

AWARENESS OF SITE SPECIFIC MULTIDISCIPLINARY TEAM TUMOUR BOARDS AMONG FINAL YEAR PAKISTANI MEDICAL STUDENTS

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ABSTRACT

BACKGROUND: Multidisciplinary tumour boards are an integral component of cancer care in many countries. In developing countries like Pakistan these boards are in phase of establishment. Doctors will have to be more involved in making these boards meaningful. **METHODS:** A questionnaire was designed to assess awareness of final year medical students towards tumor boards. By convenience sampling 3 medical colleges were chosen. An investigator went to medical colleges and obtained informed consent. **RESULTS:** Awareness of MDT tumour board meetings is variable among colleges with awareness ranging from 73% being aware to 70% being not aware. Around 87% replied that they are willing to attend these meetings and when asked how often, the most common answer was "monthly". **CONCLUSIONS:** Awareness of tumour board meetings is variable among final year medical students. Willingness to participate in boards after becoming doctors is high. Offering CME credit for attendance may facilitate participation.

Keywords: tumour boards, multidisciplinary team, medical students, oncology, undergraduate medical education.

Introduction

Even with technology advancing so rapidly, treating patients with cancer is still a formidable challenge where all avenues of potential benefit must be fully harnessed. Multi-disciplinary Tumour (MDT) tumour board meetings provide one such avenue. They have been shown not only to alter disease management,¹ but also improve patient survival.² Not only being of benefit to the patient, it also provides experience to specialists on how to combine treatments along with being a valuable teaching tool for medical students and junior doctors alike.³

Across the world MDT tumour board meetings have been shown to be fruitful. A study conducted in the UK showed 3 year survival jump from 58% to 66% in patients with Duke C stage colorectal cancer by

introduction of the MDT⁴ tumour board while a study in Australia showed a mean improvement in survival in patients with inoperable non-small cell lung cancer from 205 days to 280 days, when compared with cases discussed in an MDT tumour board meeting with those that were not.⁵ Thus showing benefit regardless of place or specialty. These meetings are gradually being adopted by centers treating cancer patients in Pakistan and statistics released by the 'City Tumour Board (CTB) Karachi' showed 264 cases being presented between March 2010 and March 2012 with the initial treatment management plan being changed in 70% of cases.⁶ Along with improving decision making and outcomes, they have shown to drastically decrease the cost of treatment. Establish-

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ment of the University of Michigan Multi-disciplinary Melanoma Clinic (UM-MDMC) saved third party payers roughly \$1600 per patient by improving the way resources were used.⁷ The reduced cost is of exceptional importance in places such as Pakistan where it is a major limiting factor in the delivery of effective treatment facilities.

The potential benefits of MDT board meetings can only be reaped if clinicians across specialties are willing to regularly, actively and efficiently attend such meetings. Early awareness may make future clinicians more willing and prepared to participate in their practical life. This study aims to assess current level of awareness and attitude as regards to MDT boards in final year M.B.B.S (Bachelor of Medicine and Surgery) students. Improving so will better treatment being offered to cancer patients as well as reduce costs in the future.

Materials and Methods

A questionnaire was designed to assess awareness and attitude of final year medical students towards Multidisciplinary Team (MDT) tumour boards. A short description about MDT tumour boards was provided at the top of the questionnaire to enable students not aware of them to answer the subsequent questions. By convenience sampling three medical colleges of Karachi were chosen. An investigator went to the medical colleges and after obtaining informed consent distributed the questionnaire to the students willing to participate in the study. IBM SPSS statistics 20.0 was used to analyze the results.

Results

A total of 122 final year medical students from 3 medical colleges in Karachi participated in the survey. 60 students were from medical college A, 36 from medical college B and 26 from medical college C. Awareness of MDT tumour boards was variable among the different colleges. The students were given a short description about MDT tumour boards and asked, "Had you ever heard of the term multidisciplinary team tumour board before reading the above description?" In response, 70% of students from medical college A responded with "No". In contrast

73% of students from medical college C responded with "Yes". While 53% of students from medical college B responded with "No".

When asked regarding the participants of an MDT tumour board meeting, awareness of participation of hematologists and pediatric oncologists was the least with around 1/3rd of students being aware of their participation. Awareness of medical oncologist being present was highest at 88.5%. Less than half of students were aware of participation from a specialist from the concerned medical specialty while 56.6% were aware of participation of specialist from concerned surgical specialty.

94.4% of students thought MDT tumour boards would improve the treatment of cancer patients. Around 87% replied that they in their clinical practice would be willing to take out time to attend these meetings and when asked how often, the most common answer at 47.7% was monthly.

More than 8 out of 10 students thought these meeting would make cancer treatment more cost effective while 6 out of 10 thought that one clinician alone is not sufficient to effectively manage a cancer patient while 36% said it would depend on the case and only 4 out of 122 students thought that he would be sufficient.

When asked if being given Continuing Medical Education (CME) credit or extra pay would make them more inclined to attend MDT tumour board meetings, 84.4% responded with "Yes" for the former and 89.3% for the latter.

Discussion

In the struggle to conquer cancer, all areas of potential benefit are being explored by health care providers. One of the fruits of this labor has been the establishment of site specific Multi-Disciplinary Team (MDT) tumor boards. MDT tumor boards have now been an integral part to patient centered⁸ management of cancer patients worldwide⁹ across disciplines^{10,11} for decades now. From starting off with general tumor boards to the development of site specific tumor boards to the use of videoconferencing,¹² the MDT tumor board process is continuously being refined to improve the contribution it provides to the cancer care process.

Though now well established in many parts of the world for decades, in Pakistan we are in the phase of establishment of this activity and published data is scarce.¹³ Without much to go by it may be safe to say that generally, the incorporation of these meetings at hospitals providing cancer care is still a work in progress. The fresh blood entering the health care system from medical colleges provides an opportunity to improve this current state.

The scientific evidence shows that MDT tumor boards have been shown to alter management decisions¹⁴ and reduce costs.¹⁵ The success of MDT tumor boards depends on the active and efficient participation of clinicians and effective management by hospital administration to make them productive, taking into account the time and effort that is needed to be put in.¹⁶ A study from the United Kingdom identified participation of key members, provision of description of patient related factors, use of proforma or checklist and patient selection for discussion as important considerations for a successful MDT tumor board.¹⁷ Another study in Canada presented more administrative support, introduction of billing and video conferencing as suggestions to improve meetings.¹⁸ Studies have also shown that identifying areas of weakness and subsequent measures of intervention can have a positive impact.¹⁹ The University of Colorado Hospital using the multidisciplinary model has been able to successfully establish multiple site specific clinics where patients have all their required tests, cases discussed and meet the specialists involved all within a period of one to two days.²⁰

Centers around the world continue to improve the multidisciplinary process to gain more benefit from it and improve the standard of care for their cancer patients we continue to lag behind. We hope to see MDT tumour boards established in all institutes of Pakistan where cancer care is being provided.^{21,22} Early awareness of how all health care providers, not just oncologists, are an important component of the cancer care process, can prepare medical students to be enthusiastic future participants of these meetings. Their willingness to participate is high as shown by this study. As difficult it is to provide good outcomes to cancer patients with state of the art facilities, in settings where resources are limited, the active voluntary participation of clinicians across the board can make up for at least some of this deficit.

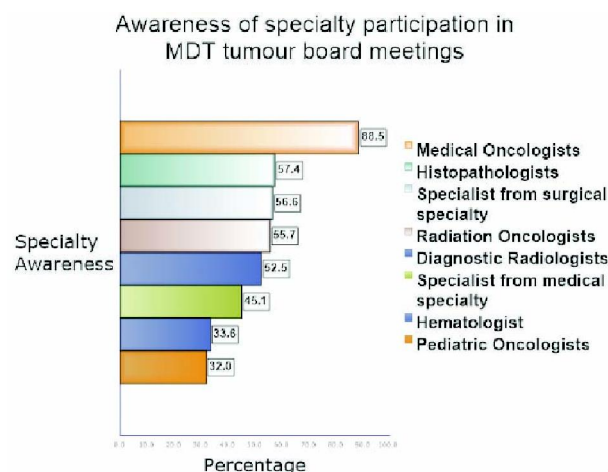


Figure 1: Awareness of specialty participation in MDT tumour board meetings

Medical College A	Medical College B	Medical College C
60 Participants	36 Participants	26 Participants

Table 1: Student participation from the respective medical colleges

Conclusions


Awareness of MDT tumour board meetings is variable among the various medical colleges with awareness ranging from 73% being aware to 70% being not aware of them. Although almost 9 out of 10 students were aware of the participation of medical oncologists, they were not so much aware of the participation of clinicians from other disciplines. As not all students will become medical oncologists it is important for students to be aware of MDT tumour boards as a vital component of the cancer care process, regardless of what discipline they choose for their future practice as MDT tumour boards are gradually integrated into the health care system in the coming years.

The overwhelming majority of students thought these meetings would improve the treatment being provided to cancer patients and as many as 87% would be willing to designate time from their clinical practice to attend.

As per our study giving CME credit and extra pay for attendance in these meetings would be measures that would facilitate further participation.

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