A mobile pharmaceutical decision support system – a useful tool for district nurses?

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Health care professionals handle a lot of information and require access to updated information. A Personal Digital Assistant (PDA) is a mobile tool by which healthcare professionals’ access updated information of importance for their work. A pharmaceutical decision support system in a PDA, with a bar-code reader, can provide an overview of the patients’ complete medication, and enable different services such as interactions, therapeutic duplications and warnings for inappropriate pharmaceuticals for the elderly. This decision support system is suitable in particular for healthcare professionals in home care. The wide spread use of pharmaceuticals, prescribed by different physicians unaware of each other, increases the risk of polypharmacy and drug-drug interactions among the elderly. The aim of the present study was to evaluate the use and acceptability of a mobile decision support system for district nurses’ pharmaceutical assessments of patients regarding prevention, safety and security. District nurse students (n=15) used a PDA with a pharmaceutical decision support system for five weeks in their clinical practice. The students answered a pre, intra and post questionnaire, and they were interviewed in focus groups. The pre and post questionnaires were composed on the basis of current problems of the patients’ complete pharmaceutical consumption, regarding the functions and contents of the PDA. The intra questionnaire was a comparison between manual and electronical assessments of the patients’ complete pharmaceutical consumptions. All questionnaires as well as the focus group interviews focused on consumption interactions, therapeutic duplications and warnings for inappropriate pharmaceuticals for the elderly. Qualitative data were analysed by content analysis and quantitative data were analysed using SPSS. The main findings were that the students regarded most of the functions and the contents of the pharmaceutical decision support system as important, practical applicable and user-friendly. The students received a comprehensive picture from the patients’ medication and were detecting interactions, therapeutic duplications and warnings.

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