

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
Chapter 27	Al-Zahrawi's Explanation on Bone Fractures and Its Surgical and Non-Surgical Treatments	137
Chapter 28	Inhalation and Oral Anesthetics: Views of Selected Muslim Physicians	144

CHAPTER FOUR

AL-RAZI ON GOUT

Akmal Nurhananie binti Abd Rahman, Abdi O. Shuriye
Fac. of Eng., International Islamic Univ. Malaysia (IIUM), Jalan Gombak, 53100 Kuala Lumpur, Malaysia.

4.1 INTRODUCTION

This chapter studies al-Razi's treatise on gout entitled *Maqalah fi Ajwa' an-Niqris*. The materials used are acquired from the books and academic journals. The study investigates al-Razi's understanding on gout, and the main focus of chapter is to enquire answers on how Abu Bakr Muhammad Zakariyya al-Razi treated the disease. Al-Razi's book on gout can be considered as the first authentic, independent work devoted to this disease; in addition, the work has survived to the present day. In view of its medical importance and in crediting al-Razi's pioneering work on gout, this study has been carried out.

4.2 GOUT IN THE MEDIEVAL ERA

Hippocrates recognized gout in the fifth century BC by referring it as 'the unwalkable disease'. Some of Hippocrates' remarkable clinical perceptions in relation to gout are preserved in aphorisms, as shown in Table 1, which are as true today as they were 2500 years ago (Nukiand Simkin, 2006, p. 1). He had identified that the excessive accumulation of one of the body's humours is responsible of gout, and suggested restricted diet, barley water and black hellebore to slow and lessen the severity of the attacks (Hamarneh, 1986, p.259).

Aphorism	Details
VI-28	Eunuchs do not take the gout, no become bald.
VI-29	A woman does not take the gout, unless her menses be stopped.
VI-30	A youth does not get gout before sexual intercourse.
VI-40	In gouty affections, inflammation subsides within 40 days.
XI-55	Gouty affections become active in spring and in autumn.

Table 1 Five aphorism of Hippocrates on gout. This table is adopted from: (Nuki and Simkin, 2006, p. 2)

Six centuries later, Galen was the first to describe tophi, which were compact of phlegm, blood, or bile, singly or in combination (Llewellyn, 1920, p. 4). He wrote briefly