# UNIVERSITI TEKNOLOGI MARA

# IMPROVING SELF-ADMINISTERED MEDICATION ADHERENCE FOR OLDER ADULTS.A SYSTEMATIC REVIEW

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### ABSTRACT

Background: The therapeutic benefit of self-administered medication for long-term use is limited by an average 50% nonadherence rate. Patient forgetfulness is a common factor in unintentional nonadherence. 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 selfadministration of medication. Method: Database searched were MEDLINE, EMBASE, and PsynINFO from 1980. Search term included were 'selfadministration', '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 inclusion criteria. Three intervention strategies were identified: selfadministration medication programme (SAMP), nursing education and medication packaging (pill calendar). Nursing education programme that focused on improving patients' behavioral self-management of drug prescribing were the most studied area with 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:** systematic review, self-administration, medication adherence, intervention, elderly

### CHAPTER 1

### 1.0 INTRODUCTION

### 1.1 Background

### 1.1.1 Self-Administration

Self-administration of medication is a philosophy of patient care that advocates independence for patients to take charge of their own care. Patients are responsible for taking medication prescribed to them under varying amounts of supervision(1). They will therefore be able to make informed decisions. A patient should be equipped with the right knowledge, judgment and behaviorso that he or she is capable of monitoring medication side effects. Multiple factors may affect the ability of patients to acquire the necessary knowledge for medication self-care(2). Factors such as anxiety, pain, cognitive ability, motivation, complexity of the regimen, and the short interaction time will complicate the learning process (2). The most common reasons given by patients for not taking their medication is forgetfulness at 30%, followed by other priorities at 16%, deciding to omit a dose at 11%, lack of information at 9% and emotional reasons at 7% (3).

Self-administration of medication is advantageous to patients because medicinetaking control is returned to them (4). By promoting patient comfort and involvement, it allows patients to practice taking their medicines under supervision. Then, patient can alert healthcare professionals about any problems that they may experience in adhering to a medicine regime. This involvement also demonstrates