

## **ABSTRACT**

**Background:** Antipsychotic polypharmacy is a common phenomenon in psychiatry. There is limited evidence on its efficacy and it is generally discouraged by international clinical guidelines. It is important to observe good clinical practice when several treatments are prescribed together. Little is known about local clinicians' approach to antipsychotic polypharmacy. Thus, a clinical audit was conducted to evaluate and endeavour to improve the practice of antipsychotic polypharmacy in this setting.

**Method:** A baseline audit was performed on a large cross-sectional sample consisting of all in-patients and a sampled population of out-patients in a large psychiatric hospital in Hong Kong. Adherence to pre-set audit criteria was determined. Subsequently, various quality improvement interventions were implemented, comprising a staff education lecture, individual reminders to doctors and memoranda posted at the out-patient clinic. A second audit was conducted four months after these interventions to ascertain any change in adherence to audit criteria. A questionnaire survey was then conducted to characterize the obstacles encountered by clinicians in observing audit criteria. Finally, the prescription pattern of antipsychotic polypharmacy use was examined.

**Results:** At baseline, the adherence to audit criteria was low, averaging 40.7% (S.D. 23.5) in the in-patient wards and 35.7% (S.D. 35.4) for the out-patient clinic; the range was 15.9-62.4% for in-patients and 7.4-75.4% for out-patients respectively. The

adherence to audit criteria had significantly improved with respect to documented indications for antipsychotic polypharmacy and obtaining patient's consent. At re-audit, the average adherence to audit criteria improved to 54.6% (S.D. 21.0) in in-patients and 50.1% (S.D. 28.9) in out-patients, ranging between 32.3-73.9% and 23.9-80.6% respectively. Moreover, respondents to a questionnaire survey identified the key obstacle of adherence to audit criteria as insufficiency of time.

**Conclusion:** Audit criteria on good clinical practice regarding antipsychotic polypharmacy use revealed generally low adherence at baseline. Following quality improvement interventions, adherence to some of the audit criteria showed improvement. These data suggest that going forwards, re-audit at regular intervals might serve to identify specific areas for improvement, such as quantifying the effectiveness of quality improvement interventions, and monitoring any change in the quality of patient care. Future work is proposed on the prescription patterns of antipsychotic polypharmacy so as to provide clinicians with more evidence on the risk-benefit ratio of such practice.