

EVALUATION OF PHARMACISTS' DRUG INFORMATION ACCESS AT PATIENT BEDSIDE IN THE INTENSIVE CARE UNIT

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INTRODUCTION

Clinical pharmacists in acute care teams such as the Intensive Care Unit have been shown to reduce preventable adverse drug reactions (ADRs) by 78% and respond to drug information (DI) queries in the shortest time possible.¹ A study by Kopp et al found that a clinical pharmacist present at ward level with a critical care team effectively identified and prevented ADRs leading to a decrease in potential costs of over €210,000 in 5 months.²

AIMS

To evaluate and assess the access of DI by pharmacists at the patient bedside in a 20-bed Intensive Care Unit

SETTING

Mater Dei Hospital (MDH)

METHOD

Weekday daily morning ward rounds carried out by the multidisciplinary team led by the Intensive Care Unit consultant were attended to between 08:00 and 11:30. The study was carried out over a period of 8 weeks. Besides following each patient's pharmacotherapeutic review, drug information queries requested during the ward round were forwarded to the pharmacist-researcher attending the ward round who used a personal digital assistant having the same resources to the MDH drug information centre (DIC). A documentation template consisting of query requested, requestor, reason for query, type of query, time taken to answer query, resources used and pharmacist intervention carried out, if any was compiled to record and follow-up each query requested.

RESULTS

In the Intensive Care Unit, 140 bedside queries were forwarded to the pharmacist, resulting in an average of 3 queries daily. Forty-three percent of queries were inquired by medical officers, 32% by medical consultants and 16% by nurses (Figure 1). Pharmacotherapy queries were forwarded by physicians and medical officers while queries from nurses included drug administration and dosing.

Eleven DI queries (8%) were issues brought up by the pharmacist while reviewing drug treatment charts, 9 of which resulted in a clinical intervention. Seven issues resulted in stopping medication due to drug interactions or unnecessary treatment while two issues resulted in addition of a new medication.

The majority of queries (86%) were answered in less than 10 minutes. Queries which required an in-depth search (14%) were forwarded to the DIC.

Micromedex was used to answer 62% of the queries while UpToDate had an answer to 36% of the queries (Figure 2).

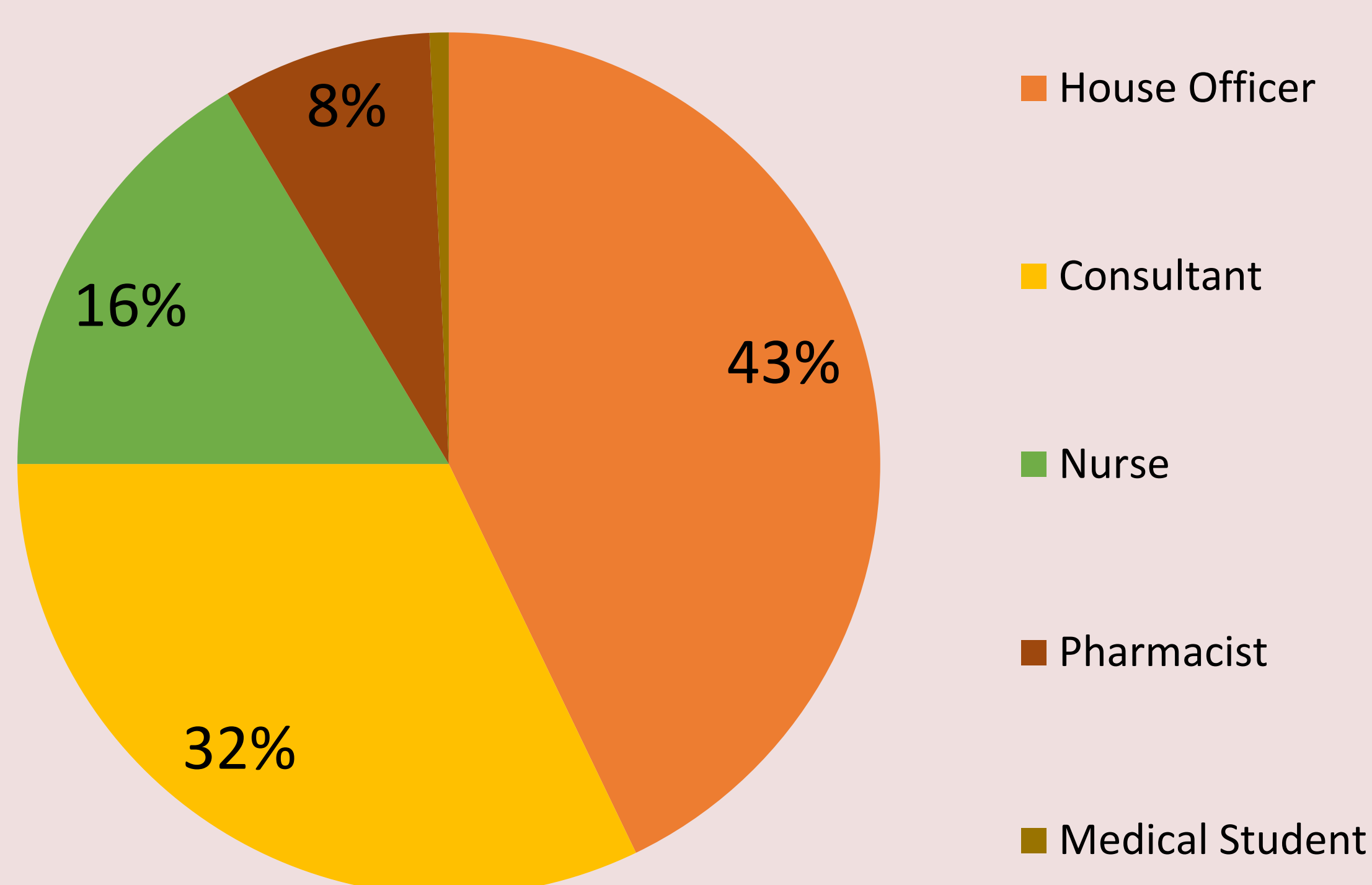


Figure 1: Requestors of DI at Patient Bedside

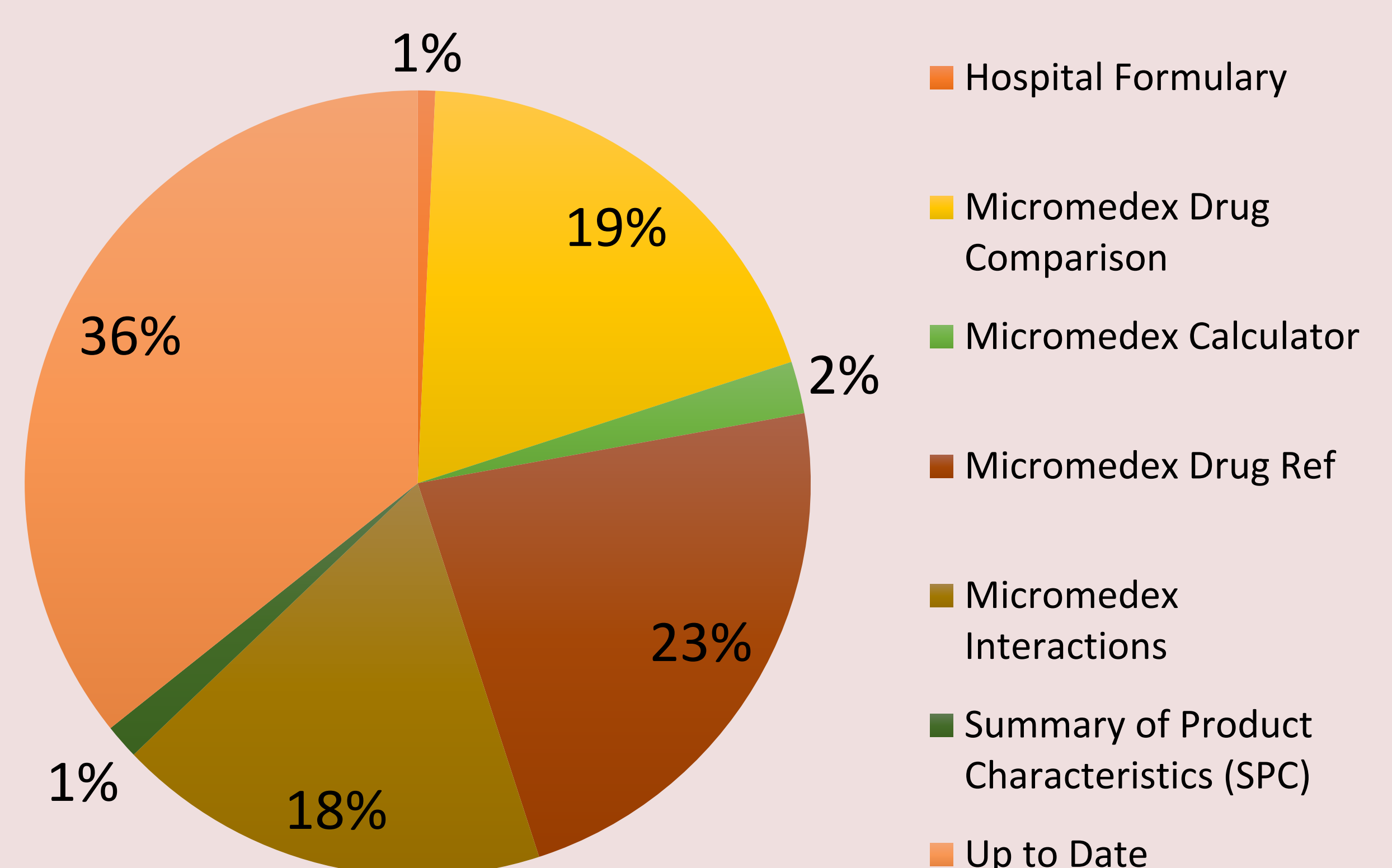


Figure 2: Resources Used at Patient Bedside

CONCLUSION

The Intensive Care Unit at MDH is an acute and dynamic scenario and DI queries need to be answered quickly. The pharmacist was the only consistent healthcare team member attending daily ward rounds since the consultant and the other team members change weekly. For this reason, the pharmacist is a key player in the healthcare team by providing effective drug information services at the bedside. This resulted in a more rapid response and an immediate support to the team.

REFERENCES

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2. Kopp BJ, Mrgan M, Erstad BL, Duby JJ. Cost implications of and potential adverse effects prevented by intervention of a critical care pharmacist. *Am J Health-Syst Pharm* 2017; 64: 2483-2487.