

THE USAGE STUDY OF HUMAN INSULIN AT OUT-PATIENT PHARMACY DEPARTMENT OF HOSPITAL UNIVERSITI SAINS MALAYSIA (HUSM) KELANTAN

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

PREPARED BY:

NOOR ALWANI BINTI AWANG

NIK NOOR SYAHIRAH BINTI NIK ADIB

NIK SYARIFAH SYAFIQAH BINTI NIK IZHAM

MARCH 2017

The Usage Study of Human Insulinat Out-Patient Pharmacy Department of Hospital Universiti Sains Malaysia (HUSM) Kelantan

Prepared By

Noor Alwani Binti Awang Nik Noor Syahirah Binti Nik Adib Nik Syarifah Syafiqah Binti Nik Izham

1st Supervisor: Tuan Umar Bin Tuan Ismail

Pharmacy Department, Hospital Universiti Sains Malaysia, Kelantan.

2nd Supervisor: Dr. Lean Qi Ying

Lecturer of Faculty of Pharmacy, UiTM Pulau Pinang,

Bertam Campus.

3rd Supervisor: Puan Che Noriah Binti Othman

Lecturer of Faculty of Pharmacy, UiTM Pulau Pinang,

Bertam Campus.

Submitted in partial fulfillment for the Diploma in Pharmacy of Faculty of Pharmacy,

Universiti Teknologi MARA

Pulau Pinang

March, 2017

Faculty of Pharmacy,
Universiti Teknologi MARA
Pulau Pinang.

ABSTRACT

This research was carried out to study the prescribing pattern of human insulin at outpatient department of Hospital Universiti Sains Malaysia (HUSM), Kubang Kerian, Kelantan. We have randomly picked 3 months from year 2016 which are January, February and March to observe the increasing or decreasing of human insulin prescribed, the most prescribed insulin and which gender is leading the disease. The subject of our study was the diabetic patients that have been attached to clinics in HUSM such as Klinik Rawatan Keluarga (KRK), Klinik Pakar Perubatan (KPP) and other 12 clinics which are A&E, O&G, CKD, USAINS, Orthopaedic, Ophthalmology, Surgery, Oncology, Haemodialysis, Endoscopy, Staff and Paediatric. We picked every day from each months in order to get a right and valid data. The focus of this study is to relate the factors which are ages (demographic factors), gender (demographic factors), clinics and company versus types of insulin prescribed by the health professionals. We discussed that, from Chi-Square Test, we are able to find the linkage between clinics and types of human insulin but there are no association between gender and types of human insulin. We also used Spearman's rank order correlation to find the relationship between range of patients' age with types of human insulin. Result shows that, the prescribing pattern of human insulin is decreasing from January to February while increasing from February to March. The most prescribed human insulin is insulin Isophane (Insulatard) and male patients are leading in every month (January - March). We conclude that we achieved the objectives of our study where we can see the usage of human insulin prescribed by the health physician to diabetic patients and its relationship with gender, age and clinics.

ACKNOWLEDGEMENT

First of all, we praise to God, the Almighty, Merciful and Passionate, for providing us this opportunity and granting us the capability to proceed successfully. This research as our final project appears in its current form due to the assistance and guidance of several people. We would like to offer our sincere thanks to all of them.

A thousand thanks to the Hospital Universiti Sains Malaysia (HUSM) and Department of Pharmacy of HUSM, Kelantan for giving us too much information and helping to commence on this research especially Tuan Umar bin Tuan Ismail as our respective supervisor. Without his exemplary, guidance, fresh ideas, monitoring and constant encouragement throughout the course of this research project, we cannot done it completely.

We also like to express our gratitude to our Faculty of Pharmacy Universiti Teknologi MARA (UiTM) Pulau Pinang, Bertam Campus as well as Puan Che Noriah binti Othman, as the course coordinator, Dr. Lean Qi Ying as main supervisor and lecturer-in-charge from UiTM Pulau Pinang, Bertam Campus. The blessing, knowledge and support given by them time to time shall carry us a long way in the journey of life on which we are about to embark. Their hardworking, time and concerned are very valuable.

On the other hand, we would like to thanks to our classmates and course mates for their concerned and always alert to the updated information that was given by the lecturers. They will share the information to ensure that we all get attached to the latest updated information. We also shared our opinion and idea through a discussion and find the solution at the end.

Lastly, thank you so much to our parents and siblings who had given their full support especially in financial problem. Without them, this research project would not be possible to accomplish completely at the right time.

TABLE OF CONTENT

Acki	nowledgement	11
Tabl	le of Contents	iii
List	of Tables	v
List of Figures		vi
Abbreviation		vii
Abst	tract	viii
CHA	APTER 1: INTRODUCTION	1
CHA	APTER 2: LITERATURE REVIEW	3
CHA	APTER 3: AIM AND OBJECTIVES	6
3.1	Aim	
3.2	Objectives	
CHAPTER 4: MATERIALS AND METHODS		7
4.1	Study Design	
4.2	Study Subject	
4.3	Data Collection	
4.4	Data Analysis	
СНА	APTER 5: RESULTS AND DISCUSSIONS	8
5.1	Results	
5.2	Discussions	