

The use of handheld devices among healthcare staff and students in a teaching hospital in Qatar



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Introduction

Handheld computers, also commonly known as personal digital assistants (PDAs) were originally designed as personal organizers. Nowadays, many health-care providers deploy PDAs in their clinical work, accessing medication databases, guidelines and clinical decision-based support tools. The use prevalence of these devices in our hospital and the level of acceptance between staff and students are unknown. Finding out this will help in understanding how PDA plays role in our healthcare system.

Objectives

To examine the prevalence of PDAs use among staff and students in healthcare setting what device functionalities are mostly used, self reported usefulness, safety and satisfaction level from these devices.

Methods

Exploratory descriptive study by using a self administered survey administered to healthcare workers and students during their clinical rounds. This survey was initially validated (content validation and internal consistency test). Demographic questions in addition to 5-point scale for responses to usefulness, safety and satisfaction level were used. The rate was from 1 (disagree) to 5 (agree).

Results

Total of 86 responders were included in this study. Male were 48 (55.8%) and mean age was 29.6 ± 6.9 . Prevalence of PDAs use among healthcare workers were 83% between physicians (30 out of 36), 96.3% between pharmacists (26 out of 27). Students use prevalence were 88.9% among medical students (8 out of 9), and 85.7% between pharmacy students (12 out of 14). Accessing medication databases were the most frequently used functionality between all users (83.7%), followed by internet searching (76.7%) then medical calculations (59%). See **Figure 1** for full details. Considering 5 as the top of the scale, self reported usefulness across participants mean was 4.5, safety in decision making was 4.4 and overall

Discussion

This overview of the use of PDAs revealed a positive attitude towards the PDA, which was considered as a feasible and convenient tool. The possibility of immediate access to medical information has the potential to improve patient care. The PDA seems to be a valuable tool for staff and students in health care. Most of the users were physicians. There is some evidence that the use of a PDA in health care settings might improve decision-making, reduce the numbers of medical errors, and enhance learning for both students and professionals.

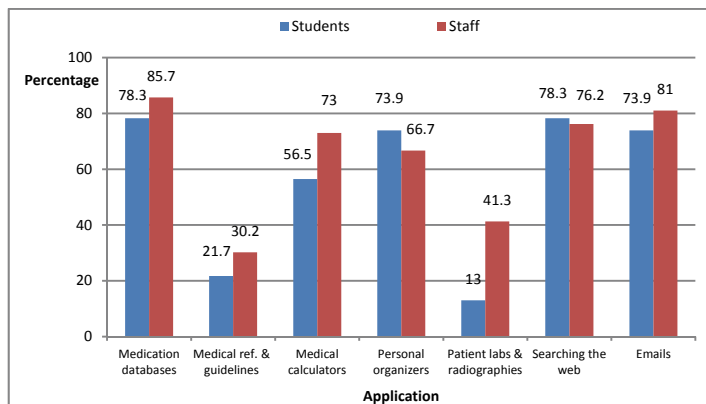


Figure 1 Percentage of applications' use across staff and students

Conclusions

PDAs predominantly were used by healthcare workers and students in clinical rounds. Their level of usefulness, and satisfaction were high. In addition, it increases the safety of decision making according to users report. The results can prove the dissemination of such mobility solutions and its beneficial effect on patient care and safety.

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