Contributions of Muslim Scientists to Medicine and Related Sciences

Abdi O. Shuriye Raihan Othman



IIUM Press INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

Contributions of Muslim Scientists to Medicine and Related Sciences

Editors Abdi O. Shuriye Raihan Othman



IIUM Press

Published by: IIUM Press International Islamic University Malaysia

First Edition, 2011 ©IIUM Press, IIUM

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without any prior written permission of the publisher.

Perpustakaan Negara Malaysia

Cataloguing-in-Publication Data

Abdi O. Shuriye: Contributions of Muslim Scientists to Medicine and Related Sciences

ISBN: 978-967-418-155-0

Member of Majlis Penerbitan Ilmiah Malaysia – MAPIM (Malaysian Scholarly Publishing Council)

Printed by : IIUM PRINTING SDN.BHD. No. 1, Jalan Industri Batu Caves 1/3 Taman Perindustrian Batu Caves Batu Caves Centre Point 68100 Batu Caves Selangor Darul Ehsan Tel: +603-6188 1542 / 44 / 45 Fax: +603-6188 1543 EMAIL: iiumprinting@yahoo.com

Contents

<u>TITLE</u>		
Preface		v
Acknowledgment		vi
Lists of Contributors		vii
Introduction		1
Chapter 1	Al-Majusi Contribution in the Understanding of the Cardiovascular System and Blood Circulation	3
Chapter 2	Al-Majusi: The Pioneer in Obstetrics	7
Chapter 3	Al-Razi Works and Contributions in Neurological Sciences	12
Chapter 4	Ar-Razi on Gout	19
Chapter 5	Ali Bin Isa Al-Kahhal: Pioneer in Ophthalmology	25
Chapter 6	Al-Majusi's Treatment of Physical Diseases Using	
	Drug Therapy and Surgical Manipulation	30
Chapter 7	Al-Razi's Understanding and Curing of Smallpox and Measles	35
Chapter 8	Al-Razi's Contribution to the Study of Nexus between Human Mind and Body	39
Chapter 9	Abu Zayd Ahmed Ibn Sahl Al-Balkhi on Medical Psychology	45
Chapter 10	Contributions of Ashraf Ali Thanwi to Mental Disease Treatment	49
Chapter 11	Ibn Zuhr on Diseases and Treatments	54
Chapter 12	Ibn Al-Jazzar on Fever	59
Chapter 13	Ibn Al-Khatib and his Theory of Contagion	64
Chapter 14	Ibn Al-Nafis Contribution in Urology Progress Practices	67
Chapter 15	Ibn Al-Quff on Preventive Medicine	72
Chapter 16	Ibn Sina on Aromatherapy	76
Chapter 17	Studies in Gynaecology in Zad Al-Musafir Wa Qut Al-Hadir of Abu Jaafar Ibn Al-Jazzar	81
Chapter 18	Contributions of Ibn-Sina in Pharmaceutical Sciences	88
Chapter 19	The Contribution of Ibn Al-Baitar in Medicine	94
Chapter 20	The Contribution of Saghir Akhtar in Pharmaceutical Science	99
Chapter 21	The Glorious Contribution of Ibn Al-Quff on Cardiology and	
	Embryology as Well as Other Surgical Matters	104
Chapter 22	Success Journey of Mehmet Oz in Cardiothoracic Surgery	109

Chapter 23	Abu Al-Qasim Al-Zahrawi's Contribution to Neurosurgery	115
Chapter 24	Al-Zahrawi Method on Inflammatory Swellings and Tumours Surgery	120
Chapter 25	Oculist's Contributions to Cataract Operation	126
Chapter 26	Al-Zahrawi Contribution to Medical Instruments	131
•	Al-Zahrawi's Explaination on Bone Fractures and Its Surgical and Non-Surgical Treatments	137
Chapter 28	Inhalation and Oral Anesthetics: Views of Selected Muslim Physicians	144

CHAPTER SEVEN

AL-RAZI'S UNDERSTANDING AND CURING OF SMALLPOX

AND MEASLES

Iman Hawari, Jamal I. Daoud

Fac. of Eng., International Islamic Univ. Malaysia (IIUM), Jalan Gombak, 53100 Kuala Lumpur, Malaysia.

7.1 INTRODUCTION

The objective of this study is an attempt to introduce the role of the Muslim scholar, namely Al-Razi, in establishing treatment for smallpox and measles clinical observations. The methodology of this chapter uses the book written by Al-Razi about smallpox and measles in Arabic language as a reference. In 1970, the World health Organization (WHO) praised Al-Razi for the originality and accuracy in his writings in this subject (Amoozaneh & Ashtiyani, 2010). Smallpox and measles have been known through the decades as prominent killers destroying millions of lives as they pass through towns and villages, though vaccines for both diseases were developed.

From the discussion below, it is seen that Al-Razi was a pioneer in distinguishing the two diseases from each other and the initiative in using natural and homemade remedies to cure and prevent the disease. Al-Razi's treatise was translated into Latin, Persian, English and other European languages. The significance of this chapter is to acknowledge the studies of small pox and measles and its treatment initiated by one of the famous Muslim scholars, Al-Razi.

7.2 MUHAMMAD IBN ZAKARIYA AL-RAZI

Abu Baker Muhammad Ibn Zakariya Al-Razi, also called Rhazes, was born in Rayy, Iran in 865 C.E. He showed talent at early age in music, alchemy and philosophy. He has numerous contributions in different disciplines such as his medicine encyclopaedia which he called Al-Hawi. However this chapter will be restricted to discussing his achievements in smallpox and measles treatment (Glick et al., 2005). Al-Razi was described as:

> "Rhazes is rightly considered one of the greatest medical practitioners and writers in the period between Galen and the Renaissance re-emergence of medicine as an empirical discipline. He was a rationalist, extremely confident in the power of reason, free from every kind of prejudice, and daring in the expression of his thoughts. He was described as outstanding in generosity and always willing to treat and help the poor. He was an independent thinker and not afraid to rely on his own observations when they contradicted the past [...] Razi's fame rested on clear-cut clinical descriptions of illness,