Faculty: Shayesteh Jahanfar, Associate Professor, School of Medicine

Project Locations: Kuala Lumpur, Malaysia and Medford, MA (or student's hometown)

Dates: Early June - late August

Co-PI: Prof. Wang Ling, Prof. Wong

Project Title: Factors Influencing Self-Care Among Cardiac Patient with Atrial Fibrillation

Project Details: Cardiovascular diseases remain a leading cause of morbidity and mortality worldwide and atrial fibrillation (AF) can be presence among the various types of CVDs. AF is the most common cardiac arrhythmia, occurring in 1.5-2.0% of the general population. AF is a serious public health problem because of its increasing incidence and prevalence in the aging population and its association with elevated risks of cardiovascular events and death.

Cardiac patients with AF often require lifelong management and self-care practices to maintain health and prevent complications such as stroke. Self-care is a crucial aspect of managing cardiac conditions and involves a range of behaviors and decisions made by individuals to maintain their well-being, adhere to treatment plans, and adopt healthy lifestyle habits. Therefore, identifying factors that influence self-care behaviors among cardiac patients with AF is essential to facilitate self-care practices.

In addition to patients' medico-sociodemographic factors, the ehealth literacy and symptom burden of AF are potentially significant factors that affects self-care behaviors. Findings from this study healthcare will inform healthcare providers in developing targeted educational programs, counselling, and support systems that harness eHealth technology in tandem with the rapid digitalization of healthcare. Promoting self-care among cardiac patients with AF will lead to better health outcomes, reduced hospital readmissions, and overall enhanced quality of life for these individuals.

OBJECTIVES/OUTCOMES

GENERAL

To examine factors of medico-sociodemographic, ehealth literacy, symptom burden and severity in relation to self-care among cardiac patients with AF.

SPECIFIC OBJECTIVE

- 1. To assess ehealth literacy, symptom burden and severity, and self-care of patients.
- 2. To examine the association between patients' medico-sociodemographic characteristics with ehealth literacy, symptom burden and severity, and self-care.
- 3. To determine the extent to which e-health literacy, symptom burden and severity affect the self-care of patients.

Methods:

Study design: Cross-sectional survey

Study site: cardiac medical wards including CCU, and cardiac clinics, University of Malaya Hospital. Sample size: GPower software (version 3.1.9.4) was used to calculate the minimum sample size required.

Sampling method: Consecutive sampling

Inclusion criteria

• Adult patients aged > 18 years with indexed diagnosis of heart diseases with AF.

- Can read Malay or English.
- Alert and orientated to self-administer the questionnaire.

Tasks and Responsibilities of Research Assistant:

Student will support data collection, as well as cleaning and analyzing the data. Student will also write a full paper and send an abstract to a conference for presentation.

Qualifications:

- 1. Interest in public health research
- 2. Familiarity with descriptive, bivariate, and multivariate analysis
- 3. Familiarity with data analysis with one statistical software (SPSS < R, SAS, or Stata)

Description of Field Site:

Kuala Lumpur is the capital of Malaysia. It is a modern city with all the amenities you can imagine; however, university life is simple.

Housing in Malaysia: The University of Malaysia offers an off-campus accommodations guide can be found <u>here</u>. Information about room rate for international students in residential college can be found <u>here</u>.