Quality Dispensing Audit Scale (Q-DAS) as a tool to Detect, Assess and Correct the Workflow of Dispensing in an Outpatient Pharmacy Department of Secondary Care Hospital in India

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ABSTRACT

A 7 day peer-review audit was performed in the outpatient pharmacy of a secondary care teaching hospital, where electronic medical records system is in its blooming stage. The audit was conducted using a 10 point quality dispensing audit questionnaire. During the unmasked audit process, 500 prescription forms and their corresponding pharmaceutical products were randomly examined manually before being delivered to the patient. A total of 36 (7.2 percent) dispensing errors were detected, with 6 (1.2 percent) of these considered potentially serious and can cause harm. It was found that 14 prescriptions contained two errors and 2 prescriptions contained three. A linear relationship ($r2 = 0.78$; p less than 0.001) existed between the number of potentially serious errors and the total number of prescriptions filled. A statistically significant difference was observed in the dispensing-error rate for the seven pharmacists audited (p less than 0.003).

INTRODUCTION

Prescription is a medico-legal document written by an authorized person reflecting of the quality of health-care service being delivered to the patient. Irrational prescriptions can increase the cost as well as duration of the treatment.

Prescription audit is a holistic part of clinical audit and quality improvement process and it seeks to improve patient care and outcomes through systematic review of care against explicit criteria.

The study aimed to assess the quality of service provided in the outpatient pharmacy department (OPPD) and to investigate the rational use of drugs for completeness, legibility and patient satisfaction.

METHODOLOGY

A cross-sectional OPPD based study was conducted over a period of 7 days in the month of August 2020 irrespective of department, diagnosis and patient characteristics using a predesigned and validated data collection tool and a 10 point Quality Dispensing Audit Scale (Q-DAS).

The questionnaire was designed as per the WHO prescription and dispensing indicators and validated by the department of service excellence and quality.

RESULTS

Among the 500 prescriptions analysed, all (100%) of them had the general details, i.e. name, age, sex, date of consultation and OPD registration number. The diagnosis and doctors registration number was found in hardly few of the prescriptions. Average waiting time to receive the medicines was found to be 6.3 minutes and the average medicines dispensed per encounter was found to be 3.81. Almost every consultant prescriber preferred brand names over generic. In 98.7% of dispensing encounters the pharmacist find it easy to identify the patient. The average dispensing quality score was found to be 8.76 ± 0.87.

Out of the 36 dispensing errors identified, the average score was found to be 6.8 out of 10. A linear relationship was found between the potentially serious errors and the number of prescriptions filled. The age of the dispensing pharmacist is found to have a positive correlation with the occurrence of errors (0.69, p less than 0.001).

CONCLUSION

Outpatient pharmacies with high volumes should set a limit to the number of prescriptions filled by their pharmacists and should experiment with quality assurance systems to reduce dispensing errors and subsequent legal liabilities.

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