

**CUSTOMERS' LEVEL OF
UNDERSTANDING AND SATISFACTION
OF THERAPUTIC DRUG MONITORING SERVICES**



**DIPLOMA OF PHARMACY IN THE
FACULTY OF PHARMACY,
UNIVERSITI TEKNOLOGI MARA,
PULAU PINANG**

**PREPARED BY
NUR ARINA BINTI MUSTAFFA
KHAIRUL AINOL AMEER BIN SAMSUL BAHARUM
NURUL 'AIN BINTI A. HAMID
NURUL HAWA BINTI MANAP**

APRIL, 2009

**CUSTOMERS' LEVEL OF
UNDERSTANDING AND SATISFACTION
OF THERAPUTIC DRUG MONITORING SERVICES**

Prepared by:

**NUR ARINA BINTI MUSTAFFA
KHAIRUL AINOL AMEER BIN SAMSUL BAHROM
NURUL 'AIN BINTI A. HAMID
NURUL HAWA BINTI MANAP**

Supervisors:

**PUAN MAZNIRA BINTI DERAMAN
PUAN SITI FATIMAH BINTI ABU BAKAR
EN HUSNIZAEN BIN MOHAMED
CIK SITI ROSNAH BINTI SURADI
(Therapeutic Drug Monitoring Department,
Hospital Sultanah Aminah, Johor Bahru)**

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

April 2009

**Faculty of Pharmacy,
Universiti Teknologi MARA
Pulau Pinang**

ABSTRACT

In our current training hospital, which is Hospital Sultanah Aminah, Johor Bahru, we had been informed by the pharmacist who in charged in Therapeutic Drug Monitoring that no survey on customers' understanding and satisfaction had been done before. Instead of searching any problem that might occur in Therapeutic Drug Monitoring Department, we choose to survey their level of understanding and satisfaction first. From there, we could determine what had caused any problem that might occur while running samples.

Every hospital all over Johor currently sent their sample to our training hospital as it is the main general hospital and the only hospital that provide TDM services. However, we narrowed our subject only to the hospital wards. We choose nurses as our target population instead of doctors and patients as nurses dealt with the department more often.

As our research showed that their level of understanding and satisfaction still in medium ranking, we listed out what had caused it. One of their problem included lack of knowledge needed while handling the samples, where we found it is important to give them exposure regarding their responsibilities in sample handling. After that, we did some intervention including distributed pamphlet and organized a seminar for them.

We did second survey after the intervention and turned out that their level of understanding and satisfaction had increased with a lot of improvement. We compared our data before and after intervention. We concluded that the level of understanding and satisfaction has correlation with each other.

ACKNOWLEDGEMENT

First and foremost we offer our sincerest gratitude to our supervisors, Puan Maznira Binti Deraman, Puan Siti Fatimah Binti Abu Bakar, Encik Husnizaen Bin Mohamed and Siti Rosnah Binti Suradi who have supported us throughout our research with their patience and knowledge. We would like to thank them for their candor and unfailing support. They always who addressed all our queries pertaining to data collection process of this project.

We would like to extend my thanks to the staff of Therapeutic Drug Monitoring Unit for their help in finding information that is really valuable for our research. We have been impressed by their knowledge and by the speed of service.

We attribute the level of our Diploma in Pharmacy to their encouragement and effort and without them this thesis, too, would not have been completed or written. One simply could not wish for better or friendlier supervisors.

Not forgotten to our current training hospitals' head of pharmacy department, Puan Rosidah Binti Md Din and all her staff's as they have put a great deal of effort into our research for allow and assist us during our completion of implementation for this research. We also would like to acknowledge the full and open support we have received from our lecturers and other members of our group and other group as well. We would also like to acknowledge the advice and support we received from our visiting lecturers for the recommendation for our research for better performance.

The Department of Pharmacy in Hospital Sultanah Aminah has provided the support and equipment we needed to produce and complete our research. We were so grateful for that.

We also would like to give an exceptional thank you for our parents for supporting us throughout all our studies and for providing a home in which to complete our writing up. Last but certainly not least, thanks all for both friendship and for the clear professionalism with which they proffered their assistance in administration.

THANK YOU.

TABLE OF CONTENTS

Acknowledgement	ii
Table of Contents	iii
List of Tables	iv
List of Figures	iv
Abstract	v
CHAPTER 1: INTRODUCTION	1
CHAPTER 2: LITERATURE REVIEW	3
CHAPTER 3: AIM AND OBJECTIVES	4
CHAPTER 4: MATERIALS AND METHODS	5
CHAPTER5: RESULTS AND DISCUSSION	
5.1 Before implementation	
5.1.1. Level of Understanding: Marking Scheme Method	7
5.1.2. Customers' Satisfaction: Statistical Method	9
5.2 After implementation	
5.2.1. Level of Understanding: Marking Scheme Method	13
5.2.2. Customers' Satisfaction: Statistical Method	14
5.3 Comparison between before and after intervention	18
CHAPTER 6: CONCLUSION	21
REFERENCES	22
APPENDIXES	23