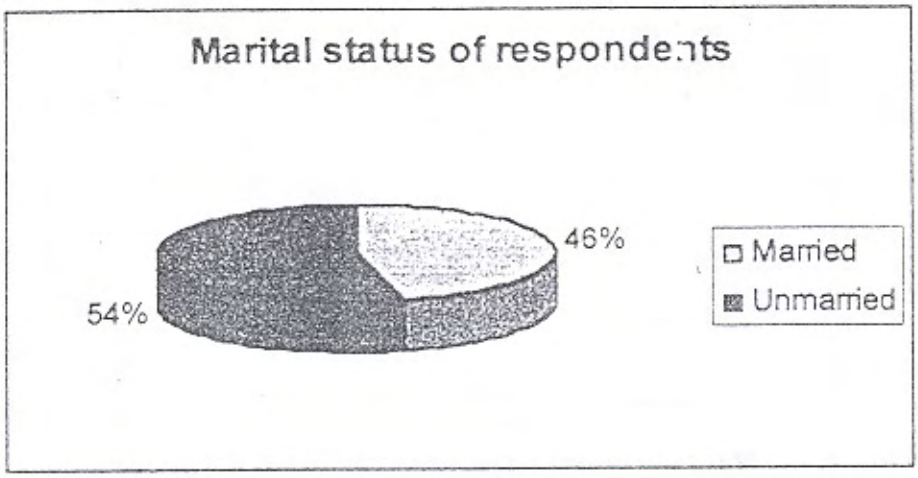


Above pie chart shows that:

Majority of respondents,84% were P.C.L. nursing passed and 16% were bachelor of nursing passed including 1 respondent had diploma in oncology nursing. The majority of staffs working in hospital are after completing P.C.L. level. It may be due to new entry of fresh P.C.L. nursing passed staffs.

Pie-chart No -2

Number and percentage distribution of respondents according to marital status.



The above chart shows that:

- Majority of 27(54%) respondents were unmarried.
- 23(46%)Respondents were married.

Table No-1

Number and percentage distribution of respondents according to their working experience in years

S.N.	*Working experience*	*Number(f)*	*percentage*	*Mid value(x)*	*fx*
1	Working experience of 1-5years	33	66%	3	99
2	Working experience of 6-10years	5	10%	8	40
3	Working experience of 11-15years	5	10%	13	65
4	Working experience of 16-20years	7	14%	18	126
	Total	*50*	*100*		*330*

$\sum fx = 30$

$$\text{Mean work experience} = \frac{\sum fx}{N} = \frac{330}{50} = 6.6\text{years}$$

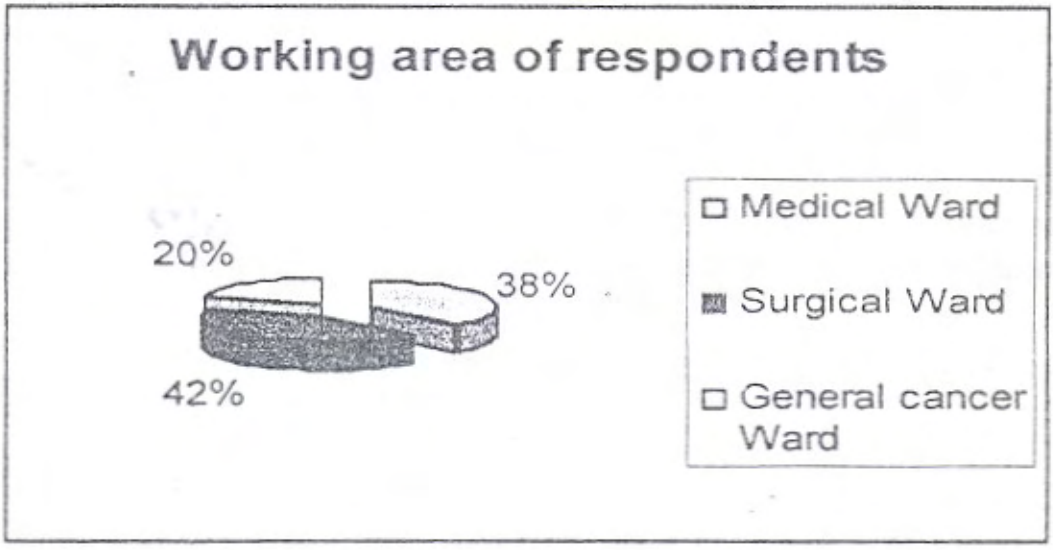
The above table shows that:

- Out of 50 respondents 33(66%) had 1-5years of working experience with cancer patient.

- 10% of respondents have 6-10 yrs experience, 10% of respondents have 11-15 yrs and 14% of respondents have 16-20 yrs of working experience.
- The mean work experience was 6.6yrs
- Most of the respondents had 1-5 yrs of working experience (66%). It may be due to large number of staffs were P.C.L. Nursing level.

Pie chart No-3

Number and percentage distribution of respondents according to their working area.

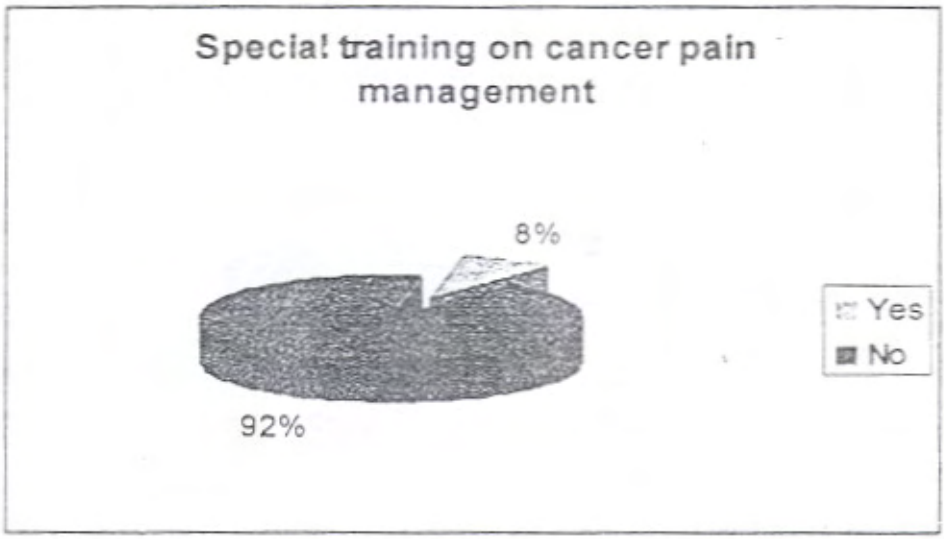


The above pie-chart shows that:

- Out of 50 respondents 21(42%) working in surgical ward.
- 19 respondents (38%) working in medical ward and 10(20%) working in general cancer ward.

Pie-chart No-4

Distribution of respondents according to their extra training/ special course regarding cancer pain management.

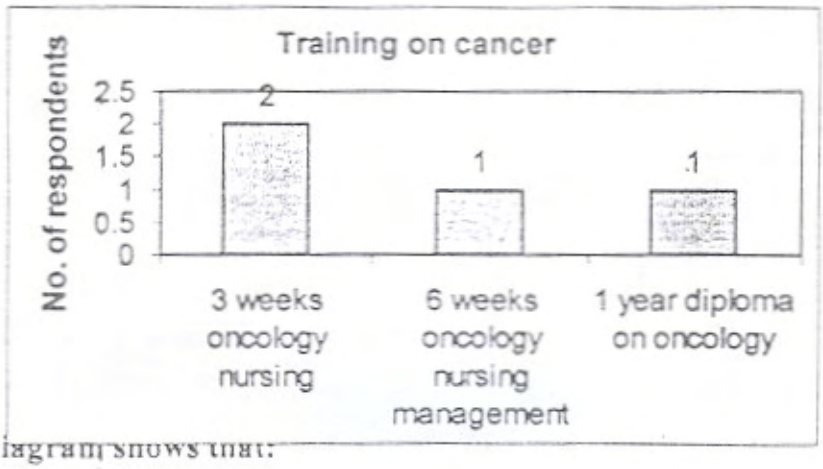


The above pie chart show that:

- Only 4 (8%) respondents had got training on cancer and cancer pain management, other 92% didn't have any training regarding cancer.

Bar diagram No-1

Number distribution of respondents according to their type of extra training special course on cancer.



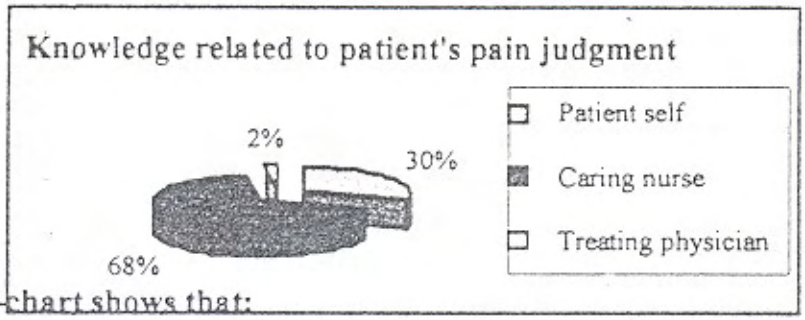
Above diagram shows that:

- Among 4 respondents, 2 got 3 weeks of oncology nursing training in Calcutta, 1 got 6 weeks of oncology nursing management in BP cancer hospital and 1 got one year of Diploma in oncology course in Calcutta.

4.3 Knowledge regarding cancer pain management

Pie chart No-5

Number and percentage distribution of respondents according to their knowledge related to patient's pain judgment.

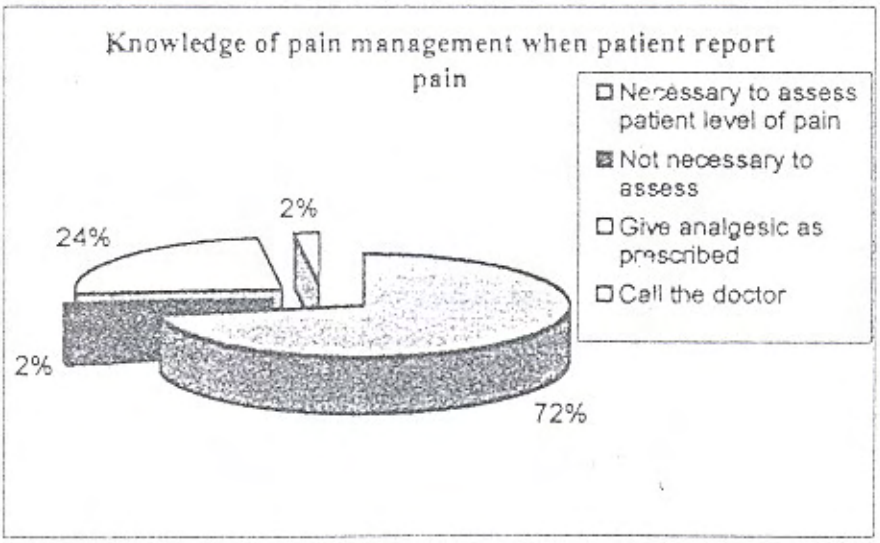


Above pie-chart shows that:

- Out of 50 respondents 34(68%) answered that patient's pain is most accurately judged by caring nurse, 15(30%)of respondents answered that patient's pain is most accurately judged by patient self and 1(2%) of respondents answered that patient's pain is most accurately judged by treating physician.
- Majority of respondents answered patient's pain is most accurately judged by caring nurse, it may be due to misconception of pain and objective judgement of pain.

Pie chart No-6

Number and percentage distribution of respondents regarding the knowledge of management, when patient reports having pain.

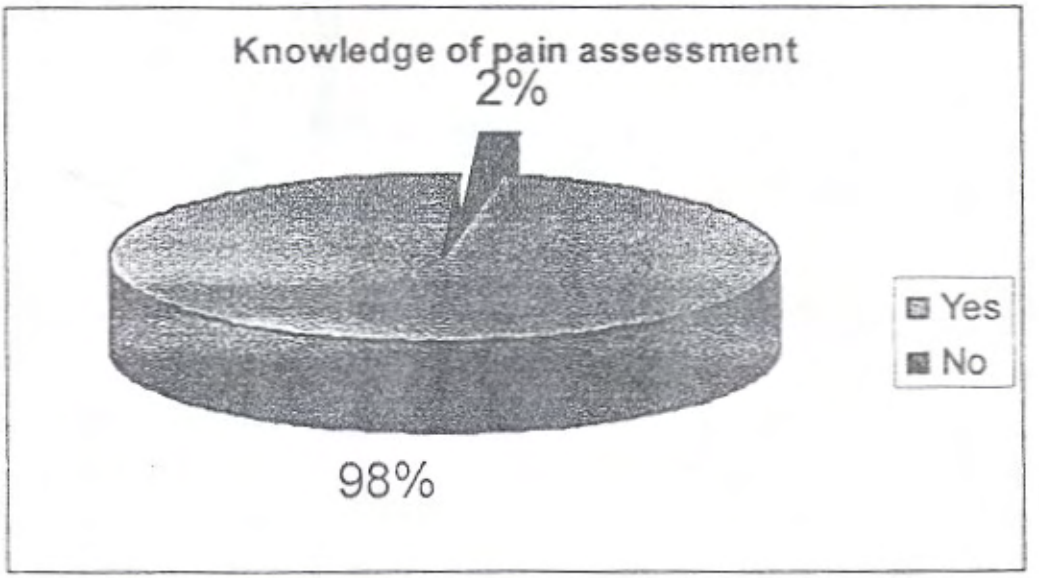


The above pie-chart shows that -

- Majority of 36(72%)respondents felt the need of assessing the level of patient's pain when a patient reports having pain, whereas 12(24%) respondents felt the need of giving analgesic as prescribed and 1(2%)respondents thought that it is not necessary to assess the level of patient's pain and 1(2%) respondents call the doctor when patient reports having pain .
- Most of nurse has knowledge on need of pain assessment before giving medication.

Pie Chart No. 7

Number and percentage distribution of respondents in relation to pain assessment before giving pain medication.

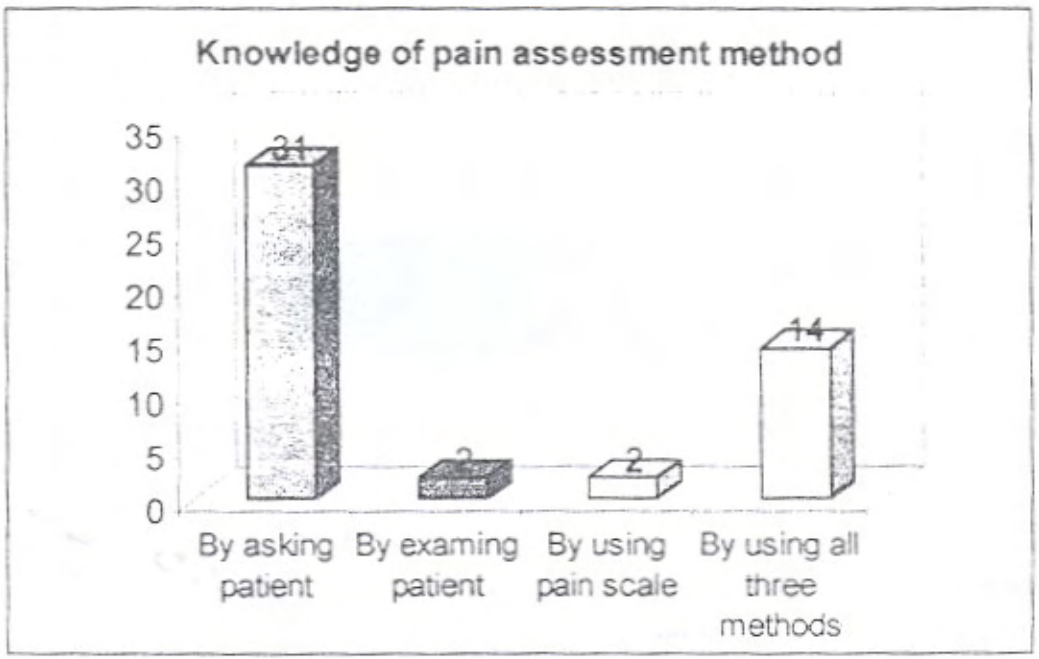


Above figure shows that:

- 49(98%) of respondents assess patient's pain before giving pain medication and 1 (2%) of respondents do not assess the patient's pain. It shows that around all of staffs assess the level of patient's pain according to their knowledge and experiences.

Bar diagram No. 2

Number and percentage distribution of respondents in relation to knowledge of pain assessment method.



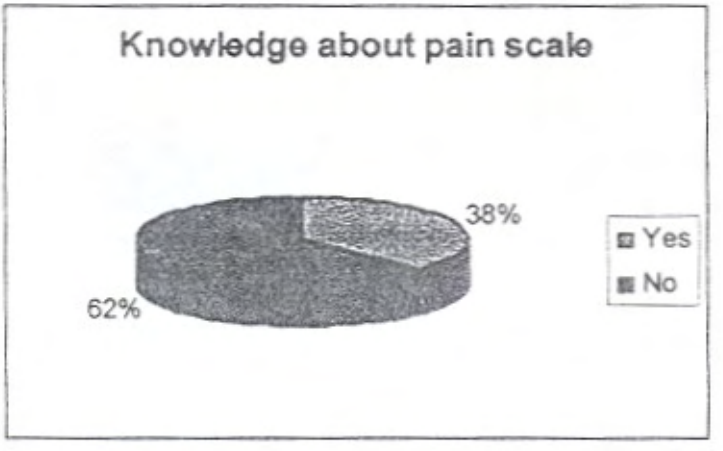
N = 49

The above diagram shows that:

- Majority of respondents 31(63.26%) assess the patient's pain by asking patient, 4.08% of respondents assess patient's pain by examine the condition of patient, 4.08% of respondents assess the patient's pain by using pain scale and 14(28.57%) of respondents assess the patient's pain by using all of the three methods. It shows that asking patient about intensity of pain in common practice for pain assessment before giving pain medication.

Pie chart No. 8

Number and percentage distribution of respondents in relation to knowledge about pain scale.

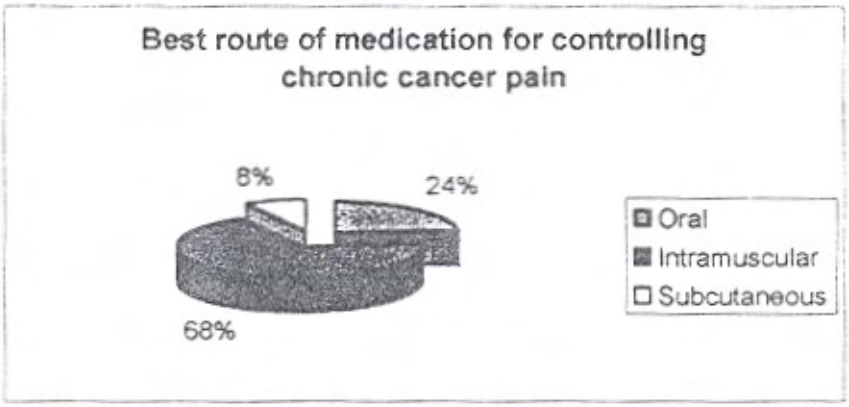


The above pie chart shows :

- Out of 50 respondents, 19 (38%) of respondents have knowledge about pain scale and 31(62%) of respondents did not have knowledge about pain scale.
- Among those of known respondents, they only heard about pain scale and very rarely use the pain scale for pain assessment because previous diagram shows that only 4% had used pain scale for patient's pain assessment. It shows that, though, nurses have knowledge about pain scale, they did not use in practical setting .

Pie chart no. 9

Number and percentage distribution of respondents knowledge regarding the best route of medication for controlling chronic cancer pain.

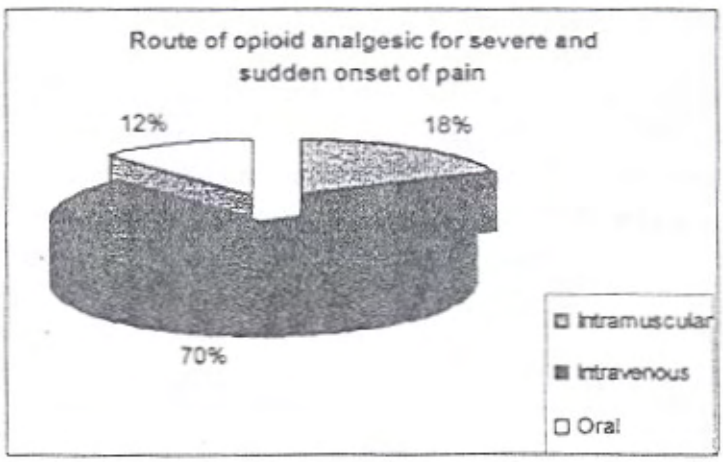


The pie chart, shows that:-

- 68% of respondents answered the intramuscular route as best route of medication for controlling chronic cancer pain and 8% answered the subcutaneous route as best route for long term effect of medication for controlling chronic cancer pain.
- Out of 50 respondents, only 12(24%) respondents answered correctly as oral route is the best route of medicatrion for controlling chronic cancer pain.
- It shows that nurses had least konweldege on best route of analgesic for chronic cancer pain management.

Pie chart No. 10

Number and percentage distribution of respondents knowledge regarding the recommended route of opioid analgesic for severe and sudden onset of cancer pain.

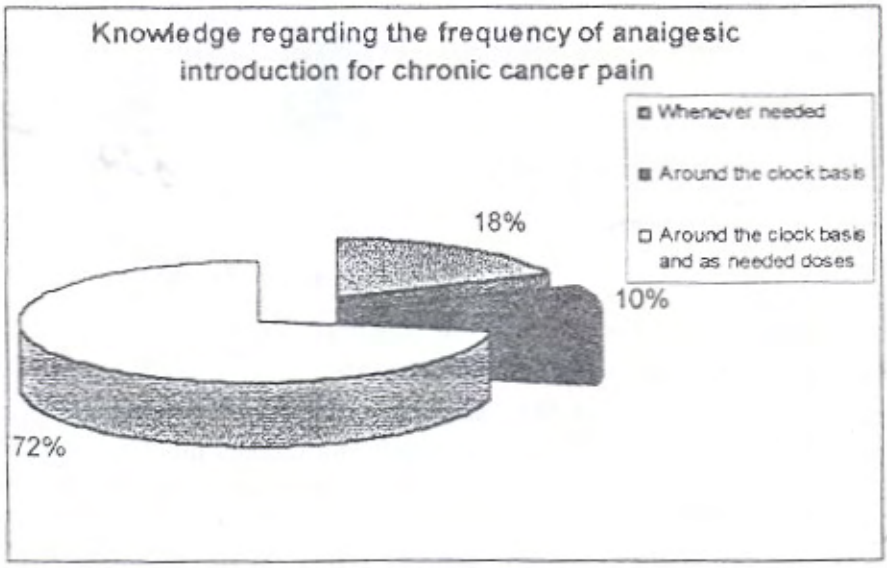


The above pie chart shows that:-

- 70% of respondents correctly answered as intravenous route is the recommended route of opioid analgesic for serve & sudden onset of cancer pain, 12% of respondents answered the oral route as recommended route and 18% answered the intramuscular route as recommended route of opioid analgesic for serve and sudden onset of cancer pain .
- it shows that majority of the respondents have good knowledge for sudden and severe onset of cancer pain.

Pie chart No. 11

Number and percentage distribution of respondents' knowledge regarding the frequency of analgesic introduction for chronic cancer pain.

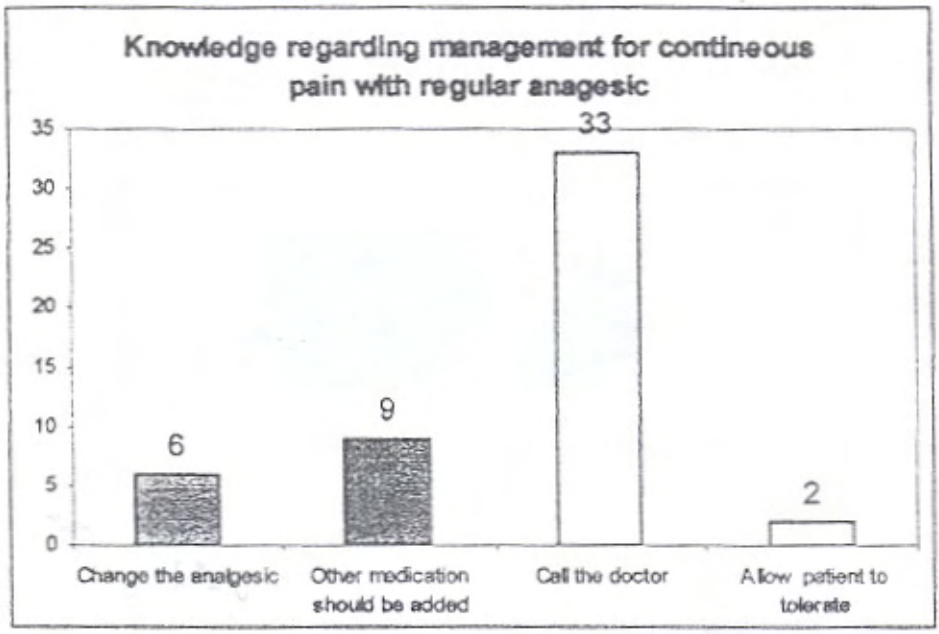


The above pie chart shows that:-

- 72% of respondents have knowledge on giving an around the clock basis and as needed doses of analgesic for chronic cancer pain. 10% of respondents provided an around the clock basis analysis for cancer patients and 185 of respondents give analysis whenever it is needed (PRN or SOS) basis for chronic cancer pain.

Bar diagram No-3

Number and percentage of respondents in relation to knowledge regarding to management for continuous pain with regular analgesic.

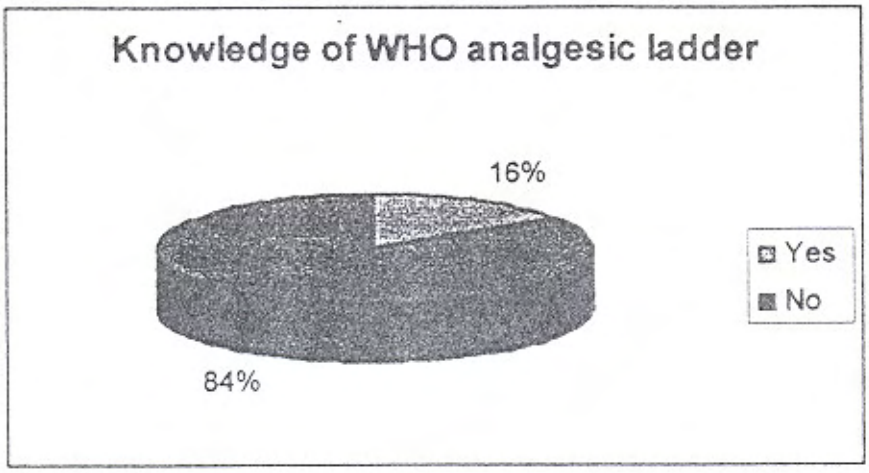


The above bar diagram shows that-

- Majority of respondents 33(66%) gave correct answer because they have good knowledge about call the doctor for other medication if pain is continuous with regular analgesic, 18%of respondents answered to add other pain medication if pain is continuous and 4% of respondents answered to allow patient to tolerate pain as much as possible. It is patient's right to become a pain free state.

Pie Chart no. 12

Number and percentage distribution of Respondents regarding knowledge of analgesic ladder prescribed by WHO.



Above pie chart shows that:

- 16 %(8) of Respondents know about WHO analgesic ladder and 84% have not any knowledge and did not heard about WHO analgesic ladder.
- Respondents have least knowledge on WHO analgesic ladder; it may be due to lack of subject in curriculum and lack of exposure with such ladder.

Table no. 2

Number and percentage distribution of respondents' knowledge related to steps of WHO analgesic ladder.

N=8

S.N.	Knowledge about steps of WHO analgesic ladder	Number	Percentage
1	2 steps	1	12.5%
2	3steps	4	50%
3	4 steps	3	37.5%
	Total	*8*	*100%*

The above table shows that:

- Out of 8 respondents, who knows about WHO analgesic ladder, 50%(8) know about the correct steps of its ladder as 3 steps, 37.5%

answered 4 steps and 12.5% answered 2 steps contain in WHO analgesic ladder.

- The correct response is given by those respondents who worked in general cancer ward.

Table No. 3

Number and percentage distribution of respondents in relation to knowledge of useful medication for cancer pain.

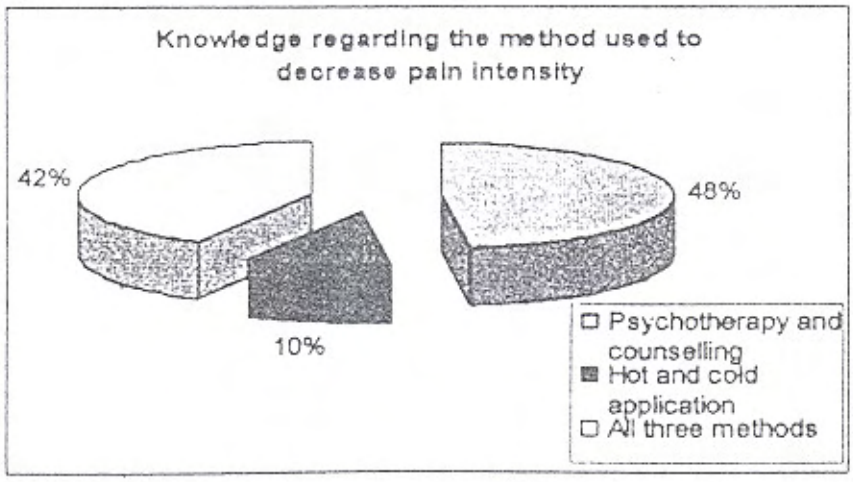
S.N.	Knowledge about medication	Number	Percentage
1	NSAID	*	*
2	Opioid analgesic	36	72
3	Adjuvant drugs	*	*
4	All of the above(NSAID,opioid and Adjuvant drug)	14	28
	Total	*50*	*100*

The above table shows that:

- Majority of respondents 72% answered that opioid is useful medication for cancer pain and 28% response as NSAID, opioid and adjuvants drugs are useful medication for cancer pain.
- Most of respondents think that opioid is best analgesia for cancer pain, it may be due to that in medical or surgical ward most of time drug prescribe for pain control is opioid.

Pie chart no. 13

Number and percentage distribution of respondent's knowledge regarding the methods used to decrease patient's pain intensity

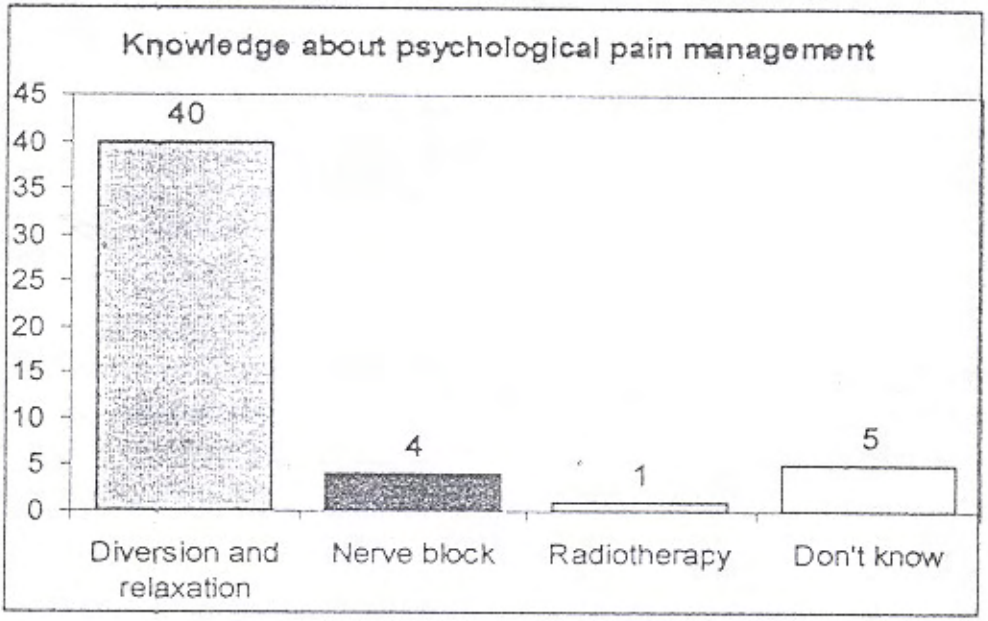


The above pie chart shows that: -

- 48% of respondents answered that psychotherapy and counseling decreased pain intensity, 10% responses that hot and cold application decrease patient's pain intensity and 42% of respondents correctly answered that all the three measures (hot and cold application, psychotherapy and counselling and acupuncture) decreased the patient's pain intensity.
- Respondents have low knowledge because of lack of exposure to pain management in practical setting.

Bar diagram No. 4

Number and percentage distribution of respondent's knowledge about psychological pain management

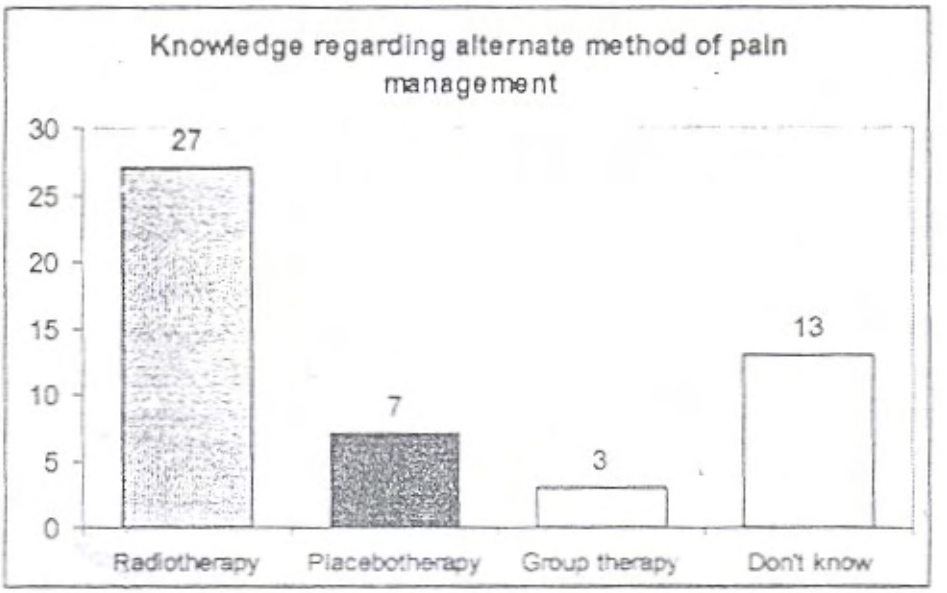


Above bar diagram show that:

- Majority of respondents (80%) have good knowledge regarding psychological pain management as diversion and relaxation can best intervened psychological pain. 8% of respondents answered that psychological pain can be intervened by nerve block and 2% of respondents gave radiotherapy as psychological pain intervention.

Bar diagram No. 5

Number and percentage distribution of respondents regarding the knowledge of alternate method of pain management besides drugs therapy.



The above bar diagram shows that-

- 54%of respondents answered that radiotherapy can be used to relieve pain besides drugs therapy whereas 14% answered that placebo-therapy and 6% answered group therapy to relieve pain besides drug.
- 26%of respondents don't know about other methods of pain relieve besides drug, It may be due to lack of exposure to cancer department.

Table No-4

Number and percentage of distribution respondent's in relation to relieve of pain by mental distraction. N=50

S.N.	*Responses about mental destraction to relieve pain.*	*Number*	*Percentage*
1	Agree	13	26%
2	Partially agree	28	56%
3	Disagree	3	6%
4	Don't know	6	12%
	Total	50	100%

Above table shows that-

- Out of 50 respondents, 13(26%) respondents agreed that mental destraction helps to reduce or relieve pain, 56% respondents partially agree towards this statements and 3(6%)respondents totally disagree that mental destruction relieve pain.

- 6(12%) respondents don't know about the affect of mental destraction to relieve pain.

Table No-5

Number and percentage distribution of respondents in relation to their knowledge about their role in pain management.

S.N.	*Role of nurses in pain management*	*Number*	*Percentage*
1	Nurses should assess the pain and give medication as prescribed	49	98%
2	Give sedatives	1	2%
3	It is doctor's duty only	*	*
4	Ignore the patient	*	*
	Total	50	100%

The above table shows that-

- 49(98%) of respondents answered that their role in pain management is to assess the patient's pain and give pain medication as ordered and only 2%of respondents answered that give seuative is only their role in pain management.
- Respondents have very good knowledge on their role in pain management.

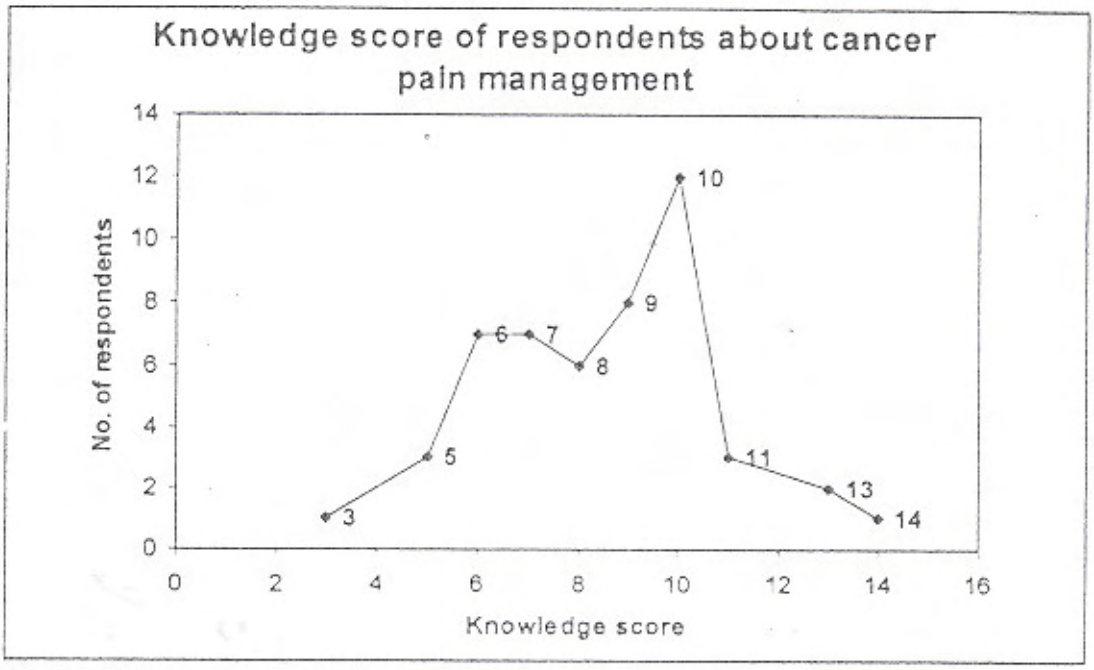
Knowledge score of cancer pain management

There are 15 multiple-choice questions, which had only one correct response for each question. For each response, score '1' is for correct response and score '0' was graded for incorrect response. The maximum possible knowledge score was 15 and minimum (lowest) score was '0'.

The knowledge score was obtained by totalling the responses to each three section of questionnaire i.e. pain assessment, use of medication and nursing management of pain.

Frequency polygon No. 1

Distribution of respondents in relation to knowledge of cancer pain management.



The above frequency polygon shows that-

- Knowledge score of respondents range between 3-14. Out of maximum score of 15, 14 was the highest score and 1 respondents only achieved the 14 score. One respondent obtained least knowledge score of 3 out of 15,most of respondents obtained 6-10 score on pain management knowledge.
- The mean knowledge score was 8.44 with medium 9 and mode 10. the standard deviation was 2.1892.

4.3 Attitudes regarding cancer pain management

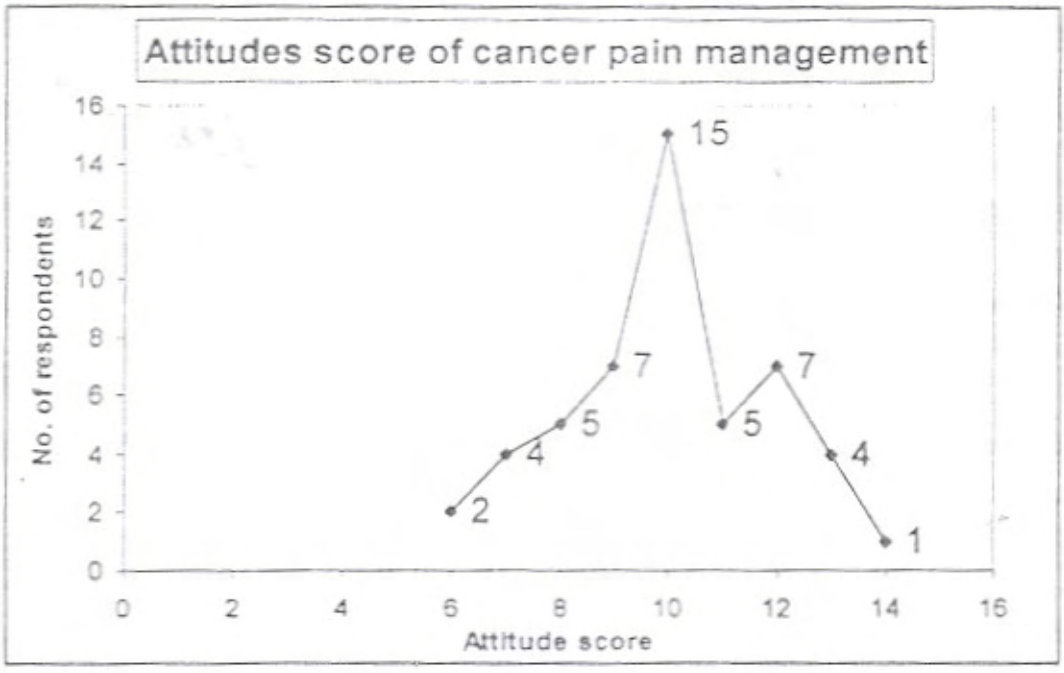
There was 15 items used to assess the nurses' attitudes towards cancer pain management. The items were based on likert type scale (summated scale), In which, there were four categories of agreement and disagreement. Such as strongly agree, agree, disagree, and strongly disagree. An approximately equal number of positively and negatively worded statements were chosen to avoid bais.

During analysis, the respondent's responses of strongly agree and agree was kept as positive response and strongly disagree and disagree response was kept as negative response. Score '1' is awarded for positive response and score '0' was graded for wrong response. The positive response is rewarded as positive if respondents response in strongly agree and agree for positive statement and regarded as wrong or '0' score if respondents response strongly disagree or disagree for positive statement and vice-versa.

The highest attitude score was 15 and lowest attitude score was '0'. A high score consistently reflects positive attitudes and a low score reflects negative attitudes.

Frequency polygon No-2

Distribution of respondents according to cancer pain management attitude scores.



The above frequency polygon shows that-

- Attitude scores of respondents ranging from 6-14 score.
- Out of maximum 15, 1 respondent obtained 14 attitude score.
- Majority of respondents obtained 10 score which is middle score.
- 2 respondents have least score of 6, out of 15 attitude score.

- 34%of respondents have more than 10 attitude score and 66% of respondents have 10 and less than 10 attitude score.
- The mean attitude score was 9.96 with median 10 and mode value 10. The standard deviation was 1.8966.

4.4 Hypothesis Testing

Hypothesis No-1

Nurses' who have more working experience will have higher knowledge score on cancer pain management than those nurses with less experienced.

Table No-6

Cancer pain management knowledge scores according to length of working experience. N=50

S.N.	*Length of working experience*	*Number*	*Mean value*	*S.D.*	*df*	*t- value*	*Z-value*
1	More than 5 years	17	7.7	2.22	48	2.20	2.23
2	Less than 5 years	33	9.15	2.126			

The above table shows that-

- The mean knowledge score and standard deviation of respondents who had more than 5 yrs of working experience and those had less than 5yrs of working experience.
- The mean cancer pain management knowledge score of more than 5 years of working experience was 7.7 and those of less than 5 years of working experience was 9.15.
- The tabulated value of Z at 0.05 level of significance is 1.96. Since the computed value of Z is greater than its tabulated value; the null hypothesis Ho is rejected i.e. there is significant difference in knowledge according to working experience (Z = 2.23).
- The tabulated value of 't' at 0.05 level of significance in df 10 + 40 - 2 = 48 is 2.00. As calculated value (2.20) is greater than tabulated value, the hypothesis is accepted i.e. statistically nurses having more than 5 years working experience have higher knowledge score than those of less experienced.

Hypothesis no.2

The knowledge score of the nurses with higher educational background will be significantly high than those nurses with lower educational background.

Table No. 7

Cancer pain management knowledge score according to educational background N=50

S.N.	*Educational level of respondents*	*Number*	*Mean*	*S.D*	*df*	*t-value*	*z- value*
1	P.C.L. nursing	42	8.0476	2.19	48	0.216	0.1779
2	Bachelor nursing	8	8.25	3.03			

The above table explain that:-

- The mean knowledge score and standard deviation of P.C.L. passed respondents were 8.0476 and 2.19 respectively and those of Bachelor nursing passed respondents were 8.25 and 3.03 respectively.
- The hypothesis was rejected because t-value = 0.216 and z-value = 0.1779 i.e., Statistically the knowledge score of the nurses with higher educational background have no significantly high than those nurses with lower educational background or there isnot association of knowledge score according to educational background .

Hypothesis No.3

Nurses working in cancer unit have good knowledge than those working in other ward

Table no.8

Cancer pain management score according to working area. N= 50

S.N.	*Working area*	*Number*	*Mean score*	*S.D.*	*df*	*t- value*	*Z- value*
1	Working in cancer ward	10	11.2	1.47	48	5.476	6.27
2	Working in Medical/ Surgical ward	40	7.75	1.7986			

The above table state that:-

- There were 10 respondents working in cancer ward, whose mean knowledge score and standard deviation was 11.2 and 1.47 respectively.

- 40 respondents were working in medical/surgical ward whose mean knowledge score and standard deviation was 7.75 and 1.7986.
- Since the computed value of 't' and 'Z' was greater than its tabulated value (t = 5.476; Z = 6.27), the hypothesis was accepted and there is significant difference in knowledge according to working area.

Hypothesis No.4

Nurses having higher knowledge scores have higher (better) attitude scores.

Table No.9

Cancer pain attitudes score according to knowledge score of respondents.

N=50

S.N.	*Level of knowledge score*	*Number*	*Mean attitude score*	*S.D.*	*df*	*t- value*	*Z- value*
1	Respondents with high knowledge score	18	10.88	1.55	48	2.966	2.64
2	Respondents with low knowledge score	32	9.5	1.71			

The above table shows that:-

- Respondents with high knowledge score (≥10) have 10.88 of mean attitude score and lower knowledge score have 9.5 mean attitude score.
- Decision, since the computed value of 't' and 'Z' value is greater than its tabulated value, statistically there was significant difference in attitude score according to higher knowledge score.

CHAPTER-V

FINDING, CONCLUSION AND RECOMMENDATIONS

This chapter deals with the finding of the study, summary of the study, conclusion, implications and recommendation for future study, and comparison of finding to literature review. Besides these, strength and limitations of the study, difficulties faced during study, plan for dissemination have also been enclosed in this chapter.

5.1 Finding of the study:

The collected data were thoroughly analysed and interpreted in terms of finding and stated objectives. The major findings of the study are as follows; which have also been tried to compare with reviewed literature.

Demographic characteristics:

1. Among 50 respondents, majority of respondents 84%(42) had completed P.C.L. nursing and 16% of respondents had completed B.N. degree including one respondent had completed diploma in oncology course.
2. 54% of respondents are unmarried and 46% of respondents are married.
3. Regarding working experience, out of 50 respondents; 66% had 1-5 years of working experience with cancer patients, 10% have 6-10 years of working experience,10% also have 11-15 years of working experience and 14% have 16-20 yaers of working experience.
4. According to present time of working area, 80% of respondents were working in medical/ surgical ward and 20% in general cancer ward.
5. Regarding special training on cancer(pain management), only 8% had special training on cancer with various duration.
6. Among 50 respondents , 80% from TUTH and 20% were from BCCC.

Knowledge regarding cancer pain management:

1. Regarding knowledge of respondents about patient's pain judgement, 68% of respondents answered that patient's pain intensity is best

judged by caring nurse, 30% said that patient self only give the accurate pain judgement and only 2% of respondents answered that patient's pain is best judged by treating physician.

2. Regarding the knowledge about nurses action after reporting pain, 72% felt that it is necessary to assess level of patient's pain,24% answered to give analgesic as prescribed, 2% felt that there is not necessary to level of pain and 2% think that doctor should be called if patient report pain.
3. 98% of respondents assess patient's pain before giving pain medication and only 2% hadn't assess patient's pain.
4. Regarding knowledge about methods of pain assessment used by respondents to assess pain, 63.3% assessed by asking patient, 4.1% assessed by examing patient, 4.1% use pain scale for assessment and 28.6% used all three methods to assess pain.
5. Among 50 respondents, 38% have knowledge about pain scale and 62% don't know about pain scale.
6. 24% of respondents have correct knowledge that oral route is best for controlling chronic cancer pain, 8% answered as subcutaneous route and 68% think that intramuscular is best route for controling chronic cancer pain.
7. Regarding knowledge about recommended route of opioid analgesic, 70% give correct response as intravenous is best route, 12% answered as oral route and 18% thinks that intramuscular is the best route for severe and sudden onset of pain.
8. 72% of respondents knew that analgesia should be given an around the clock basis and as needed doses for cancer pain, 18% answered that analgesia should be given whenever it is needed and 10% response that analgesia should be given an around the clock basis.
9. Regarding knowledge about related action for contineous pain with regular analgesics, 66%of respondents call the doctor, 18% added other medication with previous one,12% answered that analgesic should be changed and 4% think that patient is allow to tolerate pain.
10. Only 16% of respondents knew about analgesic ladder and 84% of respondents didn't know about this ladder.
11. Among those of 16%, who know about analgesic ladder, 4(50%) gave correct answer as 3 steps in WHO analgesic ladder 12.5% answered that it contain 2 steps,and 37.5% think that it contain 4 steps, which were wrong.

12. Regarding knowledge about medication for cancer pain, 72% answered that opioid is useful, only 28% correctly answered that NSAID, opioid and adjuvant drugs are useful for cancer pain.
13. Out of 50 respondents, 48% answered that psychotherapy and counselling decreased pain intensity and 10% thought that hot and cold application does it. Whereas, 42% of respondents have good knowledge about decreasing pain intensity by hot & cold application, psychotherapy and accupuncture.
14. For psychological pain intervention, 80% of respondents answered correctly as diversion & relaxation so majority have good knowledge.
15. Regarding knowledge about method for relief, 54% have good knowledge and correctly answered as radiotherapy, 14% answered as placebotherapy and 6% as group therapy. Among those , 26% have no any ideas and knowledge about this statement.
16. 98% of respondents felt that their role was to assess the level of pain and give medication as ordered in pain management,.
17. The mean pain management knowledge score was 8.44 which range between 3-14. None of them have obtained highest score of 15. The median was 9 with mode 10 and standard deviation 2.1892.
18. The pain attitude score was ranged from 6-14 with mean value 9.96, mode10 median 10 and standard deviation 1.8966. None of them obtained the highest score of 15. 17 respondents obtained more than 11 score i.e. positive score and 66% have 10≤10 attitude score i.e. negative. Most of the nurses have negative attitudes towards pain management.
19. Statistically there was significant difference in nurses' knowledge according to working area i.e. nurses working in cancer unit have higher knowledge than those working in medical/surgical ward(Z = 6.27; t = 5.476).
20. There was significant difference in attitude score according to knowledge score (Z = 2.966; t = 2.64)
21. Statistically, there was significant difference in knowledge according to working experience (Z = 2.23; t = 2.20).
22. The second hypothesis was rejected as Nurses' having higher educational background have higher knowledge (t=0.1779; z = 0.216) so there was no significant difference in knowledge according to educational background.

5.2 Discussion:

The present study revealed that the overall pain management knowledge is average. In all three areas of knowledge questionnaire, more than 50% of respondents answered correctly. Of the three areas of questionnaire, the highest correct response was on pain assessment and lowest response was on use of medication. Only 38% know about pain scale and only 8% of respondents correctly know about WHO analgesic ladder. It may be due to lack of exposure and non use of these ladder and scale. About all of the respondents know about their role on pain management as assessment but have least knowledge on other areas of nursing management. More than 50% of respondents have knowledge about analgesic administration as regular and PRN basis. The mean pain management knowledge score was 8.44 with median 9, mode 10 and standard deviation 2.19.

Only 34% had more than 10 attitudes score i.e. positive score. The mean attitude score was 9.96 with median 10 mean 10 and standard deviation 1.8966 so statistically the attitude was average.

The significance of hypothesis was tested by using 'Z' value and 't'- value, it shows that statistically three hypothesis were accepted and one was rejected i.e. nurses who were working in cancer ward have more knowledge than nurses who were working in medical/surgical ward, Nurses with more working experience have more knowledge about cancer pain management than those with less experienced and Nurses with higher knowledge score have higher (better) attitude score.

The acceptance of hypothesis might be due to more knowledge about pain to nurses working in cancer ward because of continuous learning and practical use in daily practice, the other possible reason might be that they copied the answer from each other and there was no equal sample in two groups.

5.3 conclusion:

Based on the finding and discussion of the study, this conclusion was drawn; the most knowledgeous areas were pain assessment, role of nurses on pain management and frequency of analgesic introduction for chronic cancer pain and psychological pain management. The most prevalent knowledge deficit was on use of medication (opioid), route of opioid administration, pain scale and

WHO analgesic ladder. They have inadequate knowledge and poor attitude in general so need for pain education of cancer and cancer pain management. As the nursing curriculum have no specific content about cancer and cancer pain; also training section hasn't recognized the pain management as major subject so nurses have least knowledge about this subject. So this study concluded that the curriculum should have specific content, time to time training should be conducted for nurses and nurses attitude should be increased which will help to improve knowledge and attitude towards cancer pain so that quality of nursing care is increased and patient's quality of life is also increased.

5.4 Comparison of finding to literature review:

1. **Man women C.B. (2000)** Found that master degree prepared scored significantly higher (mean = 31.5) than nurses with all other level of educational preparation. But in my study, Higher educational background (bachelor in nursing) haven't significantly higher score (Mean = 8.25) than lower educational background (mean = 8.04) with 't' = 0.216 & Z = 0.1772.

2. **A Study conducted by O' Brien S. et.al. (1996)** highlighted that among 1400 RNs, nurses who have cared for patients with cancer are more knowledgeable and have more liberal attitude towards pain management from nurses who have not cared for the patient with cancer. Similarly in my study, there is significantly higher knowledge in nurses working in cancer ward than medical/surgical ward (t = 5.476; Z = 6.27) with mean 11.2 & 7.7 and standard deviation 1.47 & 1.7986.

3. **Ryan (1994)** concluded that oncology nurses were significantly more knowledgeable about pharmacology management of cancer pain than were the nurses in LTCFs. Similarly, in my study, more than 80% of oncology nurses correctly answered the pharmacological management and pain assessment, with mean knowledge score 11.2 and standard deviation 1.47.

4. My research finding was also compatible with the finding of **Bruneier, Carson and Harrison (1995)**, which reported that nurses from hospital oncology units have more knowledge about pain than nurses from other hospital units.

5. The research finding is also compatible with the research of **Fothergill B. & wilson B. (1992).** They concluded that hospice nurses had significantly more pain knowledge (P<0.001) with a mean of 67.5%

correct compared to the hospital nurses who had a mean of 55.3 correct. In my study also general cancer nurse have significantly higher knowledge (t = 5.476;Z = 6.27) with mean score 11.2 than medical/ surgical ward nurse with mean knowledge score 7.75.

6. **Furstenberg et.al. (1998)** concluded that nurses were more knowledgeable about pain assessment. The research finding also shows that more than 50% of nurses have knowledge on pain assessment and 98% of nurses assess the patient's pain before giving pain medication.

7. **Lebovits et. al. (1997) and Mc caffery M. Ferrel, B.K. (1995)** concluded that there was serious knowledge deficit exist in the care of patient with cancer pain. This finding is partially accepted because the finding of this research shows that nurses have average knowledge about cancer pain with mean knowledge score 8.44.

8. **Kubeeka, K.E. et. al. (1996)** show that overall pain management score was 67.5% . The major area of knowledge deficit was behavioural indicators of pain, classification of opioid analgesic , adjuvant medication and incidence of addiction. In this research findings also shows, nurses have serious knowledge deficit on use of analgesic, adjuvant medication, WHO analgesic ladder and use of pain scale.

9. **Short, Burnett, Egbert (1990)** Concluded that patient gender is reported to affect some nurses decision about pain. Some nurses believe that female requested more pain medication that male. But in my research, 40% nurses agree that female request more medication and 60% disagree about this statement.

10. **Short et. al. (1990)** concluded that young adult request more pain medication than elderly patient, but in my findings 60% agree that young patient request more pain medication and 40 % of nurses disagree towards this statement

5.5 Implication of the study:

Despite the limitation of this small scale study, this study highlighted a number of implications for nursing practice and health.

- **For Hospital:**
  - The finding of the study helps to plan further training on cancer and cancer pain management for nurses to improve their knowledge

and attitude, this will enable nurses to provide better and quality nursing care for patient with cancer.

- The Hospital staffs will know their area of knowledge deficit so they can improve it by self directed learning.

- **For Administrator, policy maker and curriculum developer:**
  - The finding helps policy makers to plan and develop educational package for nurses.
  - This finding suggests curriculum developer to modify and add the content of cancer.

- **For Nursing research:**
  - Further research is needed regarding nurses pain assessment, pain management practice and pain management education in various setting. This study would provide background to other researcher related to this subject and other related studies in future.

- **For Nurse educator:**
  - This study finding may help them to plan focused educational intervention to strengthening education.
  - The finding helps them to conduct regular pain assessment classes which rapidly develop new knowledge.

- **For Nursing:**
  - Although nurses have average knowledge and attitude towards cancer pain, further inservice education will have to improve their knowledge and attitude.

5.6 Recommendations:

1. **For Hospital Administrator and Policy makers:**
   - As lack of knowledge and negative attitude may cause low quality nursing care and this may harm patient's life. So inservice education/training should be given on regular basis to new and old staffs.
   - An educational package should be given for every ward so that nurses can study and follow in any difficult situation.
   - An flow chart for cancer pain management and use of WHO analgesic ladder should be prepared to manage accordingly.

2. **For future researcher:**

i. A comparative study can be carried out between:-

- Two Hospital's nurses
- Cancer hospital nurses and general hospital nurses.
- Doctors and nurses.
- Urban and rural hospital nurses
- Nursing staffs and students.

ii. A quasi experimental study can be conducted in one hospital.

iii. A comparative study can be done by providing educational package.

iv. A study can be conducted on nurses' knowledge about cancer pain assessment.

v. A study can be done on nurses' knowledge and attitude about surgical cancer pain management.

vi. A study can be conducted on nurses' knowledge about post operative pain management.

Vii. This type of study can be done in large scale in different hospital.

5.7 Strengths of the study:

1. This study tried to explore the present knowledge and attitude of nurses about cancer pain management, which is very necessary to manage educational package.
2. The investigator has gained confidence from this study to do large scale research.
3. Research is new subject for an investigator so this study was beneficial for her to carryout further research in future.
4. This study is focused on protecting the rights of respondents by maintaining anonymity and confidentiality.
5. The investigator found adequate journal, books and medline abstract in internet for literature review, from which the researcher has gained a lot of information about the topic.

5.8 Limitations of the study:

1. The study was limited upto 50 samples only in TUTH and BCCC, so it was difficult to generalized.

2. The investigator was not sure whether the respondents had got help from their friends or not because of self-administered questionnaire.
3. Non-probability purposive sampling was adopted to select required sample. Respondents therefore werenot be randomly selected so that they can't be considered as representative of all nursing staffs.
4. The study was limited only after PCL completion with minimum of one-year experience.
5. The study was limited upto cancer, medical and surgical ward only so generalization is difficult.

5.9 Difficulties faced during the study:

1. The investigator didn't get sufficient literature in context of Nepal.
2. The investigator found some difficulties during instrument development, scoring, analysis and interpretation due to lack of experience.
3. Some of the respondents lost the questionnaire and it was difficult to get the lost questionnaire.

5.10 Learning from the study:

1. Gained experience on how to conduct research study.
2. Gained more experience in data collection and analysis.
3. Gained confidence on research report writing.
4. Gained knowledge about the importance of communication and co-operation with different staffs for completion of the study.
5. Gained knowledge and experience about literature review from different citation.

5.11 Plan for dissemination:

After completing research study, the researcher has planned to disseminated the finding to the following:

1. Library of nursing campus, Maharajgunj.
2. Advisor; Mrs Kamala Tuladhar, of this research study
3. Nursing director (Matron) of TUTH.
4. Director of BCCC.
5. NHRC.

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INSTITUTE OF MEDICINE

NURSING CAMPUS, MAHARAJGUNJ

SELF ADMINISTERED QUESTIONNAIRE FOR DATA COLLECTION

Instruction : You are requested to answer following questions. The obtained information will be used for study purpose only & it will be kept confidential with anonymity.

Objectives : To assess nurses' knowledge & attitudes about cancer pain management.

Research topic : Nurses' knowledge & attitudes about cancer pain management.

Part I

Demographic information

1. Educational level:
   a. PCL Nursing ☐ c) Diploma in Nursing ☐
   b. Bachelor in Nursing ☐ d) Master in Nursing ☐
2. Marital status:
   a. Married ☐
   b. Unmarried ☐
   c. Widow ☐
3. Working experience in years:
   .....
4. Working Institute:
   a. TU Teaching Hospital ☐
   b. Bhaktapur Cancer Care Center ☐
5. Working Area:
   a. General Cancer ward ☐
   b. Medical ward ☐
   c. Surgical ward ☐
6. Any special course/training of cancer (pain management)
   a. Yes ☐ b. No ☐

If yes, Topic.....

Duration.....

Part II

Statement related to knowledge

Carefully read the following statement & give your responses by placing a tick mark against the statement in the appropriate box

A pain assessment

1. The patient's pain is most accurately judged by:
   a. The treating physician ☐
   b. The caring nurse ☐
   c. The patient ☐
   d. The visitor or family ☐
   e. Don't know ☐
2. When a patient reports having pain:
   a. It is necessary to assess the level of patient's pain. ☐
   b. It is not necessary to assess pain. ☐
   c. Give analgesic as prescribed. ☐
   d. Call the doctor. ☐
   e. Don't know. ☐
3. Do you assess patient's pain before giving pain medication:
   a. Yes ☐
   b. No ☐

If yes, how do you assess:

   a. By asking patient. ☐
   b. By examing patient. ☐
   c. By using pain scale. ☐
   d. All of the above. ☐
4. Do you know about pain scale:
   a. Yes ☐
   b. No ☐

B. Use of medication

5. The best route for long term effect of medication for controlling chronic cancer pain is:
   a. Oral ☐
   b. Intramuscular ☐
   c. Subcutaneous ☐
   d. Rectal ☐
6. The recommended route of opioid analgesic for severe and sudden onset of cancer pain is:

a. Oral ☐
b. Intravenous ☐
c. Intramuscular ☐
d. Rectal ☐

7. How frequent the analgesia for chronic cancer pain should be given.
   a. An around the clock basis (regularly). ☐
   b. Whenever it is needed (PRN or SOS). ☐
   c. An around the clock basis and as needed doses (regularly + SOS). ☐
   d. Only when patient asked. ☐
8. If pain is continuous with regular analgesic:
   a. Change the analgesic. ☐
   b. Other pain medication should be added. ☐
   c. Call the doctor. ☐
   d. Allow patient to tolerate pain as much as possible. ☐
9. Do you know about WHO analgesic ladder?
   a. Yes ☐
   b. No ☐

If yes, how many steps does it contains:

a. 2 steps ☐
b. 3 steps ☐
c. 4 steps ☐
d. 5 steps ☐

10. What medication is useful for cancer pain?
    a. NSAID i.e. Brufen, Aspirin. ☐
    b. Opioid i.e. Pethidine, morphine. ☐
    c. Adjuvant drugs i.e. prednisolone, antidepressants. ☐
    d. All of above ☐

C. Nursing management of pain

11. Pain intensity can be decreased by:
    a. Hot & cold application ☐
    b. Psycho-therapy & counseling ☐
    c. Accupuncture ☐
    d. All of above ☐
12. Psychological pain can be intervened by:
    a. Nerve block ☐
    b. Diversion & relaxation ☐
    c. Radiotherapy ☐

d. Don't know ☐

13. Besides drugs, other method can be used to relieve cancer pain is:
    a. Radiotherapy ☐
    b. Placebo therapy ☐
    c. Group therapy ☐
    d. Don't know ☐
14. Mental distraction helps to relieve pain & cause pain more tolerable.
    a. Agree ☐
    b. Partially agree ☐
    c. Disagree ☐
    d. Don't know ☐
15. What is the role of nurses in pain management?
    a. Give sedatives. ☐
    b. Nurses should assess the pain and give pain medication as ordered. ☐
    c. It is doctor's duty only. ☐
    d. Ignore the patient. ☐

Part III

Statement related to attitude

Please read the statement given below and give your responses by placing a tick mark against the statement in the appropriate column of the code:-

SA- strongly agree A-agree

D- disagree SD- strongly disagree

SN	Statement	SA	A	D	SD
1.	Pain experience is different in each individual.				
2.	Patients do not tell about their level of pain.				
3.	Patient receiving narcotics the regular basis is at risk for respiratory depression.				
4.	Lack of pain expression means patient is having no pain.				
5.	Pain along with other vital sign in cancer patient, need to assess regularly.				
6.	Continue assessment is necessary for good management of pain.				
7.	Parents should not be present during the painful procedure of their cancer children.				
8.	Pain medication should be given prior to any painful procedure.				
9.	Doctors or nurses' estimation of pain is more valid than the patient's estimation experiences.				
10.	Narcotics given on a regular schedule is better than it is given when needed (PRN) in cancer patient.				
11.	Children under 2 years have decreased pain sensitivity				
12.	Client with chronic pain often have psychological problem.				
13.	Female patient experience more pain and request for pain medication more than males.				
14.	Young adults tolerate less pain and request more pain medication than elderly patient.				
15.	The level of pain experienced by the patient depends on their cultural values & belief.				

Consent agreement

Title of the study :

"Nurses knowledge and attitude about cancer pain management in hospital setting"

I am Roshani Laxmi Tuitui and studying B.N. second year in Maharajgung nursing campus. I am going to do small research study on nurses' knowledge and attitude about cancer pain & its management. Knowledge means possession of facts on various aspects of cancer pain management & attitudes means psychological representation, which predispose an individual to respond in a particular way. I would like to ask you to participate as a subject in my research. If you agree to participate in my research study, I will give you some questionnaire related to cancer pain; it will take 10-15 minutes of your time.

You will be entirely anonymous & your name won't be linked with any of your answer. You give your participation in the study in entirely voluntary. There will not be any direct benefits to you from this study but it will help to understand nurses' knowledge and attitudes towards cancer pain and its management & provides baseline for educational intervention/In-service education/training package for nurses. If possible, I will provide educational learning guide to your unit for study.

Respondents written agreement:

I understand what this research is about to participate in your research study.

Date:

Signature:

APPENDIX 2

TRIBHUWAN UNIVERSITY
INSTITUTE OF MEDICINE
NURSING CAMPUS MAHARAJGUNJ
OPERATIONAL PLAN FOR RESEARCH

	Program	Study Block					NCP II Practicum					Research					Vacation			Research		Study Block
	Month	Magh	Falgun				Chaitra				Baishakh					Jestha				Ashad		
	Date	28	5	12	19	26	4	11	18	25	1	8	15	22	29	5	12	19	26	2	9	16
	Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
S.NO	Particulars																					
1	Literature Review	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X
2	Topic Selection	X	X	X	X																	
3	Narrowing of Problem			X	X																	
4	Topic Presentation					X																
5	Proposal Writing						X	X	X	X	X	X	X									
6	Instrument Development											X	X									
7	Pretest												X									
8	Preparation for Data Collection												X									
9	Data Collection												X	X	X							
10	Data Analysis														X	X			X			
11	Provisional Report Writing																		X	X		
12	Final Report Preparation																			X	X	
13	Revision of Final Report																				X	
14	Computer Work & Report Submission																					X

SUMMER VACATION

त्रिभुवन विश्वविद्यालय
चिकित्सा शास्त्र अध्ययन संस्थान
नर्सिङ क्याम्पस
क्याम्पस प्रमुखको कार्यालय

पो.ब.नं:
महाराजगन्ज
काठमाडौं, नेपाल ।
फोन नं: ४९१२६६, ४९१७२

शास्त्र अध्ययन संस्थान
२०२९

नर्सिङ क्याम्पस, महाराजगंज
सं : २०२९

या — च नं. ५२८/२०२९।०५५

मिति: ०५९।१।१७

विषय : आवश्यक सहयोग गरी दिने बारे ।

श्रीमान निर्देशकज्यू,
त्रि.वि.शिक्षण अस्पताल,
महाराजगंज ।

यस क्याम्पसमा अध्ययनरत बि.एस. दोस्रो वर्षका ७ जना छात्राहरु मिति ०५९।१।१७ देखि ०५९।२।१५ सम्म डाटा कलेक्शनको लागि यस अस्पतालमा आउँदै छन । निज विद्यार्थीहरुलाई सो कार्यको लागि अनुमति तथा आवश्यक सहयोग गरी दिनु हुन अनुरोध गर्दछु ।

१. अजन्ता महर्जन
२. अनुपमा ताम्राकार
३. झानु वैद्य
४. कमला सुवेदी
५. रोशनी लक्ष्मी तुई तुई
६. भारती भेटवाल
७. गीता गुरागाई

बोधार्थ :
श्री मेट्रोनज्यू,
त्रि.वि.शिक्षण अस्पताल,
महाराजगंज ।

श्रीमती गंगा चित्रकार
सहायक क्याम्पस प्रमुख

त्रिभुवन विश्वविद्यालय
चिकित्सा शास्त्र अध्ययन संस्थान
क्याम्पस
क्याम्पस प्रमुखको कार्यालय
क्याम्पस, महाराजगञ्ज
सं : २०२९

दर्ता नं० ५६६
मिति २०२९/०७/१८

पो.ब.नं:
महाराजगञ्ज
काठमाडौं, नेपाल ।
फोन नं: [illegible]

२०२९

च नं. ५६२/२०२८।२९

मिति:०५९।११७

विषय : आवश्यक सहयोग गरी दिने बारे ।

श्रीमान प्रमुखज्यू,
[illegible]
[illegible] ।

यस क्याम्पसमा अध्ययनरत बि.एस. दोश्रो वर्षका छात्रा श्री रोशनी लक्ष्मी तुइ तुइ [illegible] वर्ष [illegible] छात्रा [illegible] त्यस मेडिकलमा आइरहे छन्। [illegible] चिकित्सकहरु को [illegible] आवश्यक सहयोग गरी दिनु हुन अनुरोध गर्दछु ।

श्री राजा रामजी,
आवश्यक कार्यवाहीको लागि
[illegible]
०५९/१/१९

श्रीमती गंगा चित्रकार
सहायक क्याम्पस प्रमुख