A short introduction into the German guideline on "Multimedication": recommendations for treating adults and geriatric patients on multimedication.

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**Abstract**

**Background:** Managing polypharmacy is a challenge in usual and integrated care. Since several years, the development of single disease guidelines that do not take into account patients with multimorbidity and respective polypharmacy has been criticised, especially by those involved in the care of the elderly. The publication of Boyd et al. (2005) [1] that addresses the problems arising in the treatment of multiple diseases of the elderly according to the respective single disease guidelines, has been discussed intensively. In 2010, Garfinkel and Mangin [2] demonstrated possibilities to reduce medication use. Their study population comprised elderly with relatively high average age. Furthermore, the framework of medication review applied in the study of Garfinkel and Mangin is not transferable to the situation of general practitioners (GPs) in Germany. Despite of these challenges, the GP guideline group of Hesse (Germany) developed a GP guideline on polypharmacy [3],

**Methods:** A systematic guideline and literature search was conducted. No guideline addressing polypharmacy could be identified. Meanwhile a Dutch guideline [4] and the Kings Fund Report on polypharmacy [5] have been published. No convincing studies could be identified allowing to recommend with good evidence general practitioners to conduct a medication review and to apply a special instrument for this task. In most of the studies, medication reviews were done by professional groups other than GPs in settings that are not comparable to the working environment of GPs. The guideline group of Hesse decided by consent to recommend the Medication Appropriateness Index [6] as a tool to review and evaluate the medication of a patient. The guideline recommendations are partly based on study results and/or consent of the authors of the guideline.

**Targeted group:** General practitioners, physicians, pharmacists and other health professionals engaged in the care of patients with multimedication.

**Main Topics:** The guideline introduces the topic of polypharmacy using epidemiological data that demonstrates the relevance of this issue. The so called “key questions for GPs” address all problems related to polypharmacy from the perspective of GPs. The core of the guideline is formed by the so called “medication process” which has been developed according the concept of Bain et al. (2008) [7] and consists of the following steps: assessment - medication review - reconcilement with the patient – prescribing recommendation – communication with patients – dispensing of drug
in the pharmacy – drug use by patient – monitoring. The last step “monitoring” forms the starting point for the next passage of the medication process visualized as a circle. The guideline provides information for each step of the process. Special attention is paid to the task to set preferences in cases where all drugs are indicated but the situation requires a reduction of the number of drugs.

Implementation: The guideline is disseminated via internet and print media and implemented in quality circles of physicians after a training of moderators of the circles. Participants of the circles are asked for feedback with a standardized questionnaire (results available end of 2014). Besides, the guideline is a constituent part in some special contracts between health insurers and physicians.

**Comments on sustainability:** The sustainability can be improved by continuous feedback to prescribers based on prescribing data related to multimedication. Further, a “culture” of interprofessional communication and cooperation concerning patients with multimedication (eg medication reconciliation) has to be established. Integrated care offers good possibilities to improve the care of patients with multimedication. Awareness of patient preferences is an essential part of the process.

**Keywords**
- polypharmacy; guideline; medication process; patient preferences; interprofessional cooperation

**References**


**PowerPoint presentation**