

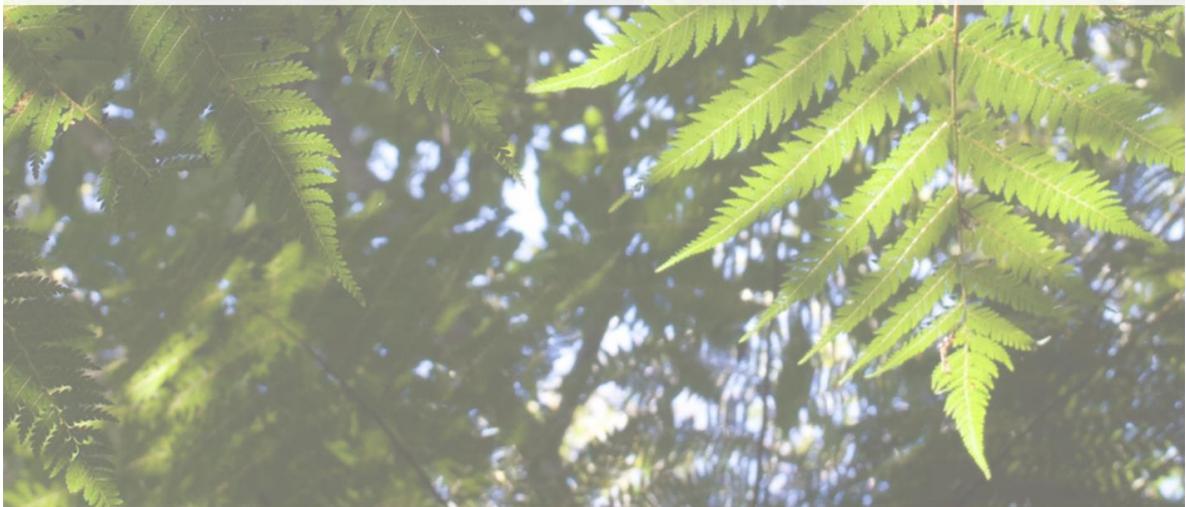


# OMS HEALTH PROFESSIONS EDUCATION RESEARCH GROUP

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## ONLINE SYMPOSIUM PROCEEDINGS

Wednesday 1st & Thursday 2nd December 2021



Edited by Megan Anakin, Qian Liu, & Ciara Lee  
Otago Medical School, University of Otago

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## Programme



### Wednesday 1st December

Presenter	Discussion Topic / Abstract Title	Time
Facilitators	Day 1 welcome and introductions. Conversation starter: What area of education research in health professions are you most intrigued/enthused/passionate about?	3:00-3:20pm
Jim Ross & Lynley Anderson	Encountering unacceptable behaviours in Health Science students' clinical years	3:25-3:45pm
Fardowsa Mohamed	How might a historical-cultural-social research perspective impact our investigation of students' and clinicians' experiences of learning and teaching decision-making in surgery settings?	3:50-4:15pm
Joanne Robertson-Smith	How can we better understand mentorship in critical and acute care nursing settings?	4:20-4:45pm
Whole group	Day 1 Closing Plenary. Take home messages from Day 1.	4:45-5:00pm

### Thursday 2nd December

Presenter	Discussion Topic / Abstract Title	Time
Facilitators	Day 2 welcome and introductions. Conversation starter: What areas of education research in health professions are you most intrigued/enthused/passionate about? and/or What ideas have most intrigued you from yesterday?	3:00-3:20pm
Ibrahim Al-Busaidi	Impact of an intercalated research degree on long-term academic success	3:25-3:45pm
Lynette Murdoch	Is the juice worth the squeeze? Medical students' experiences of striving for distinction.	3:50-4:15pm
Louise Beckingsale	SimPHARM as an asynchronous educational tool for learning about interprofessional shared decision making	4:20-4:45pm
Whole group	Day 2 Closing Plenary. Take home messages from Day 2.	4:45-5:00pm

## Guidelines for Presenters and Participants

We will use Zoom as the conversation platform to connect group members during our symposium on Wednesday 1st and Thursday 2nd December, from 3-5pm each day.

On both days, there will be a 15-minute welcome session, followed by three 25-minute presentation sessions, and a 15-minute closing discussion. We aim to make all sessions conversational.

**Facilitators** will be present in all sessions. They will be available to help anyone during the symposium. Facilitators will manage the use of breakout rooms during the welcome session. Facilitators will assist presenters to monitor and respond to the chat messages during presentation sessions. Facilitators will help presenters to manage to conversation so that all participants who want to speak can do so.

**Presenters** have 5 minutes to introduce their topic to set the scene for discussion. The remaining 20 minutes of the session is intended to be a conversation about issues related to the topic and questions posed for discussion.

**Participants** are strongly encouraged to discuss the topic with each other in two ways, by:

- unmuting their microphone to speak
- using the chat function in Zoom to post ideas, comments, and continue threads of conversations in writing.

All abstracts were reviewed independently by Ciara Lee, Qian Liu, and Megan Anakin. The three reviewers met to discuss their reviews and provide constructive feedback to authors. Abstracts were included in the symposium when they met the following criterion:

- The abstract outlines a topic for discussion that is relevant to health professions education practice or research.

If you have any questions, please contact Megan ([megan.anakin@otago.ac.nz](mailto:megan.anakin@otago.ac.nz)). Authors have provided their permission for their abstracts to be published and be made publicly available in OUR Archive (<https://ourarchive.otago.ac.nz/>).

## **Encountering unacceptable behaviours in Health Science students' clinical years**

Jim Ross<sup>1</sup>, Lynley Anderson<sup>2</sup>, & Geoff Noller<sup>2</sup>

<sup>1</sup>General Practice and Rural Health, Dunedin School of Medicine, University of Otago, Dunedin, New Zealand

<sup>2</sup>Bioethics Centre, Dunedin School of Medicine, University of Otago, Dunedin, New Zealand

### **Background**

University of Otago Health Sciences staff involved in teaching are often receiving anecdotal reports from their students about experiences of sexual harassment, racism, and other unacceptable behaviours in clinical contexts. Sometimes these experiences involve patients, sometimes staff or peers. Students do not always know how to respond. Some students may feel anger or shame and these feelings impact on their learning. Other students report these experiences to their clinical supervisor, yet others do not. If reported, responses from teaching staff can range from dismissing the experience of the student to taking it seriously and responding in a way that supports students to feel safe and keep learning.

### **Challenge**

Our project team consists of a diverse group of 10 researchers with varying experience and research interests. Additionally, we wish to apply a co-design approach to our project. We are therefore assembling a stakeholder panel, comprising student representatives from the five professional schools in the Division of Health Sciences, along with Māori and Pasifika Health Science (and potentially other) student groups, to collaboratively refine the method and research instruments (validated questionnaire, structured interviews, focus groups) to capture project data.

### **Questions**

1. How do we most productively manage the potentially diverse research interests and agendas of our researchers to accommodate team members' varying focus, for example where there might be a particular theoretical preference or competing interests in terms of project outputs, such as collecting frequency data, producing university policy, or high-quality publications?
2. How do we manage the relationship between the stakeholder panel and the research team, in terms of balancing the needs of research with those of students experiencing unacceptable behaviours (who will also be similarly diverse), such that the principles of co-design are meaningfully expressed in the project?

## **How might a historical-cultural-social research perspective impact our investigation of students' and clinicians' experiences of learning and teaching decision-making in surgery settings?**

Fardowsa Mohamed<sup>1</sup>, Konrad Klaus Richter<sup>1,2</sup>, & Megan Anakin<sup>2</sup>

<sup>1</sup>Department of Surgery, Southland Hospital, Invercargill, New Zealand

<sup>2</sup>Dunedin School of Medicine, University of Otago, Dunedin, New Zealand

### **Background**

The ability to make decisions about patient care is a core learning outcome in the curricula of medical schools and it is central to practice as a doctor, however, students and clinicians find decision-making challenging to learn and teach. We wondered how the culture, norms and practices within surgical settings might impact teaching and learning about decision making. These historical, cultural, and social factors impact on the ways students can learn and clinicians can teach decision-making. These factors also influence how students become decision-makers and the care doctors can provide to their patients.

We are curious about how medical students, surgical registrars, and senior surgeons view their interactions with one another when they learn/teach decision-making in surgery settings.

### **Challenges**

We have chosen one-to-one interviews as the method for collecting data from approximately 12 participants. A surgical registrar is conducting the interviews. There was a delay in commencing data collection due to the slow process of obtaining locality authorisation and increased clinical workloads for participants and interviewer due to the pandemic. Participant checking, anonymising data, and maintaining confidentiality when reporting results are crucial steps in the research process due to the relationships among participants as students, teachers, and colleagues.

### **Questions for Discussion**

What insights might we gain/miss by investigating a historical-cultural-social research perspective in our study?

What are the strengths and possible limitations of including medical students, surgical registrars, and senior surgeons as participants in our study?

Have you performed similar research and how have you used the findings?

Are we making any assumptions that we should consider?

## **How can we better understand mentorship in critical and acute care nursing settings?**

Joanne Robertson-Smith<sup>1</sup> & Megan Anakin<sup>2</sup>

<sup>1</sup>Dunedin Public Hospital, Southern District Health Board, Dunedin, New Zealand

<sup>2</sup>Dunedin School of Medicine, University of Otago, Dunedin, New Zealand

### **Background**

Mentorship is used as a method to teach complex care skills in critical and acute care nursing and to support new staff members as they learn the skills and knowledge required to perform their roles settings. However, anecdotally, experienced nurses express a reluctance to provide or engage in mentorship because they find it time consuming and frustrating when mentees do not engage with them. We are interested in exploring the experiences of mentors working in critical and acute care nursing settings to better understand how they might interact with junior colleagues in mentorship.

### **Challenges**

We are interested in conducting a study about mentorship in a hospital context, however, due to limited research resources, we have chosen to focus on the experiences of nursing mentors only. We are concerned that by omitting mentees, we might be missing additional views of mentorship. The population of mentors at our study site is limited (n = 19) and we are uncertain about how many mentors may consent to participate in our study.

### **Questions for Discussion**

What are the strengths and possible limitations of limiting our study to a small number of mentors only?

What insights might we missing by omitting mentees as participants in our study?

What methodological approach might help us to optimise the analysis of data from a limited sample of mentors to yield the best possible insights about mentorship?

Have any attendees have had similar challenges and how they overcame them?

How have other researchers achieved buy-in from senior management/university to enact changes as a result of research like this?

Are there any assumptions we might make about the participants or mentorship that we should reconsider?

## **Impact of an Intercalated Research Degree on Long-Term Academic Success**

Ibrahim S. Al-Busaidi<sup>1</sup>, William Ju<sup>1</sup>, Yassar Alamri<sup>2</sup>, & Tim J Wilkinson<sup>3</sup>

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<sup>2</sup>Christchurch Hospital, Christchurch, New Zealand

<sup>3</sup>Department of Medicine, University of Otago, Christchurch, New Zealand

### **Background**

Recent reports suggest that the clinical academic workforce is declining worldwide. Medical schools have implemented initiatives to reverse this trend including formal undergraduate research training pathways (e.g., intercalated research degrees). The BMedSc(Hons) degree at the University of Otago is a 1-year full-time supervised research project offered to medical students who have completed three or more years of their undergraduate medical training.

We used a matched cohort design in a 1:1 ratio (with cases and controls) to examine the effect of completing a BMedSc(Hons) degree [1995-2006] on post-graduation peer-reviewed publications, attainment of higher academic degrees and appointment to faculty positions.

A total of 94 students (59% male) completed the BMedSc(Hons) degree with a median follow-up period of 14.4 years. Compared with controls, BMedSc(Hons) students were significantly more likely to publish in PubMed®-indexed journals (OR 7.3, CI 3.13-17.21;  $p = 0.001$ ), obtain a PhD (OR 13.0, CI 1.70-99.38,  $p = 0.013$ ) or any higher degree (OR 3.2, CI 1.17-8.74;  $p = 0.023$ ) following graduation. However, completing a BMedSc(Hons) degree was not associated with securing academic/faculty positions (OR 1.6, CI 0.67-3.59;  $p = 0.301$ ).

### **Challenge**

We evaluated the long-term impact of a 1-year research intercalating degree focusing on academic indicators. However, whether attainment of these outcomes (e.g., completion of higher academic degrees) was directly related to the BMedSc(Hons) experience is not known.

### **Questions for Discussion:**

How should the above results be interpreted?

What insights might we gain/miss by investigating outcomes from a research training activity focusing on 'academic'?

What other important short- and long-term outcomes that should be examined?

## **Is the juice worth the squeeze? Medical students' experiences of striving for distinction.**

Lynette Murdoch

University of Otago, Christchurch, New Zealand

### **Background**

Medical schools are switching to non-graded pass assessment systems for part or all of their programmes with the aim of improving student well-being, fostering approaches to learning that align with effective life-long learning, and improving fairness for students entering medical schools from diverse backgrounds. However, there is little published research on medical students' experiences with traditional tiered grading versus non-graded pass assessment systems.

This year, I interviewed 10 final year medical students individually, exploring their experiences of an assessment system with three grading tiers (distinction/pass/fail) that temporarily switched to a non-graded pass system (pass/fail) for 2020. This temporary change was a consequence of the COVID-19 pandemic. With one exception, all students had been awarded several distinction grades during the medical programme.

I have identified the following themes from the interview transcripts:

- Striving for distinction grades is much less important than it was at entry to medical school.
- Distinction grades are a tangible and immediate way of recognising effort, and an important motivator for some.
- Preparing to be a good doctor is motivating and not the same as striving for distinction.
- Striving for distinction comes at a cost to learning (in a broad sense) and to personal well-being.
- Perception of unfairness in the awarding of distinction grades.
- Doubt about the value of distinction grades outside of medical school.
- Relief when the option of striving for distinction is removed.
- Personalised narrative feedback from an assessor is valued much more than a distinction grade.
- Assessor subjectively is more acceptable in the context of personalised narrative feedback than in pass/distinction decisions.

This is where I'm up to with this research.

### **Challenges and Questions:**

- What are some explanations for these results?
- What theories could be relevant?

## **SimPHARM as an asynchronous educational tool for learning about interprofessional shared decision making**

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<sup>2</sup> School of Pharmacy, University of Otago, Dunedin, New Zealand

### **Background**

Therapeutic decision-making is a fundamental skill that health professionals use in order to make evidence-based and individualised decisions on the choice of and dose selection of medicines to improve patient care. Interprofessional shared decision making (IP-SDM) is defined as a collaborative process facilitating team involvement for clinical decision-making.

SimPHARM is a clinical pharmacology simulation engine that creates autonomous, cloud-based virtual patients. The students interact with their virtual patients via a web-based interface in real-time with the purpose of managing their patient's medical / clinical pharmacology needs. SimPHARM provides a consequence driven learning platform for students. It offers a safe and relevant environment for students to learn about clinical decision-making for therapeutic treatments.

Interprofessional education (IPE) occurs when two or more professions learn with, from and about each other to improve collaboration and the quality of care. Although SimPHARM is more often used with unprofessional cohorts it has been trialled with small numbers of multiple students from different professional backgrounds, both synchronously and asynchronously, and has shown promise as a novel way to deliver IPE and meet a range of IPE competencies.

### **Challenges**

In 2021, a study was carried to determine the feasibility of using SimPHARM as a tool for engagement in asynchronous IPE with a cohort of 24 medical and 16 pharmacy students. The main learning outcome about IP-SDM was to “collaborate within an interprofessional team to reach a shared therapeutic decision for patient care”.

Data collection included a short online student evaluation survey, audio-recording of the teaching team debrief and facilitator debriefing notes. An initial analysis of the data suggests that SimPHARM helps overcome some of the logistical challenges of organising large groups of students from diverse backgrounds with equally diverse curricular and timetables. However, from the data collected it is hard to draw solid conclusions about the IP-SDM learning outcomes.

### **Questions to discuss**

- How could we measure IP-SDM?
- Is it possible to measure IP-SDM using game-based software?
- How could we design a follow-on study that will measure the learning outcomes:

- To collaborate within an interprofessional team to reach a shared therapeutic decision for patient care
- To utilise effective communication strategies in teams in relation to the acceptability, quality and safety of clinical and professional outcomes