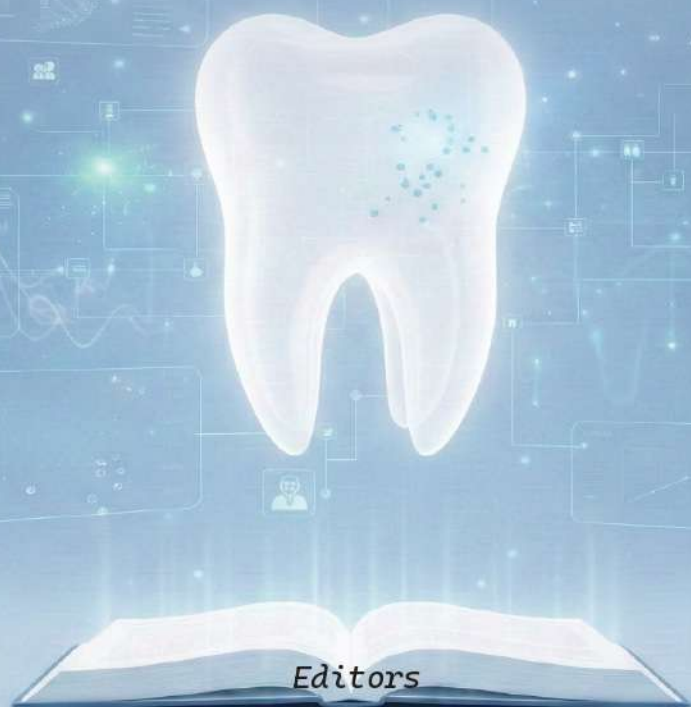


COMPENDIUM of ORAL HEALTH RESEARCH

Genetics, Therapeutics and Patient Insights



Editors
Azlini Ismail
Khairani Idah Mokhtar



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CONTENTS

<i>Figures</i>	<i>vii</i>
<i>Tables</i>	<i>xi</i>
<i>Preface</i>	<i>xiii</i>
<i>Acknowledgements</i>	<i>xv</i>
<i>Introduction</i>	<i>xvii</i>

CHAPTER 1

LEPTIN -2548G/A (RS7799039) AND LEPTIN RECEPTOR Q223R (RS1137101) POLYMORPHISMS IN SUSPECTED ORAL CANCER PATIENTS 1

Nur Armidha Nadiah Amir Sabri, Khairani Idah Mokhtar, Basma Ezzat Mustafa, Mohammad Shafiq Mohd Ibrahim, Pram Kumar Subraniam and Shamim Rahman

CHAPTER 2

IMPACT OF THE MENSTRUAL CYCLE ON THE INCIDENCE OF ALVEOLAR OSTEITIS IN WOMEN UNDERGOING TOOTH EXTRACTIONS 29

Nazih Shaban Mustafa, Basma Ezzat Mustafa, Mohamad Shafiq Mohd Ibrahim, Haniesha Mohd Hanafi and Mahfuzah Hussin

CHAPTER 3

ANTI-INFLAMMATORY POTENTIAL OF A POLYHERBAL ORAL SPRAY FORMULATION 55

Nur Hikmat Zakaria, Nur Hidayah Abdul Samad, Widya Lestari, Basma Ezzat Mustafa and Azlini Ismail

CHAPTER 4 COMPARISON OF ANTIMICROBIAL ACTIVITY BETWEEN PANDAN COCONUT WATER AND SEA COCONUT WATER ON STREPTOCOCCUS MUTANS AND LACTOBACILLUS CASEI	86
<i>Zurainie Abllah, Maisarah Ismayatim and Siti Fadzilah Ibharm</i>	
CHAPTER 5 THE AWARENESS OF THE USAGE OF INTERDENTAL BRUSHES AMONG PATIENTS PRESENTED WITH PERIODONTAL DISEASES	113
<i>Mohd Nor Hafizi Mohd Ali, Nurul Ruziantee Ibrahim, Nur Amelin</i> <i>Ahmad Faaiz and Nur Aqilah Hamdan</i>	
CHAPTER 6 ORAL HEALTH BEHAVIOURS AMONG DENTAL AND MEDICAL STUDENTS: A COMPARATIVE STUDY AT INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA (IIUM)	140
<i>Mohamad Shafiq Mohd Ibrahim, Muhd Firdaus Che Musa,</i> <i>Yasmin Dalilah Yahya, Siti Hamizah Salman and Cheong Joo</i> <i>Ming</i>	
<i>Conclusion</i>	165
<i>Contributors</i>	167
<i>Index</i>	171

FIGURES

Figure 1.1	Saliva collection using passive drool method.	11
Figure 1.2	After centrifugation, the pellet of cells from saliva at the bottom of the tube.	12
Figure 1.3	Gel electrophoresis for genomic DNA extracted from saliva samples.	14
Figure 1.4	PCR results for <i>LEP</i> -2548G/A (rs7799039) showing the bands at 242 base pairs.	15
Figure 1.5	PCR results for <i>LEPR</i> Q223R (rs1137101) showing the band at 330 base pair.	15
Figure 1.6	<i>HhaI</i> restriction enzyme result for <i>LEP</i> -2548G/A (rs7799039) showing homozygous and heterozygous genotypes. The genotypes of <i>LEP</i> -2548G/A (rs7799039) are denoted as GG (242 bp), GA (242, 181, and 60 bp), and AA (181 and 60 bp).	16
Figure 1.7	<i>MspI</i> restriction enzyme result for <i>LEPR</i> Q223R (rs1137101) showing homozygous and heterozygous genotypes. The genotypes of <i>LEPR</i> Q223R (rs1137101) are denoted as GG (293 and 37 bp), GA (330, 293, and 37 bp), and AA (330 bp). The 37 bp band was not observed on the agarose gel.	16
Figure 1.8	Electropherogram of sample <i>LEP</i> -2548G/A showing a single peak for homozygous genotype GG.	17
Figure 1.9	Electropherogram of sample <i>LEP</i> -2548G/A showing a single peak for homozygous genotype AA.	17

Figure 1.10	Electropherogram of sample <i>LEP</i> -2548G/A showing peaks A and G for heterozygous genotype AG.	18
Figure 1.11	Electropherogram of sample <i>LEPR</i> Q223R showing a single peak for homozygous genotype AA.	18
Figure 1.12	Electropherogram of sample <i>LEPR</i> Q223R showing a single peak for homozygous genotype GG.	19
Figure 1.13	Electropherogram of sample <i>LEPR</i> Q223R showing peaks A and G for heterozygous genotype AG.	19
Figure 3.1	Polyherbal formulation, HURREM.	67
Figure 3.2	Comparison of the effect of HURREM polyherbal formulation on the inhibition of heat-induced protein denaturation with the reference drug, diclofenac, at 2.5 mg/mL. The asterisk indicates a p-value of 0.001 for the comparison of HURREM at 0.01%, 0.1%, or 1% versus the reference drug (diclofenac, 2.5 mg/mL) using Dunnett's post-hoc test.	71
Figure 3.3	Comparison between the anti-lipoxygenase effect of HURREM polyherbal formulation and the reference drug, indomethacin (100 µg/mL). The asterisk indicates a p-value of 0.001, comparing HURREM at 0.01%, 0.1%, or 1% versus the reference drug (indomethacin, 100 µg/mL) using Dunnett's post-hoc test.	73
Figure 3.4	The Base Peak Intensity (BPI) plot for the LC-QTOF-MS chromatogram of HURREM.	74
Figure 4.1	<i>Lactobacillus casei</i> on MRS agar.	100
Figure 4.2	Contamination of the plates.	101
Figure 4.3	Pandan coconut water–amoxicillin mixture.	101
Figure 4.4	Inhibition zone.	102
Figure 4.5	Sea coconut on <i>L. casei</i> and <i>S. mutans</i> .	102
Figure 5.1	Flowchart of the study.	125
Figure 5.2	Pie chart displaying the percentage of patients who clean interdental areas.	129

Figures

Figure 5.3	Bar chart depicting the types of interdental cleaning tools used by patients.	129
Figure 5.4	Locations chosen for dental check-ups.	131
Figure 5.5	Percentage distribution of dental check-up frequency.	131

TABLES

Table 1.1	Inclusion and exclusion criteria for controls and suspected patients.	10
Table 1.2	Forward and reverse primer sequence of leptin gene and leptin receptor gene.	13
Table 1.3	Characteristics of the subject in controls and suspected patients.	14
Table 1.4	Genotype and allele distribution of leptin gene in controls and suspected patients.	20
Table 1.5	Genotype and allele distribution of leptin receptor gene in controls and suspected patients.	20
Table 2.1	Variable distribution according to menstrual cycle timing.	42
Table 2.2	Variable distribution according to AO frequency.	43
Table 2.3	Frequency of AO according to menstrual cycle timing.	46
Table 3.1	Gradient table.	69
Table 3.2	Operating parameters.	69
Table 3.3	Effect of HURREM polyherbal formulation on the inhibition of the heat-induced protein denaturation.	71
Table 3.4	The anti-lipoxygenase activity of HURREM and the reference drug, indomethacin.	72
Table 3.5	Phytochemical compounds identified in HURREM using LC-QTOF-MS analysis.	75
Table 5.1	Stages of periodontitis.	118
Table 5.2	Grades of periodontitis.	119
Table 5.3	Sociodemographic data.	125
Table 5.4	Awareness of the usage of interdental brushes.	126
Table 5.5	Daily toothbrushing adopted by the patients.	130

Tables

Table 5.6	Association between gender and educational levels and awareness towards interdental brushes.	132
Table 5.7	Association between sociodemographic data and practising interdental cleaning.	133
Table 5.8	Relationship between gender and awareness of the usage of interdental brushes.	134
Table 5.9	Relationship between gender and cleaning interdental areas.	134
Table 6.1	Sociodemographic characteristics of IIUM dental and medical students.	151
Table 6.2	Oral health behaviours among IIUM dental and medical students.	152
Table 6.3	Comparison of oral health behaviours between IIUM dental and medical students.	154
Table 6.4	Gender differences in oral health behaviours among IIUM students.	156

PREFACE

Oral health forms an integral part of overall well-being; however, its complexity necessitates a multifaceted approach to care and research. In recent years, advances in genetics, therapeutic innovations, and patient-centred methodologies have created new opportunities for understanding and managing oral health conditions. This book, entitled *Compendium of Oral Health Research: Genetics, Therapeutics, and Patient Insights*, presents a collection of research articles that illuminate these developments and offer a comprehensive exploration of the factors shaping modern oral healthcare.

The book opens by exploring genetic polymorphisms associated with oral cancer, highlighting their potential use as genetic markers for early detection and enabling personalised risk assessment. By applying these insights, clinicians and researchers may move towards a future in which oral health strategies are tailored to the unique genetic profiles of individuals.

Recognising the intricate relationship between the human body and oral health, the subsequent chapter examines how physiological conditions shape oral health outcomes, offering valuable guidance for clinicians to optimise therapeutic interventions according to patient-specific circumstances.

The book further investigates therapeutic innovations, with particular emphasis on natural remedies possessing significant anti-inflammatory and antimicrobial properties. These treatments are evaluated as potential natural adjuncts to conventional therapies.

Finally, the book underscores the critical role of patient awareness and behaviour in achieving successful oral health outcomes. It promotes a proactive approach that integrates education, prevention, and self-care, thereby enabling patients to actively manage their oral health.

By presenting this multifaceted approach, *Compendium of Oral Health Research: Genetics, Therapeutics, and Patient Insights* aims to promote a deeper understanding of the roles played by genetics, physiological conditions, innovative therapies, and patient awareness in improving oral health. It is intended as a valuable resource for researchers, clinicians,

Preface

and students seeking to facilitate more personalised, comprehensive, and effective oral healthcare.

Readers are invited to explore the dynamic landscape of oral health research and to discover the prospects for improved oral health and enhanced quality of life.

AZLINI ISMAIL

KHAIRANI IDAH MOKHTAR

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INTRODUCTION

Oral health constitutes a vital component of overall well-being, influencing physical, emotional, and social aspects of quality of life. Despite its importance, oral healthcare remains a complex and evolving domain, necessitating an interdisciplinary approach to address its multifaceted nature effectively. Recent advances in genetics, therapeutic innovation, and patient-centred methodologies have enabled groundbreaking research and transformative practices in oral health. This book offers insights into the factors shaping modern oral healthcare. The chapter opens by examining the role of genetic polymorphisms in oral cancer, demonstrating their potential as biomarkers for early detection and personalised risk assessment. These findings establish genetic profiling as an integral aspect of oral health management.

In recognition of the interconnectedness between oral and systemic health, the volume further explores the influence of physiological conditions on oral health outcomes. Through understanding these relationships, clinicians may tailor treatments to suit patients' unique health profiles and optimise therapeutic success. Within the domain of treatment innovation, the chapter highlights the emerging potential of natural remedies with anti-inflammatory and antimicrobial properties, presenting them as promising adjuncts to conventional therapies.

Finally, the discussion underscores the crucial role of patient awareness and behaviour in achieving sustainable oral health. By integrating education, prevention, and self-care, this chapter advocates a proactive, patient-centred approach that enables individuals to take responsibility for their oral health.

In summary, readers are invited to gain insights from genetics, therapeutic innovation, and patient empowerment to advance personalised, comprehensive, and effective oral healthcare strategies.

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INDEX

A

alveolar osteitis 51-54, 165
anti-inflammatory 34-36, 47, 49-50, 53,
56, 60-66, 76-85, 87, 91-94, 96,
107-109, 163, 165
anti-lipoxygenase 56, 64, 68, 72-73, 77
avulsed 88, 93, 95, 104, 109, 111-112
awareness 114-115, 121-124, 126, 132,
134-136, 138-141, 143, 145-146,
153, 155, 157, 159-161, 163,
165-166

B

bacterial contamination 29-32, 34, 39
bioactive 62, 78, 87, 91, 93-97, 103-
104, 110, 165
bovine serum albumin 64, 76, 80

C

chi-square test 149
complication 29, 31, 41-42, 44, 47, 51,
59
contraceptive 39, 50-51, 54
conventional 44-45, 88, 91, 95, 108-
109, 165
cyclooxygenase 60, 64

D

dental floss 114, 117, 120-124, 126-
127, 129, 134, 138, 144, 148,
150, 155

dental students 122, 136, 141-148, 150,
152-153, 155, 157-160, 162-164,
166

DNA Sequencing 8, 17

Dry socket 53-54

E

extraction 11, 29-33, 35-47, 49-54, 165

F

fibrinolytic activity 30-33, 46, 49
fibrinolytic process 32
fluoridated toothpaste 144, 146, 148,
150, 152, 155, 157, 160
formulation 56, 62, 66-68, 70-73, 76-
78, 109, 165

G

gingivitis 55, 63, 83, 91-93, 95-96, 105,
107, 113, 115-116, 120, 123,
125-126, 139
G*Power software 149

H

herbal medicine 61, 81, 85
hormonal changes 31, 33, 47, 51

I

incidence 1, 3, 6, 21, 30-31, 33-36, 38,
41-51, 53, 105, 165

inflammation 32-35, 37, 44, 47, 49-50,
55-63, 65-66, 76, 78-85, 93, 114-
115, 120, 139, 164
interdental brush 114-115, 117, 120,
122-124, 126, 128, 135-136, 138
interdental cleaning 114-117, 120-124,
129, 133, 135-139, 157, 165

L

leptin gene 2-3, 5, 12-13, 15, 20-21,
23-24
leptin receptor gene 2, 5, 12-13, 16,
20-21, 23-25
lipoxxygenase 56, 60, 64-66, 68, 72-73,
77, 80-82, 84

M

medical students 122, 140-154, 157-
164, 166
menstrual cycle 30-31, 33-36, 39, 40,
41-42, 45-53, 165
mid-cycle 31-32, 35-36, 40, -41, 45-47,
50
mouth rinse 153, 155, 158-160
mucositis 58-59, 82-83

N

natural remedies 56, 61, 165

O

oestrogen 30-31, 33-39, 45-47, 49-50
oral cancer 1-3, 5, 8, 10, 13, 19, 21-28,
58-59, 80, 165
oral health 7, 44, 58-59, 63, 78, 87-88,
91-95, 97, 104-105, 108-112,
120-122, 135, 137, 140-148,
150-166
oral health behaviour 163-164
oral squamous cell carcinoma 2, 22,
25, 28
osteitis 29, 51-54, 165

P

perception 87, 90, 105, 132
periodontal disease 43-44, 48, 54, 58,
81-83, 113-117, 120
periodontitis 7-8, 26, 55, 58, 62, 78,-79,
82-83, 91-92, 96, 106-107, 113-
120, 123-125, 139
polyherbal 56, 62, 64, 66, 68, 70-73,
76-78, 165
Polymerase Chain Reaction (PCR) 12
protein denaturation 56, 64-65, 67, 70-
71, 76-77, 80

S

saliva 1-2, 7-8, 10-12, 14, 86, 90, 95
SNP 2, 6-7, 22, 25, 27

T

therapeutic 9, 54-55, 65, 78, 83, 88,
92, 165
toothbrushing 114-117, 120-121, 126,
130, 132, 135, 137, 139, 143,
148, 152, 154-158, 160

COMPENDIUM of ORAL HEALTH RESEARCH

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Compendium of Oral Health Research: Genetics, Therapeutics, and Patient Insights takes readers through multifaceted approaches to modern oral healthcare. The book begins by exploring genetic polymorphisms as potential biomarkers for early oral cancer detection. It then examines the relationship between systemic and oral health, analysing how hormonal fluctuations during the menstrual cycle influence postoperative complications such as alveolar osteitis. Natural-based therapeutics are evaluated, highlighting the anti-inflammatory and antimicrobial efficacy of polyherbal formulations and coconut water in managing oral conditions. Finally, the volume addresses patient behaviour, including interdental cleaning among periodontal patients and oral hygiene routines among medical and dental students. This collection offers evidence-based insights for personalised oral healthcare.

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