



ORIGINAL ARTICLE

The Evolving Role of National Tumor Board – Attitudes of Professionals Towards Multidisciplinary Team Meetings

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Abstract

Background and Objectives: Multidisciplinary team (MDT) meetings are an essential part of cancer management. While the importance of such meetings is generally acknowledged, the recent launch of Bahrain Oncology Centre and National Tumor Board provides an opportunity to assess the attitudes of its participants to the concept and its introduction to Bahrain.

Methods: This study was conducted at Bahrain Oncology Center on 96 attendees that were encouraged to complete a questionnaire that asked 14 questions including three main questions, (a) Do you think that the MDT-Tumor Board is beneficial? (b) Are you satisfied with the structure and function of the MDT? (c) What are your perceptions on how it may be improved? Quantitative data was produced by using Likert 5-points scale to measure participants' agreement or non-agreement with different statements.

Results: A total of 60 forms were completed and returned. Of these, 49 (81%) of participants strongly agreed that MDT meetings were beneficial to patient management. In addition, general satisfaction levels with MDT meetings according to Likert 5-points scale calculated from 14 MDT related questions showed that 36/60 participants were very satisfied (1), 22/60 participants were moderately satisfied (2), one participant was neutral (3), while one participant was moderately unsatisfied (4).

Conclusion: This study confirmed that the majority of participants viewed MDT meetings as being beneficial to patient care. However, lack of patient information was considered a barrier to overall effectiveness, and 20% of the participants suggested that specialty specific meetings could improve the overall efficiency.

Keywords: Attitudes of professionals; Bahrain oncology center; Cancer in Bahrain; Multidisciplinary team meetings; Patient care team; Decision making.

Introduction

Modern medical practice emphasizes the importance of teamwork. This not only improves practitioner satisfaction but provides a structure for improved patient care. Multidisciplinary team (MDT) meetings have demonstrable benefits in terms of patient safety and improved overall quality of care.¹ MDT meetings are an essential part of the care pathway for patients with cancer² and are internationally considered as an accepted gold standard of cancer care.³ These meetings consist of various medical personnel such as oncologists, surgeons, physicians, nurses, pathologists and radiotherapists that meet frequently to discuss cases and reach a consensual decision that meets international best practice and guides the management and treatment.^{4,5} MDTs have been proven to lead to better health outcomes and improve patient satisfaction levels.⁶

In these MDT meetings, the patient's health is a priority and working as a team is vital to reach optimal decisions regarding the patient's management and treatment. Previous research has shown that working in teams was positively related with providing high quality care through professionals sharing objectives and support.^{7,8,9} However, interpersonal communication and the ability to work in a team environment are skills that are mostly overlooked in training programs^{7,10} and could be a source of difficulty in such meetings. This may be more important when professionals from different institutions participate in an MDT and when a national MDT is introduced.

The clinical significance of this study was to assess attitudes of attendees to the new format of a national MDT with a view to also identify areas where the utility of the National Tumor Board may be improved, to operate in a manner that ensures effective and high-quality patient care. Furthermore, the aim of this study was to obtain feedback regarding the multidisciplinary team meetings, to identify the strengths and weaknesses of these meetings, and to provide information to empower changes that could provide a better outcome for all patients discussed.

Methods

The Bahrain Oncology Center is the main venue for the National Tumor Board (since February

2019) where patients with cancer are discussed and followed up. A simple convenience sampling technique was used to engage participants. The period of study was from 15 July 2019 to 26 August 2019. The study was approved by the Research Ethics Committee of Royal College of Surgeons in Ireland – Medical University of Bahrain and King Hamad University Hospital. Before the start of each meeting, all attendees were given a brief introduction to the study and asked to complete the questionnaire provided to them and return it after the end of each meeting. After completing the questionnaire, the participants were asked to place them in the drop box placed at the meeting venue to ensure anonymity. The questionnaire contained four demographic questions and 18 questions regarding the MDT meeting, in which 14 questions produced quantitative data using the Likert 5-points scale to measure participants' agreement or non-agreement with different statements.¹¹ Overall, the data was analyzed descriptively and revolved around three core questions, (a) Do the participants find MDT meetings beneficial for the patients? (b) Are the participants satisfied with the MDT meetings? (c) How can MDT meetings be improved?

Results

In total, 96 questionnaires were distributed over six weeks, with 60/96 completed and returned. The total number of female participants numbered 21 while male participants were 39 in total. Among those who responded, 31 were Bahrainis and 29 were non-Bahrainis. The occupational distribution of all participants is as shown in Figure 1, with most being medical oncologists. From Table 1, it is

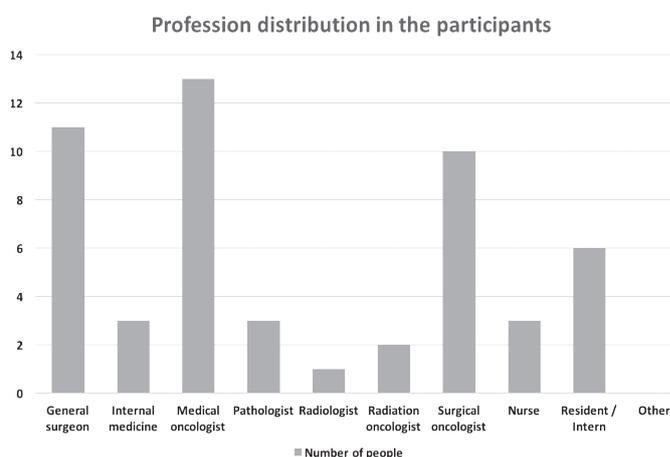


Figure 1: Occupational distribution of participants.

observed that 81% of participants strongly agreed that MDT meeting was beneficial for the patient, however, 2% strongly disagreed with the statement.

Table 1: Likert scale distribution for statement “Do you find MDT meeting beneficial for the patient?”

Likert scale for statement: Do you find MDT meeting beneficial for the patient?	Number of participants (percentage %)
Strongly agree	49 (81%)
Agree	7 (12%)
Neutral	3 (5%)
Disagree	0 (0%)
Strongly disagree	1 (2%)

The general satisfaction level with the MDT meetings calculated according to the Likert 5-points scale and the 14 MDT-related questions showed that 36/60 participants were very satisfied (1), 22/60 participants were moderately satisfied (2), one participant was neutral (3), while one participant was moderately unsatisfied (4).

In terms of improving the MDT meeting structure, three questions were asked, including what makes MDT meetings run effectively, key barriers to an effective MDT meeting and suggestions on how MDT meetings can be improved. Respondents considered that having various specialties present for the meetings, working collaboratively using radiology and pathology were aspects that made these meetings effective. On the other hand, lack of time, heavy workload, large number of cases to discuss and poor MDT form documentation, along with lack of patient information were main key barriers to an effective MDT meeting. In addition, respondents suggested that adequate filling of MDT referral forms, having site specific meetings, having teleconferences, involving more radiologists and pathologists, and encouraging the attendance of physicians would help in improving MDT meetings.

Discussion

Over the past fifteen years, the multidisciplinary team meetings have become essential as they play an important role in managing patients with different medical conditions, especially those

battling cancer.¹² The main objectives of MDT meetings are to discuss patient cases and facilitate suitable treatment planning, to provide educational opportunities for the healthcare staff and provide support to team members, which is why it is very important to reevaluate the structure of MDT meetings in order to have effective an meeting that aids in the consideration of patient’s holistic needs, ensuring delivery of the best healthcare to them,¹³ and improving their survival, which was the main aim of this study.

In terms of finding MDT meetings beneficial for the patient, 49/60 participants strongly agreed with the statement, as the core principal of these meetings was to discuss cases which would further lead to improved treatment recommendations based on updated and evidence based knowledge or expert opinion.¹⁴ A study published in 2011 showed that participants of MDT meetings believed them to be of great benefit¹² and that they improved the quality of care delivered to colorectal cancer patients. Regarding general satisfaction level with MDT meetings, most participants reported an overall positive attitude, which is important to enable healthcare staff optimize their performance and increase job satisfaction, leading to enhancement in the quality of patient care.¹⁵ With respect to MDT meetings running effectively, participants agreed that teamwork and respect was important as it would positively affect patient outcome and help provide a practical approach in delivering quality patient care.¹⁶ Similar studies^{12,17} have previously shown that poor interpersonal relationships and absence of teamwork were huge barriers to a successful MDT meeting, placing patient safety at risk and generating situations rife for medical errors.¹⁸

As for key barriers to MDT meetings, it was agreed upon that lack of patient information was an important barrier because it served to inhibit decision making or provide patients with clinically inappropriate decisions.^{3,19} Non-attendance of primary physicians was also noted to be a crucial problem, as it delayed patient treatment.^{3,20} In regard to improving MDT meetings, most participants suggested site specific meetings, where the meeting is split into smaller, site specific sessions as well as triaging cases, which would help create more manageable and

more efficient meetings.² Furthermore, increasingly involving consultants from pathology and radiology with clinical specialists at MDT meetings would add quality to the diagnosis and enable decisions regarding patient management reap the true benefits of these meetings.²¹

As to the clinical implications of this study, effective MDT meetings that ensure equal participation of all attendees will improve clinical decision-making and coordination of the care provided to patients.³ Moreover, improving these meetings will lead to an increase in the work satisfaction levels of the participants, and better quality care for patients, with lesser errors, eventually leading to an increase in satisfaction among patients. Additionally, the main strength of the study is that it is a pilot study that is first of its kind to be conducted in the Kingdom of Bahrain, with the main aim of studying the satisfaction levels among MDT meeting attendees in order to improve them. Furthermore, there were some limitations, such as having a small number of circulating attendees in the MDT meetings, which decreased the sample size. Some physicians also refused to complete the questionnaire, due to their commitment to other responsibilities or simply because they were too busy.

Conclusion

MDT meetings are a crucial part of the cancer healthcare system where core team members from different medical specialties come together to share information and make collective evidence-based recommendations for patient management, which leads to improvements in patient care.²⁰ These meetings provide an opportunity for learning to all the hospital's physicians and trainee doctors.²⁰ It is essential to evaluate them to ensure their effectiveness and ensure high satisfaction levels among the healthcare staff involved in the meetings in order to guarantee improved health outcomes for patients. In the future, more studies should be conducted with the aim of constantly seeking improvements in the setting of MDT meetings.

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