

UNIVERSITI TEKNOLOGI MARA  
KAMPUS BERTAM  
APRIL 2010

FACULTY OF PHARMACY



AN AUDIT OF DRUGS RETURN FROM  
MEDICAL WARDS TO INPATIENT  
PHARMACY DEPARTMENT, HUSM

FATIN AZZYATI BT PAKURURAZI

NURUL NURHAYATUL SYIMA BT MOHAMAD ARIFFIN

**AN AUDIT OF DRUGS RETURN FROM MEDICAL WARDS TO  
INPATIENT PHARMACY DEPARTMENT, HUSM.**

Prepared by

**FATIN AZZYATI BT PAKURURAZI                      2007235628**  
**NURUL NURHAYATUL SYIMA                      2007214712**  
**BT MOHAMAD ARIFFIN**

Supervisors: Ms.Noraini Bt Ariffin

Inpatient Pharmacy, HUSM

Ms.Intan Farahanah Bt Amran

Outpatient Pharmacy, HUSM

Submitted in part fulfilment for the Degree of Diploma of Pharmacy in the  
Faculty of Pharmacy,  
Universiti Teknologi MARA  
Pulau Pinang

April, 2010

Faculty of Pharmacy,  
Universiti Teknologi MARA  
Pulau Pinang

## ACKNOWLEDGEMENT

In the name of Allah S.W.T, the Most Gracious, Precious and Most Merciful. Highest gratitude forwarded to God the Almighty for His blessing and mercy as this task has exultantly been completed on time. This errand would not be prepared impeccably without the groovy understanding and awe-inspiring cooperation from our practical training friends and HUSM's pharmacy department staff, notably Inpatient Pharmacy Department. Dare not to forget , this chore is stunningly finished with the hand of aid by our supervisors, Ms. Noraini Ariffin and Ms. Intan Farahanah Amran. Your advocate are rays to my weedy path, your ire are soothing music to my ears and your lectures are words of guidance...Thanks a million for everything!

Mission accomplish! That is what we are screaming our lungs for as this research project finally come to an end. Enduring plightness, savouring glee and vivaciousness of wrangle and teenage angst while doing this, we are more grown up than we were before.

Ultimately , we would like to grab this golden opportunity to thanks all that indulged directly or indirectly in helping us , sharing moments of shimmering information and experiences, beneficial ideas , twinge and glimmering-merry comments and suggestions , and total abundance of buoy and gladden encouragements in order to keep hearten us in completing our research project . Those people who deserved that gratitude are, Tuan Haji Zainol Abidin Hamid ( Pharmacy Directory Senior ), Tuan Haji Azman Mat (Pharmacy Deputy Director Senior ) and Haji Abdul Manan Kechik (Chief of Dispenser ).

Last but not least , all the support and assistance will always be my fringe-meter in bouncing high and low, up and down, in the future ahead.

Thank You

# TABLE OF CONTENTS

|                                         |           |
|-----------------------------------------|-----------|
| Acknowledgement                         | ii        |
| Table of Contents                       | iii       |
| List of Tables                          | v         |
| List of Figures                         | vi        |
| Abstract                                | vii       |
| <b>CHAPTER 1 INTRODUCTION</b>           | <b>1</b>  |
| <b>CHAPTER 2 LITERATURE REVIEW</b>      | <b>3</b>  |
| 2.1 Study of Drug Return                | 3         |
| <b>CHAPTER 3 AIM AND OBJECTIVES</b>     | <b>4</b>  |
| <b>CHAPTER 4 MATERIALS AND METHODS</b>  | <b>5</b>  |
| 4.1 Study Design                        | 5         |
| 4.2 Study Subject                       | 5         |
| 4.3 Data Collection                     | 6         |
| 4.4 Data Analysis                       | 10        |
| <b>CHAPTER 5 RESULTS AND DISCUSSION</b> | <b>11</b> |
| 5.1 Results                             | 11        |
| 5.2 Discussion                          | 26        |

## ABSTRACT

Underutilize medicines are regarded as a common problem in Hospital Universiti Sains Malaysia,(HUSM).All wards are advised to return unused medicines to Inpatient Pharmacy for recording, reusing and eradication purpose. Inpatient Pharmacy in HUSM supplies medications to patients in the wards via unit dose system. The medication are supplied 3 days per week which are on Sunday, Tuesday and Thursday. Suprisingly, there were abundant of drugs returned to Inpatient Pharmacy, especially from medical wards. This study was conducted in order to find the factors that contribute to drug return from medical wards to Inpatient Pharmacy Department, HUSM. This study was also done to suggest suitable solution to those problems. Prospective observational study was used as a method in conducting the research. We have chosen drug return from medical wards (Ward 7 Utara and 7 Selatan) as our source of data. The data was collected 3 times weekly (Sunday, Tuesday and Thursday) for 11 weeks, from 13 October 2009 till 27 December 2009 . In questionnaire session, 35 respondents were choose randomly including physician, inpatient pharmacy's staff and ward's staff in order to help us identify the factors that contribute to the drug return to Inpatient Pharmacy. A "Drug Return Form" was created by that and the form was used to record the data. Then, the obtained data was analyzed by using SPSS 17.0 and Microsoft Excel 2007.Based on the research conducted, we know that, discharged/transfer patient is the highest factor that contribute to drug return from medical wards(7 Utara and 7 Selatan) to Inpatient Pharmacy with 2863 factors and the lowest is expired drug with 0 factor. We also found that 25109.75 drug were given by Inpatient Pharmacy to medical wards from 13 October 2009 till 27 December 2009 and 11648.75 were returned back. That means,47% of drug are returned back and it is quite a number. Meanwhile, from that, 12939.5 of drug return are in tablet form and 4474 are in injection form .As a conclusion, we suggest that a programme should be instill to educate ward's staff, physician, and pharmacy staff itself regarding Unit Dose practiced Pharmacy Department, HUSM.

# **CHAPTER 1 : INTRODUCTION**

## **1.1 Introduction**

Inpatient Pharmacy is one of units under Pharmacy Department in Hospital Universiti Sains Malaysia (HUSM). The main role of this unit is to supply the medications that are needed by patients in the ward. Besides, it also supplies the medication to the discharged patients. The medication supply system that is applied in this unit is Unit Dose System. Here, the medication supply is 3 days per week which is on Sunday, Tuesday and Thursday and it is known as Trolley Day. Every wards will bring on their own medication trolley together with patient's medication chart to Inpatient Pharmacy in order to get the medication prescribed. The medications are supplied in single dose for every patient based on original prescription.

Theoretically, because of the unit dose system practiced by Inpatient Pharmacy, there will be no drugs returned to pharmacy itself, as we assume that patient will take all the medication prescribed. Unfortunately, the real situation is, we found that there were abundant of drug returned back in the medication trolley to Inpatient Pharmacy. These leads to a chain of predicaments as the underutilized medicines are regarded as one of the problem in Inpatient Pharmacy. This is because, unused medicines represent economic value and a waste, as well as the consequences of non-adherence to prescribed treatment.

Most of the cases, the unused drugs are returned via medication trolley. There are drawers attach to the trolley that is use per patient. This means, one drawer is meant for one patient. During Trolley Day, staff usually have to clear the drug return from wards out of the trolley first, before they begin filling in the drawer with the prescribed medications as in the patient's medication chart. The work of clearing and sorting out the unused drugs and keeping it back is such a workload because there are drugs which are in bad condition, cannot be reused or already contaminated.