



POUCH BLISTERS (MEDIFILM[®]) AS NEW INDIVIDUALIZED DRUG BLISTER PACKAGING

THE SITUATION OF PHARMACIES AND HEALTH INSURANCES
IN SWITZERLAND AND THE PROBLEM OF SPLIT TABLETS

Master's thesis of
Cindy Aeschlimann

Supervised by
Dr. Phil. II Isabelle Arnet
Prof. Dr. Kurt E. Hersberger

16.01.2012 - 08.06.2012

Pharmaceutical Care Research Group

University of Basel

1. ABSTRACT

Introduction

Reminder packaging such as the pouch blisters of Medifilm® is being discussed as a possible compliance aid. A German model project showed savings of 30.90 euro per patient and week for health insurances if the patients were delivered with blister packagings by the community pharmacies. There are no according studies in Switzerland and there is little information available about the use of Medifilm® in Switzerland. Prescriptions with half tablets are a problem for repackaging as well as for pharmacies. Furthermore, inappropriate splitting can lead to imprecise dosage, reduction in pharmacological effects or even cause adverse events. A new method to increase compliance besides the reminder packaging are drug reminder apps.

The aim of this thesis was to assess the framework conditions for the use of pouch blisters in ambulant patients in Switzerland.

Methods

With an online-questionnaire, pharmacies as clients of Medifilm® were interviewed to determine the profile of their ambulant patients. Websites of health insurances were searched for existing compliance programs and the health insurances were questioned. All discharge medication prescriptions in 2011 from the University Hospital Basel were analysed for half tablets. Three different sources were used as references. Three reminder apps were tested with fictive medication plans, analysed and described.

Results

15/20 (75%) answering Medifilm®-clients were community pharmacists. 12/15 (80%) recommended Medifilm® actively to ambulant patients and 6/15 (40%) delivered Medifilm® to a total of 29 ambulant patients. Their age ranged from 21 to 91 years and the pharmacists estimated their satisfaction as 9.3 ± 1.2 (best satisfaction: 10).

1/15 health insurances had a project to enhance patients' compliance. This project was a combination of both a home care organization and a medication delivery service.

3'757/36'751 (10.2%) prescriptions from 2011 contained split tablets. For 63.9% of them, splitting to reduce the dosage is allowed, for 20.9% it is not, and 13.8% of the split medication could not be classified due to lack of information.

2/3 apps can record whether the medication was taken or not but only one of them can register the correct intake time. 1/3 investigated the effect an app has on compliance in a study.

Conclusion

The use of pouch blisters in ambulant patients seems possible, and ideal patients are forgetful ones and those with polypharmacy. More studies should be done to measure the use of compliance apps and possible savings for health insurances with increased compliance. The Summary of Product Characteristics should provide clear information about the divisibility.