

## Improving Clinical Pharmacology learning: Pharmacist-led teaching of first year clinical students

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**Background:** It is well recognised junior doctors find prescribing difficult during their formative years<sup>1</sup>. They report feeling unprepared and express concerns about content on prescribing in the tertiary medical curriculum<sup>2</sup>. They make more errors than experienced clinicians<sup>3</sup>. In New Zealand, the final three years of medical degrees are placement focussed providing the opportunity for clinical workplace learning. In 2018 a new pharmacist led Clinical Pharmacology module was developed as a voluntary option for fourth year students; this included tutorials and clinical attachments with pharmacists for students.

**Aim:** The aim was to improve clinical pharmacology knowledge, skills and confidence in medical students whilst creating inter-professional understanding. New practical collegial activities were introduced to consolidate foundation knowledge, enhance prescribing practice and create cultural change through inter-professional relationship building.

**Methods:** Structured seminars and pharmacist-led attachments with formal sign off were introduced for 2018. Changes include joint doctor/pharmacist-led prescribing tutorial, introduction to e-prescribing and clinical pharmacy attachment with specific learning outcomes. Informal PDSA cycles were used to improve the learning throughout the 6month introductory period. Pre and post intervention evaluation was completed.

**Results:** 85% students completed attachment (n=39). 100% of those students agreed / strongly agreed the tutorial and attachment were valuable. 96% reported improved confidence in skills. 100% had better knowledge of sources of help.

**Discussion:** This is a low cost and practical way for medical students to gain both explicit and implicit knowledge about prescribing and clinical pharmacology whilst building inter-professional understanding, providing a solid foundation for their remaining undergraduate years. Pharmacists report improved relationships with their students, facilitating improved prescribing rather than time spent on corrective actions.

**Conclusion:** Clinical Pharmacists are ideally placed to lead this learning as subject matter experts for medical students. Evaluation findings from 2018 will be applied to the 2019 intake, as a continuous improvement cycle.

### References:

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