



Polymedikations-Check

**Pilotierung verschiedener Messinstrumente im
Rahmen einer randomisiert-kontrollierten
Evaluations-Studie**

Masterarbeit

16. Januar – 08. Juni 2012

Véronique Lottaz

Betreuung

Dipl. pharm. Markus Messerli

Prof. Dr. Kurt E. Hersberger

**Pharmaceutical Care Research Group
Universität Basel**

Abstract

Background

In September 2010 the ‚Polymedikations-Check (PMC)‘, a cognitive service that aims to improve patients adherence and to screen for medicines use problems, was introduced in Switzerland. A pilot study in 2011 in order to describe first experiences with the PMC showed numerous barriers.

A randomized-controlled evaluation trial conducted in pharmacies is starting in June 2012, which aims to provide the evidence (= improvement of adherence) of this service.

Objectives

Development and validation of measuring and analytical instruments for the evaluation study.

Methods

The telephone interview was tested in terms of duration, comprehensibility and validity by means of a role play and expert opinions. Furthermore an anchoring index and correlations were calculated in order to check whether there occurred an anchoring effect for the questions with a likert scale from 1 to 10.

A questionnaire for the survey of the pharmacists was developed and tested by 5 pharmacists aiming at surveying the comprehensibility of the questions.

The PMC-Portfolios, compiled by the pharmacy students of the assistance year 2011/2012, were analyzed regarding the duration of a PMC, number of patients with pill dispenser before and after the PMC, patients positive and negative feedbacks in terms of the PMC and the estimation of the usefulness of a PMC in favor of the patients.

Results

Within the context of the role plays the average duration of the telephone interview was 28 ± 6 minutes and the validation of the questions showed a correspondence of 81.5% for the examined scale questions and 100.0% for the yes/no questions. In order to optimize the comprehensibility of the questions, fifty-seven percent were adjusted, whereas 76% of these alterations were small adjustments. The examined anchoring areas eventually showed anchoring indexes of 51%, 78% and 25%.

Seven out of 16 questions of the questionnaire for the pharmacists were rated unanimous as unproblematic regarding their comprehensibility.

The 68 patients of the portfolio analysis showed an average age of 71.8 ± 10.5 years and took an average of 11.0 ± 3.9 drugs. 43% of them already used weekly pill organizer before the PMC, after interventions this percentage increased to 51%. Within the context of the PMC, 49% of the patients received a pill system suggestion which was accepted by 35%. The patients named 61 negative and 206 positive items regarding the PMC and rated his usefulness with an average 4.4 points on a scale from 1 to 5.

Discussion

The telephone interview was tested and adjusted and his validity was proven so that it is ready to be used for the survey of the patients within the context of the evaluation study.

The questionnaire for the pharmacists was tested and should now be revised in order to be used for the study.

The analysis of the PMC-portfolios provided important informations that can be used for the preparation of the study.