MUSCULOSKELETAL DISORDER

Edited by

THANDAR SOE SUMAIYAH JAMALUDIN
NORFADZILAH AHMAD
MASMUNAA HASSAN



MUSCULOSKELETAL DISORDER

Edited by
THANDAR SOE SUMAIYAH JAMALUDIN
NORFADZILAH AHMAD
MASMUNAA HASSAN



First Print, 2018 ©IIUM Press, IIUM

IIUM Press is a member of Majlis Penerbitan Ilmiah Malaysia – MAPIM (Malaysian Scholarly Publishing Council)

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

Thandar Soe Sumaiyah Jamaludin

MUSCULOSKELETAL DISORDER / THANDAR SOE SUMAIYAH JAMALUDIN, NURFADZILAH AHMAD, MASMUNAA HASSAN. ISBN: 978-967-418-757-6

- 1. Musculoskeletal system--Abnormalities--Research.
- 2. Musculoskeletal system--Disease. 3. Government publications--Malaysia.
- I. Norfadzilah Ahmad. II. Masmunaa Hassan. III. Title. 616.70072

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

CONTENTS

	Contributors	vii
	Figures	ix
	Tables	xi
	Preface	XV
	Acknowledgements	xvii
	Abbreviations	xix
	Symbols	xxi
CHAPTER 1	IMPACT OF MUSCULOSKELETAL SYMPTOMS ON GENERAL PHYSICAL ACTIVITY AMONG NURSING STUDENTS	1
	Siti Norkhaliss Muhd Kamil, Muhammad Kamil Che Hasan, Norfadzilah Ahmad & Thandar Soe Sumaiyah Jamaludin	
CHAPTER 2	PREVALENCE OF MUSCULOSKELETAL	25
	COMPLAINTS AMONG FIREMAN	
	Mohamad Zulhelmi Noor Hazlan, Muhammad Kamil Che Hasan & Norfadzilah Ahmad	
CHAPTER 3	WORK-RELATED MUSCULOSKELETAL	47
	DISORDERS AMONG NURSES	
	Nurul Natrah Khairuanuar, Muhammad Kamil Che Hasan, Masmunaa Hassan & Thandar Soe Sumaiyah Jamaludin	
CHAPTER 4	APPLICATION OF BODY MECHANIC	86
	AMONG HEALTH CARE PROVIDERS	
	IN DAILY ROUTINE TASK	
	Nurul Shazlina Mohd Yusoff, Mohd Khairul Zul Hasymi Bin Firdaus, Masmunaa Hassan & Thandar Soe Sumaiyah Jamaludin	

CONTRIBUTORS

Siti Norkhaliss Muhd Kamil, undergraduate nursing student, Kulliyyah of Nursing, International Islamic University Malaysia (IIUM), Jalan Hospital Campus, 25100 Kuantan, Pahang Darul Makmur. MALAYSIA.

Muhammad Kamil Che Hasan is a Lecturer at the Department of Medical Surgical Nursing, Kulliyyah of Nursing, International Islamic University Malaysia (IIUM). His area of interest are rehabilitative nursing, musculoskeletal health, promotion of healthy ageing, prevention of falls, orthopaedics and traumatology nursing. He teaches the similar related courses at the Kulliyyah of Nursing for undergraduate students.

Mohamad Zulhelmi Noor Hazlan, undergraduate nursing student, Kulliyyah of Nursing, International Islamic University Malaysia (IIUM), Jalan Hospital Campus, 25100 Kuantan, Pahang Darul Makmur. MALAYSIA.

Nurul Natrah Khairuuanuar, undergraduate nursing student, Kulliyyah of Nursing, International Islamic University Malaysia (IIUM), Jalan Hospital Campus, 25100 Kuantan, Pahang Darul Makmur. MALAYSIA.

Nurul Shazlina Mohd Yusoff, undergraduate nursing student, Kulliyyah of Nursing, International Islamic University Malaysia (IIUM), Jalan Hospital Campus, 25100 Kuantan, Pahang Darul Makmur. MALAYSIA.

Mohd Khairul Zul Hasymi Firdaus is a lecturer at the Department of Medical Surgical Nursing, Kulliyyah of Nursing, International Islamic University Malaysia (IIUM). His area of expertise are Orthopaedics & Traumatology Nursing specifically and Medical Surgical Nursing generally. He teaches the similar related courses at the Kulliyyah of Nursing for undergraduate students.

MUSCULOSKELETAL DISORDER

The prevalence of the nursing students who is suffering musculoskeletal disorder worldwide is increasing dramatically. For example, in Australia, it is stated that 80% of them experienced it at some body site. On the other hand, musculoskeletal complaints had become significant issues affecting fireman safety and cause injury to them. Several factors had been identified contributing to these problems.

Thandar Soe Sumaiyah Jamaludin obtained her Bachelor of Nursing Science at University of Nursing, Yangon, Myanmar. She then pursues her Master of Nursing Science (Cardiothoracic Intensive Care Nursing) at University of Malaya, Kuala Lumpur, Malaysia. She has completed the Postgraduate Diploma in Teaching under Education at Open University Malaysia. Prior joining IIUM, She was an emergency registered nurse at Asia Royal Cardiac & Medical Care Center, Yangon. She then continued her carrier as a Cardiothoracic Intensive Care registered nurse at National Heart Institute of Malaysia. Her research interest includes both nursing education and clinical practice mainly in cardiovascular disease field, self-care, community health practice, teaching and learning in Nursing education. She is also actively supervises undergraduate student' research in the field of nursing education and community health awareness at the present. Currently she is a lecturer and Head for Department of Medical-Surgical Nursing at Kulliyyah of Nursing, International Islamic University Malaysia (IIUM). And, she is pursuing her PhD and in the mid of doing research project related to clinical assessment in undergraduate nursing program under purview of the IIUM.

Norfadzilah Ahmad received her Diploma in Nursing from the Universiti Sains Malaysia, Kelantan in May 2000 and Bachelor of Science degree in Nursing in June 2004 from Universiti Malaysia Sarawak. After completing undergrad study, she worked in various clinical settings such as Medical and Surgical unit in Kuantan Medical Centre, Pahang and Gleaneagles Ampang, Selangor since 2002. She completed her M.Sc (Medical Education) in 2010. During her graduate studies, Norfadzilah conducted a research pertaining to Clinical Learning Environment. Following that she's worked as a lecturer at the Kolej Islam Sains & Teknologi, Kelantan (2006 – 2010) and then moved to the International Islamic University Malaysia, Kuantan (2011- present) in which her responsibilities include teaching both local and international nursing students, coordinating subjects, involving in curriculum preparation and supervising final year students' research. Norfadzilah appointed as a Head of Department in the Department of Professional Nursing Studies, IIUM in January 2017. Norfadzilah's research interest includes simulation based education, nursing education and professional development.

Masmunaa Hassan graduated with Diploma in Nursing from Puteri Nursing College Malaysia in 1998 and Post Basic in Critical Care Nursing from Puteri Nursing college collaboration with University of Australia in 2002, Degree in Nursing (Hons) from Open University Malaysia in 2012 and Master of Nursing Science from MAHSA University collaboration with Northumbria University, UK in 2016. She was employed to Kuantan Specialist Hospital, Malaysia as a registered nurse in Multidiscipline ward (Surgical/Medical), Pediatric/Maternity/Nursery, Operation Theatre and Intensive Care Unit (ICU)/Cardiac Care Unit (CCU) from July 1998 till June 2002. As an ICU nurse in Jan 2003 till Feb 2006. She was employed as staff nurse 1to King Fahad Medical City Riyadh, Saudi Arabia from 5 Feb 2006 till 6 Feb 2008 in Cardiovascular Intensive Care Unit (CVICU) and High Dependency Unit (HDU) She was employed as a senior staff nurse to Kuantan Medical Centre, Malaysia from 2 Feb 2009 till 1 April 2014 in Multidiscipline Ward, (ICU) and High Dependency Unit (HDU) and thereafter she joined Kulliyyah of Nursing, IIUM in 15 July 2015. She is currently an academic fellow at the said Kulliyyah.

ISBN 978-967-418-757-6

IIUM Press

Tel: +603 6196 5014 / 6196 5004 Fax: +603 6196 4862 / 6196 6298 Email: iiumbookshop@iium.edu.my Website: http://iiumpress.iium.edu.my/bookshop

