

MOTIVATIONAL INTERVIEWING IN CLINICAL PHARMACIST INTERVENTIONS: A SYSTEMATIC REVIEW OF RANDOMISED CONTROLLED TRIALS

Fatima Freije; Ulla Hedegaard

Clinical Pharmacology, Pharmacy and Environmental Medicine, Department of Public Health, University of Southern Denmark, Denmark

Background

The role of clinical pharmacists in delivering services with patient-focused care is growing. Motivational interviewing is an effective intervention for changing patient behaviour, however, the role of motivational interviewing in clinical pharmacist intervention has not yet been well established.

Aim and objectives

The aim of this systematic review was to investigate the existing evidence on the effect of motivational interviewing in clinical pharmacist interventions in hospitals, primary care practices and specialized outpatient clinics. The types of motivational Interviewing interventions, their characteristics and outcomes were examined.

Methods

A systematic literature search using the databases PubMed, PsycINFO, EMBASE and The Cochrane Library, was conducted. Randomised controlled trials (RCTs) about motivational Interviewing interventions performed by clinical pharmacists in hospitals, primary care practices and specialized outpatient clinics working in close collaboration with physicians were included. Studies performed in community pharmacies were excluded. No restriction criteria were applied for the population type, delivery mode of the intervention, the comparator, or outcome. A bias assessment was performed by two reviewers according to the Cochrane collaboration risk of bias tool.

The literature search yielded 8 RCT studies (figure 1). More than 10 different outcome variables were reported across the studies. Four of eight studies showed a statistically significant effect on primary outcomes like medication adherence, hospital readmissions, emergency department visits (table 1). Five studies reported training of pharmacists in motivational Interviewing. The amount of training ranged from half a day and up to three days. Three studies reported fidelity assessment to evaluate the integrity of motivational interviewing being delivered. Overall, the risk of bias was low except from in two pilot studies. The main limitations of the systematic review were the small number of studies and their heterogeneity.

Results

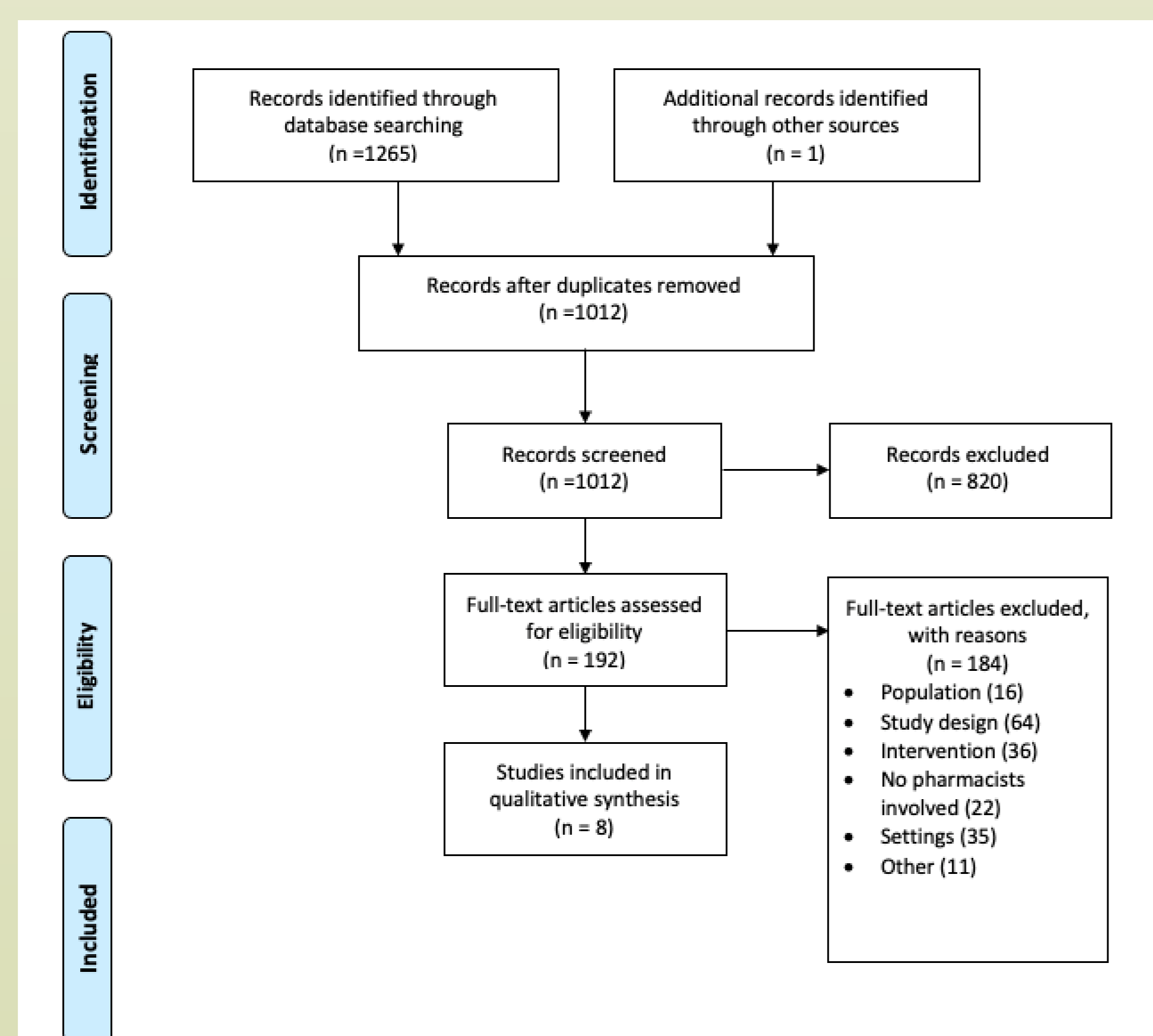


Figure 1: Flowchart: study selection process for the systematic review

Study	Country	Population Disease	N	Intervention (including motivational Interviewing)	Delivery mode of MI	Effect on medication adherence +/-	Effect on clinical outcomes +/-
Hedegaard et al. Cerebrovasc Dis Extra . 2014 11;4(3):221-34	Denmark	Stroke	201	Focused medication review, MI, action plan, 3 follow-up phone calls within 6 months	Face to face + phone calls	-	-
Ravn-Nielsen et al. JAMA Intern Med 2018;78(3):375-382	Denmark	Admitted at a emergency department	1499	Medication reconciliation, medication review, MI, action plan, 2 or more follow-up phone calls within 6 months, letter to the general practitioner	Face to face + phone calls	NA	+ readmissions +ED visits
Hedegaard et al. Am J Med 2015; 128 (12):1351-6	Denmark	Hypertension	532	Focused medication review, MI, action plan, 2 or more follow-up phone calls within 6 months	Face to face + phone calls	+	-
Choudhry et al. JAMA Intern Med 2018;178(9):1182-9.	USA	Hyperlipidemia, hypertension, diabetes	4078	MI phone calls, text messages, reminders and pillboxes	Phone calls	+	+ED visits
Eyler et al. Consult Pharm. 2016;31(1):38-43	USA	Pneumonia	30	MI discharge care and counselling on antibiotics, review of discharge instructions, a follow-up phone call the last day of antibiotic therapy.	Face to face	-	NA
Östbring et al. Eur J Hosp Pharm Sci Prac 2014; 21 (2): 102-7	Sweden	Coronary heart disease	33	Medication review, MI and a follow-up phone call 2 weeks later.	Face to face + phone calls	-	NA
Khdour et al. Br J Clin Pharmacol, 2009. 68(4): p. 588-98	Ireland	COPD	173	Written information on COPD, information on exercises, MI, referral to a special smoking cessation programme, action plan, 2 follow-up calls at 3 and 9 months.	Face to face + phone calls	+	+ ED visits
Zwikker et al. Patient Educ Couns, 2014. 94(3): p. 356-61	Netherlands	Rheumatoid arthritis	123	2 MI guided group sessions one week apart with 5-7 patient, brochures about medicines	Group sessions	-	NA

COPD: Chronic obstructive pulmonary disease; ED: Emergency Department; MI: Motivational interviewing; NA: Not available

Table 1: Randomised controlled trials on clinical pharmacist interventions including motivational Interviewing

Conclusion

Beneficial effects of motivational Interviewing were found in some clinical pharmacist interventions. These interventions could have a positive impact on medication adherence, hospitalisation and other health-related outcomes; however, more trials are needed to establish the effects of motivational Interviewing and determine characteristics and training associated with the success of the intervention.