

Geriatric Medicine Masterclass: Collaborative Learning Initiative for Undergraduate Healthcare Students

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ABSTRACT

The shift towards an aging population poses unprecedented challenges for the healthcare system, with more effort needed in developing our healthcare curriculum to address the issue. It is equally important to foster interprofessional education (IPE) collaboration among healthcare students and enhance their understanding and engagement in collaborative geriatric care through comprehensive and interactive learning experiences. Coordinated by respective undergraduate students and lecturers from the respective medical, dental, pharmacy and nursing departments, a workshop was organised, consisting of a forum, team-based case discussion and presentation sessions focussed on addressing the holistic healthcare needs of older people. Pre- and post-workshop assessment of students' confidence and feedback was undertaken. Improvement in confidence among participants was significant, with positive feedback on the organisation, content, and method of delivery. This interprofessional geriatrics masterclass had a positive impact on the participants' confidence level and might serve as a useful educational intervention in fostering holistic care for older people.

Keywords: Education, geriatrics, interdisciplinary, undergraduate

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INTRODUCTION

Malaysia's aging population is growing at a faster-than-expected rate, with the portion of the population aged ≥ 60 years projected to increase to 4.9 million or 13.6% in 2030 and 9.6 million or 23.6% in 2050 (Naraval et al., 2017). Hence, it is crucial to enhance the healthcare curriculum to align with the evolving needs of the nation's healthcare system and address the unique challenges associated with aged care. Older patients

often present with complex issues that involve multidisciplinary care. Interprofessional education (IPE) collaboration can help healthcare practitioners develop teamwork skills for effective and comprehensive care (Thompson et al., 2020). IPE is defined by CAIPE as “occasions when two or more professions learn with, from, and about each other to improve collaboration and the quality of care”. This study aimed to explore the impact of interdisciplinary collaborative learning in enhancing the understanding and competencies of undergraduate healthcare students in geriatric care through an interprofessional workshop (CAIPE, 2002).

METHODOLOGY

This student-led interprofessional workshop was organised by the undergraduate medical, dental, pharmacy, and nursing society of Universiti Malaya. It was also supported by their respective lecturers. The workshop consisted of (1) a forum which featured a panel composed of a geriatrician, geriatrics-trained nurse, pharmacist, and restorative dentist, sharing their experiences in providing holistic multidisciplinary geriatric care, (2) interprofessional small group discussion of geriatrics-specific cases designed by the student committee and facilitated by a healthcare professional with expertise in geriatric care and student facilitator, and (3) case presentation sessions by each group to the rest of the participants. Pre- and post-workshop assessments were conducted to evaluate the students’ knowledge in geriatric care, interest in geriatrics, and views on the workshop’s usefulness using a 5-point Likert scale. Additionally, confidence in various domains of geriatric care were assessed using a 10-point Likert scale. The questionnaire was developed internally based on what the study team felt were important measurable outcomes, with the domains based on the literature search of the relevant topic. Results were compared using a paired sample t-test, with the significance level set at $p < 0.05$. A post-mortem SWOT analysis was also summarised from participant feedback.

RESULTS

There were 48 participants, and 46 of them (medicine 30.43%, nursing 28.26%, pharmacy 21.74%, dental 19.57%) filled in our pre- and post-workshop assessment. Most of the participants (58.7%) reported encountering geriatric patients daily. From the pre- and post-workshop questionnaire, all aspects showed significance in improvement with the aspects of knowledge showing greatest improvement ($\bar{x}$ differences = 1.617), followed by interest ($\bar{x}$ difference = 0.532), and view of whether the workshop was beneficial to form interdisciplinary collaboration academically ($\bar{x}$ difference = 0.382). Results in Table 1 also showed a significant ($p < 0.001$) increase in confidence level across all the different domains.

Table 1
Changes in confidence levels among participants in pre- and post-workshop

Domain	Pre-Score (Mean ± SD)	Post-Score (Mean ± SD)	t (df = 45)
Improving patient care outcome	5.48 ± 2.401	8.46 ± 1.501	8.519
Reducing medical error	5.61 ± 2.436	8.35 ± 1.581	7.657
Starting treatment fast	5.33 ± 2.468	8.13 ± 1.681	7.426
Reducing healthcare inefficiencies	5.59 ± 2.286	8.43 ± 1.544	8.508
Reducing healthcare costs	5.24 ± 2.152	8.20 ± 1.708	8.949
Improving interprofessional relationships	5.93 ± 2.265	8.63 ± 1.466	8.678
Increasing job satisfaction	5.83 ± 2.254	8.63 ± 1.420	9.226
Improving patient’s quality of life	5.91 ± 2.411	8.70 ± 1.459	8.782
Improving caregiver-provided care	5.96 ± 2.394	8.67 ± 1.506	8.670
Working with students from other healthcare disciplines	6.35 ± 2.378	8.83 ± 1.355	7.542

Source: Authors’ work

Feedback was overwhelmingly positive, with a $\bar{x}$ score of 4.70 (S.D=0.462) on a 5-point Likert scale, showing their enjoyment in participating in the event. Many of them enjoy “Case discussion & Presentation” the most, while most of them commented that time allocation for each session should be more precise and longer.

DISCUSSION

The workshop was a significant step towards enhancing interdisciplinary collaboration in healthcare education, particularly in geriatrics, where a holistic approach is essential for improving care outcomes. The event achieved its intended objectives of bringing together students from various healthcare faculties, including medicine, dentistry, nursing, and pharmacy, to develop a comprehensive understanding of geriatric care through collaborative activities and discussions.

One of the main successes of the event was its focus on interdisciplinary small group case discussions that encouraged participants to engage deeply in real-world scenarios and exchange ideas across faculties. Participants highly appreciated the opportunity to work closely with peers from different fields, further reinforcing the importance of a collaborative approach in geriatric care. Additionally, the hands-on involvement of facilitators from various disciplines helped guide these discussions effectively, ensuring that participants could apply theoretical knowledge in a practical context. The event demonstrated its potential to grow and could serve as a platform for even more structured collaborations in future events, perhaps extending beyond Universiti Malaya to include students from other institutions. The measurable increase in the participants’ knowledge and confidence in geriatric care, based on pre- and post-workshop assessments, further highlights its educational value.

However, time management emerged as a challenge, with several activities, particularly the case presentations and forum sessions, feeling rushed. Participants expressed a desire for longer discussions and more time for refreshment breaks. This issue could be addressed in future events by extending the duration of the workshop or adjusting the schedule to allow for more flexibility. Another challenge was the participation numbers were lower than expected, partially due to the event clashing with exams for some batches of students. Finding a suitable date that fits with the academic calendars of multiple faculties was an issue. Moving forward, the organising committee can improve by coordinating event dates with academic calendars across faculties, and securing a date that minimises conflicts, would help to boost attendance. Additionally, the event's planning timeline was a bit tight due to the late start by the organising team. This compressed schedule limited marketing efforts, sponsorship opportunities, and left little room for adjustments. To avoid this in the future, the next organising committee should start preparations earlier as it would open up opportunities for securing partnerships and sponsorships, which could help alleviate financial constraints and improve the overall quality of the event.

Another area for improvement is the study design of our event evaluation, where the questionnaire should be validated or adapted from similar studies to enhance its reliability. Apart from that, our study relies primarily on self-reported outcomes and qualitative feedback, which, while still valuable, may not be sufficient for proving long-term effectiveness. More rigorous research designs, such as Randomised Controlled Trials (RCTs), Controlled Before-and-After (CBA) studies or Interrupted Time Series (ITS) designs could be considered to provide stronger evidence of the impact of our event on healthcare practice and patient outcomes (Reeves et al., 2013).

CONCLUSION

Overall, the workshop provided an important opportunity for students to experience the value of interdisciplinary collaboration, which is essential for addressing the complexities of aged care. The event helped not only improve participants' knowledge but also gain confidence in applying what they have learned to real-world situations. The success of this year's event provides a strong foundation for future iterations. Organisers should consider increasing the event duration, enhancing the interactive components, and engaging with a broader audience by expanding the event to include participants from other universities or healthcare disciplines. With these improvements, the Geriatrics Masterclass has the potential to become a flagship event that incorporates the interprofessional collaboration into our current healthcare undergraduate curriculum, which is an innovative strategy recognised by the World Health Organisation (WHO) and its partners (Gilbert et al., 2010), offering an even more rewarding and impactful experience for the students.

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