

# An Evaluation of Polypharmacy Workshops for Undergraduate Pharmacy Students

## **Authors**

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# Background

Inappropriate polypharmacy can lead to many problems for patients, especially the elderly. Those taking ten or more medicines are 300% more likely to be admitted to hospital with an adverse event, 50% of these are preventable<sup>1</sup>. The World Health Organisation aims to reduce the incidence of medication related harm by 50% globally in the next five years in their third global challenge<sup>2</sup>. The iSIMPATHY (implementing Stimulating Innovation in the Management of Polypharmacy and Adherence Through the Years) team are delivering medication reviews in Northern Ireland, Ireland and Scotland.

# Aims/Objectives

To design and deliver a polypharmacy workshop for all final year pharmacy students.

## Methodology

A polypharmacy workshop was designed to help students conduct medication reviews and identify and action inappropriate polypharmacy. This workshop was delivered by the iSIMPATHY team to all final year pharmacy students in Northern Ireland. A full day workshop, delivered in conjunction with a clinical psychologist, was provided at Ulster University, Coleraine (UU) and analysed using pre- and post-workshop questionnaires which had received ethics approval. A three hour workshop was provided at Queen's University, Belfast (QUB) consisting of a workbook taking 1.5 hours to complete and a 1.5 hour in-person workshop. This was analysed using a Teaching Evaluation Questionnaire.

# **Results/Outcomes**

The workshops were well accepted with high levels of student satisfaction. Questionnaires were completed by 37% UU and 25% QUB students. Ninety-two percent of UU students felt more confident to identify inappropriate polypharmacy and had increased confidence in other important skills, all students enjoyed the psychology session. QUB students highlighted high levels of student satisfaction. Figure 1 shows student-reported knowledge (feels knowledgeable or very knowledgeable) pre- and post-workshop at UU.

## Student knowledge pre- and post-workshop

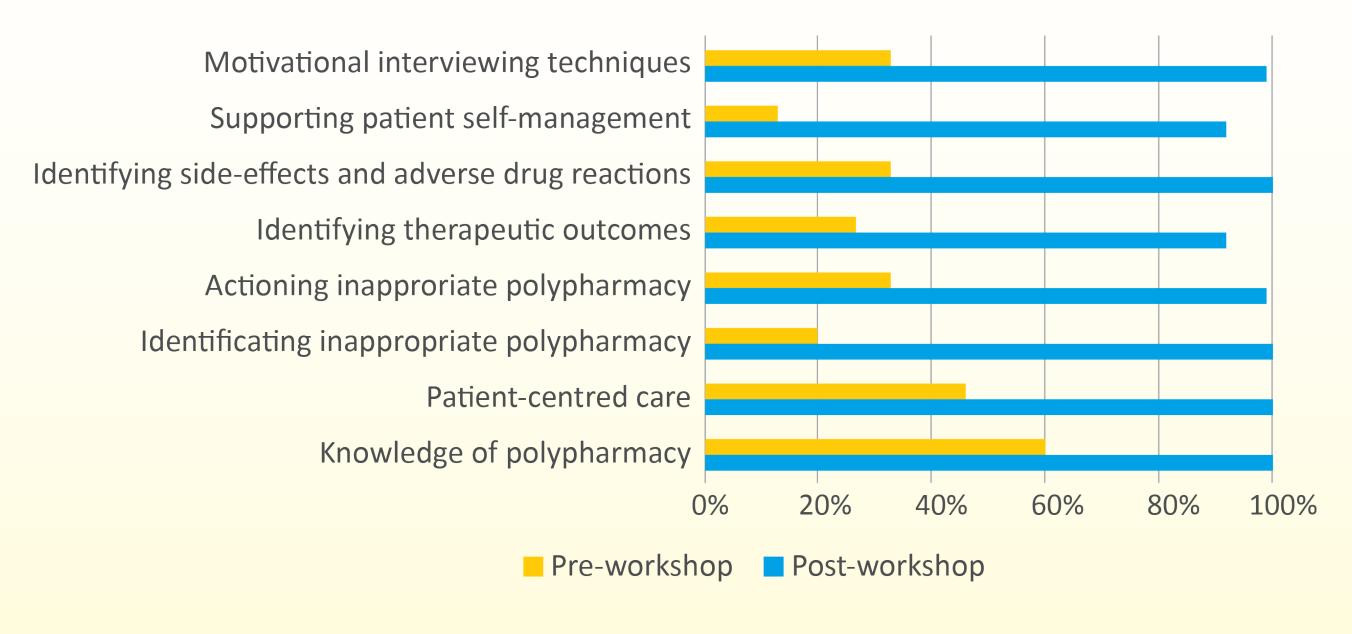


Figure 1. Student-reported outcomes of feeling knowledgeable or very knowledgeable.

#### **Student quotes:**

QUBa: 'Really good at highlighting the grey areas of polypharmacy. It was useful when some practical tips were highlighted e.g. relating to the types of resources that would be useful for a pharmacist to have at hand to help with patient counselling/signposting.'

QUBb: 'Really enthusiastic and helped you consider another viewpoint in terms of patient care and understanding the patients' feelings.'

QUBc: 'I liked how it was a 'relaxed' style of workshop but still very informative. Was very useful to tie in quite a lot of knowledge from lots of different areas.'

UUa: 'Found the workshop to be very effective and useful in highlighting the importance of polypharmacy.'

UUb: 'This was a fabulous workshop and I really enjoyed the two parts. The health psychology component is highly relevant for us as pharmacy students and I think is a valuable skill. I hope this is a component that will be explored further for pharmacy education.'

UUc: 'A better knowledge of how to stop medication is just as important as starting new medicines.'

## Conclusion

The polypharmacy workshops were well accepted and students increased their knowledge and confidence in identifying and actioning inappropriate polypharmacy.



### References

- 1. Polypharmacy management by 2030: a patient safety challenge. https://www.isimpathy.eu/downloads/Polypharmacy-Handbook-2nd-Edition.pdf(accessed 6th October 2021)
- 2. World Health Organisation 3rd global challenge: medication without harm (medication safety in polypharmacy). (accessed 6th October 2021). Available from: https://www.nes.scot.nhs.uk/our-work/transforming-nmahp-roles











