

Introduction

Paediatric oncology patients are a high-risk patient population due to complex pharmaceutical care needs. The direct participation of a clinical pharmacist to act as a co-ordinator of care between the patient, parents and carers, and healthcare professionals optimizes the interdisciplinary service offered to this patient cohort and their carers. Such a holistic service adds to the continuous improvement of the standard of care provided to the patients and contributes to improved health outcomes.

In the local paediatric oncology ward, paediatric oncologists collaborated informally with pharmacists. This collaboration was based on fragmented individual partnerships.

Aim

To develop and implement an innovative clinical pharmacy service within the interdisciplinary health care team caring for children attending the paediatric oncology ward at an oncology hospital setting.

Method

Phase I

A gap-finding tool based on the standards of practice for clinical pharmacy services put forward by the Society of Hospital Pharmacists of Australia Committee of Specialty Practice in Clinical Pharmacy (2013), the American College of Clinical Pharmacy (2014) and the European Association of Hospital Pharmacists (2014) was developed and implemented between April and May 2017. The paediatric oncology ward was attended three times per week to compare the local care practice at the ward to international care practices and enable the identification of gaps.

Phase II

A novel clinical pharmacy service was implemented and appraised between June 2017 and January 2018. The developed clinical pharmacy service focused on addressing the gaps identified which were mainly related to direct-patient pharmacist intervention and participation in the interdisciplinary caring team. One of the key performance indicators to appraise the novel clinical pharmacy service was the identification and actioning of pharmaceutical care issues (PCIs). PCIs were classified according to an innovative classification system based on categorisations developed by the Pharmaceutical Care Network Europe (PCNE) Foundation classification for drug related problems version 8 and the DOCUMENT system.^{1,2} The PCIs identified were discussed with the clinicians and outcomes recorded.

Results

- The gap-finding tool captured nine missing domains related to pharmacy service provision at ward level (Table 1). The gaps identified which were subsequently implemented were pharmacist participation in interdisciplinary care through the attendance of ward rounds and meetings, participation in the provision of medicines information to healthcare professionals and parents and coordination of patient access to treatment. Services which were optimised by the pharmacist were the discharge process by developing a discharge medication guide for parents, the documentation process by developing a pharmacy patient profile and the monitoring of current medication management process through review of prescriptions and treatment charts to ensure validity, appropriateness and safety within an individual patient context.
- A total of 545 pharmaceutical care issues (PCIs) were identified during 325 pharmaceutical care sessions provided over 8 months. The most common PCI categories were counselling (n=147), drug selection (n=129), dose selection (n=105) and monitoring (n=84). Pharmaceutical interventions proposed to resolve the PCIs identified were accepted and implemented (95%) by the healthcare professionals or the parents as relevant.

Table 1: Missing domains for pharmacist contribution

Section	Heading
1	Accurate History
2	Current Medication Management
3	Clinical Review
4	Therapeutic Drug Monitoring
5	Providing Medicines Information
6	Adverse Drug Reaction Management
7	Participating in Interdisciplinary Care
8	Information for ongoing care
9	Documentation

Conclusion

This study demonstrated that the innovative approach of developing a novel clinical pharmacy service to address gaps in practice settings resulted in a standardized service provision that contributed to optimisation of pharmacotherapy and medicines management. This model of custom-developing clinical pharmacy services to meet needs of clinical areas in a health system can be adopted to increase efficiency of clinical pharmacy services and maximise outreach of clinical pharmacy services across the health system.

References

- Pharmaceutical Care Network Europe (PCNE) Foundation: PCNE classification for drug related problems. V8.01. 2017. Available from: https://www.pcne.org/upload/files/215_PCNE_classification_V8-01.pdf
- Pharmaceutical Society of Australia. Standard and guidelines for pharmacists performing clinical interventions. 2011. Available from: <https://rb.gy/asnjso>