Pharmacists’ Experiences of Using Knowledge Bases on Medicines in Pregnancy and Breastfeeding

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Abstract. Knowledge bases on medicines during pregnancy and breastfeeding integrated into a clinical decision support system are valuable tools for pharmacists. The information facilitates counseling, is time-saving and improves patient safety.

Keywords. Clinical decision support system, pregnancy, breastfeeding, pharmacy

1. Introduction

Medicine treatment during pregnancy and breastfeeding implies special challenges. To facilitate access to reliable information, Region Stockholm provides the knowledge bases Janusmed Drugs and Birth Defects and Janusmed Breastfeeding, freely accessible on the internet (https://janusmed.se) and integrated into electronic health records. In September 2021, the knowledge bases were also integrated into the Electronic Expert Support (EES), a clinical decision support system used when dispensing prescription medicines, available at almost all Swedish pharmacies [1]. The EES is provided by the Swedish eHealth Agency and financed by the government. This study is a preliminary evaluation of the pharmacists’ perceptions of using the two knowledge bases via EES.

2. Methods

A web-based questionnaire was distributed via e-mail or intranet six months after the launch of the databases in EES, to approximately 5 000 pharmacists in Swedish pharmacies. The questions focused on use and perceptions of the databases and were multiple-choiced, scaled, or open-ended. A survey tool provided by Questback Essentials® was used to set up and collect the data.

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3. Results

In total, 403 pharmacists responded to the questionnaire (response rate ~ 8-10%). Respondents from all regions in Sweden participated, most of them (95%) worked at community pharmacies. The majority (77%) were aware of the two new knowledge bases in EES, and more than half had used them. The respondents perceived that the information is trustworthy, time-saving and improves patient safety (Fig. 1).

Among the respondents, around 38% received questions every week from pharmacy customers regarding medicines in pregnancy or during breastfeeding. When asked how they handle these questions, the majority said they use Physicians’ Desk Reference (94%). Many respondents also used EES (66%) and the website for the knowledge bases (59%).

![Figure 1](image.png)

Figure 1. Responses to statements about *Janusmed Drugs and Birth Defects* and *Janusmed Breastfeeding* in Electronic Expert Support (EES), on a scale 1-5 (1=Totally disagree, 5=Totally agree).

4. Discussion and Conclusions

This study shows that pharmacists rate the two knowledge bases as reliable and supportive when dispensing prescription medicines. The positive results are in line with previous evaluations of the databases among health care professionals and pregnant women [2]. If health care professionals and pharmacists use the same information source, this most likely facilitates communication and ensures that pregnant and breastfeeding women receives consistent, professional advice.

References
