Effects of a clinical medication review focused on personal goals, quality of life and complaints in older persons with polypharmacy; a randomised controlled trial (DREAMeR-study)

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Background Clinical medication reviews (CMR) are increasingly performed in older persons with multimorbidity and polypharmacy to reduce drug-related problems. However, effects on clinical outcomes are limited. Little attention has been paid to patient’s preferences and needs.

Purpose The aim of this study was to investigate the effect of a patient-centred CMR, focused on personal goals, on health-related quality of life (HR-QoL) and health-related complaints.

Method This study was a randomised controlled trial performed in 35 community pharmacies and cooperating general practices in the Netherlands. Older persons (>70 years) with polypharmacy (> seven chronic drugs) were randomly assigned to usual care or to receive a CMR. The primary outcomes were HR-QoL (assessed with EQ-5D-5L and EQ-VAS) and number of health-related complaints after three and six months. Complaints were measured as the total number of health-related complaints and number of health-related complaints with impact on daily life.

Findings Between April 2016 and February 2017, we recruited 629 persons (54% females, median age 79 years) and randomly assigned them to receive the intervention (n=315) or usual care (n=314). Over six months, compared with the control group, in the intervention group HR-QoL measured with EQ-VAS increased with 3.4 points (difference per 3 months: 1.7; 95% CI 0.47 to 2.9; p=0.006), and the number of health-related complaints with impact on daily life decreased with 12% (difference per 3 months: -0.17; 95% CI -0.32 to -0.018; p=0.029). There was no change between the intervention and control group for HR-QoL measured with EQ-5D-5L and total number of complaints.

Conclusion In older persons with polypharmacy, clinical medication review focused on personal goals increased quality of life measured with EQ-VAS and decreased the number of health-related complaints with impact on daily life, but did not improve quality of life measured with EQ-5D-5L.