

TRANSFORMING MEDICAL HEALTHCARE THROUGH RESEARCH



Editors

ROSLINA ABDUL RAHIM

AHMAD FAIDZAL OTHMAN

MOHD NAZLI KAMARULZAMAN



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PREFACE

All praise to Him, that with His blessing, the inaugural research book from our Medical Research Symposium is finally published. Transforming Medical Healthcare Through 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.

ROSLINA ABDUL RAHIM

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MOHD NAZLI KAMARULZAMAN

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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 Kulliyah 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 Kulliyah 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.

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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.