# UNIVERSITI TEKNOLOGI MARA

# FACTORS INFLUENCING MEDICATION ADHERENCE IN HEMODIALYSIS PATIENTS

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### **ABSTRACT**

Medication non-adherence is a common problem worldwide. However, studies related to investigating the factors influencing medication compliance in dialysis patients of Malaysian population is lacking. This study was set out to investigate level of and factors influencing medication adherence in hemodialysis patients. Cross-sectional descriptive design survey and convenience sampling were used. 70 patients who undergo dialysis treatment at Selayang Hospital, Selangor were interviewed and completed the questionnaires. For this study, adherence was defined as taking ≥ 80% of medication prescribed. Factors that were used to find out the correlation between medication adherence are demographic characteristics, medication related barriers, technical problems, heath-team – patient relationship barriers, patient related barriers, social support barriers and patients' medication knowledge. Among all patients, 51% were claimed adherent when being observed by using Morisky Scale while 76.3% patients were claimed adherent to medication prescribed when interviewed. Chi square and Spearman's test were applied for statistical analysis. There findings shows that no significant difference between medications adherences with all factors investigated (p > 0.05). The conclusion is no specific factors can influence medication adherence, therefore pharmacist are responsible to intervene all hemodialysis patients towards medication adherence regarding to all aspects.

Key words: medication adherence, hemodialysis, correlation, factors influencing, correlation, intervention

## **CHAPTER 1**

# INTRODUCTION

# 1.1 Background of study

Hemodialysis is a process of blood washing to eliminate water, waste and salt by being passed through artificial kidney machine (Kutner, 2001). Dialysis will give positive and negative impact to the patients (Loghman-Adham, 2003). Some of them have many health problems such as salt and water retention, phosphate retention, secondary hyperparathyroidism, hypertension, chronic anemia, hyperlipidemia, and heart disease (Loghman-Adham, 2003). Therefore most of the patients require fluid restriction, phosphate binders, vitamin D preparations, antihypertensive medications, hypoglycemic agents, erythropoietin (EPO), iron supplements and other medication to overcome those problems (Loghman-Adham, 2003). 50% of hemodialysis patients are non- adherent to treatment regimen which includes fluid restriction, diet, medication and dialysis therapy (Kutner, 2001).

According to World Health Organization Adherence (2003) and Koneru *et al.* (2008), medication adherence can be defined as the situation to which a person's behavior corresponds exactly with medical or health advice as directed. "Adherence" may be a better term, even though compliance is well accepted (Loghman-Adham, 2003).