

Appendix 3. Studies excluded after quality assessment

Systematic reviews excluded because of very low or low AMSTAR 2 score

Author/year	Title	PRISMA	AMSTAR 2
Jalal, Smith et al. 2014	Pharmacy care and adherence to primary and secondary prevention cardiovascular medication: A systematic review of studies	14	3,5
Omran, Guirguiset al. 2012	Systematic Review of Pharmacist Interventions to Improve Adherence to Oral Antidiabetic Medications in People with Type 2 Diabetes	15	3,5
Heise, Servellen 2014	The nurse's role in primary care antidepressant medication adherence	15	4
Kripalani, Yao et al. 2007	Interventions to Enhance Medication Adherence in Chronic Medical Conditions	16	5
Cai, Dai et al. 2013	Pharmacist care and the management of coronary heart disease: a systematic review of randomized controlled trials	18	5,5
Williams, Manias et al. 2008	Interventions to improve medication adherence in people with multiple chronic conditions: a systematic review	16	6
Al-Jumah, Qureshi, 2012	Impact of pharmacist interventions on patients' adherence to antidepressants and patient-reported outcomes: A systematic review	17	6,5
Jackson, Gray et al. 2016	EHealth technologies in inflammatory bowel disease: A systematic review	19	6,5
Laba, Bleasel et al. 2013	Strategies to improve adherence to medications for cardiovascular diseases in socioeconomically disadvantaged populations: a systematic review	21	6,5
Pousinho, Morgado et al. 2016	Pharmacist Interventions in the Management of Type 2 Diabetes Mellitus: A Systematic Review of Randomized Controlled Trials	19	7,5
Simon-Tuval, Neumann et al. 2016	Cost-effectiveness of adherence-enhancing interventions: A systematic review	20	7,5
Van Heuckelum, Van Den Ende et al. 2016	Electronic monitoring feedback to improve medication adherence and clinical outcomes	22	7,5
El Hajj, Jaam et al. 2017	Effect of pharmacist care on medication adherence and cardiovascular outcomes among patients post-acute coronary syndrome: A systematic review	18	8
Hartung, Low et al. 2017	Interventions to Improve Pharmacological Adherence Among Adults With Psychotic Spectrum Disorders and Bipolar Disorder: A Systematic Review	23	8
Oberjé, de Kinderen et al. 2013	Cost effectiveness of medication adherence-enhancing interventions: a systematic review of trial-based economic evaluations	21	8
Mathes, Grosspietsch et al. 2017	Interventions to increase adherence in patients taking immunosuppressive drugs after kidney transplantation: A systematic review of controlled trials	19	8,5
Readdean, Heuer et al. 2017	Effect of pharmacist intervention on improving antidepressant medication adherence and depression symptomology: A systematic review and meta-analysis	25	8,5
Ruppar, Cooper et al. 2016	Medication adherence interventions improve heart failure mortality and readmission rates: Systematic review and meta-analysis of controlled trials	24	8,5

SR excluded despite moderate or high AMSTAR 2 score

Author/year	Title	PRISMA	AMSTAR 2	Reason for exclusion
Hatah, Braund et al. 2014	A systematic review and meta-analysis of pharmacist-led fee-for-services medication review	25	12	Eligible studies had overlap with studies in Nieuwlaat 2014 and Normansell 2017
Karumbi, Garner, 2015	Directly observed therapy for treating tuberculosis	23	11	Wrong/mixed interventionists
McLean, Murray et al. 2016	Interactive digital interventions to promote self-management in adults with asthma: Systematic review and meta-analysis	24	12,5	The two eligible RCTs were from the same study (SMASHING)
Renaudin, Boyer et al. 2016	Do pharmacist-led medication reviews in hospitals help reduce hospital readmissions? A systematic review and meta-analysis	25	10	The characteristics of the included studies were too poorly reported. Missing information about samples in IG and CG, the duration and content of the interventions
Rocha, Silveira et al. 2015	Pharmaceutical interventions in antiretroviral therapy: Systematic review and meta-analysis of randomized clinical trials	24	11,5	One of the two eligible studies had overlap with Nieuwlaat 2014
Thomas, Huntley et al. 2014	Pharmacist-led interventions to reduce unplanned admissions for older people: a systematic review and meta-analysis of randomised controlled trials	23	10,5	The included studies did not report how adherence was measured. Adherence was part of the interventions but not in focus