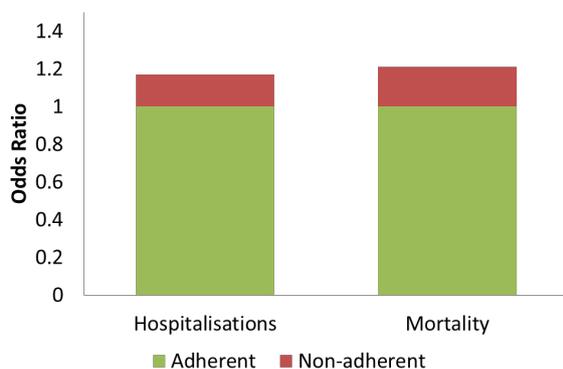


aforementioned health outcomes. Nearly all of the included studies had a disease specific focus with regards to adherence measurement and most used pharmacy refill claims to measure adherence.

FIGURE 1: IMPACT OF MEDICATION NON-ADHERENCE ON HEALTH OUTCOMES



We found that medication non-adherence (i.e. not taking your medication as prescribed more than 80% of the time), was associated with a **17%** increased risk in hospitalisation and a **21%** increased risk in death over long term follow up (>1 year).

The ‘healthy adherer’ bias, whereby people who are adherent to their medication tend to exercise other healthy behaviours such as not smoking, maintaining a healthy weight etc., may explain the protective effect of medication adherence on mortality risk.

WHAT CONCLUSIONS DID WE COME TO?

Medication non-adherence represents a significant risk for all-cause hospitalisation and mortality in older people. Hospitalisation of older people is one of the main drivers of high medical costs and medication non-adherence should be monitored and addressed in this cohort to prevent hospitalisation and reduce healthcare costs.

RECOMMENDATIONS

Despite the relatively large evidence base, we were only able to conduct meta-analyses for three outcomes, consisting of a small number of studies.

Health care professionals such as clinical pharmacists should assess the potential presence of medication non-adherence when older patients attend hospital and explore the underlying reasons for non-adherence.

More concerted action is needed to establish and standardise methods of measuring adherence in older people with multimorbidity, which are comparable across studies.

ACKNOWLEDGEMENTS

Study co-authors: Dr Caitriona Cahir, Dr Sarah Tecklenborg, Dr Catherine Byrne, Michael A Culbertson & Prof Kathleen E Bennett.

Funding information: This work was funded by the Health Research Board (HRB) Research Leaders Award (HRB RL-2015-1579) and conducted as part of the SPHeRE Programme under Grant No. SPHeRE/2013/1.

FURTHER INFORMATION:

 carolinewalsh@rcsi.com

 @CarolineWah25

READ THE FULL ARTICLE [HERE](#):

Walsh, CA, Cahir, C, Tecklenborg, S et al. The association between medication non-adherence and adverse health outcomes in ageing populations: a systematic review and meta-analysis. *Br J Clin Pharmacol.*2019; 1–15. <https://doi.org/10.1111/bcp.14075>