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## Knowledge and Practice (KAP) Assessment of Cancer Patient attendants and evaluation of its influence on cancer treatment.

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### ABSTRACT

There is an increasing incidence of cancer not just in our country but worldwide. The aim of this study is to evaluate socio-demographic data, knowledge, awareness, practice level in cancer patients through assessment of their respective attendants. A self-administered, structured, open ended and pretested questionnaire covering the general characteristics, KAP about cancer, screening and treatments was used to collect responses of cancer patient attendants in KIMS a Teaching Hospital at Hyderabad. Their age group was between 18-79years. The educational preparations of the attendants are as follows: 50 attendants are grouped as “CONTROL”, 50 are grouped as “TEST”. The information thus collected was entered and analyzed in SPSS and Microsoft Excel software. Responses from 100 attendants were recorded and analyzed. The results of both groups i.e. TEST and CONTROL pre-post interventions were tabulated and compared between the groups, educational intervention was given to only test group thus paired t-test results obtained at level of significance 0.005, shown that only test group attendants shown significant difference in aspects of knowledge and practice when compared to that of the control group who received information only at the end of the study. Our study has shown that educational interventional study give high scope in comparative studies where pre-post interventions were in use.

**Keywords :** Oncology, Chemotherapy, Health knowledge and practices.

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## INTRODUCTION

Cancer is a disease characterized by uncontrolled growth of cells .The uncontrolled growth causes a lump called a tumour. These tumors are almost never life threatening. More dangerous, or malignant, tumors form when two things occur: a cancerous cell manages to move throughout the body using the blood or lymph systems, destroying healthy tissue in a process called invasion and that cell manages to divide and grow, making new blood vessels to feed itself in a process called angiogenesis. Cancer is the second leading cause of death. Cancer begins when cells in a part of the body start to grow out of control. There are many kinds of cancer, but they all start because of out-of-control growth of abnormal cells<sup>3</sup>.

### **KAP STUDY:**

It is known that the triad of knowledge and practices in combination governs all aspects of life in human societies; these two components can be defined thus:

- **Knowledge** is the capacity to acquire, retain and use information; a mixture of comprehension, experience, discernment and skill.
- **Practice** means the application of rules and knowledge that leads to action. Good practice is an art that is linked to the progress of knowledge and technology and is executed in an ethical manner<sup>6</sup>.

A KAP survey is a representative study of a specific population to collect information on what is known, believed and done in relation to a particular topic — in this case, Cancer. In most KAP surveys, data are collected orally by an interviewer using a structured, standardized questionnaire<sup>7</sup>.

These data then can be analyzed quantitatively or qualitatively depending on the objectives and design of the study. A KAP survey can be designed specifically to gather information about Cancer-related topics, but it may also include questions about general health practices and beliefs. Questionnaire surveys are the primary method of collecting quantitative data. They include interviewing, using a questionnaire, a sample of individuals as representative as possible of the entire study population. One advantage of a KAP survey is to allow, in a single survey, the collecting of a large amount of data that will be subject to statistical analysis (which qualitative methods of data collection do not allow)<sup>8</sup>

### **Steps in Preparing the Questionnaire**

- Selection of questions from standardized questionnaires
- Identifying supplemental questions

- Adapting answers
- Coding the questionnaire
- Double translation of questionnaires
- Translation into local language
- Back-translation into the source language
- Questionnaire pre-test
- Constructing the data entry form
- Finalising the questionnaire
- Developing the analysis plan
- Approval by an ethics committee<sup>[9]</sup>

This non-experimental/comparative study was used to:

1. To assess the current knowledge and attitudes of cancer patient attendants within the target population;
2. To provide empirical evidence of attendants assessment and documentation behaviors prior to an intervention designed to address real and potential knowledge and attitude deficits
3. To assess the effectiveness of the intervention in terms of changes in knowledge and practice and documentations.

## MATERIALS AND METHODS:

### **Study design:**

A prospective randomized educational interventional study.

### **Tool:**

Validated KAP questionnaire designed for cancer patient attendees.

### **Study population:**

Attendees of both inpatients & outpatients of Krishna Institute of Medical Sciences hospital, Minister road, Secunderabad.

### **Inclusion Criteria:**

- Attendees of patients with different types & stages of cancer disease.
- Attendees of both inpatients & outpatients.
- Attendees for Patients from age group of 18 to 60years.

### **Exclusion Criteria :**

- Attendees of Patients from other hospitals.

- Attendees of Patients below 18years of age.
- Attendees of pregnant women with cancer not considered.
- Attendees of Patients with other illness are not considered.

### Procedure:

A field study was conducted on attendees of cancer patients with various types and stages of cancer. Firstly Patient Profile forms, consent forms and patient information leaflet were designed. A self-assessed questionnaire form was designed by dividing it into two aspects of quality of life (i.e. knowledge and attitude). Next obtained permission from ethical committee. To start the study attendees of cancer patients were identified and among the selected attendants, they were divided into two groups i.e. Test and Control groups. Test group attendees were counseled and given information about disease whereas control group were given info only at the end of the study. Data was collected through the designed patient proforma's and questionnaire form. Information regarding the disease was provided in the form of information leaflets. The scores obtained are evaluated & analyzed. Comparative study is made between the pre intervention and post intervention scores of both control and test groups<sup>[12],[15]</sup>.

## RESULTS AND DISCUSSION

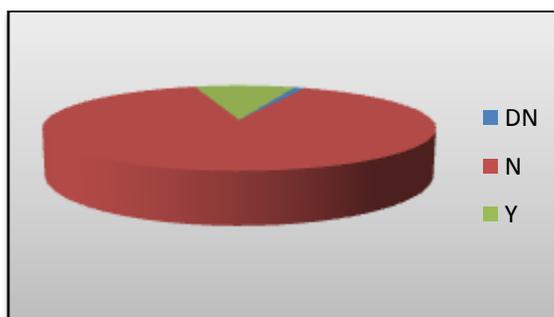
### Demographic Data Analysis

**Table – 1 Gender**

Gender	Frequency	Percent
Female	56	56.0
Male	44	44.0
Total	100	100.0

The sample population consists of 100 cancer patients. According to our data collected, there were 56 female patients and 44 male. And we have concluded that there were more female patients prone to cancer compared to that of male patients.

### Patients with Family history of Cancer



**Figure-1 Patients with Family history of Cancer**

The figure 1 here depicts that in total sample number of patients who had cancer in their

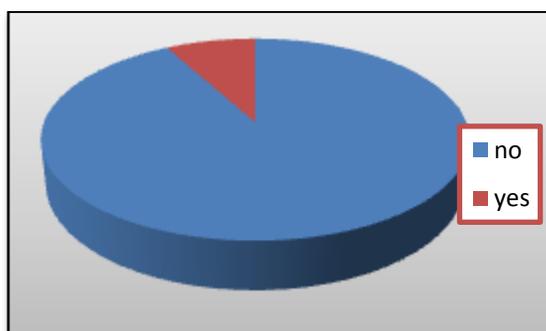
respective family history were only 10 while the rest (89 patients) reported that either they don't know about family history with cancer or had no family history of cancer.

**Table -2 Patients using Tobacco**

	<b>Smoking</b>		<b>Chewing Tobacco</b>	
	<b>Frequency</b>	<b>Percent</b>	<b>Frequency</b>	<b>Percent</b>
No	89	89.0	96	96.0
Yes	11	11.0	4	4.0
Total	100	100.0	100	100.0

This table shows number of patients who are using tobacco. 11 people out of 100 said that they have smoking habit, while 89 patients said they don't Smoke. Among 100 patients tobacco chewers were 4 and 96 do not use tobacco.

#### **Patients consuming alcohol**



**Figure-2 Patients consuming alcohol**

The figure 2 shows about how many patients consume alcohol, 8 patients out of 100 reported to be consuming alcohol while the rest 92 do not. According to this data, alcohol consumption cannot be considered to be a factor causing cancer.

**Table -3 Patients who received chemotherapy**

	<b>Frequency</b>	<b>Percent</b>
No	25	25.0
Yes	75	75.0
Total	100	100.0

Among the available treatments for cancer chemotherapy i.e. using medicines is considered to be the first choice of treatment. So in total 100 patients data collected, number of patients who received chemotherapy was 75 and 25 patients were yet to receive the treatment during our study.

**Table -4 Patients underwent surgery**

	<b>Frequency</b>	<b>Percent</b>
No	53	53.0
Yes	47	47.0
Total	100	100.0

This table shows that Number of patients who underwent surgery was 47 in a sample of 100

**Table -5 Patients exposed to radiation**

	Frequency	Percent
No	62	62.0
Yes	38	38.0
Total	100	100.0

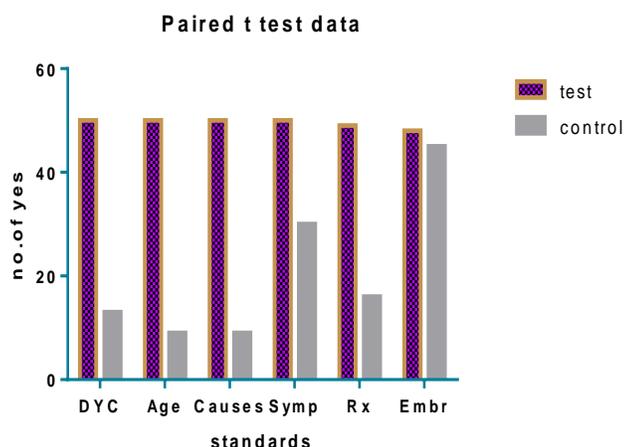
This table shows that Patients who received radiation therapy were 38, while 62 said they weren't exposed to radiation in a sample of 100<sup>[1]</sup>.

### Paired t - test Data

**Table -6 Assessing knowledge of patient attendants through specified questionnaire.**

Knowledge	t-value	P value	Significant difference
	4.763	0.005	YES

This is the Data obtained from the patient information tool/questionnaires<sup>[1]</sup>



**Figure – 3 Assessing knowledge of patient attendants through specified questionnaire.**

DYK – Do you know about cancer?

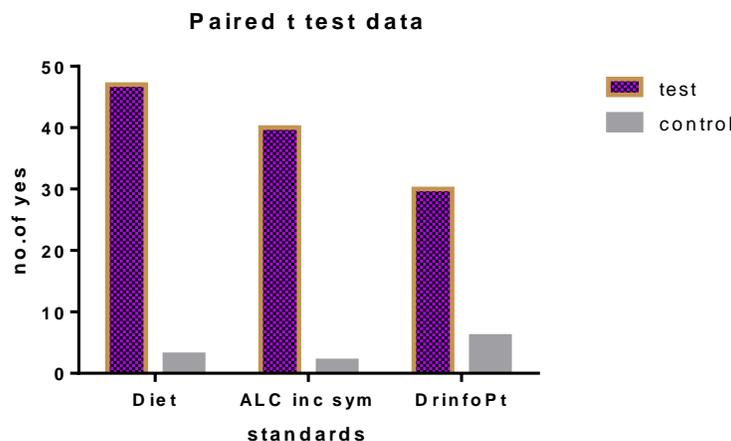
Rx – Treatment

Embr- Did Patient Embarrassed to talk to doctor

In accordance with the paired t-test results there is significant increase in the knowledge of the patient attendants of the test group when compared to that of the control group after post interventional study at level of significance ( $p=0.005$ ). The difference in knowledge is accounted to the educational intervention given to the test group in the form of information leaflets and counselling<sup>10</sup>.

**Table -7 Assessing practice of patient attendants through specified questionnaire**

Practice	t-value	P value	Significant difference
	5.963	0.027	YES



**Figure – 4 Assessing practice of patient attendants through specified questionnaire**

ALC incsym – Alcohol consumption increase symptoms

Dr info Pt – Doctor Information to the patient

In accordance with the paired t-test results, there is significant difference in the practice patterns of the patient attendants of the test group when compared to that of the control group at level of significance ( $p=0.027$ ,  $t=5.963$ )<sup>[12]</sup>.

The overall findings of this study, following an educational intervention, indicate that the attendant's knowledge did significantly increase; however, the frequency of patient practice patterns did not increase significantly. The results of the study were both statistically significant and/or of clinical or practical importance<sup>13</sup>.

The results are assessed based on the number of positive and negative responses given by the sample population. Each question answered is tabulated and assessed using SPSS software and frequencies and graphs thus obtained were included. The results of both groups i.e. TEST and CONTROL pre-post interventions were tabulated and compared between the groups, educational intervention was given to only test group thus paired t-test results obtained at level of significance 0.005, shown that only test group attendants shown significant difference in aspects of knowledge and practice when compared to that of the control group who received information only at the end of the study. Hence our study has shown that educational interventional study give high scope in comparative studies where pre-post interventions were in use.

#### **Assumptions:**

The following are the assumptions in this study:

1. Patients attendee is truthfully and accurately reporting their knowledge and practice.
2. Patient attendants are completing the questionnaire truthfully.

3. Assessments and assessment documentations are “typical and not influenced by any’ participation in the study.

The research questions addressed the effectiveness of an educational intervention designed to address the knowledge and attitudes of the oncology patient attendants in KIMS Hospital.

### **Limitations**

Several limitations were identified and may have influenced this study: Since no concurrent observations were done, all data collected were dependent upon the documentation in the patients’ attendant questionnaire. There was no way to evaluate any of the attendants assessments or interventions which were not been documented.

The study findings cannot be generalized beyond the restricted setting described for this study. Due to the sample size of attendants and patients’ medical records, these findings cannot be generalized to all attendants of cancer patients.

### **CONCLUSION**

The following conclusions were drawn from the analysis of the data. The educational intervention did have a positive effect on cancer patient attendant’s knowledge and practice of TEST group. However, while there was not an increase in the CONTROL group samples from the pre-intervention to the post-intervention. The change in results obtained between the TEST and CONTROL are due to the fact that TEST group received an educational intervention through leaflets while the CONTROL group did not receive any. Changes in behaviors occur over time and this single intervention is not enough to change all the cancer patient attendants’ knowledge/practice. They need regular counseling and support during and after their visits to the hospital.

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