

Can students develop competencies in interprofessional collaboration using Telehealth in allied health programs? A systematic review



Sian Hopkins, Jane Kellett, Allyson Flynn, Cate Hilly, Rachel Bacon
Faculty of Health, University of Canberra
Correspondence: Sian.Hopkins@canberra.edu.au

Background

Interprofessional Education (IPE) enables students to collaborate effectively to deliver high quality service user outcomes.¹ Due to COVID-19 the use of telehealth to deliver health care services has increased and demand for health professionals competent in using telehealth is expected to rise.² While some research has shown that IPE can have benefits to allied health students,^{3,4} no reviews have been conducted that investigate IPE delivered through telehealth.

Aim

This systematic review aimed to explore whether telehealth can support allied health students to develop competencies in interprofessional collaboration.

Method

- A systematic review was conducted using the PRISMA guidelines.⁵
- Studies were included where there was one or more allied health⁶ student in interprofessional student teams, and where at least one student in the interprofessional team provided care to a real or simulated patient through telehealth.
- The Interprofessional Education Collaborative (IPEC) competencies were used as a framework for data extraction.⁷
- Quality appraisal was conducted using the McGill Mixed Methods Appraisal Tool (MMAT).⁸

Results/Discussion

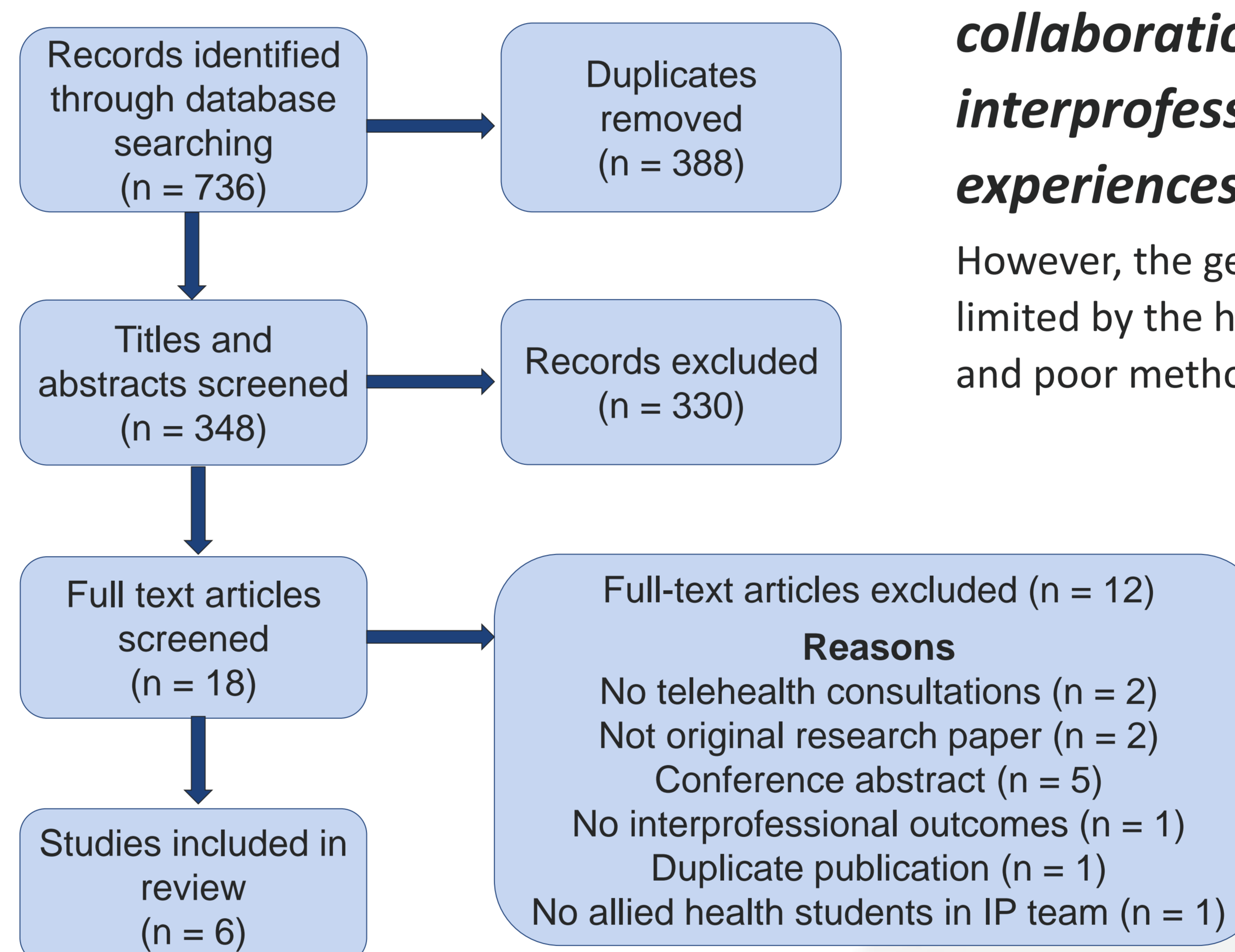
- Of 341 studies screened, six were selected for inclusion.⁹⁻¹⁴ IPE delivered using telehealth was able to address the IPEC competencies.
- All included studies used a mixed methods design; however, no two studies used the same evaluation tools.
- The generalisation of the findings is limited by poor methodological quality (MMAT scores 0-50%).
- Students found service delivery challenging via telehealth due to technical issues and lack of preparedness in Telehealth service delivery.

- Students were able to meet the IPEC Interprofessional Collaboration Competencies in the reported studies:
 1. Values/Ethics for Interprofessional Practice ($n = 5$)
 2. Roles/Responsibilities ($n = 5$)
 3. Interprofessional Communication ($n = 4$)
 4. Teams and Teamwork ($n = 6$)

Conclusion

Students can develop competencies in interprofessional collaboration through interprofessional telehealth experiences.

However, the generalisation of the findings is limited by the heterogeneity of the studies and poor methodological quality.



References



Please scan QR code to access full reference list

Author	Professions in interprofessional team	Interprofessional experience	Competencies Addressed
Scott et. al. (2020) ⁹	Nursing, medical, pharmacy	Simulated: emergency in hospital setting, nursing and pharmacy students present, medical students remote via audio/video "telehealth robot"	1, 2, 3, 4
Bautista et. al. (2020) ¹⁰	Medicine, pharmacy	Real patient: outreach clinic. Students met prior to patient contact to review charts; interprofessional patient call conducted via Zoom; post-encounter "huddle" with preceptors to review patient	1, 2, 3, 4
O'Shea et. al. (2019) ¹¹	Nutrition and dietetics, exercise physiology	Simulated: Students took turns consulting with a standardised patient while student from other discipline observed	2, 3, 4
Shortridge et. al. (2018) ¹²	Nurse practitioner, physiotherapy, occupational therapy	Simulated and real patient: first semester web-based learning modules, then interprofessional care plan for fictional patient. Second semester same teams developed plan for and provided care to standardised patient. Then subset of students met with real patient in clinical learning activity	1, 2, 4
Sweeney Haney et. al. (2018) ¹³	Nurse practitioner, clinical nurse specialist, physical therapy, speech pathology, clinical counselling, medical, athletic training, dental hygiene, social work, paediatric nurse practitioner, pharmacy	Simulated: three phases: (1) Online learning module and development of group care plan; (2) standardised patient experience via telehealth; (3) development of app or website to support patients and family	1, 2, 3, 4
Shortridge et. al. (2016) ¹⁴	Nurse practitioner, physiotherapy, occupational therapy	Simulated: case study and orientation to telehealth equipment in advance. Standardised patient encounter in clinical room, with one member of interprofessional student team participating remotely through video call.	1, 4