

Barriers to Staff Attendance at the Basics in Medical Education (BiME) Course organized by the Faculty of Medicine and Surgery, University of Malta

a case study approach

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Background

The Basics in Medical Education (BiME) course aims to promote faculty development within the Faculty of Medicine and Surgery, University of Malta. Despite being offered free of charge the turnout has been underwhelming. This research aimed to identify barriers to staff attendance.

Methods

A qualitative, explanatory, single-case study was performed in 2020 after obtaining Ethics Committee permission. Data was collected via semi-structured interviews with faculty members who self-selected to participate after receiving an invitation email; and through documentation analysis of anonymised participant feedback forms collected from previous iterations of the course held in 2018 and 2019. Data analysis was performed using Pattern Matching.

Results

Individual and institutional barriers to attendance were identified. The main barrier was an individual's personal characteristics, particularly a lack of appreciation of the importance of faculty development. Other barriers included a lack of time; a reduced awareness of the concept of separate professional and educator identities; a lack of information about the course; a feeling of isolation from the faculty community; and a possible insufficiency of institutional governance and recognition. Funding, and the interprofessional aspect of the course, were found not to be barriers to attendance.

Conclusions

An understanding of the specific barriers to attendance at the BiME course may allow the Faculty to mitigate these, encouraging staff attendance, and thus promote faculty development in medical education at the University of Malta.

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The role of the medical educator has evolved over time - from a deliverer of knowledge to a studentlearning facilitator to the twelve well-defined roles of the medical teacher..¹ As such, Steinert² argues that faculty development is important to enhance an individual's knowledge, skills, and behaviours.³

The Medical Education Unit (MEU) at the University of Malta (UM) was set up in October 2017 as a nonstatutory unit,⁴ with the aims of Staff Development, Quality Assurance, Medical Education Research, and maintenance of Standards in Medical Education. To address faculty development the MEU offers a Basics in Medical Education (BiME) Course. This full-time in person course which is held over three days has been delivered to Faculty members on three occasions during 2018-2019 at the Medical School, Mater Dei Hospital. The BiME Course is targeted at all Faculty members, including resident academics, members of the visiting teaching stream and casual staff. In July 2019, the Human Resources office confirmed that the Faculty had six hundred and fifty-five faculty members (personal correspondence), divided into sixty-nine resident academics; three hundred and sixty-five members of the visiting teaching stream; and two hundred and twenty-one casual staff members. The BiME course covers topics: Medical Education Theory; Curriculum Development, Delivery and Evaluation; and Assessment and Feedback. All faculty members are invited to attend free of charge; participation is voluntary.

Interest and attendance at the BiME Course were less than expected by the MEU, therefore the objective was to identify barriers to staff attendance. The evidence-based recommendations from this study may facilitate course attendance, improve faculty development, and enhance the delivery of teaching experiences to students.

Several barriers to continuous professional development (CPD) exist such as time and funding,⁵⁻ ⁹ but these have not been studied in relation to the Faculty of Medicine and Surgery's BiME course. Thus, this explanatory single-case study set out to identify barriers to CPD attendance at the BiME course compared to those reported in the literature.

MATERIALS AND METHODS

A qualitative, explanatory, holistic, single-case study was performed in 2020. Ethical approval was obtained from the Faculty Research Ethics Committee, Faculty of Medicine and Surgery, UM (FRECMDS_1819_114, 4th December 2019) and from the School of Medicine, University of Dundee (SMED REC Number 19/ 202, 20th December 2019.) Research was carried out using the theoretical lens of post-positivism,¹⁰ the ontology of critical realism and the epistemology of objectivism. When using a postpositivist theoretical perspective, it is recommended that the methodology should include the collection of multiple data sources to allow data triangulation.¹⁰ This led to the choice of a case study methodology for investigation of the research question: Why are staff members at the Faculty of Medicine and Surgery, University of Malta not Basics in Medical Education attending the Course? Additionally, the research question fulfils the criteria posed by Yin,¹¹ Bassey,¹² and Stake¹³ for the use of case study research.

Interviews and documentation were chosen as the data sources. Thirteen individual, face-to-face, semistructured interviews were held at a place of the interviewee's choosing. Documentation analysis of forty-four anonymised BIME course feedback forms (2018-2019) were examined for barriers to attendance, as informed by the Theoretical Propositions developed through the first part of the Pattern Matching (PM) process.

Pattern Matching (PM) is a method of data analysis used in qualitative research which firstly involves the identification of predicted patterns (called Theoretical Propositions) from the literature and from author experience on the topic in question. Later, these are compared with observed data to look for congruence, thus strengthening the research's internal validity. A step-by-step description of the PM data analysis process used for this case study has been published by Attard Cortis and Muir.¹⁴A visual representation of the process followed is presented in Figure 1.



Figure 1 A flow chart of the Pattern Matching process used for this research. Attard Cortis, P. (2020). Barriers to Staff Attendance at the Basics in Medical Education (BiME) Course organized by the Faculty of Medicine and Surgery, University of Malta: a case study approach. MMEd Thesis. University of Dundee. The Theoretical Propositions developed for this research were:

- Time is a significant barrier to attendance⁵⁻⁹
- Individual personal characteristics influence attendance irrespective of external motivators or barriers⁵
- The idea of separate professional and teaching identities⁷ is poorly developed locally and this lack of awareness acts as a barrier to attendance (author experience)
- Positive or Negative Incentives, or lack thereof, influence attendance⁷
- The lack of a sense of belonging to the Faculty community acts as a barrier to attendance^{5,6}
- A lack of awareness of the existence of the BiME course is a barrier to attendance (author experience)
- Funding^{8,9} is not a barrier to attendance (author experience)
- Interprofessional education⁶ is not a barrier to attendance (author experience)

The strengths of this case study include clear alignment of the theoretical lens, ontology, epistemology, methodology, methods and analysis choices; a well-defined bounded system of study i.e., the three previously organized BiME courses; addressed a "why" question with significant utility to the Faculty; and addressed a contemporary phenomenon. Furthermore, the data collected provided rich descriptions of the barriers to attendance as experienced by the faculty members who volunteered and who were forthcoming with their thoughts and opinions, allowing data saturation to be reached. A reflexive stance was useful to establish rigour and trustworthiness in this qualitative research.15

Generalisability was limited to the well-defined case of the BiME courses held in 2018 and 2019. Therefore, the findings may not be generalizable to other courses organized by the UM or to other faculty development courses. However, the research methodology is explained in detail and with the small pool of medical educators in Malta, it is possible for medical educators who work in similar contexts to decide whether the findings could be applicable to their situation.

As an insider researcher an inherent culture bias was present.¹⁶ However, the cultural context of the case



Figure 2 A graphical representation showing the research findings in relation to barriers to attendance at the BiME course Attard Cortis, P. (2020). Barriers to Staff Attendance at the Basics in Medical Education (BiME) Course organized by the Faculty of Medicine and Surgery, University of Malta: a case study approach. MMEd Thesis. University of Dundee.

study was important to situate and analyse the research findings. The risk of confirmation bias was reduced by transcribing interviews and feedback form data, and transcripts were member checked. Coding and analysis followed a PM technique (Figure 1) and the theoretical propositions to increase dependability.

Faculty member participants who volunteered for interview may have been subject to acquiescence, social desirability, or sponsor biases.¹⁶ Additionally, it is not possible to know if participants were significantly different from non-participants, or if they experienced significantly different barriers to attendance from non-participants. Furthermore, no casual members of staff participated and thus the barriers experienced relate only to resident academic and visiting teaching faculty members.

RESULTS

The results are presented as the "Main Barriers Identified" (Figure 1) as matched to the theoretical "Propositions" (Figure 1) extracted from the literature and author experience prior to the start of data collection. In Figure 2, eight themes as barriers were considered as per the theoretical propositions. Within these, sixteen sub-themes were identified.

Time

Nine interviewees stated that time was a barrier. Three stated that time was not a barrier although they showed an appreciation that time may be a barrier to visiting faculty members. Six mentioned that an increasing number of medical students may be a possible barrier due to the additional time commitment. The need to keep abreast with CPD in medical education as well as in the participant's primary specialty, for example clinical practice or research, was seen as a possible challenge by six participants.

Individual Characteristics

The individual's general attitude was seen as a determining factor and many faculty members were unable to identify personal barriers to attendance on open questioning, possibly as a reflection of their positive attitude and internal motivation.

"... ideally the people who are selected to teach, are only those people who are extremely strongly motivated to teach... I think the selection process is extremely important." (Visiting Teaching Participant 6)

Nine interviewees highlighted that, if faculty members believe attending faculty development is not important, then they would not turn up. Also, an individual's resistance to change was considered a barrier by four interviewees.

A person's comfort with, and approach to, technology was related to barriers to attendance. While one interviewee mentioned that online faculty development programmes may be preferred to faceto-face courses, and another mentioned that online learning may be more efficient in terms of learning time required, the majority preferred attending courses in person. Despite this, forms of blended learning were viewed positively.

Four participants emphasized that a lack of continuity and follow up may be a barrier to attendance and may have a domino effect on their peers i.e. make it less likely that other faculty members will attend. Continuity was also deemed important by course participants, as demonstrated by feedback form analysis in reply to the question for wishes for future CPD in medical education.

Personal commitments were cited by five interviewees and logistical barriers were also considered. While travel to the course was not a problem for the majority, issues including parking facilities for those not based at Mater Dei Hospital or University were. The venue received positive comments through the feedback forms. Access to study leave or vacation leave for course attendance was considered a barrier by five participants.

Three faculty members stated that the course tutors could be a barrier to attendance, as they review the course based on the tutors' credentials which would form part of their decision-making process. The fact that an international medical education expert with an excellent reputation was a tutor on this course helped to mitigate this barrier. From the feedback form analysis, it was clear that the tutor input was well received; sixteen course participants praised tutors for their work. Only one participant commented, "some deliveries were a bit rushed as they assumed prior knowledge".

Regarding the programme, five faculty members said that content would be a determining factor when deciding to attend. Particularly, they would consider if it was like previous faculty development courses which they may have attended; whether the topics would be of personal interest; and that having increased clarity about the course aims as well as a programme with specific learning outcomes would encourage attendance.

Separate professional and teaching identities

The proposition from the literature and author experience was that separate professional and teaching identities are poorly developed locally and this lack of awareness could act as a barrier to attendance. Nine interviewees agreed with this.

"I think it is still a bit muddled... when we graduated, we were expected to teach your peers or teach medical students... and I don't think that was fair... because although you just graduated, you graduated as a doctor not as a teacher." (Visiting Teaching Participant 5)

The idea of separate professional and educator identities was perceived as not having a strong local foothold, though the concept seems to be gaining traction. Additionally, lack of institutional feedback was perceived by three participants as being a barrier.

"... on what basis are people basing their own selfjudgement? ...Does the University provide these people with formal assessment... Do they get proper feedback?" (Visiting Teaching Participant 6)

Positive and negative incentives or lack thereof

Positive and negative incentives, or their absence, could possibly influence attendance. This was observed not only from an individual's perspective, but also from the institution. The role of the institution in rewarding good medical education practices and disincentivizing poor practice was deemed relevant in relation to BiME course attendance.

When asked about the role of positive incentives, interviewees presented contrasting views. Five expressed the idea that the lack of positive incentives may be a barrier. Positive incentives that were lacking included promotion; adequate financial remuneration for visiting teaching staff; formal teaching awards; and evidence of attainment of CPD points. However, others stated that learning from the course was a positive incentive in itself. Concern was expressed about the effectiveness of faculty development initiatives that motivated attendance using positive incentives and the difficulty of implementing these in a fair and transparent manner.

Faculty members were divided regarding the role of negative incentives. Five agreed that a lack of negative consequences for course non-attendance acted as a barrier, although concerns were raised that this may not be appropriate for adult learners or even if this would be a realistic local possibility.

"... I don't think anyone was ever stopped from lecturing... because they underperformed." (Visiting Teaching Participant 3)

The rest of the faculty members expressed the idea that negative incentives should not be adopted. They stated that these could possibly be considered in a formative manner; or even introduced gradually, making BiME course attendance mandatory for new recruits. Finally, using such negative incentives may be counterintuitive.

Since 2016 Faculty increased its work on faculty development through the creation of the MEU which was seen as a positive step forward, despite the need for more continuity between initiatives and a focused strategy. In both the feedback forms and the interviews, there is repeated reference to making the BiME course compulsory for faculty members.

"... in my opinion, had it been made compulsory, it would have been better." (Resident Academic Participant 5)

Furthermore, it was stated that the UM gives priority to research and publications when considering promotions, and less so to education and teaching excellence. This lack of recognition and structure in relation to educational governance may be a barrier to attendance.

"...a need to ensure that the people... who progress within the Faculty, are people who have a commitment to teaching... research and publications often are given a lot of weight... look at what the major focus of our University is... an institution that prepares our students to deliver their role... as doctors..." (Visiting Teaching Participant 6)

Isolation

Seven participants agreed that a sense of isolation from Faculty community could act as a barrier to attendance. A further three admitted that this could be a challenge for some, although they did not personally relate to this position. In contrast it could be one of the mitigating factors of this barrier, helping to enhance community. This was supported by comments in the feedback forms, where the opportunity for networking and meeting other staff was seen as a positive course facet.

Awareness of the Course

Five interviewees had not heard of the BiME course prior to the study participation email, and all stated that they would have attended had they been aware. A sixth participant who had attended the course was concerned that for most faculty members this lack of awareness was a significant barrier.

Funding

The BiME course is provided to participants free of charge and therefore the study proposition is that funding would not be a barrier to attendance, and most faculty members did not mention this barrier. However, two interviewees considered that this could be an issue because attendance to the course outside working hours could lead to loss of earnings from private practice.

Interprofessional education

faculty members Nine agreed that the interprofessional aspect of the BiME course was not a barrier to attendance. They emphasized that this was a positive aspect in view of networking and community-building. This was echoed by findings in the feedback forms from all sessions. On the other hand, two participants expressed reservations in this regard in view of potential differences between the outlook of pre-clinical and clinical faculty members; as well as in view of possible limited benefits of the course if delivered to very junior staff.

In summary, the barriers to attendance at the BiME course in Malta are multifactorial, with both individual and institutional barriers reported. The strongest barrier was found to be an individual's personal characteristics, particularly a lack of appreciation of the importance of faculty development. Other barriers include a lack of time; a reduced awareness of the concept of separate professional and teaching identities; a lack of information about the course; a feeling of isolation from the faculty community; and a possible insufficiency of institutional governance and recognition.

DISCUSSION

Time, and Promoting the Educator Identity

Time is a significant barrier to BiME course attendance, as reported in the literature.^{6,7,9} Importantly, more than half the staff members at the Faculty of Medicine and Surgery, UM are part of the visiting teaching group and thus, their medical education role is held in addition to a considerable commitment to clinical practice. Subsequently, time was found to be more of a barrier for visiting staff than for resident academic staff which is similar to the findings of Aziz et al⁸This is sometimes compounded by difficulty in obtaining study leave to attend faculty development programmes which concurs with Wearne et al¹⁷ The main hospital in Malta - Mater Dei Hospital - is the teaching hospital affiliated with the Faculty of Medicine and Surgery, UM therefore discussion between the two institutions may help to streamline clinical and educational commitments for clinicians who are also faculty members.

However, an additional barrier identified is the concept of separate professional and teaching identities which may not be widely accepted in Malta. This is congruent with the findings of Brownell & Tanner.⁷ Some faculty members stated that ignorance in this respect could be attributed to individual and institutional failings. By increasing local awareness of these separate identities. Faculty may encourage BiME course attendance. Furthermore, if this is supported by a structure that rewards faculty members for investing their time in CPD activities, attendance can be promoted.⁷

In the pursuit of excellence in medical education in Malta, the BiME course is the first step. This could be advanced by the development of an Intermediate Medical Education Course and an Advanced Medical Education Course, possibly progressing to formally recognized post-graduate qualifications in medical education. Liaising with other Faculties at the UM or partnering with international Universities with a proven track record in medical education faculty development, could create successful collaborations. Such faculty programme development could create a trained educator workforce, and as part of the course programme could encourage research as well as evidence-based quality improvement and educational governance initiatives with high local utility. This would create continuity and a follow up path to the BiME course, addressing the institutional hurdle identified by Nadeem & Yasmin¹⁸ as well as the research findings.

Identifying and Motivating the Individual Educator

The most frequently mentioned barrier to attendance by faculty members was the individual's personal characteristics, particularly in relation to a lack of interest regarding the importance of faculty development in medical education, similar to Caffarella & Zinn.⁵ This hurdle could be overcome if internally motivated individuals are identified, recruited, and rewarded. Others lacking these qualities could be given feedback and encouraged to improve, possibly through the creation of communities of practice of motivated medical educators.¹⁹⁻²¹

The lack of negative incentives was seen to act as a barrier to attendance by some interviewees. Faculty would need to consider the benefits of retaining untrained staff versus the risk of demotivating other faculty members and possibly failing to improve institutional standards and governance in medical education. This is particularly relevant because Malta has a small and limited number of medical educators, and other Universities are establishing a local presence in medical education.

Reward Structures

A lack of recognition and reward for course attendance was mentioned as a barrier, akin to the literature.²²⁻²⁴ Tangible reward structures could include the establishment of awards in medical education^{25,26} and the development of a formative feedback framework for faculty members including input from senior Faculty staff, peers, and students, such as collaboration with the Malta Medical Students Association (MMSA)'s Standing Committee on Medical Education (SCOME). The BiME course should remain a free resource.

Increasing BIME Course Awareness and Reducing Isolation

Providing clear and detailed information about the BiME course to faculty members would address the lack of awareness. A carefully designed and ergonomic introductory manual should be developed with messages from the Faculty's Dean and MEU's Head, while highlighting the institution's position on the importance of faculty development. Additionally, it could launch some of the reward structures and outline the Faculty's strategy to address the institutional recognition and governance barriers. The positioning of the BiME course in relation to faculty members' progression in pursuing a medical education career within the Faculty would situate its relevance within the local context and could encourage faculty members to attend.

Details of the course tutors, with photographs and biographies, outlining their credibility in medical education as well as an outline of the BiME course programme with its aims, learning objectives and long-term outcomes clearly formulated might help, too. These would address the identified barriers regarding course tutors and the course programme, which are similar to barriers reported in the literature.^{8,27-28} The inclusive nature of the course could be emphasized by including testimonials from faculty members who attended previous iterations. The BiME course manual could be hand-delivered to individual faculty members by appointing 'medical education champions', or even through the organization of a course re-launch event associated with an opportunity for community building.

The findings of this study may be used as a foundation for future research wherein a quantitative questionnaire could be distributed to all faculty members at the Faculty of Medicine and Surgery, UM. Also, in-depth research into the barriers experienced by different faculty member cohorts namely resident academics, visiting teaching staff and casual staff - would be important as no casual staff members participated in this study. Additionally, different barriers may be experienced to different extents by the different cohorts.

To conclude, recommendations as informed by this study include increased consideration of the individual's characteristics, possibly at the faculty member recruitment stage as internal motivation seem to be key;²⁹ promotion of the idea of separate professional and educator identities;⁷ development of reward strategies for excellence in medical education;²⁵⁻²⁶ encourage the development of communities of practice;¹⁹⁻²¹ re-branding and relaunching of the BiME course.

ACKNOWLEDGEMENTS

Professor Godfrey La Ferla, Dean, Faculty of Medicine and Surgery, University of Malta, and Professor Josanne Vassallo, Head, Medical Education Unit, University of Malta; for their support as research sponsors.

All faculty members who participated as interviewees.

All faculty members who participated as interviewees in the data collection phase including, in alphabetical order, Dr Sarah Cuschieri, Prof Anthony Fenech, Dr Marco Grech, Prof Janet Mifsud, Dr Velitchka Schembri Agius, Prof Isabel Stabile, Mr Mark L. Zammit, Dr Mario Zerafa, and others. Their time and cooperation were invaluable.

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