

# A Descriptive Study: Assessment of the Level of Anxiety and Hope in Cancer Client Undergoing Radiation Therapy in Selected Hospital, Nagpur, Maharashtra

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## Abstract

The present study has been designed to enhance hoping process to help cancer clients to appraise the illness in a non-threatening manner and feel a sense of control over their illness. It helps in managing uncertainty related to illness and to develop a "fighting spirit" in the clients preventing the development of unhealthy coping mechanisms like depression in clients [1]. With hope even though with poor prognosis, the patient and family can have improved quality of life by discussing and planning what they can get out of remaining days. Positive role of hope in human life, in health and illness is widely recognized [2].

**Keywords:** Cancer; Anxiety; Hope; Radiation Therapy; Health Belief Model.

## Background of the study

*"Cancer puts you to the test and it also brings out the best in you"*

Cancer has emerged as an important health problem in India. Cancer is perceived to be associated with loss, pain, despair; sadness and anxiety are seen as inseparable associates of cancer and its experiences [3], involvement with complicated and fragmented health care delivery system. But studies among cancer clients show that there are great individual differences in the way they cope with the disease and how the significance of the disease is appraised [4]. Hope seems to be one of the strategies for coping with cancer. Even though many cancer clients confront cancer with a hopeful spirit, not all clients are hopeful [5]. Recognizing that the patient is vulnerable, the nurse can help the clients to determine actual hopes as well as sources and threats to hope. Even with There is an old proverb saying "where there is life –there is hope" meaning hope is inseparable to human existence [6].

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## Need of the study

*Anxiety's like a rocking chair. It gives you something to do, but it doesn't get you very far."*

Hope inspiration is interwoven with the concepts of nursing care. Studies show that nursing professionals facilitate hope in clients by nursing interventions the totality of patient by providing physical care, emotional care, and spiritual care and helping to revise and redefine hopes according to the patient's perception to reality [7]. These are also studies, which show that nursing professionals perceive themselves as not adequately prepared to meet the psychological needs of the patient and they may at times hinder the patients hope also [8].

Cancer clients and their treating team consider hope as a healthy way of adaption to illness. As 24 hours caregivers of patient, nursing professionals are in the best position to facilitate this coping mechanism in their patients provided they are adequately equipped with the necessary knowledge and skill in inspiring and instilling hope in clients [9]. Definitely hope is humane. It is reactivated and becomes more dynamic as a healthy way of coping when person is confronted with an existential crisis as in cancer [10]. But a recurrent theme appearing in most of the studies is that, the hoping process in

cancer clients is associated with many factors outside the personal realm of the patient like the family support, the social network available, and the health professionals support and care, opportunity for achieving and experiencing significant events and attainable aims in life, clients faith in spirituality and higher power and their confidence in the treatment and treating team [11]. Due to this the investigator wanted do the study on this topic that anxiety can be reduced and hope is increased by the health professional [16]. Hence, researcher is interested to conduct a study to the level of anxiety and hope of cancer client undergoing radiation therapy with the use of health belief model.

### Objectives of the study

1. To determine the level of anxiety in cancer client undergoing radiation therapy
2. To assess the level of hope in cancer client undergoing radiation therapy.
3. To find out the co-relation between the level of anxiety and level of hope in cancer client undergoing radiation therapy.
4. To determine association between level of anxiety and hope with selected demographic variables

### Sample

100 cancer clients undergoing radiation therapy in radiation therapy unit.

### Sample technique

Non-random purposive sampling technique.

### Sample size

The sample size for the present study is 100 cancer clients between the age group of 30-60 year undergoing radiation therapy.

### Variables

#### Independent Variable

The independent variables are demographic variables such as Age, gender, religion, education, marital status, occupational status, family pattern and family income per month.

#### Dependent Variable

The dependent variables are anxiety and hope level of cancer client.

### Description of the tool

#### Part-1

*Section A:* A questionnaire was developed to identify the demographic data of the cancer client such as Age, gender, religion, education qualification, marital status, occupational status, family pattern, family income per month.

*Section B:* Incidence of illness including duration of diagnosis of cancer, stage of cancer, duration of radiation therapy, Episode of radiation therapy, Availability of emotional Support and Counseling facilities.

#### Part-2

Zung self anxiety scale was designed by William W. K Zung to quantify the level of anxiety for patients experiencing anxiety like symptoms.

#### Part-3

A standardized tool developed by Kaye Herth (1992) and was used to measure hope in the study. It is specially designed to measure the level of hope in cancer patients.

The instrument measures hope in 3 domains. Domain-I: Inner sense of temporality and future-assess hope in cognitive and temporal dimensions. Domain-II: Inner positive readiness and expectancy-assess hope in affective and behaviors dimensions.

HHI contain totally 12 items with 4 items in each domain. Items 1, 2, 6 and 11 measures hope in domain I. Items 4, 7, 10 and 12 measure hope in domain II. Items 3, 5, 8 and 9 measures hope in domain III. The tool is in 4 point Like RT format. Each item in the tool is scored on an ordinal scale from 1-4 where a score of 1 indicates "strongly disagree" and a score of 4 indicates "strongly agree". The items 3 and 6 in the tool are to be reversely scored. The total score could range from 13-48 with a higher score denoting greater hope.

Low= 13-25; Average =26-35; High=36-48

### Data analysis and interpretation

The data collected was organized, tabulated, analyzed and interpreted under 5 sections:

*Section A:* Demographic variables of the cancer client undergoing radiation therapy and incidence of illness.

Section B: Assessment of anxiety of the cancer client  
 Section C: Assessment of hope of the cancer client.  
 Section D: Correlation between anxiety and hope level.

Section E: Association between level of anxiety and hope with selected demographic variable

**Table 1:** Frequency and mean, median, Standard Deviation of anxiety

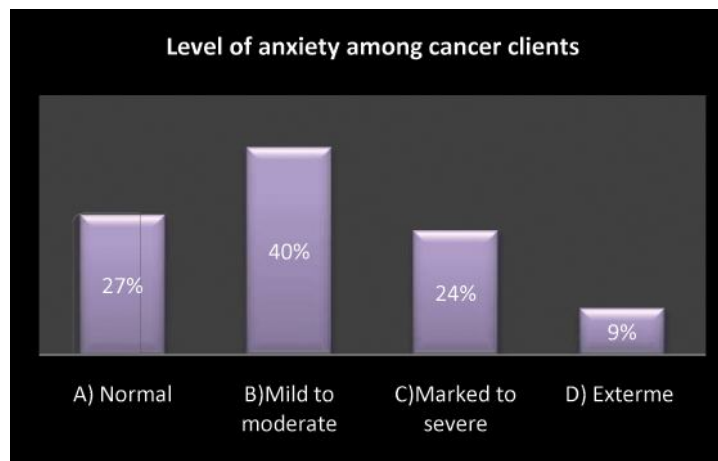
**N=100**

S. No.	Level of Anxiety	Range of score	Frequency	Mean	Median	SD
1	Normal	20-44	27	40.84	41	2.23
2	Mild to moderate	45-59	40	49.195	50	3.796
3	Marked to severe	60-74	24	66.30	63	5.19
4	Extreme	75-80	09	76.44	76	1.66
	Total		100			

Table shows the anxiety level of cancer subjects undergoing radiation therapy, the highest number of subjects have mild to moderate anxiety level is 40

(40%), So it can be concluded that, maximum (40%) of cancer client had mild to moderate anxiety level.

**Fig. 1:** Hope of cancer client undergoing radiation therapy



To assess the level of hope of client undergoing radiation therapy, a standardized tool Herth Hope Index (HHI) was used by the researcher. The questionnaires were 4 point Likert type. Each item in the tool is scored on an ordinal scale from 1-4 where a score of 1 indicates "strongly disagree" and a score of 4 indicate "strongly agree". The item 3 and 6 in the tool were reversely scored. The total score could range from

13-48 with a higher score denoting greater hope.

The Client were categorized into three group based on their hope level. The Client who scored between 13-25 was categorized into Low group, Client who scored between 26-35 was categorized into average group and Client who scored between 36-48 was categorized into high hope level group.

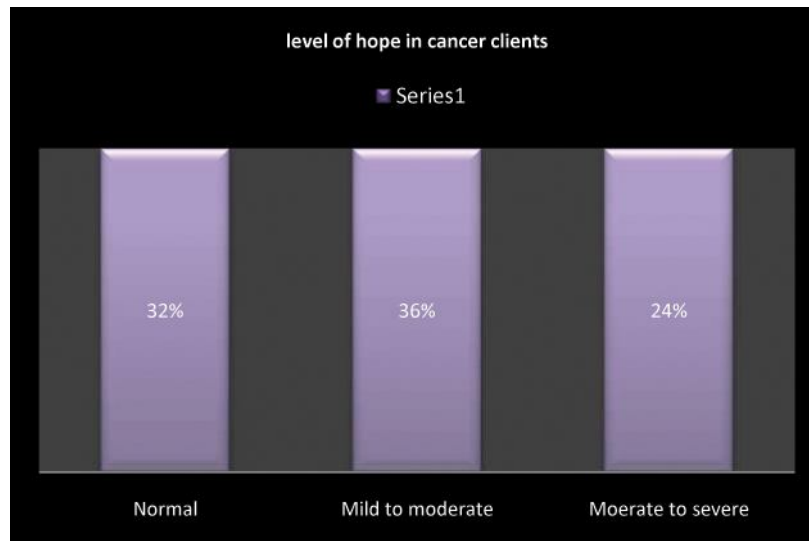
**Table 2:** Frequency and mean, median, Standard Deviation of hope level of cancer client undergoing radiation therapy

**N=100**

S. No.	Level of hope	Range of score	Frequency (f)	Mean	Median	SD
1	Low	13-25	32	22.25	23	2.094
2	Average	26-35	44	30.32	32	3.021
3	High	36-48	24	37.66	38	1.63
	Total		100			

Table shows the hope level of cancer subjects undergoing radiation therapy, the highest number

of subjects have average hope level is 44 (44%),

**Fig. 2:** Finding related to correlation between anxiety and hope level of client

To see the correlation between the anxiety and hope of Client undergoing radiation coefficient of

correlation was calculated data were presented in table.

**Table 3:** Co-efficient of Co-relation between of anxiety and hope level of Client undergoing radiation therapy **N=100**

Variable	Mean	Standard deviation	"r"
Anxiety level	53.38	12.23	-0.53 Negative correlation (mod-erate degree)
Hope level	29.53	6.28	

Table 3 depicts that there was negative correlation is found between anxiety and hope level of cancer client undergoing radiation therapy, in actual

meaning when anxiety level is increases, hope level is decreases.

**Table 4:** Chi-square analysis to find out the association between anxiety and hope levels with selected demographic variables. **N=100**

Variables	Chi-square value	Degree of freedom	Table value	Inference
Age	3.60	6	12.6	Not significant
Gender	3.5	3	7.82	Not significant
Religion	4.96	12	21.0	Not significant
Education	18.39	12	21.0	Not significant
Marital status	1.413	9	16.9	Not significant
Occupation status	5.607	9	16.9	Not significant
Type of family	2.534	6	12.6	Not significant
Family income per month	2.149	9	16.9	Not significant
Diagnosed with cancer	17.39	9	16.9	Significant
Type of cancer stage	2.311	6	12.6	Not significant
Duration of radiation	18.32	9	16.9	Significant
Times of radiation	2.99	9	16.9	Not significant
Emotional support	12.56	9	16.9	Not Significant
Counseling facilities	9.87	9	16.9	Not Significant

Table 4 depicts that analysis to find out the association between the levels of Anxiety with duration of diagnosis as cancer. Table reveals that there was significant association between the levels

of Anxiety with duration of diagnosis as cancer (chi square 18.32) at 0.05 level of significance.

There was significant association between the levels of Anxiety with Duration of receiving radiation

(chi square 18.32) at 0.05 level of significance.

*After analysis of the finding it was found that*

Majority of the Client had Mild to moderate anxiety level (40%) and Most of the Client had average hope level (44%).

Moderate degree negative correlation found between anxiety and hope level of Client with -0.53 coefficient correlations.

Significant relationship was found between anxiety and hope level with du-ration of radiation therapy, diagnosed with cancer.

No significant relationship was found between anxiety and hope level with Age, gender, Religion, Marital status, education, occupation status, Family income per month and times of radiation therapy.

## **Implications**

### *Nursing practice*

Oncology nursing professionals have a significant influence on the family's ability to survive and evolve throughout the cancer care experience. Cancer treatment should become more family-oriented to consider the needs and involvement of the primary caregiver.

### *Nursing education*

By providing educational opportunities that increase nursing professionals' understanding of the physical, psychosocial, and spiritual impact of care giving, future provision of nursing interventions can become more individualized and phase-specific. These personalized interventions would ideally assist caregivers to develop a greater capacity to accommodate to loss, grief, and life changes.

### *Nursing administration*

The nurse administrator has responsibility to provide continuous care to the cancer client and also provide psychological and emotion support to the client. The nurse administrator should help the nurse to know the importance of developing and practicing scientifically based nursing interventions in meeting the holistic needs of the client.

### *Nursing research*

Research on providing appropriate spiritual support to families receiving cancer care is needed for healthcare professionals to use effective

interventions. In addition, a significant gap exists in the current literature regarding the challenges encountered during the illness experience by caregivers of people with the same type and stage of cancer. Another area of required research is how nursing professionals can build trust with non-Western families so that they will be open to nursing professionals providing in-home, culturally sensitive support services.

### *Outcome of the study*

Definitely hope is humane .it is reactivated and becomes more dynamic as a healthy way of coping when a person is confronted with an existential crisis as in cancer but in present study the hoping process in cancer clients is associated with many factors outside the personal realm of the patient like the family support, the social network available the health professionals support and care, opportunity for achieving and experiencing significant events and attainable aims in life, clients faith in spirituality and higher power and their confidence in the treatment and treating team. So by giving Hope to am cancer client helps them in to appraising the illness in a non-threatening manner and feel a sense of control over their illness. It helps uncertainty to develop a "fighting spirit" in the clients preventing the development of unhealthy coping mechanisms like depression in clients.

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