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The use of MiDatabank by shift workers out of hours

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Background

Since July 2013, Manchester University Foundation Trust– Oxford Road Campus (MFT-ORC) introduced a 24/7 pharmacy service, which aims to provide patients with consistent pharmaceutical care. The service is mainly delivered by band 6 and 7 shift-working pharmacists, where they work late shifts up until 10:30pm and also provide a night-shift cover. This essentially means that there is a pharmacist on site 24 hours a day, 7 days a week [1]. During this out-of-hours service, several enquiries are received ranging from supply to clinical queries. All calls are documented briefly on the On-call Manager program.

MiDatabank is a software used regularly by the medicines information (MI) team to document enquiries as part of the medicines information service between 9 am and 5 pm Monday to Friday [2]. MiDatabank is available to MFT-ORC shift-working pharmacists on a read-only basis, where they can search for previous enquiries to facilitate the clinical queries they receive. MiDatabank also has the facility to document calls from non-MI users which is an expanded function not currently available to the shift-working pharmacists.

With the vast amount of information that MiDatabank holds and its function to retrieve previous enquiries, we wanted to explore if the use and functionality of MiDatabank could be expanded to improve the delivery of the out of hours hospital pharmacy service

Aims and Objectives

The aim of this project is to expand the use of MiDatabank and to evaluate if it can improve delivery of clinical enquiries in a 24-hour hospital pharmacy service.

Objectives:

1. To explore shift workers experiences with MiDatabank.
2. To review what type of medicine information topics are received as enquiries out of hours.
3. To evaluate the usefulness of MiDatabank out-of-hours both for reading and documenting enquiries

Methods

Qualitative data was obtained through questionnaires completed by the shift-workers before and after the study period to explore their thoughts on the use of and documentation on MiDatabank out of hours and whether their opinions had changed after the study.
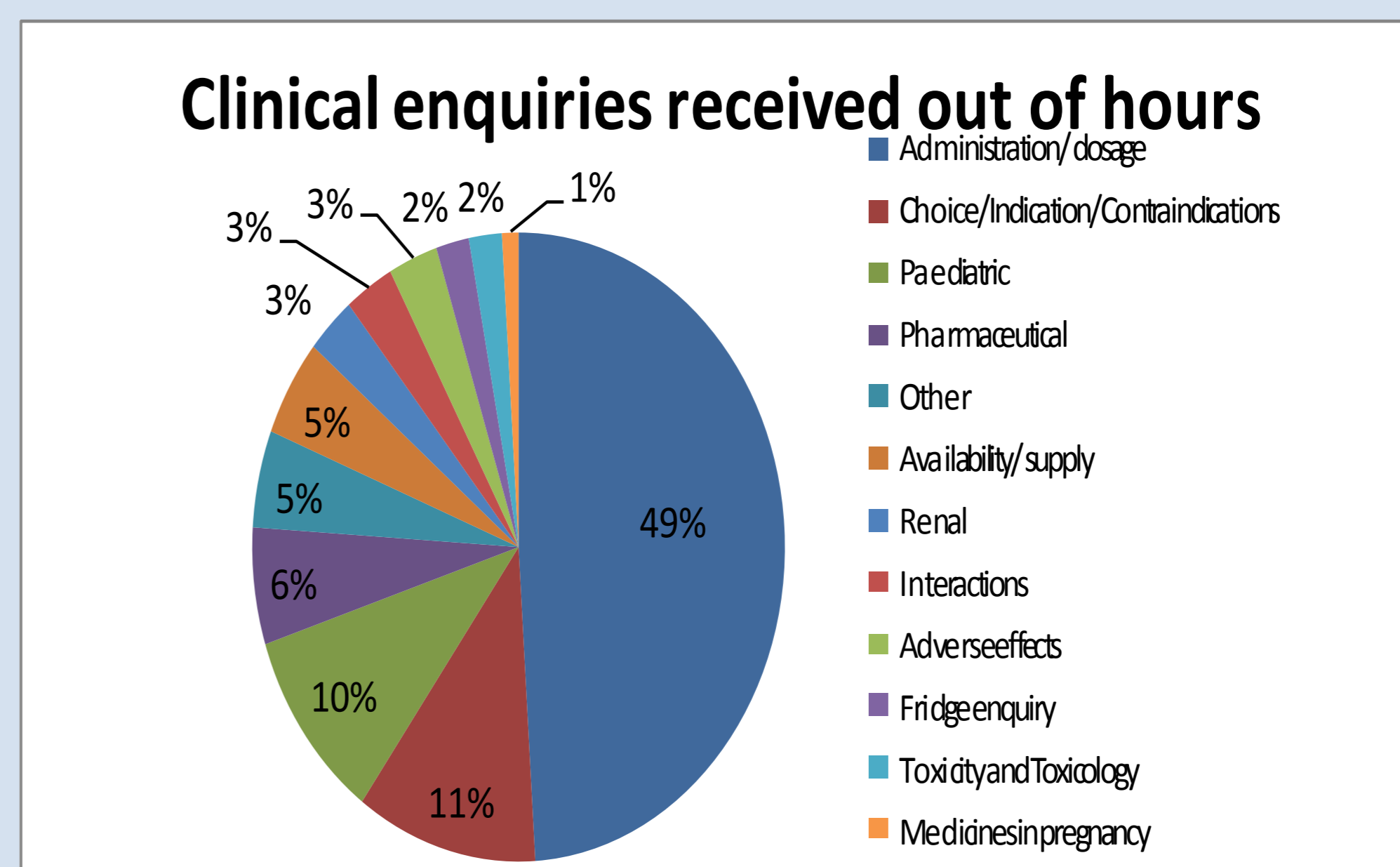
Quantitative data was obtained by the shift-worker during their night shift over a 4 week period. All clinical enquiries received were documented onto a data collection sheet; if an answer was not found using general resources, ie. BNF, SPC, or from previous enquiries on MiDatabank, they were logged as an enquiry on MiDatabank. The shift-worker would document the resources they looked into and what the answer to the enquiry was.

This would then be checked and taken off the system to be stored in the database by an MI pharmacist during the day. Data was subsequently analysed.

Results

10 out of 16 shift-workers completed questionnaires and study period. All were aware of the program MiDataban, but only 20% reported to use it on a regular basis out of hours.

During the data collection period, there were a total of 172 medicines information enquiries where 24 were during a night shift; 6 of these calls were considered complex and 3 were documented onto MiDatabank by the shift-worker. 49% of the medicines information enquiries were regarding administration/ dosage (Figure 1).

Clinical enquiries received out of hours

- Administration/dosage — 49%
- Choice/Indication/Contraindications — 11%
- Paediatric — 10%
- Pharmaceutical — 6%
- Other — 5%
- Availability/supply — 5%
- Renal — 3%
- Interactions — 3%
- Adverse effects — 3%
- Fridge enquiry — 2%
- Toxicity and Toxicology — 2%
- Medicines in pregnancy — 1%

From the questionnaire, when asked about whether they would be willing to document enquiries onto MiDatabank out of hours, responses included:

"It would be a duplication of work as I am already documenting my calls onto OnCall Manager"

"I don't think I would have time to do that (document on MiDatabank) as it can get quite busy with the bleep going off, so it would be quite time-consuming"

In terms of documenting enquiries during their shift, the main barrier identified was time-consumption, especially during shift with high volume of workload. Some respondents did find it useful, but did not feel that they would have the time to do so. All respondents would like to receive feedback on enquiries they had worked on out of hours.

Conclusions

MiDatabank is currently not the go-to resource out of hours due to the accessibility of other resources; however it is useful for more specific complex enquiries. Documentation on the system out of hours was considered time-consuming and duplication of work as other systems are in place to document calls out of hours.

As there is only one computer in dispensary that has access to MiDatabank, that could have posed as a limitation of the study. This study also only focused on night shifts where the pharmacist is lone-working from 10:30pm up until the 8:30am the next morning, so an additional work they take on could be considered a burden. Further research can be conducted on a larger scale for a longer duration and looking into the rest of the out-of-hours service, with a Medicines Information pharmacist reviewing the complex enquiries and providing feedback to the shift-working pharmacist.

MiDatabank is still an underutilised resource given the vast database of evidence-based information it contains. Further promotion of the program used out of hours has the potential for improvement of the quality of pharmacy service we deliver.

References

[1] Office of the Chief Pharmaceutical Officer, Medical Directorate. Transformation of seven day clinical pharmacy services in acute hospitals. NHS England; 2016. Available from: https://www.england.nhs.uk/wp-.content/uploads/2016/09/7ds-clinical-pharmacy-acute-hosp.pdf/ [Accessed 25th

[2] Midatabank.com. MiDataBank > Home. Available from: http://www.midatabank.com/ [Accessed 18th January 2018 March 2018].