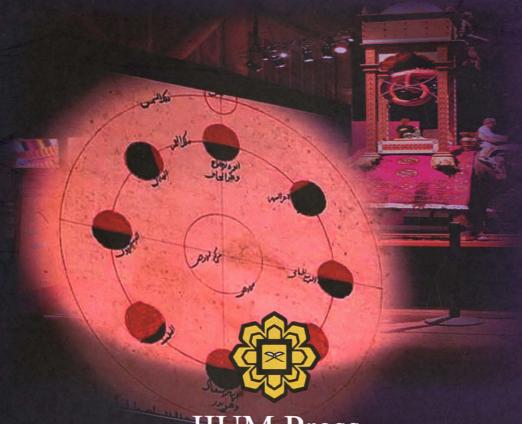
Contributions of Muslim Scientists to Medicine and Related Sciences

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



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
Acknowled	gment	vi
Lists of Co	ntributors	vii
Introduction	n	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	2:
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	3:
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	6
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	8]
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
Chapter 27	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 EIGHTEEN

CONTRIBUTIONS OF IBN-SINA IN PHARMACEUTICAL SCIENCES

Rusila Zamani bt Jusoh @ Abd Rashid, Amir A. Shafie
Fac. of Eng., International Islamic Univ. Malaysia (IIUM), Jalan Gombak, 53100 Kuala
Lumpur, Malaysia.

18.1 INTRODUCTION

This chapter investigates about the contribution of Ibn-Sina in pharmaceutical sciences. Ibn-Sina was the most famous physician, philosopher, encyclopaedist, mathematician and astronomer at his time. The objective of this chapter is to investigate the contribution of Ibn-Sina in pharmaceutical sciences through his book; The Canon of Medicine. Ibn-Sina is chosen among Muslims Scientists because of these reasons: Ibn-Sina is a simply best represents the Iranian-Islamic scientific culture and medicine in history and he is a well recognized and respected in science and medicine throughout the world. The methodology adopted in this chapter is library based research and data is collected from reliable sources such as articles, journals and books. This chapter explores the findings of Ibn-Sina that using different methods of medications and treatment in pharmaceutical sciences.

18.2 IBN-SINA THROUGH HISTORY

Hakim Abu Ali al-Husayn Abd Allah Ibn Sina was born in 980 A.D. near Bokhara, Afghanistan. At the age of ten he was already expert in the Quran and the Arabic classics. During the next six years he devoted himself to Muslim Jurisprudence, Philosophy and Natural Science. He also studied Logic, Euclid, and the Almeagets. He turned his interest to Medicine at the age of 17 and by the age of 18 he had built up a name as a physician (Hamza Sheth, 2010, pp. 7-35).

Ibn Sina has been wrote 246 books, including Kitab Al- Shifa (The Book of Healing) and Kitab Al-Qanun fit Tibb (The Canons of Medicine). The Book of Healing consisting of 20 volumes was a monumental work that has been approved to be the largest ever produced by one person. In this book, Ibn Sina developed his theories of medicine and its relevant allied sciences by illuminating the doctrines of logic, natural sciences, psychology, geometry, astronomy, arithmetic, music, and metaphysics. Meanwhile, The Canons of Medicine containing over a million words which reviewed the entire medical knowledge available from ancient and Muslim sources, and as well as his own original contributions. The Canons of Medicine was the principal guide for medical science in the West from the twelfth to the seventeenth century (Hamza Sheth, 2010, pp. 7-35).

Ibn Sina is without hesitation the most widely known intellectual figure concerned with science in Islamic civilization. He has gained the image of a famous scientist, especially in the zones of Arabic, Persian, and Turkic cultures. Moreover, his