

**UNIVERSITI TEKNOLOGI MARA**

**PRACTITIONERS' ATTITUDE TOWARDS RGP  
FITTING IN KLANG VALLEY AREA**

**NUR AKMAL BINTI MAT NAWI**


**BACHELOR OF OPTOMETRY (HONS)  
FACULTY OF HEALTH SCIENCES**

**JULY 2016**

## AUTHOR'S DECLARATION

I declare that the work in this proposal is considerably my own, and to the extent that any part of this work is not my own, I have indicated that it is not mine by fully acknowledgement in accordance with the standard referring practices of the discipline.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, University Technology MARA (UiTM) regulating the conduct of my study and research.

Name of Student	: Nur Akmal Binti Mat Nawi
Student I.D. No.	: 2012453196
Program	: Bachelor of Optometry
Faculty	: Health Sciences
Thesis	: Practitioners' Attitude towards RGP Fitting in Klang Valley Area
Signature of Student	:  .....
Date	: July 2016

## ABSTRACT

**Purpose:** Rigid gas permeable (RGP) lens has numerous of benefits compared to soft lens. However, the trends of RGP lens prescribing had faced a decrement from a few past decades. This study aimed to address the low prescribing rate of RGP lens in Malaysia with particular focus on the practitioners' attitude to the RGP fitting.

**Method:** A questionnaire was adopted from Gill et al (2009) modified and validated. Two hundred and fifty questionnaires were distributed to optical practices and hospitals in Klang valley area by post and email.

**Result:** Generally, the percentage of lenses prescribed in a year was 86% soft contact lenses, and 14% RGP lenses. Respondents majorly enjoyed the challenges of RGP fitting mainly because they were confident of their skills in RGP fitting but they felt that it was time consuming for them to fit RGP lenses. It also found that the initial discomfort felt by patient during fitting did hindered the respondents from fitting RGP lenses. Besides, they agreed that slit lamp and keratometer was enough for a successful fitting but having a corneal topographer would be advantageous.

**Conclusion:** This study have provided an information on the reasoning behind the low prescribing trend of RGP lenses. The low recommendation of RGP lenses also have been found mainly due to the patient's factor with initial discomfort and adaptation issues. As conclusion, practitioners disagreed that RGP lens were becoming irrelevant but initial discomfort issues and long chair time and adaptation period was a very major issues for them especially in private practices.

# TABLE OF CONTENTS

<b>AUTHOR'S DECLARATION</b>	<b>II</b>
<b>SUPERVISOR'S SIGNATURE</b>	<b>III</b>
<b>ACKNOWLEDGEMENT</b>	<b>IV</b>
<b>TABLE OF CONTENTS</b>	<b>V</b>
<b>LIST OF FIGURES</b>	<b>VIII</b>
<b>LIST OF TABLES</b>	<b>IX</b>
<b>LIST OF EQUATIONS</b>	<b>X</b>
<b>LIST OF ABBREVIATIONS</b>	<b>XI</b>
<b>LIST OF SYMBOLS</b>	<b>XII</b>
<b>ABSTRACT</b>	<b>XIII</b>
<b>ABSTRAK</b>	<b>XIV</b>
<b>CHAPTER 1: INTRODUCTION</b>	<b>1</b>
1.1 BACKGROUND	1
1.1 PROBLEM STATEMENT	3
1.2 OBJECTIVES	3
1.3 RESEARCH QUESTIONS	3
1.4 HYPOTHESES	4
<b>CHAPTER 2: LITERATURE REVIEW</b>	<b>5</b>
2.1 COMPARISON OF RIGID GAS PERMEABLE (RGP) LENS AND SOFT CONTACT LENS	5
2.2 TRENDS OF PRESCRIBING RIGID GAS PERMEABLE (RGP) LENSES	5
2.3 THE CAUSES OF LOW PRESCRIBING TRENDS	6
2.3.1 INITIAL DISCOMFORT	6
2.3.2 WIDE RANGE OF SOFT CONTACT LENSES MODALITIES	8
2.3.3 ADVANCED TECHNOLOGY ON SOFT CONTACT LENS MATERIALS AND DESIGNS	8
2.3.4 PRACTITIONERS' ATTITUDE TOWARDS RGP FITTING	9

<b>CHAPTER 3: RESEARCH METHODOLOGY</b>	<b>11</b>
3.1 RESEARCH DESIGN	11
3.2 SAMPLING	11
3.3 SAMPLING CRITERIA	12
3.4 RESEARCH MATERIALS	13
3.4.1 ADOPTION AND MODIFICATION OF QUESTIONNAIRE	13
3.4.2 VALIDATION	13
3.4.3 FIELD TEST	14
3.4.4 FINAL FORMAT VERSION	14
3.5 ETHICS APPROVAL	14
3.6 PROCEDURES	15
3.7 STATISTICAL ANALYSIS	15
<b>CHAPTER 4: RESULT</b>	<b>16</b>
4.1 DEMOGRAPHIC INFORMATION	16
4.2 NORMALITY TEST	20
4.3 PRACTITIONERS' ATTITUDE TOWARDS RGP FITTING	20
4.3.1 DIFFERENCE IN ATTITUDE TOWARDS RGP FITTING BETWEEN QUALIFICATIONS OF PRACTITIONERS.	24
4.3.2 DIFFERENCE IN ATTITUDE TOWARD RGP FITTING BETWEEN WORK SETTINGS.	25
4.4 RECOMMENDATION OF RGP LENSES	26
<b>CHAPTER 5: DISCUSSION</b>	<b>29</b>
5.1 RESPONSE RATE	29
5.2 STATISTICS OF PRESCRIBING RATE	30
5.3 PRACTITIONERS' ATTITUDE TOWARDS RGP FITTING	30
5.3.1 DIFFERENCE OF ATTITUDE TOWARD RGP FITTING BETWEEN OPTOMETRISTS AND OPTICIANS.	34