

**PATIENT'S MEDICATION RETURN STUDY**



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## **ABSTRACT**

There is increasing concern regarding the fate and effects of the medicines compounds on the environment. The reasons patients return unused drugs to pharmacies have been explored. The study focuses on patient's explanations for not returning medication; being categorized as: excessive supply, expired medicines, changes in medical condition, other changes in patient circumstances, or the repeat medicines policy at the surgery and also patient's death. This study was undertaken to investigate the household habits of storage and disposal of unused medicines. The aims of the original study are to increase the awareness of the public on the effects of indiscriminate disposal of medicines on the environment and at the same time achieving improved standards of pharmaceutical care since the cases of medicine poisoning have also seen rapid increase yearly, especially among children. The Pharmacy Department of Putrajaya Hospital took the initiative to conduct this study with the aim that it will increase public awareness on the storage, disposal and environment issues relating to their medicines. A programme called "Return Unwanted Medicines for Disposal" was conducted for six months beginning on the 1<sup>st</sup> September 2007 and ending on the 29<sup>th</sup> February 2008. This was a prospective, single-centered and an observational study conducted among patients and hospital staffs who returned their unwanted medicines voluntarily at Putrajaya Hospital from September 2007. Posters and bunting were displayed at several places in the hospital compound. Members of the public who returned unwanted medicines were asked to fill up a questionnaire. This programme managed to receive responses from 100 patients. The study indicated that the need for an appropriate method and disposal of unwanted medication are very important to prevent and to avoid any unwanted incidents such as medication poisoning.

## **1.1 BACKGROUND**

Pharmaceutical waste disposal is a rapidly emerging concern that spans a broad range of issues including human and environmental health, water quality, solid waste management, law enforcement, and the health care industry. Substances of concern include both prescription and non-prescription medicines. The terms “medicine,” “medication” and “pharmaceutical” are used interchangeably throughout the documents that follow to refer to substances used in treating disease or illness. There are thousands of products that fall into this classification; all of these substances are specifically designed to interact with biological processes and are widely used around the world. They can reach the environment when people dispose of medicines via trash or toilet, or after use when they are excreted in their original or metabolized form or rinsed off the skin in the case of topical applications.

Medicine waste is a complex and multifaceted problem which may arise from a number of factors, related to both patients and prescribers, to excess supply and to over ordering. Unused medicines are costly to society in a number of different ways, such as admission to hospital following treatment failure, poisoning and suicides, environmental clean-up of pharmaceutically active compounds, policing of black market medicines and other less tangible elements.