

The Health Professionals' Views on Medido®: a Qualitative and Quantitative Study about an Innovative Pill Dispenser

Master Thesis

Duy Nguyen

Advisers:

Prof. Dr. Kurt Hersberger

Dr. Phil. II Isabelle Arnet

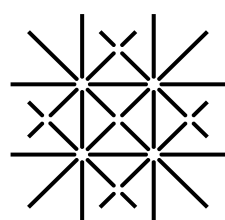
Samuel Allemann, Msc pharm

January – June 2016

University of Basel

Department of Pharmaceutical Sciences

Pharmaceutical Care Research Group



**Universität
Basel**

Abstract

Background and Objective: Several Management Aids exist to improve patient' adherence in their medication intake. In Switzerland, studies have been conducted to reach this objective by setting up an interdisciplinary medication adherence program or innovative technologies from a community pharmacy. Recently, Medido® an electronic pill dispenser emerged, reminding patients to take their medication and facilitate their care with health professionals. The Pharmaceutical Care Research Group (PCRG) at the University of Basel continue to perform studies about this dispenser with opioid substituted patients. To complement these studies, this thesis aims to collect and analyze health professional's views on Medido®.

Setting and Methods: A focus group was conducted with pharmacists, physicians, psychologists, nurses and a social worker to generate reasons and barriers of Medido® use and role of health professionals in its supply process. A questionnaire for health professional was developed and sent to addiction institutions and community pharmacies to quantify the results of the focus group.

Results: Ten reasons and 9 barriers of Medido® use were identified during the focus group. Seven reasons of from 10 were confirmed as meaningful by 52 participants of the questionnaire: "the patient needs a reminder aid" (78.8%), "the pharmacotherapy should be taken at fixed time (78.8%), "the patient has cognitive deficits" (65.3%), "the patient has adherence problems" (55.8%), "the patient would like to be independent" (55.8%), "the pharmacotherapy is composed of more than 3 medicines per day" (50%), "the pharmacotherapy requires controlled BTM-delivery" (50%) and "the pharmacotherapy should be taken under DOT" (50%). Two barriers of Medido® use were confirmed by the results of the questionnaire: "the patient must be at home" "patient refuses the medication" (78.8%).

In the optimal Medido® supply process: physician suggests the use of Medido®, physician writes the prescription with the note "Adherence-aid", pharmacist or nurse organize the Medido®, nurse installs Medido® at patient home, pharmacist delivers the medication in unit-dose pouches to the patient, pharmacist sets the medication supplementary orders in unit-dose pouches and pharmacist takes care of the patient with questions/problems with Medido®.

Conclusion: Medido® is considered as an e-MMA to help and supply patients their medication and can targets therapy-related factors, condition-related factors, and social factors of non-adherence. Our master thesis showed that our application for Medido® is coherent with the existing literature. However, this new technology needs health professionals who can identify its application and barriers). The pharmacist can be considered as the main professional in Medido® supply process with an interdisciplinary team.