

TRANSFORMING MEDICAL HEALTHCARE THROUGH RESEARCH



Editors

ROSLINA ABDUL RAHIM

AHMAD FAIDZAL OTHMAN

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IIUM
Press

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IIUM
Press

Gombak • 2023

First Print, 2023
©IIUM Press, IIUM

IIUM Press is a member of the Majlis Penerbitan Ilmiah Malaysia – MAPIM
(Malaysian Scholarly Publishing Council)
Persatuan Penerbit Buku Malaysia – MABOPA
(Malaysian Book Publishers Association)
Membership No. 201905

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Perpustakaan Negara Malaysia

Cataloguing-in-Publication Data

Roslina Abdul Rahim

Transforming Medical Healthcare Through Research / Roslina Abdul Rahim,
Ahmad Faizal Othman, Mohd Nazli Kamarulzaman

e-ISBN 978-967-491-316-8

1. Medical care--Research

2. Health care reform

I. Ahmad Faizal Othman

II. Mohd Nazli Kamarulzaman

III. Title

362.1072

RA440.85

Published in Malaysia by
IIUM Press
International Islamic University Malaysia
P.O. Box 10, 50728 Kuala Lumpur, Malaysia

CONTENTS

<i>Tables</i>	<i>xi</i>
<i>Figures</i>	<i>xiii</i>
<i>Preface</i>	<i>xvii</i>
<i>Acknowledgements</i>	<i>xix</i>
<i>Introduction.....</i>	<i>xxi</i>
<i>Roslina Abdul Rahim, Ahmad Faizal Othman and Mohd Nazli Kamarulzaman</i>	
PART 1: BASIC MEDICAL SCIENCES RESEARCH	1
Chapter 1: Effect of Climate Variability on Dengue Cases in Pahang	2
<i>Isnizam Sapuan , Noor Artika Hassan, Razman Mohd Rus and Edre Mohammad Aidid</i>	
Chapter 2: The Impact of Spousal Support on Mental and Maternal Healthcare of Postpartum Patients in the Gombak District	15
<i>Nor Adibah Mohd Kusni, Mohd Azam Mohd Yusoff, Norhana Mohd Kasim and Karimah Hanim Abd Aziz</i>	
Chapter 3: The Effects of Tualang Honey on Sperm Profile and Follicular- Stimulating Hormone in High Cholesterol Diet-Induced Animal Model	29
<i>Sakiinah Hasan, Roslina Abdul Rahim, Mohd Afzal Alias, Naznin Muhammad, Nor Zamzila Abdullah, Redzuan Nul Hakim Abdul Razak and Faridah Ismail.</i>	
Chapter 4: The Effect of Transient Receptor Potential Vanilloid 4 (TRPV4) Ligands on Fatty Acid-Binding Protein 4 (FABP4) Adipocytes Signalling in Different Duration of Differentiation	44
<i>Hazulin Mohd Radzuan , Mark A. Cole and Andrew James Bennett</i>	
Chapter 5: Road Construction Workers' Safety Performance as a Risk Factor for Workplace Accidents in Developing Countries: A Systematic Review.....	58
<i>Mohd Faiz Itam, Lina Farhana Ramli, Nik Qistina NAR, Mohd Rafee Baharudin, Ahmad Azuhairi Ariffin and Anita AR</i>	
PART 2: CLINICAL RESEARCH	91
Chapter 6: Placenta Accreta Spectrum Disorder in a Tertiary Referral Centre in Malaysia: A Six-Year Review	92
<i>Izzni Adilah Dzulkifli, Hamizah Ismail, Zalina Nusse and Noraihan Mohd Nordin</i>	

Chapter 7: Telemedicine in the Management of Outpatient Clinic: Experience in the Vascular Tertiary Center During Covid-19 Pandemic.....	103
<i>Muhammad Shamil Suhaimi, Muhammad Irfan Mohamad Salmi, Syaza Putri Zainudin, Muhammad Afiq Kodiron, Muhammad Abdul Jaafar, Azuwairie Amir, Sanjay Dev Singh Dharshan Singh, Mohd Norhisham Azmi Abdul Rahman and Ahmad Faizal Othman</i>	
Chapter 8: The Association of Anthropometric Characteristics, Hormonal Alterations and Ovarian Volume with Polycystic Ovarian Syndrome	109
<i>Sumayyah Mohammed Faridz, Zalina Nusee, Nor Faiza Mohd Tohit, Hamizah Ismail, Nurkhairulnisa Abu Ishak, Roslina Abdul Rahim and Nor Zamzila Abdullah</i>	
Chapter 9: Factors of Elective Daycare Cancellation in Tertiary Vascular Center...	122
<i>Muhammad Shamil Suhaimi, Muhammad Irfan Mohamad Salmi, Syaza Putri Zainudin, Muhammad Afiq Kodiron, Muhammad Abdul Jaafar, Azuwairie Amir, Sanjay Dev Singh Dharshan Singh, Mohd Norhisham Azmi Abdul Rahman and Ahmad Faizal Othman</i>	
PART 3: CASE SERIES.....	127
Chapter 10: Bowel Ischaemia in a Post-Covid-19 Infection.....	128
<i>Harjit Singh Chaal and Tony Yong Yee Khong</i>	
Chapter 11: A Case Report of Elevated Beta Human Chorionic Gonadotrophin: Doctor, Am I Pregnant?	137
<i>Hamizi Mohd Haris, Akmal Azim Ahmad Alwi and Mat Salleh Sarif</i>	
Chapter 12: Extramammary Paget's Disease of Scrotum : A Rare Encounter Lesion	144
<i>Muhammad Shamil Suhaimi, Mohd Fahmi Abd Aziz, Akmal Azim Ahmad Alwi and Islah Munjih Abdul Ab Rashid</i>	
Chapter 13: Cupping Therapy: A Misadventure	149
<i>Muhammad Shamil Suhaimi, Muhammad Irfan Mohamad Salmi, Syaza Putri Zainudin, Muhammad Afiq Kodiron, Muhammad Abdul Jaafar, Azuwairie Amir, Sanjay Dev Singh Dharshan Singh, Mohd Norhisham Azmi Abdul Rahman and Ahmad Faizal Othman</i>	
Chapter 14: Gangrenous Cholecystitis: Factors Contributing for Delay in Management -A Case Series	154
<i>Nadirah Hassan , Mat Salleh Sarif , Junaini Kasian, Khairunisa Ahmad Affandi and Siti Kamariah Che Mohamed</i>	

Chapter 15: Heel Reconstruction with Free Osteofasciocutaneous Flap of Deep Circumflex Iliac Artery: A Report of Two Cases.....	164
<i>Mohd Ariff Sharifudin , Wan Faisham Wan Ismail , Nor Azman Mat Zin and Sahran Yahaya</i>	
 <i>Conclusion</i>	 <i>173</i>
<i>Roslina Abdul Rahim, Ahmad Faizal Othman and Mohd Nazli Kamarulzaman</i>	
<i>Contributors</i>	<i>177</i>
<i>Index.....</i>	<i>181</i>

TABLES

Table 1.1	Poisson generalized linear model coefficients for dengue cases (Lag 0-month) in the selected district in Pahang	8
Table 2.1	Spousal support in MHC during antenatal, intrapartum, and postpartum.	18
Table 2.2	The association of Spousal support and risk of PPD.	19
Table 2.3	Respondents' factors associated with PPD	20
Table 2.4	Spouse's factors associated with PPD.	21
Table 5.1	The methodological quality of cross-sectional study.	69
Table 5.2	Characteristics of risk factors for road construction accidents among workers in developing countries.	73
Table 5.3	Characteristics of risk factors on road construction accidents among workers in developing countries according to the Construction Accident Causation elements.	76
Table 6.1	Demographics and Obstetric Characteristics of Women with PAS.	94
Table 6.2	Diagnosis of Placental Invasion at Prenatal Ultrasound, Intraoperative, and Histopathology in PAS Women Who Had Hysterectomy.	95
Table 6.3	Intrapartum Procedures and Surgical Modalities for PAS.	96
Table 6.4	Maternal Morbidity Following Primary PAS Surgery.	97
Table 7.1	Telemedicine Satisfaction Questionnaire Item (Addopted from Yip et al., 2003).	104
Table 8.1	Comparison of studied parameters between PCOS and Non-PCOS groups.	112
Table 8.2	Comparison of studied parameters to BMI between PCOS and non-PCOS groups.	112
Table 8.3	Correlation between studied parameters to the HOMA-IR in PCOS and non-PCOS groups.	113
Table 9.1	Demographic data of cancellation on vascular daycare surgery.	123
Table 14.1	Patients' characteristics predictive of GC.	161

FIGURES

Figure 1.1	Association between climate variables and dengue cases by the district in Pahang.	7
Figure 3.1	The level of follicular-stimulating hormone (FSH) in the high cholesterol diet group.	34
Figure 3.2	The sperm parameters in the high cholesterol (H1) diet groups.	35
Figure 3.3	The level of follicular-stimulating hormone (FSH) in the high cholesterol diet groups.	36
Figure 3.4	The sperm parameters in the high cholesterol diet groups.	37
Figure 4.1	Results of <i>Fabp4</i> gene expression from primary rat adipocytes treated with TRPV4 agonist and antagonist at (a) day 5 and (b) day 9 differentiation.	48
Figure 4.2	Results of FABP4 protein expression (CL) and secretion (CM) from primary rat adipocytes treated with TRPV4 agonist/antagonist obtained from (a) day 5 and (b) day 9 differentiation.	49
Figure 4.3	Day 5 differentiation.	50
Figure 4.4	Day 9 differentiation.	50
Figure 5.1	The Construction Accident Causation Framework. (Adapted from Beqiri, 2020)	63
Figure 5.2	Flow chart showing articles search, inclusion criteria, and selection process.	66
Figure 5.3	The risk factors of road construction accidents in developing countries (adaptation of the ConAC Framework).	72
Figure 5.4	Characteristics of workers' safety performance as risk factors for road construction accidents in developing countries (adaptation of the ConAC Framework).	72
Figure 7.1	Patient's satisfaction with using telemedicine.	105
Figure 7.2	Diseases of patients interviewed during the telemedicine.	105
Figure 7.3	Patients satisfaction with using telemedicine.	106
Figure 8.1	Correlation between Insulin and HOMA-IR in the PCOS group.	114
Figure 8.2	Correlation between Insulin and HOMA-IR in the non-PCOS group.	114
Figure 8.3	Correlation between HOMA- β and HOMA-IR in the PCOS group.	115

Figure 8.4	Correlation between HOMA- β and HOMA-IR in the non-PCOS group.	115
Figure 9.1	Type of cases for vascular surgery.	124
Figure 9.2	Reasons for cancellation of the surgery.	124
Figure 10.1	Bowel ischaemia of terminal ileum to rectosigmoid (completion subtotal colectomy specimen from the second surgery). The previous ileocolic anastomosis was gangrenous.	131
Figure 10.2	Gallbladder with patchy necrotic spots.	131
Figure 10.3	Multiple thrombotic spots are seen throughout the small bowel.	132
Figure 10.4	Perforation more than 50% circumference of Jejunum, 30 cm from the duodenojejunal junction.	133
Figure 11.1	Intraoperative finding: Enlarged stomach due to presence of a retroperitoneal tumour.	139
Figure 11.2	EUS finding: A: heterogeneous lesion extending from the head to the body of the pancreas. B: The presence of portal hepatic causing distorted SMA and Celiac trunk.	139
Figure 12.1	Image of tumour after excision done.	144
Figure 12.2	Tumour over left scrotal involving penile shaft with erythematous lesion.	146
Figure 12.3	Post excision and reconstruction surgery.	147
Figure 13.1	Cupping therapy	150
Figure 13.2	Swelling over the back with skin changes.	151
Figure 13.3	Incision and drainage of back abscess.	152
Figure 14.1	Section of the gallbladder shows extensive mucosal ulceration with transmural necrosis of the gallbladder wall (H&E 40x).	156
Figure 14.2	Absence of mucosa and muscular layer was replaced by necrotic material, neutrophils, and granulation tissue (H&E 400x).	156
Figure 14.3	CT image shows an irregular thickened wall of GB with wall discontinuity and subhepatic collection, suggesting perforation.	158
Figure 14.4	CT image shows multiple GB calculi, markedly thickened GB wall measuring 10mm, surrounding pericholecystic fluid, with splenomegaly.	160
Figure 15.1	(A and B) Degloving injury of the right heel with comminuted calcaneal fracture and massive bone loss. (C) The wound healing well with healthy granulation tissue. (D and E) Heel reconstruction and flap coverage with an osteofasciocutaneous flap of the DCI). (F	

and G) Plain radiographs show stable fixation with a cross ankle external fixator and screw. 166

Figure 15.2 (A) The gross defect after total calcanectomy. (B) Resected chondroblastoma of the right calcaneum. (C) Composite iliac bone flap with dual supply (deep and superficial circumflex iliac vessels). (D) The iliac bone graft was placed into the defect and fixed to the talus bone with screws. (E and F) Radiographic images at 2- and 5 months post-reconstruction showing bony union and good contour restoration. 168

Figure 15.3 (A) The patient was able to fully weight bear at 7 months post-surgery. (B) He was also able to tip toe indicating that the bone and soft tissue integration was strong and functional. 169

PREFACE

All praise to Him, that with His blessing, the inaugural research book from our Medical Research Symposium is finally published. Transforming Medical Healthcare Thorough Research is a research book that compiles the findings from studies that have been presented during the virtual MRS 2021.

The research book contains an introduction, fifteen research chapters that being divided into three parts and overall conclusion as the final chapter of this book. There are three major parts of this book which are the Basic medical science research, clinical research and case series. All chapters are peer-reviewed and carefully selected by the expertise of each area. The research work that is highlighted in this book spans the spectrum of medical sciences, from fundamental to clinical, to case series and all these research work being carried out during the pandemic. All the images describe in this book are obtained with consent from the patients and it help explaining the research works. This book is written and edited in a such way that is simple and easy for the readers to understand on how the research work being conducted and all the scientific findings were clearly explained.

It is hopeful that the work would contribute and support the transformation of healthcare, especially in this post-pandemic era. In the spirit of knowledge sharing, open access and sustainable and responsible research, we hope that the addition information to the body of knowledge could further enhance and encourage further research likewise.

Thank you.

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ACKNOWLEDGEMENTS

Alhamdulillah, Praise be to Allah S.W.T. Most Gracious and Most Merciful. The editorial board and authors would like to thank the honourable Rector of the International Islamic University Malaysia, Tan Sri Prof. Emeritus Dzulkifli Abdul Razak, the honourable Deputy Rector of Responsible Research and Innovation of International Islamic University Malaysia Prof. Dr. Ahmad Hafiz Zulkifly, the honourable Dean of Kulliyyah of Medicine, Prof. Dr. Jamalludin Ab. Rahman, esteemed reviewers and expert panels, and all who have contributed to the publication of this research book.

The editorial board would also like to thank Asst. Prof. Dr Nour El Huda Abd. Rahim, Asst. Prof. Dr. Wan Muhamad Salahudin Wan Salleh, Asst. Prof. Dr. Wan Fatein Nabeila Wan Omar and Asst. Prof. Dr. Hidayatul Radziah Ismawi and Sr Majdiah Che Othaman for their contributions in developing this research book.

We hope to be able to emulate and practice all that we have learned as we strive to fulfil our roles as responsible, dedicated, and ethical researchers who will continue to contribute to the sustainability of beneficial knowledge in our respective fields.

INTRODUCTION

Roslina Abdul Rahim, Ahmad Faizal Othman and Mohd Nazli Kamarulzaman

On the 11th of March 2020, the World Health Organisation officially categorised the COVID-19 outbreak as pandemic. The global impact of this announcement was not only on the world economy but also the academic sector. Many researchers were unable to conduct or continue their research during that time. As the pandemic evolved into a new normal, slowly but gradually movement restrictions were lifted, new standard operation procedures were adopted allowing researchers to return to their area of study.

In 2020, even the much-celebrated Kulliyyah of Medicine annual research event was postponed. In 2021, the conference named as 'Virtual Medical Research Symposium (MRS) 2021' managed to be held adhering to the COVID-19 restrictions at the time. The theme was 'Medical Research during the Pandemic: Adapting and Innovating in Adversity. The symposium received participation from numerous basic medical sciences and clinical research and case series. All these researchers shared their findings and innovations from research conducted during the pandemic. At the end of the symposium, the MRS participants were invited to contribute to the inaugural research book project. The aim of this project is to increase the number of publications particularly research book chapters in the "Transforming medical healthcare through research" our first research book, simultaneously contributing to Kulliyyah of Medicine's Malaysia Research Assessment (MyRA) performance.

This book has been divided into three parts, namely the Basic Medical Sciences Research, Clinical Research and Case Series. Each chapter is comprised of a brief introduction of research, materials and methods used to conduct the research, discussion, conclusion, acknowledgement followed by references. For the Case Series chapter, there is also a brief introduction, case report, discussion followed by conclusion and references.

This book has been divided into three parts, namely the Basic Medical Sciences Research, Clinical Research and Case Series. Each chapter is comprised of a brief introduction of research, materials and methods used to conduct the research, discussion, conclusion,

acknowledgement followed by references. For the Case Series chapter, there is also a brief introduction, case report, discussion followed by conclusion and references.

The Basic Medical Sciences chapters highlight the molecular, cellular, and systems organization of the human body. It also describes the impact of climate changes, impact on spousal support, as well road construction workers safety performance. Other than that, the basic medical science research chapter also describe the effects of Tualang honey on obese male fertility as well as calcium mobilisation in adipocytes.

Clinical Research chapters describe on latest updates in obstetric and gynaecology field which describe on placenta accreta spectrum disorder, a worst life-threatening complication of pregnancy condition and as well polycystic ovary syndrome (PCOS). The PCOS research updates us on hormonal and anthropometric alteration which show variety thoroughout the population. This chapter also highlight latest updates in general surgery field related to telemedicine and factors of elective daycare cancellation.

The case series chapter describe variety of cases from general surgery, endocrinology, orthopaedics and also traditional cupping therapy in diabetic patient. In general surgery, it describes on bowel ischaemia that occurs in post COVID-19 patient, delay in management of gangreneous cholecystitis. In endocrinology field, there were two interesting cases on beta-human chorionic gonadotropin elevation link to malignancy and extramamary paget's disease, an extreme rare disease that affects the scrotum. There is also latest updates on heel recontruction using osteofasciocutaneous flap.

All these chapters highlight their novel scientific research findings in terms of management, treatment and molecular mechanisms that would benefit our mankind in the spirit of Rahmatan Lil Alamin, empower our knowledge and improve services and treatment. This book will also help medical undergraduate and postgraduate students, doctors, medical healthcare workers to gain knowledge from our research findings and also boost their mind to next potential scientific research work.

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INDEX

A

accidents, 58, 60-62, 64-68, 71-73, 76, 78, 84
acute cholecystitis, 154-155, 158-159, 162
acute respiratory distress syndrome, 128, 133
adipocytes, 44
adipogenic, 52
Aedes mosquito, 9
appendicitis, 130
atherosclerotic diseases, 44

B

Beta hCG, 137, 140
biopsy, 144, 146, 148, 160, 167
breastfeeding, 15, 17, 19, 22-24
burning sensation, 145

C

caesarean, 92-93, 95, 98-99
calcaneal, 164, 166-169
Calcium signalling, 50-51
cancer, 44, 137, 139, 141-142, 145
child's vaccination, 17
childbirth, 15, 17
chi-square test, 18
complications, 15, 97, 99-100, 149, 152, 154-155, 161-163, 168, 170
COVID-19, 17, 19, 25, 103, 128, 132-135, 154-155, 157, 162
cross-sectional, 16, 66, 68-69, 83-84, 110, 117
cross-sectional study, 16, 66, 69, 83, 117
CRP, 134, 155-157, 159, 161
CT scan, 130, 139, 149
Cupping, 149-150, 152
CXR, 155, 158
cytokine, 128

D

dengue, 2
depression, 17, 22-24
developing countries, 59, 64, 66, 68, 71-73, 76-77, 83-85
diabetes, 111, 123, 128-129, 149, 151-152, 154, 156-157, 159, 161-162

E

elective daycare, 123
emotional stress, 122
endoscopy, 138

epidemiology, 3
epigastric pain, 138, 140

F

fatal, 58, 61, 73
fatty acid-binding protein 4 (FABP4), 44
fever, 2
follicular-stimulating hormone (FSH), 29, 34, 36

G

gallbladder, 130, 154-155, 156-157
Gangrenous cholecystitis, 154
ghrelin, 109-111, 116
glucose, 40, 44, 109, 111, 116, 159

H

high cholesterol diet (HCD), 29, 31
histological, 98, 138
Hypercholesterolaemia, 29, 38
hyperglycaemic, 152
hypertension, 15, 123, 128-129, 150, 154, 157
hypothyroidism, 111
hysterectomy, 92, 94-100

I

ICU, 92, 97, 130, 132, 159-160, 162
infertility, 29
insulin, 45, 109-111, 115-116, 118, 156-157, 159
insulin resistance, 109-111, 115-116, 118
ischaemia, 130-131, 134

J

jaundice, 15, 138, 140, 154, 159

L

laparoscopic, 138, 157, 162
leptin, 109-111, 116, 118

M

major depressive disorder (MDD), 24
maternal healthcare, 15
maternal morbidity, 92, 96
mental, 15
metabolic syndrome, 44, 109, 115
metastatic, 147
monsoon, 5
mortality, 24, 60, 92, 98, 128, 163
mosquito-borne viral infection, 2

N

necrotic, 130-131, 134, 155-156

O

occupational injuries, 58
ovarian volume, 109-111, 117-118

P

Pahang, 2-12
pain, 96, 129-130, 132, 134, 138, 145, 149-152,
154-157, 159, 167-168, 170
pandemic, 17, 19, 25, 103-104, 106-107, 117, 128,
135, 154
Peninsular Malaysia, 2, 116
placenta accreta, 92
placenta accreta spectrum disorder, 92
placenta praevia, 93, 98
pneumonia, 128-129, 132-133, 155, 158-159, 162
polycystic ovarian syndrome, 109, 115
postpartum depression, 15
pregnancy, 15
pregnant, 15, 137, 141
prevention, 3
prognosis, 141, 147

R

rainfall, 2-6, 9, 11
reconstruction, 147, 164-166, 168-170
retrospective, 5, 92, 99-100, 134, 146
road construction, 60, 64-68, 71-73, 76, 78-79, 84
road construction workers', 58

S

safety education, 78
safety performance, 58
scrotum, 144-145, 147
sepsis, 96, 99, 149, 152, 161-162

sperm concentration, 32
sperm morphology, 33
sperm motility, 32
sperm profile, 29, 38, 40
sperm viability, 32
spousal support, 15
staphylococcus aureus, 149, 151
streptococcus, 151
stroke, 149, 151
swelling, 149

T

tachycardic, 129, 157, 159
tachypnoeic, 157
telemedicine, 103-104, 106
temperature, 4
temperature-mortality, 4
tenderness, 145, 158-159
Transient Receptor Potential Vanilloid 4 (TRPV4),
44
Tualang Honey (TH), 29
tumor, 145, 147

U

ultrasound, 17-19, 21, 95-96, 98, 100, 110, 118,
134, 141
utero-placental, 95

V

vascularised, 164, 167

W

WBC, 155-159, 161
weather, 4
workplace accidents, 58
World Health Organization (WHO), 2
wound healing, 166

TRANSFORMING MEDICAL HEALTHCARE THROUGH RESEARCH

Transforming medical healthcare through research is a research book that comprises of three major parts which are the Basic medical sciences research, clinical research, and case series. All these authors have participated in our Medical Research Symposium 2021 which was conducted online due to the pandemic. It highlights the latest scientific research findings in each area of expertise.

This e-book is published to embrace the concept of open access to knowledge and sustainability by compiling the results of their resilience and dedication to be shared with the academic community. All articles were selected by experts in the field and peer reviewed.

We really hope that this e-book would benefit other academicians, researchers, clinicians, and both undergraduate and postgraduate students for future reference in their research work in medical and health sciences.

e ISBN 978-967-491-316-8



IIUM Press
(603) 6421 5014 / 5018
iiumbookshop@iium.edu.my
iiumbookshop.com
www.facebook.com/iiumpress
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