

Table 1: Summary of quality assessment for Quantitative non-randomised studies

Author and year	Clear research question	Data addressed research questions	Representative	Appropriate outcome	Outcome data complete	Confounders considered	Intervention as intended	Total
Allred et al. (2007) [1]	Yes	Yes	Yes	Yes	Yes	No	Yes	6
Chau et al. (2015) [2]	Yes	Yes	Yes	Yes	Yes	No	Yes	6
Krska et al. (2006) [3]	Yes	Yes	Yes	Yes	Yes	No	Can't tell	5
Kwint et al. (2012) [4]	Yes	Yes	Yes	Yes	Yes	No	Yes	6
Kwint et al. (2013) [5]	Yes	Yes	Yes	Yes	Yes	No	Yes	6
Laaksonen (2010) [6]	Yes	Yes	Yes	Yes	Yes	No	Yes	6
Petty et al. (2002) [7]	Yes	Yes	Yes	Yes	Yes	No	Can't tell	5
Lenander et al. (2018) [8]	Yes	Yes	Yes	Yes	Yes	No	Yes	6

Table 2: Summary of quality assessment for quantitative descriptive studies

Author and year	Clear research question	Data addressed research questions	Relevant sampling	Representative	Appropriate measurements	Low bias risk	Appropriate statistical analysis	Total
Fog et al. (2017) [9]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7
Christopher et al. (2012) [10]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7
Modig et al. (2015) [11]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7

Smith et al. (2002) [12]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7
Chan et al. (2018) [13]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7

Table 3: Summary of quality assessment for quantitative randomised controlled trials

Author and year	Clear research question	Data addressed research questions	Randomised appropriately	Groups compared at baseline	Outcome data complete	assessors blinded	Participants adhere to intervention	Total
Hessleman et al. (2015) [14]	Yes	Yes	Yes	Yes	Yes	No	Yes	6
Vinks et al. (2009) [15]	Yes	Yes	Yes	Yes	Yes	No	Yes	6
Kwint et al. (2011) [16]	Yes	Yes	Yes	Yes	Yes	No	Yes	6
Zermansky et al. (2006) [17]	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	6
Al Alaweneh et al. (2018) [18]	Yes	Yes	Yes	Yes	Yes	No	Yes	6
Elliott et al. (2012) [19]	Yes	Yes	Yes	Yes	Yes	No	Yes	6
Sorensen et al. (2004) [20]	Yes	Yes	Yes	Yes	No	No	Yes	5
Zermansky et al (2001) [21]	Yes	Yes	Yes	Yes	Yes	No	Yes	6

References

1. Alldred DP, Zermansky AG, Petty DR, Raynor DK, Freemantle N, Eastaugh J, et al. Clinical medication review by a pharmacist of elderly people living in care homes: pharmacist interventions. *Int J Pharm Pract* [Internet]. 2010 Feb 18;15(2):93–9. Available from: <https://academic.oup.com/ijpp/article/15/2/93/6137109>
2. Chau SH, Jansen APD, van de Ven PM, Hoogland P, Elders PJM, Hugtenburg JG. Clinical medication reviews in elderly patients with polypharmacy: a cross-sectional study on drug-related problems in the Netherlands. *Int J Clin Pharm*. 2016;38(1):46–53.
3. Krska J, Gill D, Hansford D. Pharmacist-supported medication review training for general practitioners: feasibility and acceptability. *Med Educ* [Internet]. 2006 Dec;40(12):1217–25. Available from: <http://doi.wiley.com/10.1111/j.1365-2929.2006.02633.x>
4. Kwint HF, Faber A, Gussekloo J, Bouvy ML. The contribution of patient interviews to the identification of drug-related problems in home medication review. *J Clin Pharm Ther* [Internet]. 2012 Dec;37(6):674–80. Available from: <http://doi.wiley.com/10.1111/j.1365-2710.2012.01370.x>
5. Kwint HF, Faber A, Gussekloo J, Bouvy ML. Completeness of medication reviews provided by community pharmacists. *J Clin Pharm Ther* [Internet]. 2014 Jun;39(3):248–52. Available from: <http://doi.wiley.com/10.1111/jcpt.12132>
6. Laaksonen R, Duggan C, Bates I. Performance of Community Pharmacists in providing clinical medication reviews. *Ann Pharmacother*. 2010;44(7–8):1181–90.
7. Petty DR, Zermansky AG, Raynor DK, Lowe CJ, Freemantle N, Vail A. Clinical medication review by a pharmacist of elderly patients on repeat medications in general practice - Pharmacist interventions and review outcomes. *Int J Pharm Pract*. 2002;10(1):39–45.
8. Lenander C, Bondesson Å, Viberg N, Beckman A, Midlöv P. Effects of medication reviews on use of potentially inappropriate medications in elderly patients; a cross-sectional study in Swedish primary care. *BMC Health Serv Res*. 2018;18(1):1–9.
9. Fog AF, Kvalvaag G, Engedal K, Straand J. Drug-related problems and changes in drug utilization after medication reviews in nursing homes in Oslo, Norway. *Scand J Prim Health Care* [Internet]. 2017;35(4):329–35. Available from: <https://doi.org/10.1080/02813432.2017.1397246>
10. Freeman CR, Cottrell WN, Kyle G, Williams ID, Nissen L. An evaluation of medication review reports across different settings. *Int J Clin Pharm*. 2013;35(1):5–13.
11. Modig S, Holmdahl L, Bondesson Å. Medication reviews in primary care in Sweden: importance of clinical pharmacists' recommendations on drug-related problems. *Int J Clin Pharm*. 2016;38(1):41–5.
12. Smith MA, Simpson JM, Benrimoj SI. General practitioner acceptance of medication review in Sydney nursing homes. *J Pharm Pract Res*. 2002;32(3):227–31.
13. Chan WWT, Dahri K, Partovi N, Egan G, Yousefi V. Evaluation of collaborative medication reviews for high-risk older adults. *Can J Hosp Pharm*. 2018;71(6):356–63.
14. Heselmans A, van Krieken J, Cootjans S, Nagels K, Filliers D, Dillen K, et al. Medication review by a clinical pharmacist at the transfer point from ICU to ward: a randomized controlled trial. *J Clin Pharm Ther* [Internet]. 2015 Oct;40(5):578–83. Available from: <http://doi.wiley.com/10.1111/jcpt.12314>
15. Vinks THAM, Egberts TCG, De Lange TM, De Koning FHP. Pharmacist-based medication review reduces potential drug-related problems in the elderly: The SMOG controlled trial. *Drugs and Aging*. 2009;26(2):123–33.
16. Kwint HF, Faber A, Gussekloo J, Bouvy ML. Effects of medication review on drug-related problems in patients using automated drug-dispensing

systems: A pragmatic randomized controlled study. *Drugs and Aging*. 2011;28(4):305–14.

17. Zermansky AG, Alldred DP, Petty DR, Raynor DK, Freemantle N, Eastaugh J, et al. Clinical medication review by a pharmacist of elderly people living in care homes—randomised controlled trial. *Age Ageing* [Internet]. 2006 Nov 1;35(6):586–91. Available from: <http://academic.oup.com/ageing/article/35/6/586/14651/Clinical-medication-review-by-a-pharmacist-of>
18. Al alawneh M, Nuaimi N, Basheti IA. Pharmacists in humanitarian crisis settings: Assessing the impact of pharmacist-delivered home medication management review service to Syrian refugees in Jordan. *Res Soc Adm Pharm* [Internet]. 2019;15(2):164–72. Available from: <https://doi.org/10.1016/j.sapharm.2018.04.008>
19. Elliott RA, Martinac G, Campbell S, Thorn J, Woodward. MC. Pharmacist-led medication review to identify medication-related problems in older people referred to an Aged Care Assessment Team: A randomized comparative study. *Drugs and Aging*. 2012;29(7):593–605.
20. Sorensen L, Stokes JA, Purdie DM, Woodward M, Elliott R, Roberts MS. Medication reviews in the community: Results of a randomized, controlled effectiveness trial. *Br J Clin Pharmacol*. 2004;58(6):648–64.
21. Zermansky AG, Petty DR, Raynor DK, Freemantle N, Vail A, Lowe CJ. Primary care prescriptions in general practice. *Bmj*. 2001;323(December):1340–3.