

## INTERPROFESSIONAL EDUCATION (IPE) ON MULTIDISCIPLINARY MANAGEMENT OF DIABETES

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### Purpose

An Interprofessional Education (IPE) programme was developed to raise awareness of interprofessional education (IPE), and interprofessional collaboration (IPC) in the management of diabetes. This was supported by Lee Foundation's Education Award (2017). Target participants included undergraduate students from various healthcare professions, and new SingHealth staff. The intended learning outcomes were to:

- Realize the necessity of a team approach to successfully manage patients with complex chronic disease.
- Understand the interprofessional team management for uncontrolled diabetics in a multidisciplinary patient-centric care model.
- Have increased appreciation of the complementary roles and functions of various team members
- Be prepared for collaborative practice in workplace.

### Methods

**Recruitment:** Invitations to the Head of clinical departments, Training and Education leaders were sent, inviting students or trainees undergoing clinical attachment at SingHealth to sign up for the IPE programme.

**Learning Journey:** The programme consists of two parts.

Part 1: E-learning module.

Participants were enrolled into an online module titled "Inter-professional Education (IPE) on Management of Diabetes with a Multidisciplinary Team" (Fig 1) on SingHealth online learning management system, 1-2 weeks before commencement of the IPE workshop. The module consist of a series of videos, using a narrative approach, that features a patient's journey with the various healthcare professionals in an outpatient setting. Using the online materials and reflective exercises, participants are able to develop an understanding of the roles and importance of collaboration of healthcare professions in diabetes management.

Part 2: IPE workshop with diabetic patient volunteer and faculty member.

The workshop starts with a brief presentation on IPE & IPC. This followed showing a case vignette with clinical notes that highlighted areas where team-based care would be needed. Participants would be distributed into groups consisted of different professions. Each group then worked collaboratively, with help from a faculty facilitator, and can interact with a diabetic patient volunteer to attempt to help identify and try to resolve key clinical or psychosocial issues (Fig 2). Through discussions, the group decide and construct action plans to deliver care for the diabetic patient. At the end, all groups presented their findings, action plans, and shared what they have learned for that day (Fig 3).

Fig 1

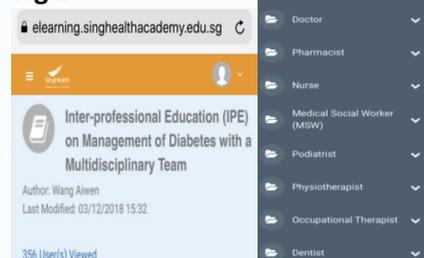


Fig 2



Fig 3.



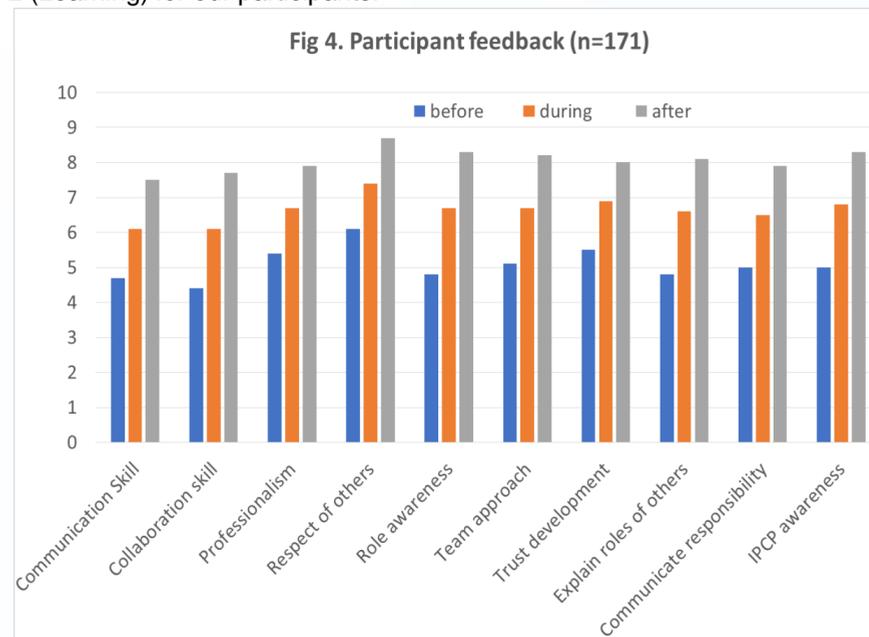
**Programme evaluation:** A 10-item questionnaire was used to evaluate participants' learning experience "before", "during" and "after" the workshop". All items were rated on a 10-point Likert scale. Qualitative written feedback was collected.



### Results

Four IPE workshops were completed with 171 participants, consisting of 151 (88.3%) students (pharmacy students, nursing students, physiotherapy students and medical students) and 20 (11.7%) newly graduated working professionals (pharmacists, dietitians, physiotherapist, podiatrists, radiologists).

The results (Fig 4) showed consistent improvement in all items from "before" to "during" and "after" the IPE workshop. These results showed that our IPE programme managed to achieve the objective to "raise awareness of IPE and IPC on management of diabetes with a multidisciplinary team". The IPE workshop was reported as "favorable and engaging" especially the interactions with the patient. Our results showed that we have achieved the Kirkpatrick Model Level 1 (Reaction) and Level 2 (Learning) for our participants.



### Conclusion

A blended IPE programme with online narrative learning approach and workshop with team-based problem-solving approach had raised awareness of IPE and IPC on management of diabetes with a multidisciplinary team of healthcare professionals (HCPs).

Online E-learning improved access to opportunities to understand how other HCPs interact with patients, and interactions with a real diabetic patient during the workshop helped to engage the students.

We plan to assess the impact of the training through focus-group discussions with previous participants to gather feedback and comments on the IPE programme attended to further refine the programme, and to assess if the blended programme helped prepare them to be collaborative practice-ready healthcare workers, i.e. Level 3 (Behaviour) of Kirkpatrick Model.



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