

Evaluating the feasibility and educational value of a multi-faceted medical student safe prescribing workshop

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INTRODUCTION

Prescribing medications is critical in medical practice, yet new medical graduates report feeling underprepared^{1,2}. Safe prescribing education is delivered via university curriculum, and includes students completing the National Prescribing Service (NPS) National Inpatient Medication Chart (NIMC) online charting module.

However, evidence indicates augmenting these modules with small group, interactive, practical, hospital based education sessions, may assist with work readiness and prescribing preparedness^{1,2,3}. A collaborative approach between hospital based pharmacists and newly qualified medical practitioners can contribute positively to prescribing practices^{1,4}.

AIMS

To evaluate the educational value and impact of an interactive case based prescribing workshop on medical students' self confidence in prescribing and intended future practice

To evaluate the educational value and impact of an interactive case based prescribing workshop on pharmacy interns' self confidence in facilitating learning of medical students.

METHOD

Pre-workshop

- **Medical students** (n=78): completed pre-reading - NPS-NIMC module and self-evaluated their prescribing knowledge and confidence*
 - **Pharmacy interns** (n=4): self-evaluated their confidence in facilitating this session*
- * via open questions and Likert scale rating (1-strongly disagree to 5-strongly agree)

Workshop

- 5 small group prescribing and medication safety workshops facilitated by pharmacist (clinical educator), pharmacy intern and medical education officer
- Within the context of an increasingly complex clinical case, students applied their knowledge of NIMC prescribing by:
 - completing a medication chart
 - discussing authentic examples of prescribing errors prompted by the pharmacist and pharmacy intern to reinforce key learning points
 - receiving immediate individual feedback by the pharmacist and pharmacy intern

Post-workshop

- **Medical students** (n=78): self-evaluated their prescribing knowledge and confidence*
 - **Pharmacy interns** (n=4): self-evaluated their confidence in facilitating this session*
- * via open questions and Likert scale rating (1-strongly disagree to 5-strongly agree)

REFERENCES

1. Hansen, C. R et al (2017). Teaching Prescribing: Just what the Doctor Ordered? *Pharmacy* 5 (2); 32
2. Thomas, J.S et al (2013). Impact of a compulsory final year medical student curriculum on junior doctor prescribing. *Internal Medicine Journal* 44 (2); 156-160
3. Christina, R.H, et al 2016. Factors Influencing Successful Prescribing by Intern Doctors. *Pharmacy* 4 (3); 24
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RESULTS

Prior to the workshop, 44% (n=78) of **medical students** agreed they felt confident in their knowledge/ability to safely use the NIMC. Post-workshop this increased to 94% (Figure 1).

Similarly, pre-workshop, 36% of medical students agreed feeling confident in their ability to prescribe common medications. Post-workshop this increased to 87%

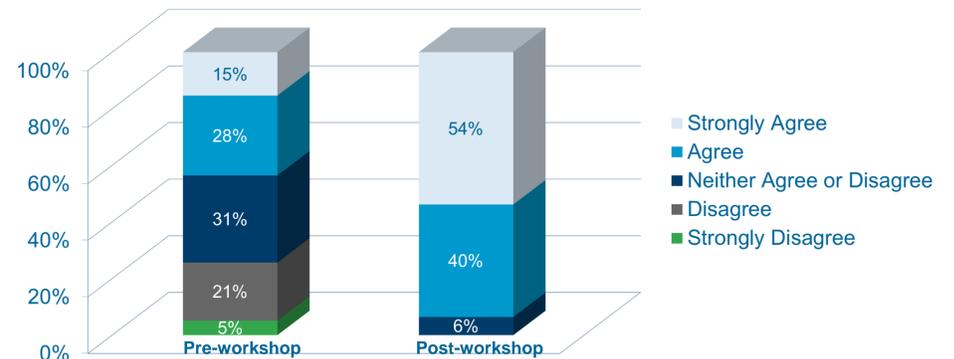


Figure 1: "I feel confident in my knowledge/ability to use the NIMC safely"

Over 97% of participants agreed the workshop had improved their understanding of safe prescribing and positively informed their intended future practice.

Medical students commented the workshop:

- was of high value and relevance to the development of their future clinical practice
- emphasized key learning points including improved knowledge in NIMC navigation; varying medication doses; using standardised terminology and legible handwriting. Students also reported having an improved understanding of the role of the pharmacist.

The workshop also provided opportunity for **pharmacy interns** to develop their role as educator.

Pre-workshop, 25% (n=4) of pharmacy interns reported feeling confident in their ability to assist beginner prescribers use the NIMC. Post-workshop this increased to 100%. (Figure 2).

Similarly, pre-workshop, 50% of pharmacy interns agreed with feeling confident in their ability to present and provide education to students on medication safety, with this increasing to 100% post-workshop.

100% of pharmacy interns agreed the workshop improved their own practice and assisted in their understanding of beginner prescriber knowledge gaps.

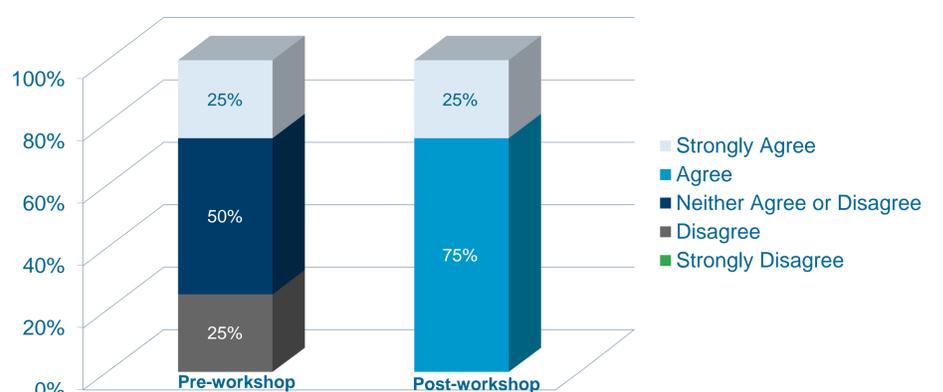


Figure 2: "I feel confident in my ability to assist beginner prescribers to use the NIMC safely"

CONCLUSION

The study suggests hospital based pharmacist led prescribing workshops are a valuable educational tool for medical students to support and augment prescribing preparedness and confidence.

Similarly, introducing pharmacy interns to the role of the pharmacist as educators, early in the career of the novice pharmacist can increase their confidence in facilitating learning and co-working with medical practitioners.

Skilled and collaborative multi-disciplinary practitioners contribute to a healthier community. Given the results, future workshop delivery is being considered; introducing more case scenarios, an expanded session for final year students and future electronic prescribing.