

## بسم الله الرحمن الرحيم

 $\infty\infty\infty$ 

تم رفع هذه الرسالة بواسطة / سامية زكى يوسف

بقسم التوثيق الإلكتروني بمركز الشبكات وتكنولوجيا المعلومات دون أدنى مسئولية عن محتوى هذه الرسالة.

ملاحظات: لا يوجد

AIN SHAMS UNIVERSITY

Since 1992

Propries 1992

# PREVALENCE OF SELF-MEDICATION FOR DENTAL CONDITIONS BY PARENTS FOR THEIR CHILDREN: CROSS-SECTIONAL STUDY

A thesis submitted to the Faculty of Dentistry at Cairo University in Partial Fulfillment of the Requirements for the Master's Degree in Pediatric Dentistry

By
Faten Salah Abdel Moneim
B.D.S 2012
Faculty of Dentistry, Cairo University

Faculty of Dentistry Cairo University 2021

©2020 Faten Salah Abdelmonem ALL RIGHTS RESERVED We certify that we have read the present work and that in our opinion it is fully adequate in scope and quality as thesis towards the Partial Fulfillment of the Requirements for the Master's Degree in Pediatric Dentistry.

Name: **Associate Prof. Dr.Soad Abdel Moneim Abas**: Associate Professor of Pediatric Dentistry and dental public health, Faculty of Dentistry, Cairo University Signature:

Name: **Dr.Marwa Aly Foaad**: Lecturer of Pediatric Dentistry and dental public health, Faculty of Dentistry, Cairo University

Signature:

We certify that we have read the present work and that in our opinion it is fully adequate in scope and quality as thesis towards the Partial Fulfillment of the Requirements for the Master's Degree in Pediatric Dentistry.

Name: **Associate Prof. Dr.Sarah Ahmed Mahmoud:** Associate Professor of Pediatric Dentistry and Dental Public Health, Faculty of Dentistry, Cairo University Signature:

Name: **Associate Prof. Dr.Ghada Abd Elwahab Ahmed**: Associate Professor of Pediatric Dentistry and Dental Public Health at the National Research Center. Signature:

Name: **Associate Prof. Dr.Soad Abdel Moneim Abas**: Associate Professor of Pediatric Dentistry and Dental Public Health, Faculty of Dentistry, Cairo University Signature:

## **DECLARATION**

The authors declare that all the work in the thesis is original work, and has not been published or used for the award of any other degree.

#### **ABSTRACT**

**Faten Salah Abdel Moneim**; Prevalence of self-medication for dental conditions by parents for their children (Cross-sectional Study)

Under the supervision of Soad Abdel-Moneim and Marwa Aly

**Aim:** This study aimed to assess the prevalence and practices of self-medication for dental conditions by parents for their children.

**Methodology:** A descriptive cross-sectional study was carried out among 188 mothers of children under 10 years of age who attended the department of Pediatric dentistry and dental public health, Faculty of Dentistry, Cairo University. Data were collected using an interviewer-administered questionnaire and were statistically analyzed.

**Results:** One hundred thirty-nine respondents reported giving drugs to their children without the advice of a doctor or using previous prescriptions for the treatment of oral conditions. There was no statistically significant difference between the demographic data (age of the children, age of parents, and their educational level), and the self-medication.

**Conclusion:** The prevalence of self-medication by parents to their children for oral health problems was 73.94%, and was not significantly influenced by the age of the children or the education level of the parents.

## **DEDICATION**

I would like to dedicate this work to my parents, and my supportive husband for their daily support and prayer.

#### **ACKNOWLEDGEMENT**

First and foremost, all thanks and praise be to Allah the most merciful.

I would like to express my respect and gratitude to *Dr. Soad Abdel Moneim*, Associate Professor of Pediatric Dentistry and Dental Public Health, Faculty of Dentistry, Cairo University, for her continuous support, valuable time and guidance throughout this work.

I am also offering my warmest thanks to *Dr. Marwa Aly*, Lecturer of Pediatric Dentistry and Dental Public Health, Faculty of Dentistry, Cairo University, for her continuous support, patience, and substantial supervision. It is a great honor and a chance of lifetime to be supervised by her. No words of praise are sufficient for her.

I would like to extend my thanks to all the staff members of the Pediatric Dentistry and Dental Public Health, Faculty of Dentistry, Cairo University for their great help and friendly support throughout the present work.

Many thanks to all children and their parents for volunteering in this study, without them I would not have accomplished this thesis.

## LIST OF CONTENTS

Title			Page No.
List of Tables			Xi
List of Figures			Xii
List of Abbreviations			Xiii
Introduction			1
Review of			3
Literature	1. Common dental problems in children		3
	2. Drug use in pediatric Dentistry	2.1. Body reaction to drugs in children	4
	Bentistry	2.2 Drug interactions	4
		2.3. Drug toxicity in children	5
	3. Pediatric	3.1. Analgesics	6
	medications for oral conditions	3.2. Antibiotics	6
	4. Antibiotics	4.1. Definition	7
	resistance	4.2 Causes of antibiotics resistance	7
	5. Self- medication:	5.1. Definition of Self- medication	8
		5.2. Prevalence of Self- medication	9
		5.3. Practices of self- medication	10
		5.4. Benefits and risks of self-medication	11
	6. Parents, contri	bution in self-medication	12
	7. Previous studies on the prevalence and practices of self-medication		13
	8. Previous studies on self-medication by parents to their children for oral problems		15
Aim of the Study	parents to their c	inden for oral problems	18
Aim of the Study			19
Participants and Methods Results			23
1- Demographic data of the participants			23
2. Prevalence of self-medication			25
3. Practices of self-medication			27
Discussion			29
Conclusions			34
Recommendations			35

Title		
Appendices	Appendix I: Thesis proposal	36
	Appendix II: Sample Size Approval	42
	Appendix III: Ethics Committee	43
	Approval	
	Appendix IV: Thesis Submission	44
	Checklist	
	Appendix V: Clinical Trial.gov PRS	51
	Appendix VI: Informed consent	55
	Appendix VII: English questionnaire	57
	Appendix VIII: Arabic questionnaire	59
References		61
English summary		67
الملخص العربي		
Jury committee's page in Arabic		
Supervisor's page in Arabic		

## LIST OF TABLES

Number	Table description	Pag e No.
Table (1)	The study outcomes	19
Table (2)	Summary of the statistics of the demographic data	23
Table (3)	The prevalence of self-medication by parents for their children for oral conditions.	26
Table (4)	Frequencies (n) and percentages (%) for the association between the answers to question (1) and the different demographic data	
Table (5)	Frequencies (n) and percentages (%) of practice questions answers.	

## LIST OF FIGURES

Number	Figure description	Page No.
Figure (1)	Pie chart showing the age of the parents.	24
Figure (2)	Pie chart showing the distribution of the children age.	
Figure (3)	Pie chart showing the educational level distribution of the parents.	
Figure (4)	Bar chart showing the association between the answers to question (1) and the different demographic data.	

#### LIST OF ABBREVIATIONS

Abbreviations	Full term
CDC	Centers for Disease Control and Prevention
DDIs	Drug-drug interactions
DRPs	Drug-related problems
IPF	International Pharmaceutical Federation
ОТС	Over-the-counter
PDO	Prescription drug overdose
WHO	World health organization

#### Introduction

According to the World Health Organization, self-medication is the act of medicating oneself, either on their initiative or on the advice of a close person, to treat self-recognized conditions or symptoms without supervision by a healthcare professional (*Paulino et al.*, 2019).

Self-medication includes the use of nonprescription drugs and a range of different alternative medicines such as herbal remedies, food supplements, and traditional products. People of all socio-demographic categories practice self-medication. Self-medication is common in both developed and developing countries but higher in developing countries, due to a wider increase of drug availability without prescription (*Esan et al., 2018*).

The factors influencing the frequency of self-medication include lack of functional health care services, high costs in health facilities, wide availability of over-the-counter medicines, availability of drugs outside pharmacies, desire to take care of oneself, extensive drug advertising, and inadequate family support (**Lukovic et al.**, 2014).

The practice of self-medication among children is considered important as children constitute a large percentage of the population in developing countries and are susceptible to many illnesses. Younger children are often given medications by their parents because the first response by most families to many illnesses in their children is the use of non-prescribed drugs (*Nahhas et al.*, 2012).

The risks of self-medication are incorrect self-diagnosis; masking of an underlying severe health condition and consequent failure to seek medical advice promptly, failure to recognize contraindications and potential drug-drug and drug-food interactions, inadequate dosage, incorrect route or manner of administration; risk of dependence or abuse; storage in incorrect conditions and incorrect choice of therapy (*Panda et al.*, 2016).