## KNOWLEDGE, ATTITUDE AND SAFETY PRACTICES ON NEEDLE STICK AND SHARP INJURIES AMONG NURSES AND LABORATORY TECHNICIANS IN YANGON GENERAL HOSPITAL AND NEW YANGON GENERAL HOSPITAL

## Thesis submitted to

the Postgraduate Academic Board of Studies,

University of Public Health, Yangon

as the partial fulfillment of the requirements

for the Degree of Master of Hospital Administration (MHA)

THIN SABAI OO M.B., B.S 2022

## **ACKNOWLEDGEMENT**

First and foremost, I would like to express special thanks to Professor Dr. Hla Hla Win, Rector, University of Public Health, Yangon. I would like to extend my words of thanks to the members of the Postgraduate Academic Board of Studies of University of Public Health, Yangon.

My sincere thanks and respects go to all Professors, Associate Professors, Lecturers and Assistant Lectures from University of Public Health, Yangon for teaching me the knowledge of public health.

I am deeply indebted to Professor Dr. Khin May Oo, Professor and Head of Department of Public Health Laboratory Science, University of Public Health, Yangon for her invaluable guidance throughout the course of study. I would like to send my utmost gratitude and respects to my supervisors Professor Dr. Myo Pa Pa Thet Hnin Htwe Aung, Professor and Head of Department of Microbiology, University of Medicine, Taunggyi and Dr. Khin San Myint, Associate Professor, Department of Medical Education Science and ICT, University of Public Health, for her interest, kind support, close supervision and continuous guidance throughout the study.

I also would like to express my gratitude and heartfelt thanks to Dr. Thida Hla, Rector (Senior Medical Superintendent/ Medical Services) of Yangon General Hospital and Dr. Kyaw Myint, Senior Medical Superintendent of New Yangon General Hospital for giving me a chance to conduct this study, and extend my thanks to all the senior consultant doctors in respective wards for helping me during data collection period. I owe remarkable thanks to all the healthcare workers who had actively cooperated and participated in this study.

Lastly, I would like to thank my family, especially my husband, Dr Min Thu Hein, who had provided continuous encouragement and support throughout my study.

## **ABSTRACT**

Needles stick and sharp injuries can transmit the common viral infections and associated with these injuries are Human Immunodeficiency Virus, Hepatitis B Virus and Hepatitis C Virus which can be transmitted by exposure with infected sharps or body fluid. These viral infections are major cause of danger for healthcare professionals by needles stick and sharp injuries. The objectives of this study were to assess knowledge, attitude and safety practices on needle stick and sharp injuries among nurses and laboratory technicians to determine the association between the socio-demographic characteristics and knowledge, attitude and safety practices on needle stick and sharp injuries among nurses and laboratory technicians in Yangon General Hospital and New Yangon General Hospital. The study was cross-sectional descriptive study and conducted from April to August 2022. There were 58 nurses and 9 laboratory technicians in Yangon General Hospital and 58 nurses and 2 laboratory technicians in New Yangon General Hospital who voluntarily participated by answering self-administered questionnaire. Data analysis was done by using SPSS software version 16. The major participants were females (96.9%), mean (SD) age is 35.29 (11.18) year and between the age of 18 to 40 years (66.9%). Most of the participants were nurses (90.6%) with less than 10 years work experience (51.2%). Although 93.7% placed the sharp bin container within the arm's reach of the injecting person and 87.4% disposed within correct time, majority of participants were not recapping of used needles (74.8%) and 29.9% participants never separated the needles from the syringes, 49.9% used WHO safety box to dispose used needles and 94.5% did not use plastic water bottle to dispose used needles. Regarding sharp container, (64.6%) disposed immediately into the sharp bin container. There was association between education and knowledge, attitude level, age group and practice level, work experience and practice level. There were strong association between knowledge and practice level, attitude and practice level. The study revealed that most of the participants did not follow universal precautions exactly. Therefore, continued medical education, training, refresher course for NSSI,

disposal of used needles into punctured proof containers and discouragement of recapping and separating the needles from the syringe after injection should be conducted to nurses and laboratory technicians.