World Academy of Science, Engineering and Technology International Journal of Mathematical and Computational Sciences Vol:14, No:12, 2020

Improving Self-Administered Medication Adherence for Older Adults: Systematic Review

Authors: Mathumalar Loganathan, Lina Syazana, Bryony Dean Franklin

Abstract: Background: The therapeutic benefit of self-administered medication for long-term use is limited by an average 50% non-adherence rate. Patient forgetfulness is a common factor in unintentional non-adherence. With a growing ageing population, strategies to improve self-administration of medication adherence are essential. Our aim was to review systematically the effects of interventions to optimise self-administration of medication. Method: Database searched were MEDLINE, EMBASE, PsynINFO, CINAHL from 1980 to 31 October 2013. Search terms included were 'self-administration', 'self-care', 'medication adherence', and 'intervention'. Two independent reviewers undertook screening and methodological quality assessment, using the Downs and Black rating scale. Results: The search strategy retrieved 6 studies that met the inclusion and exclusion criteria. Three intervention strategies were identified: self-administration medication programme (SAMP), nursing education and medication packaging (pill calendar). A nursing education programme focused on improving patients' behavioural self-management of drug prescribing. This was the most studied area and three studies highlighting an improvement in self-administration of medication. Conclusion: Results are mixed and there is no one interventional strategy that has proved to be effective. Nevertheless, self-administration of medication programme seems to show most promise. A multi-faceted approach and clearer policy guideline are likely to be required to improve prescribing for these vulnerable patients. Mixed results were found for SAMP. Medication packaging (pill calendar) was evaluated in one study showing a significant improvement in self-administration of medication. A meta-analysis could not be performed due to heterogeneity in the outcome measures.

Keywords: self-administered medication, intervention, prescribing, older patients

Conference Title: ICSRD 2020: International Conference on Scientific Research and Development

Conference Location : Chicago, United States **Conference Dates :** December 12-13, 2020