Reducing Missed Doses Associated with Medication Unavailability in Acute Hospital Wards: A New Workflow and Awareness Campaign

Jin Hah1, Moira Kinnear2, Sarah Macnines1, Anita E. Weidmann3
1NHS Lothian Pharmacy Department, 2Robert Gordon University

BACKGROUND

Missing doses of medicines causes significant harm as it may lead to worsening of chronic conditions or slowed recovery from acute illnesses. The Scottish Patient Safety Programme recognises the urgent need to solve the problem of omitted medicines in Scottish hospitals. A baseline audit in the Royal Infirmary of Edinburgh’s Renal, Transplant, Vascular and General Surgery wards showed approximately 40% of patients have one or more missed dose due to medication unavailability. The aim of this study was to investigate the impact of a new workflow and awareness campaign designed to reduce missed doses associated with medication unavailability. This intervention is simple and easily adaptable into daily practice.

RESULTS

Table 2 describes the impact of the intervention on reducing missed doses due to medication unavailability. No actual adverse events were recorded. Categorisation of adverse events were determined based on the NHS Lothian Incident Reporting System. Figure 2 describes perceived adverse events and a reduction from 14% to 6% in the severe category.

Wards with effective awareness campaigns showed significant reductions in patients with missed dose (39.4% to 22.0%, P-value = 0.001) compared to those where the awareness campaign was less effective (24% to 30%, P-value = 0.20).

Data suggests that missed doses occur more frequently in patients prescribed more medications and with longer hospital admissions.

CONCLUSION

A comprehensive workflow significantly reduced missed doses due to medication unavailability in acute hospital wards, decreasing associated adverse events. An awareness campaign is essential to the intervention’s success.

This intervention has been shared with other specialist areas to encourage local initiatives to reduce medication associated harm. This is in line with the Scottish Government’s Vision 2020 for Health and Social Care where patients live longer, healthier lives from high quality of care through advancements in patient safety.