

**UNIVERSITI TEKNOLOGI MARA**

**THE EFFECT OF NURSE-LED  
EDUCATION PROGRAM ON  
ADHERENCE TO LIFESTYLE  
MODIFICATION AND DUAL  
ANTIPLATELET THERAPY AMONG  
PATIENTS WITH CORONARY  
ARTERY DISEASE**

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Thesis submitted in fulfillment  
of the requirements for the degree of  
**Master of Nursing**

**Faculty of Health Sciences**

**February 2023**

## ABSTRACT

Coronary artery disease (CAD) is a serious condition in which the plaque build-up in the coronary arteries limits the blood supply to the heart muscle. CAD ranges from unstable angina (USA), non-ST-elevation myocardial infarction (NSTEMI) and ST-elevation myocardial infarction (STEMI) depending on the degree and acuteness of coronary artery occlusion by the plaque. Lifestyle modification is essential to reduce the risk of CAD and improve the quality of life among patients. However, lifestyle modification is one of the challenges for patients with CAD. The objectives of this study were to identify the adherence level to lifestyle modification and dual antiplatelet therapy, and to determine the effect of the nurse-led education program among patients with CAD. A quasi-experimental study was conducted among 113 patients diagnosed with CAD. The effects of nurse-led education program (one-to-one health education session with a coronary care nurse) was compared to the standard education. Patients were followed-up at one month to collect information about lifestyle modification and adherence to dual antiplatelet therapy. The result showed adherence to lifestyle modification for control group (n=56) mean=2.10 (SD±0.20) and intervention group (n=57) mean=2.23 (SD±0.18),  $t(111)=-3.41$ ,  $p<0.005$  which revealed significant difference on adherence to lifestyle modification between these two groups. Nurse-led education program affects adherence level to the physical activity comparing the two groups  $F(1,111)=6.53$ ,  $p<0.05=0.01$ . There was a significant effect on adherence to dual antiplatelet therapy between the two groups of treatment,  $F(1,111)=13.70$ ,  $p<0.001$  with small effect size  $\eta^2=0.11$ . Nurse-led education program provide important knowledge for patients to meet their needs. The information and support provided by nurse-led education program improved patients' adherence to the lifestyle modification and dual antiplatelet therapy.

## ACKNOWLEDGEMENT

In the name of Allah, the Most Gracious and the Most Merciful, with *salawat* and *salam* to Prophet Muhammad S.A.W. With the permission of Allah, I was granted the opportunity to accomplish this study. Alhamdulillah, syukur to Allah SWT, who has blessed me with my health and strength all this time.

First and foremost, I'd like to express my gratitude to my supervisor, Dr Zamzaliza Abdul Mulud, for her patience, motivation, enthusiasm, and vast knowledge. Her advice was helpful to me throughout the entire research and thesis-writing process. I could not have asked for a better mentor and advisor for my master's programme. Along with my advisor, I would like to thank Dr. Abdul Muizz, my co-supervisor, for the encouragement and insightful comments.

My appreciation goes to the Head of Department and staff of the Cardiology Department, Hospital Serdang, who provided the facilities and assistance during the data collection procedure. Special thanks to my colleagues and friends for helping me with this project.

A special thank you to my dear friends who have always been there for me, believing in my abilities and encouraging me to stay committed to my studies. There are too many to name, and I am grateful, appreciative, and fortunate to have such wonderful friends.

This thesis is dedicated to my dearest husband, Mohd Hanif Bin Adenan, and my beautiful, handsome, smart, and independent kids, Haziq and Haziqah. Last but not least, I would like to thank my parents, [REDACTED], and my beloved siblings, Mala, Mira, Nabilah, Najihah, Irfan, and other family members for supporting me spiritually throughout my life.

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