

Original

A Pragmatic Approach towards Healthcare Needs in Malaysia through Student-led Dietetics Clinic

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ABSTRACT *Background and purpose* While the concept of student-led clinics is well-established, the available evidence has been limited to multidisciplinary teams, and in North America. There is a notable gap in researching and implementing this model within dietetics, especially in resource-scarce and high disease-burden developing countries. *Methods.* The student-led dietetics clinic began with the formation of a project management team, a 2-tier team in December 2022. The implementation of SDC was carefully considered by multiple factors including operation, finance, and public outreach. The academic team consist of faculty members providing guidance and oversight on the setting up and operations of the clinic to meet students' learning outcomes. The students' team planned the daily operations of the clinic and developed resources for its operations including rotation of students on duty to manage the clinic, and strategies to obtain referrals for the clinic. *Result.* The student-led dietetics clinic presents valuable opportunities for early clinical exposure, leadership development, interprofessional skills, and practising empathy. Its accessibility to address underserved community needs should be explored more effectively. *Conclusion.* Therefore, this pragmatic approach not only benefits the student dietitians' professional development but contributes to the overall improvement of public health through specialised dietary services.

Keywords: Community dietetics, student-led clinic, education, dietary services, Malaysia

INTRODUCTION

The rise of non-communicable diseases (NCDs) in developing nations (1), highlights the urgency for a paradigm shift in dietetics education to meet the population's health needs. Integrating competency-based education can optimally train dietitians as healthcare professionals by bridging theory and practice while developing core clinical skills (2). Therefore, the dietetics programmes offered by higher education institutions must evolve to meet contemporary healthcare demands. Malaysia, an Asian developing country, faces a significant burden of NCDs linked to major nutrition transitions. The latest national health survey shows the population's high dependency on public healthcare (3). However, there exist opportunities to address the issue through accessible and affordable healthcare services. In addition, specific health-seeking behaviours such as the willingness to seek advice from healthcare

Professionals and paying out of pocket could be advantageous for dietetics services offered privately. Global shortages of clinical placement for allied health professionals including student dietitians, necessitate innovative solutions. The international competency standards for dietitians stipulated the minimum competencies to be met at the point of entry. In Malaysia, student dietitians must fulfil 1200 hours of dietetics practicum, mostly in hospitals and primary care facilities. While the concept of a student-led clinic is underexplored in dietetics in developing countries (4), a student-led dietetics clinic emerges as a pragmatic approach to address the demand effectively (5). The student-led clinic presents valuable opportunities for early clinical exposure, leadership development, interprofessional skills, and practising empathy. Additionally, the student-led clinics can be more accessible and affordable, addressing underserved community needs more effectively

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MATERIALS AND METHODS

The setting up of a student-led dietetics clinic (SDC) in a local private university began with the formation of a project management team, a 2-tier team in December 2022 (Figure 1). The implementation of SDC was carefully considered by multiple factors including operation, finance, and public outreach. The academic team consist of faculty members providing guidance and oversight on the setting up and operations of the clinic to meet students' learning outcomes. The students' team

planned the daily perations of the clinic and developed resources for its operations including rotation of students on duty to manage the clinic, and strategies to obtain referrals for the clinic. The specific activities include public announcements on social media, booking of appointments, managing the patient flow, patient consent and confidentiality process, patient documentation and collecting patient feedback on the services provided.

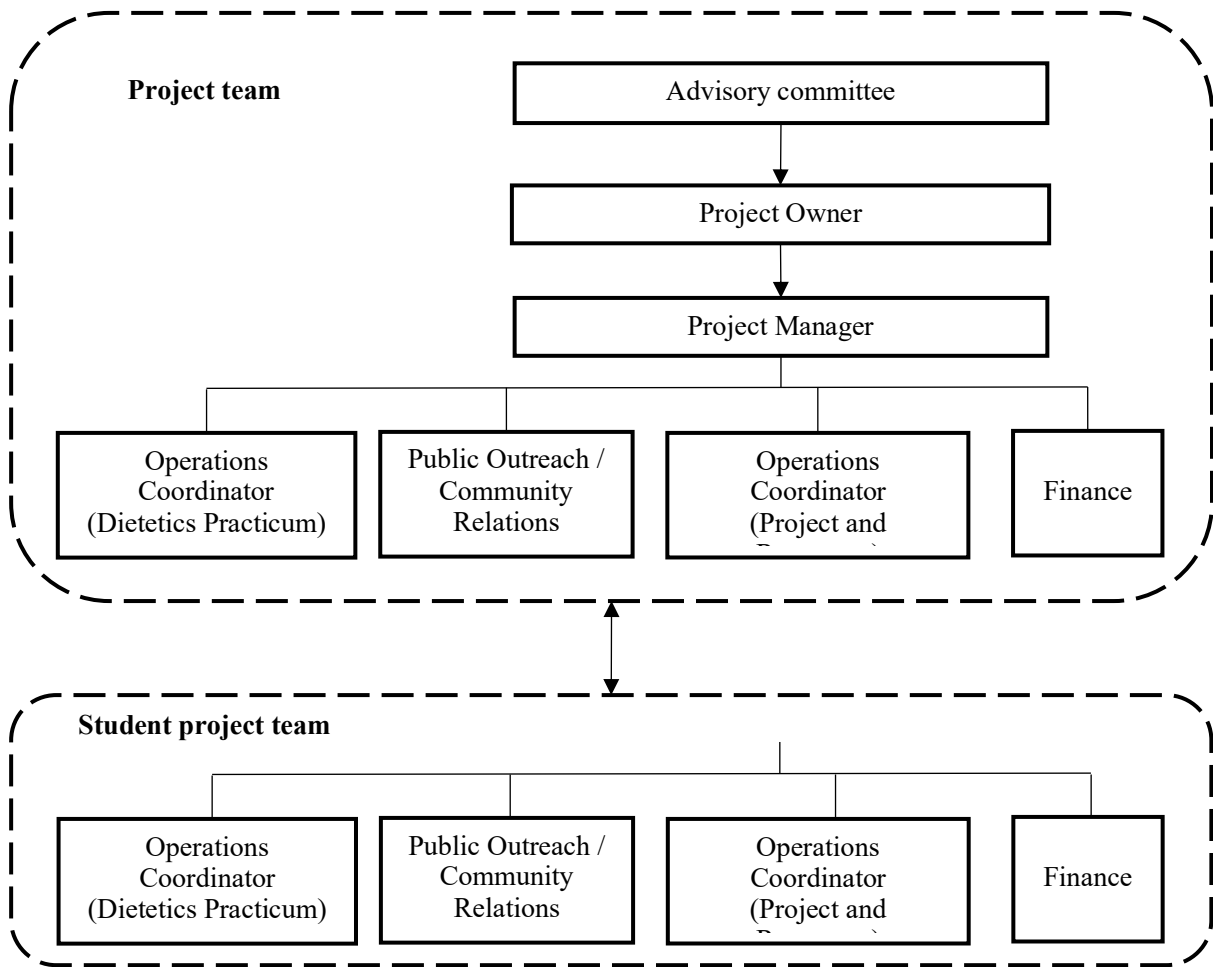


Figure 1: Student-led dietetics clinic project management team

RESULTS

Launched in August 2023, the SDC served as a free clinic and a clinical training site for the final-year dietetics programme, supervised by clinical educators. The Nutrition Care Process was fully implemented in managing patients supported by multi-frequency body impedance analysis (Figure 3), anthropometry kits, real food models, and household measurement tools. Physical copies of patient documentation using ADIME, and medical documents were stored confidentially. Since its inception, a total of 138 patients received individual consultations (Figure 2), and 90 individuals have undergone nutrition screening which mainly consists of students and working professionals in the university. The student dietitians were able to provide medical nutrition therapy primarily for obesity, diabetes, and hyperlipidaemia. All patients seen expressed their satisfaction with the services provided including the quality of nutrition care provided especially on personalised advice and new information acquired, activities conducted, ease of making appointments, minimal waiting times, and overall benefits.

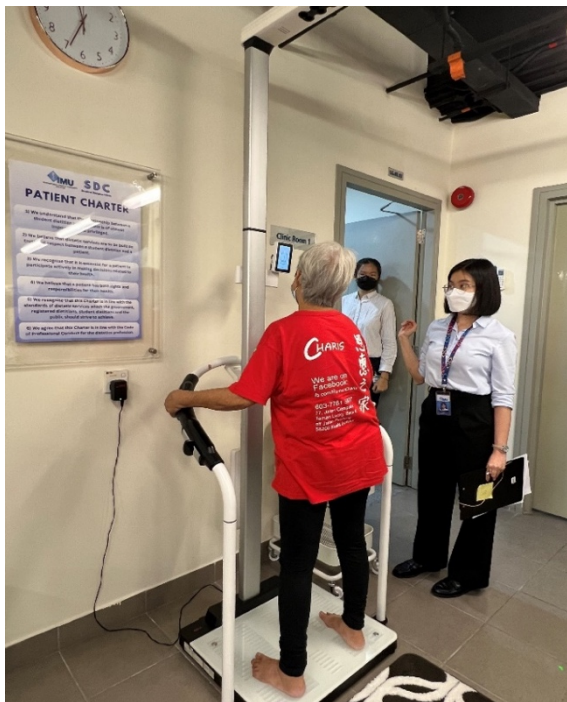


Figure 2: Individual diet consultation by a student dietitian as part of their daily activities



Figure 3: Body composition analysis using a multi-frequency body impedance analyser

The activities created the learning opportunity to conduct nutrition screening, manage adult-related NCDs through individual diet consultation, and implement a thematic-based group education project (Figure 4 and Figure 5) for the community in the form of live talks, webinars, or recorded videos (Figure 6 and Figure 7). The free dietetics services by SDC were promoted to increase public awareness through participation in health events and fairs (Figure 8).



Figure 4: Group education session on malnutrition among the elderly conducted by student dietitians



Figure 5: Healthy meal preparation workshop during a weight management campaign

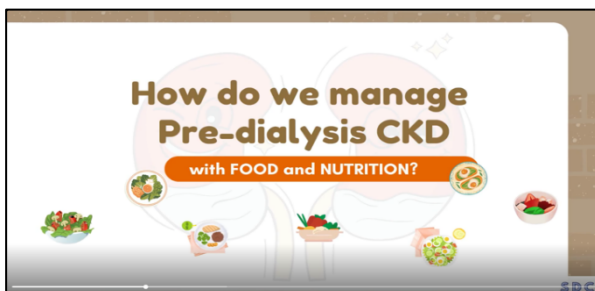


Figure 6: Educational videos on various nutrition-related topics for different target populations

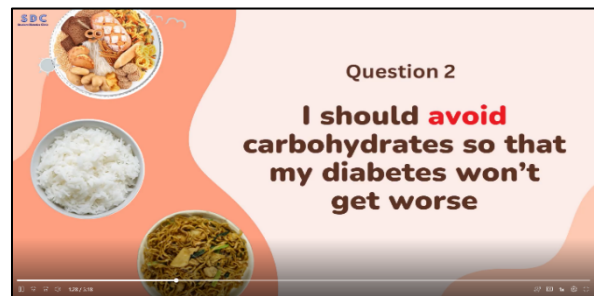


Figure 7: Live webinars to educate on medical nutrition therapy for non-communicable diseases



Figure 8: Name

DISCUSSION

A key advantage of SDC is the student-led approach while maintaining skills development through continuous feedback and guidance from the registered dietitians to the student dietitians. The student board plays a pivotal role in overseeing all clinic aspects, including delivering diet consultations, programme development, and daily operations management. This structure fosters transparency and allows younger students to volunteer and participate in clinic activities, gaining valuable insights into clinical settings. The hands-on experience not only allows all stakeholders to be involved in management, planning, and implementation but also provides beneficial exposure into the diverse and evolving needs of patients.

For student dietitians, the advantages of the SDC are multifaceted. Firstly, it offers a unique opportunity to apply and refine the skills acquired during their final year academic journey, providing practical experiences to work with real patients in an authentic clinical environment. Secondly, it provides a platform to develop effective communication strategies, fostering connections with patients from diverse backgrounds and age groups. Thirdly, students will receive invaluable feedback from supervising professionals, enhancing their documentation, practical skills, and decision-making abilities. This mentorship is recognized as a critical component in the dietetics workforce preparation and at the early stages of one's professional career (6). In addition, the SDC plays a pivotal role in nurturing professionalism and altruism, contributing to their growth as compassionate healthcare practitioners.

In conclusion, the SDC has the potential to address the gap in dietetics training in Malaysia by providing timely and cost-free dietetics services. Establishing the SDC elevated the experience of dietetics students by offering a unique platform to foster entrepreneurship, leadership, teamwork and problem-solving skills besides enhancing clinical competencies and improving client interactions. These are real-world experiences to prepare work-ready graduates for the country in combating NCDs. Ensuring the sustainability of SDC requires securing funding, expanding partnerships, integrating it into healthcare systems, and leveraging telehealth opportunities.

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