Quality improvement in seamless care by a clinical pharmacist

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Periodically performed questionnaires in the University Hospital Basel showed a lack of patient satisfaction in the process of discharge probably due to a lack of information and communication concerning discharge medication. Our objective was to improve patient counselling with focus on dosage, possible adverse drug reactions and interactions as well as patient's satisfaction. In addition the control of entry and discharge medication should improve drug safety by analysing the discrepancies in patient's medication at home and during hospitalisation.

We conducted a two arm study at a surgical ward with urology and plastical surgery patients at the University Hospital Basel. All patients over a period of two months were randomized according to their case number and divided into two groups (intervention and control group). They were asked to answer a questionnaire about satisfaction with the process of discharge and with the information given by the pharmacist. In both groups verification of entry and discharge medication was performed and discrepancies were classified as «relevant» and «nonrelevant». Data was originating from patient and Kardex ward rounds. An additional pharmaceutical counselling was done in the intervention group before hospital discharge and included a written information given to the patients about their medication if desired.

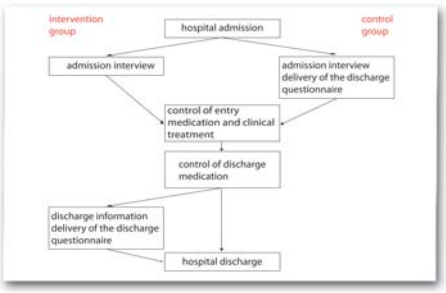

Figure 1
Study design

During the period of two months, 93 patients (46 patients in the intervention group (IG), 47 patients in the control group (CG)) were included into the study. 23 patients of each group returned the questionnaire (return rate 49%). The patient's level of information about the specified topics shown in figure 2 had ameliorated on average from 34% feeling «very well informed» (control group) to 54% (intervention group). The best improvement was achieved regarding the level of information about adverse drug reactions. The verification of entry medication revealed 236 discrepancies, whereof 82 discrepancies (35%) were classified as being relevant. The verification of discharge medication showed in contrast 527 discrepancies (39% relevant). Major problem in the documentation of the entry medication was the undocumented drug dosage (34%) which was rated as relevant in 13 cases because of different amounts of active pharmaceutical ingredient. Leading problem in discharge medication was the undocumented dosage form (47%). It could be concluded in most cases by the drug name, but 37 cases were relevant because of different possibilities.

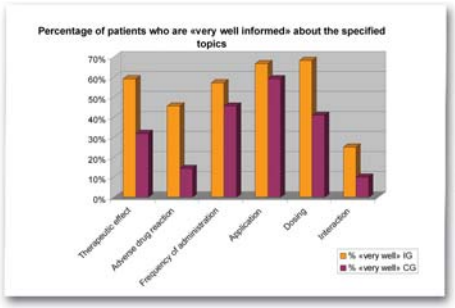

Figure 2
Percentage of patients who are «very well informed» about the specified topics of their medication

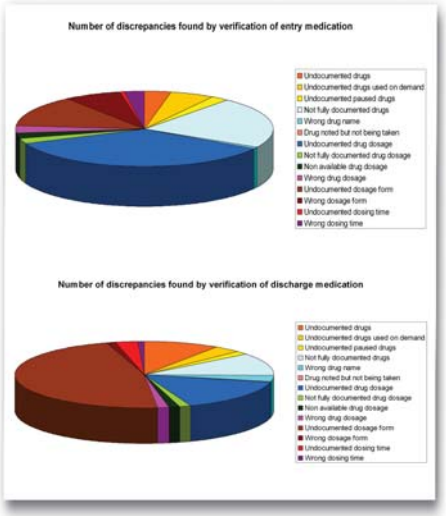

Figure 3
Differences between the discrepancies found in entry medication (N=236) and discharge medication (N=527)

The activity of a clinical pharmacist in the discharge process indicates considerable impact on the information level of the counselled patients. The wide number of discrepancies in entry and discharge medication shows a major task for the clinical pharmacist to improve drug safety and seamless care. Further studies on this topic are necessary.

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