

## EDUCATION

PROF-998

# DOCTORS NEED ENHANCED ONCOLOGY KNOWLEDGE



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**ABSTRACT...** [tariq\\_parvez52@hotmail.com](mailto:tariq_parvez52@hotmail.com). **Objective:** To assess oncology knowledge among doctors, and suggestions to improve. **Design:** Cross sectional analytical study. **Place and duration of study:** This study was carried out in the Department of Oncology, King Fahad Hospital, Madina Munawra, KSA and was completed in 8 months from November 2004 to June 2005. **Subjects and Methods:** Series of five lectures were delivered on different subjects of oncology. Participants were asked to answer an MCQ type questionnaire, which was structured regarding the content of the lecture, before the lecture and after the lecture. Comparison was made by simple percentage calculation and statistical analysis, student's t-test. **Result:** Knowledge of the doctors rose from average 37% to 74% after the lecture. **Conclusion:** Doctors need enhanced knowledge in oncology and simple lecturing can make an improvement.

**Key words:** Oncology knowledge, Lecture, Improvement

## INTRODUCTION

Oncology is not an attractive subject among the medical professionals. The level of public response to cancer diagnosis and treatment is poor which reflects the little knowledge imparted to them by the doctors in the developing world<sup>1</sup>. Cancer education of medical undergraduate is unsatisfactory in the most part of the world. The number of lectures, their timings and the total time given to this subject at undergraduate level is insufficient. Oncology is not an examination subject so undergraduate medical students don't take it seriously<sup>2</sup>. Further, in the postgraduate period if not mandatory,

there is less interest in any continued professional learning by the doctors<sup>3</sup>. This study was done to find out the baseline knowledge of the doctors in oncology and then advice for improvement if any deficiency found.

## SUBJECTS AND METHOD

Series of five lectures were delivered on cancer of breast, colon, prostate, lungs and lymphoma as a part of continuous medical educational programme of King Fahad Hospital, Madina Munawra, Kingdom of Saudi Arabia. The number of doctors attending the lecture is shown in table-I. All attendees were present from the

outset. Before the lecture briefing was given regarding answering the questions before and after the lecture. Instructions regarding the time for question and answer etc were also given. Structured questionnaires were prepared on the pattern of multiple choice questions (MCQ). An attempt was made to keep the lecture practical and clinical, and so were the questions. These questions were prepared absolutely from the content of the lecture being delivered. There were ten questions for each lecture and pass marks were 70% (Seven positive answers out of ten questions).

Answer sheets for pre-lecture and post-lecture test were distributed to the participants. The questions were displayed on the screen and read by the author one by one. 20 seconds were given to answer the question. The answer sheets contained no contents for disclosure

of the participant's identity to encourage maximum participation. Answer sheets were collected separately before and after the presentation. All the questions were repeated again during post-lecture test by the author in the same pattern and timing. Participants were from senior consultants to residents. Doctors from all specialties except oncology and hematology participated. Out of these predominant groups were mainly general medicine, and other. This study took 8 months from November 2004 to June 2005 to its completion.

**RESULT**

Attendance, positive response of participants pre-lecture, post-lecture and improvement are shown in table-I. There was statistically positive change with p-value of <0.01 in the knowledge of participants after the lectures collectively (37% vs. 74%).

Table-I.				
Subject of lecture	Attendance	Results before lecture	Result after lecture	Improvement
Breast cancer	56	20(36%)	40(71%)	97%**
Colon Cancer	48	18(38%)	42(88%)	132%**
Prostate cancer	39	14(36%)	26(67%)	86%*
Lungs cancer	42	20(48%)	31(74%)	54%*
Lymphoma	46	13(28%)	32 (70%)	150%**
Total	231	85(37%)	171(74%)	100%**

\*p<0.05 (significant improvement after lecture as compared to before lecture)  
\*\*p<0.01 (highly significant improvement after lecture as compared to before lecture)

As shown in table-I out of total 231 participants in five lectures, 85 (37%) passed before the lecture and 171 (74%) passed after the presentation. 56 attended the lecture on breast cancer and out of these 20 (36%) passed before the presentation. After the lecture this number rose to 40 (71%), showing an improvement of 97%. 48 attended the lecture on cancer colon. 18 (38%) were passing before the presentation. After presentation 42 (88%) passed with an improvement of 132%. 39 attended the lecture on cancer prostate. Out of these 14 (36%) passed before and 26 (67%) passed after the presentation leading to an improvement of 86%. 42

attended the lecture on cancer lungs. 20 (48%) passed before the lecture and 31 (74%) passed after the lecture with an improvement of 54%. 46 attended the lecture on lymphoma. 13 (28%) passed before the lecture and 32 (70%) passed after the presentation with an improvement of 150%.

**DISCUSSION**

Knowledge and information about the disease play a very important role in every disease at all levels. Cancer education is inversely associated with cancer incidence, morbidity and mortality<sup>4</sup>. The knowledge about cancer

among general public is low in developing countries<sup>2</sup>. In western countries the situation was same a few decades before, but now because of the increased knowledge the incidence has started to decrease but it is reverse in developing countries where knowledge is poor and the incidence is high<sup>5</sup>. To have a break through in cancer control, community awareness is very important which in turn depends upon the information supplied by the health care professionals, who should have accurate and up to date knowledge about the disease cancer<sup>1</sup>. In one study done in Saudi Arabia the level of awareness was low among medical professionals<sup>6</sup>. Whereas the one from Pakistan had good level of awareness among medicos<sup>1</sup>.

In our study the low result in the pre-lecture test situation shows less knowledge of the doctors. Educational level and understanding of the medical profession may vary from country to country<sup>7</sup>. A study to assess the role of general practitioner (GP) in cancer care, their knowledge about this disease and treatment, was done. The results suggested that GPs are commonly involved in cancer care, particularly in the diagnosis but also during the treatments and follow-up<sup>8</sup>.

Gaps in knowledge and practices among family physicians were found in another study but it was encouraging that they expressed interest in continuing medical education (CME) courses on this topic<sup>9</sup>. General physicians readily identify their role in cancer services, but admitted their lack of confidence in this area due to low knowledge<sup>10</sup>. In this context they need to be equipped with latest cancer knowledge in easy terms. Without this knowledge the situation in developing world will not change as for as oncology is concerned. Similarly in one study done in King Fahad Hospital earlier, there was a statistically significant difference between knowledge about causes of gastrointestinal malignancies among patient and public as compared to medicos. Author in this study suggested for a need for improvement in the knowledge at all levels, public, patients and doctors<sup>3</sup>. Improvement in the knowledge of the doctors reflects that any deficiency can be met by simple lecturing. In a study done in Pakistan it was observed that medical curriculum has many deficiencies<sup>11</sup>. Not only these deficiencies need to be

removed but also how knowledge will be presented is important. There is a need to identify educational priorities for any country based on incidence and prevalence of disease with the particular aim of improving the quality of health care and the effectiveness of clinicians within the system of health care. In a study done in Taiwan it was advised that the knowledge of and positive attitude toward cancer issues could only be conveyed to physicians through undergraduate, post graduate or on-job education<sup>12</sup>. Which means that the deficiencies in the undergraduate training can be overcome during postgraduate period.

The basic concept of learning is shifting from uni-directional flow of knowledge as in lecturing to more interactive teaching learning sessions. One to one approach, small group learning and online learning are a few of the popular options<sup>13</sup>. However in our study the learning by lecturing increased the level of positive scores satisfactorily although the participants were postgraduate. The care of cancer patient has become increasingly complex and multidisciplinary while more responsibility for cancer care is shifting to primary care physicians. So there is need for multidisciplinary cancer education for doctors dedicated to a career in primary care apart from those exclusively engaged in oncology care. This can very easily be met, as shown by the success of our study by simple lecturing in the postgraduate educational program.

Our study has many limitations. We did not include those who came late in the presentation, while those who left without giving the test were considered fail. Post lecture the failure included those who actually failed and those who did not give the test paper or left without appearing in the test.

## CONCLUSION

Oncology knowledge of doctors is poor which needs improvement. Simple lecturing should be the first step and may be enough for developing world with meager resources in the postgraduate period for affective learning.

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