Evaluating which resources healthcare professionals use to find medicines information

Jess Brady, Sue Smith, Aintree University Hospital NHS Foundation Trust, Longmoor Lane, Liverpool, L9 7AL

Introduction

At Aintree University Hospital (AUH), the medicines information (MI) department are increasingly aware that internet searches are the first port of call for enquirers. We have encountered prescribing errors directly caused by information obtained from the internet. Without adequate training in medicines information resources and retrieval it is thought that healthcare professionals (HCPs) will look for this information in places that are both easily accessible and that they are familiar with.

A study was carried out at AUH in 2017 to determine the difference in the quality of information obtained by MI pharmacists using all available MI resources to answer enquiries, compared to answers found using an internet search engine e.g. Google. Conclusions from this study showed that it was possible to answer a small number of basic enquiries via internet sites found through Google. However, it often required prior knowledge of the existence of good quality sites and/ or the strategic use of keywords to find the information. It also showed that a large number of enquiries were answered incorrectly, often due to poor quality resources, out of date information and websites originating from outside the UK.

Further research has now been carried out to determine if internet search engines are being used as widely as suspected at AUH. If this assumption is correct, it would be useful to know how information is being obtained. For example, are good quality resources being used via an internet search, such as the Electronic Medicines Compendium (EMC) or are HCPs using poor quality resources.

Aims and Objectives

- To establish where HCPs obtain their medicines information at ward level.
- To determine which reputable evidence based resources are used for medicines information and how frequently they are used.
- To determine how frequently internet searching is used to answer medicines information enquiries at ward level and whether the websites used are reputable.

Method

A questionnaire consisting of 15 open and closed questions was designed and distributed to HCPs at AUH; this was distributed electronically and on paper to individuals over a one week period with the intention of reaching at least 30 doctors, 30 pharmacists and 30 nursing staff.

The answers to these questions were then analysed and any websites highlighted by staff were assessed for reputability. For example; age of website, author/ organisation credentials, country of origin.

Results

The questionnaire was completed by 110 HCPs across the trust; this included 41 (37%) Doctors, 34 (31%) Nurses and 35 (32%) Pharmacists. The number of years of experience between participants was evenly distributed; ranging from newly qualified HCPs to those having more than 10 years of experience.

Fig.1 Percentage of HCPs at AUH that are using reputable resources as recommended by UKMI

Resource	Doctor	Nurse	Pharmacist	Comments
BNF	100%	94%	100%	Online access is most commonly used. It is also being accessed through the app and paper.
EMC	37%	50%	100%	27% of doctors and 18% of nurses are unfamiliar with the EMC.
Medusa	0%	56%	97%	44% of doctors and 21% of nurses are unfamiliar with Medusa. Currently access for doctors employed by the trust is not readily available.
Intranet (Trust guidelines/ policies)	78%	68%	97%	

Fig. 2 Number of HCPs using internet search engines e.g. Google
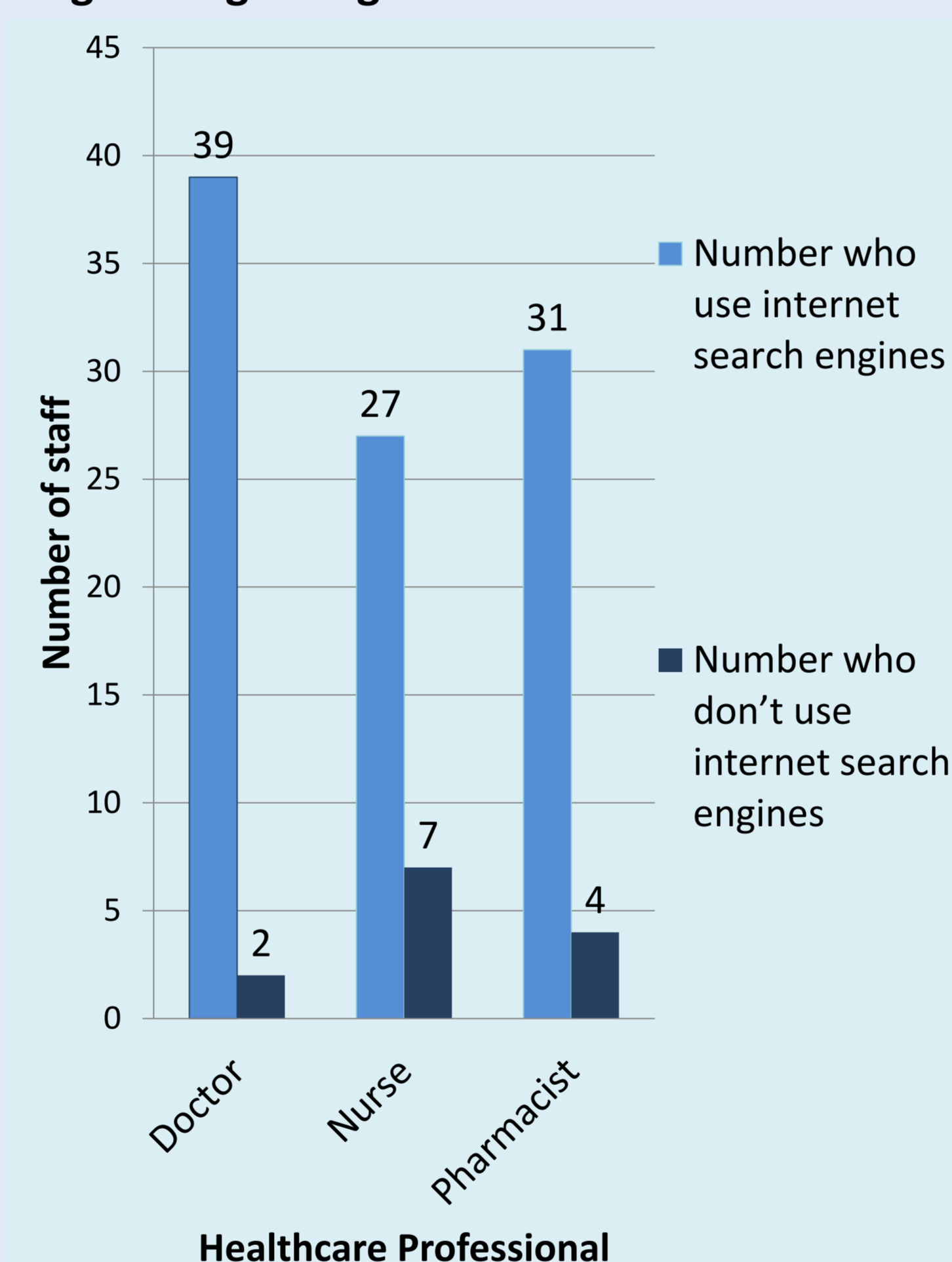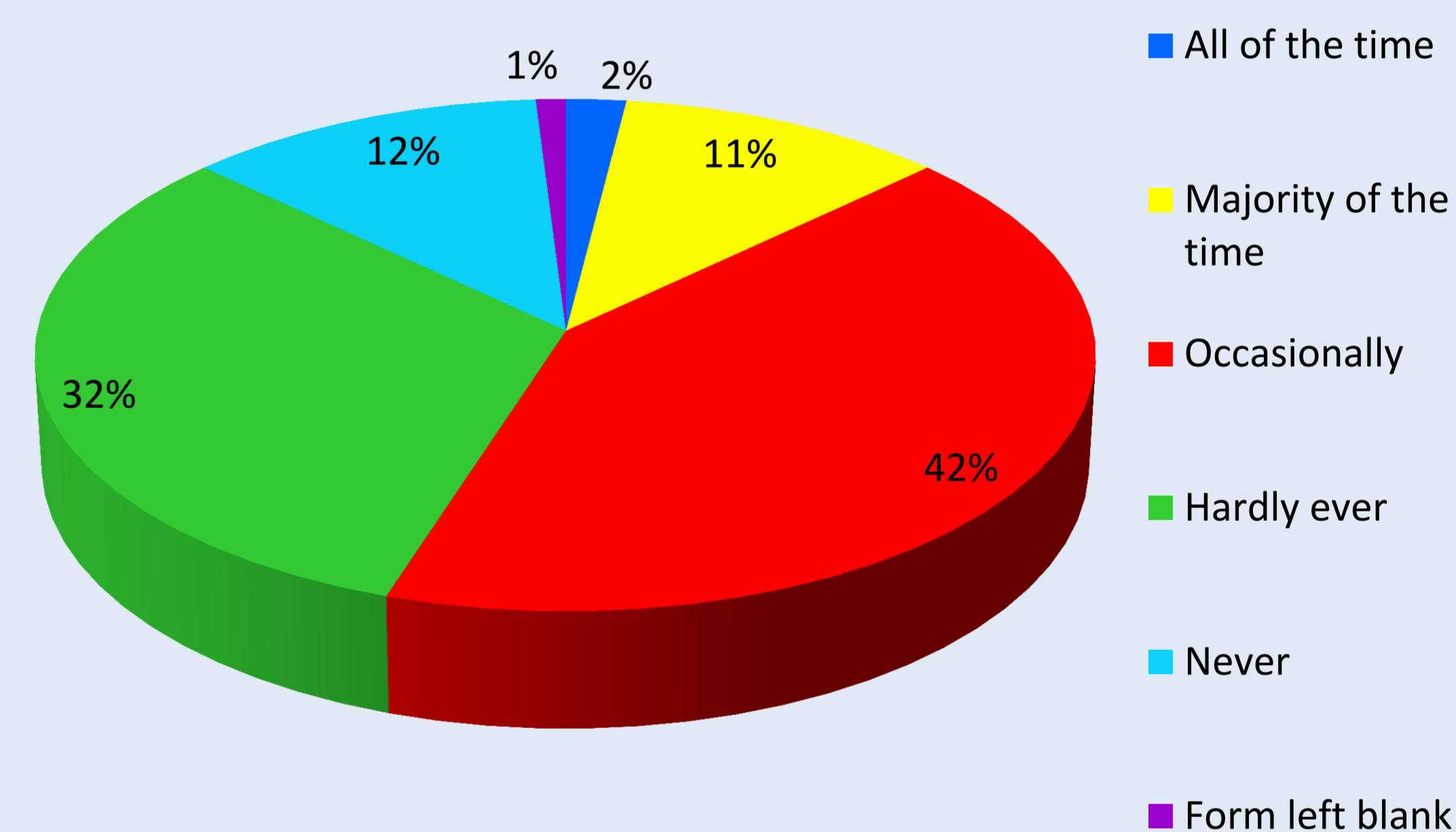
Fig. 3 A chart to show how often HCPs are using internet search engines e.g. Google to access medicines information

Discussion

The results show that there is large variation in the use of reputable resources between different HCP staff groups. The BNF is a well utilised resource and almost 100% of all HCPs in the study said that they refer to this. However, some standard first line resources are not being used. For example, only 37% of doctors stated that they used the EMC website and 27% were unfamiliar with this resource. In addition, only 56% of nurses stated that they used Medusa and 21% were unfamiliar with it. Ideally all doctors and nurses should be familiar with these resources and using them regularly to obtain information.

The results also show that HCPs are using internet search engines to find medicines information; approximately 87% of the participants who took part in the study stated this. The frequency of which staff use internet searching to source medicines information varied quite considerably with 13% of staff stating that they use internet search engines as a resource either all of the time or the majority of the time, 42% occasionally and 32% stating that they hardly ever use internet search engines.

These results show that the use of internet search engines to source medicines information is maybe not as widespread as originally thought, although we have only questioned a small percentage of our workforce. Despite this, the fact that we have any staff using internet searching as a first line resource for medicines information is a concern and clearly an education issue.

The majority of staff questioned did not specify or could not remember which sites they used. This could be due to the fact that staff are not aware or concerned about which sites they are looking at as long as they have been able to find an answer. However some specifically stated using sites such as Wikipedia which we would not recommend as a reputable medicines information resource.

Recommendations

- Provide all clinical staff within the hospital with a list of useful UKMI recommended resources[1] and how best to access them
  - Investigate whether web addresses to reputable resources can be added to favourites lists on all computers used by clinical staff.
  - Re-design the Medicines Information intranet page to include useful resource links and tips and advice on how to use them.
- Review Medicines Information resource training to doctors and discuss making Medusa website accessible to this group of staff.
- Investigate current pharmacy training provided to nurses and establish how best to include advice on medicines information resources to this group of staff.

References

1. UKMI Recommended resources lists and tools August 2019. Accessed via https://www.sps.nhs.uk/articles/ukmi-recommended-resource-lists-and-tools/