



# Effects of the Integrated Cardiac Rehabilitation (ICR) Program Applying to Post Ischemic Heart Disease Persons: A Pilot Study

**Aporn Deenan\***

Faculty of Nursing, Burapha University, Thailand

**\*Corresponding author:** Dr. Aporn Deenan, RN, Ph.D. Associate Professor, Faculty of Nursing, Burapha University, 169 Long-had Road, Bangsaen Road, Sansuk, Chonburi, 20131, Thailand, Tel No: +66 081 6116225; Email: apornd@buu.ac.th

**Received Date:** June 11, 2019; **Published Date:** June 14, 2019

## Abstract

Cardiac rehabilitation can prevent complication, reduce disease progression, and improve functional performance among post-ischemic heart disease patients. This pre-post quasi-experimental study was aimed to evaluate the effects of the integrated cardiac rehabilitation (ICR) program for Thai people. The 4-week ICR program was developed based on evidenced base practice for ischemic heart disease patients. The core components of the ICR program consisted of health coach, information about ischemic heart disease, illness management, risk reduction, self-management, and lifestyle modification. Thirty post- ischemic heart disease patients were recruited based on the inclusion criteria and participated in the ICR program 2 times a week; 2 sessions at OPD, 2 home visits, and phone calls. Data were collected by a package of questionnaires including demographic, health behaviors. Functional performance was measured by GraminViofit pedometer for walking steps. Data were analyzed by descriptive statistics and paired t-test. Results revealed that participants gained better health behaviors (risk behavior, physical activity/exercise, stress management, medical adherence, and self- management related to IHD at  $p < .05$  level. The functional performance with step count evaluation was significantly improvement ( $p < .001$ ).

From research results, the ICR program showed good effects for post-ischemic heart disease patients. Further research should implement as a randomized controlled trial, longitudinal study, and study in larger sample size.

**Keywords:** Ischemic heart disease; Integrated cardiac rehabilitation (ICR) program; Health behaviors; Functional performance

**Abbreviations:** CHD: Coronary Heart Disease; IHD: Ischemic Heart Disease; APN: Advanced Practice Nurse; ICR: Integrated Cardiac Rehabilitation; IRB: Institute Review Board; RA: Research Assistant; PI: Principal Investigator

## Introduction

Coronary heart disease (CHD) or ischemic heart disease (IHD) has become a major burden of health care system worldwide and in Thailand. World Health Organization reported that it was the number one cause of death with the estimation of 17.9 million died globally in 2016 [1].