# Development and Validation of the Filipino Version of the Coronary Artery Disease Education Questionnaire Version 2 (FILIPINO CADE-Q II)

Lucky R. Cuenza, M.D.\*; Bernard Benjamin Albano, M.D.\*\*; Joseph Michael Ramirez, M.D.\*\*; Raphael Magbag, PTRP\*\*\*, Benjamin Jose Quito, M.D.\*\*\*\*; Edgardo Ebba, M.D.\*\*\*\*; Leandro Bongosia, M.D.\*\*\*

# **A**bstract

Introduction: There is currently a lack of validated tools that measure knowledge level as an outcome of the educational component of cardiac rehabilitation programs in our local setting. The researchers aim to culturally adapt and validate a questionnaire that was designed to assess patients' knowledge about coronary artery disease and participation in cardiac rehabilitation programs, the second version of the Coronary Artery Disease Education Questionnaire (CADE-Q II).

Methods: Qualified translators did two independent translations of the questionnaire. After back translation, the questions were reviewed and modified by a committee of experts. The final Filipino version was tested in a pilot study. For psychometric validation the tool was administered to 109 patients enrolled in a cardiac rehabilitation program. Criterion validity was assessed with regards to differences in educational attainment and patient characteristics. Spearman rank was used to correlate patient's level of knowledge with number of sessions attended. Internal consistency was assessed by use of cronbach's alpha.

Results: The final version of the questionnaire had 30 questions arranged in five domains consisting of medical condition, risk factors, exercise, nutrition, and psychosocial risk. Patients who were college graduates had significantly higher mean scores than non college graduates. The number of cardiac rehab sessions attended had a weak but statistically significant correlation with knowledge. (spearman rho 0.35, p=0.007). The overall internal consistency of the questionnaire was good ( $\alpha$ =0.75)

Conclusion: The CADE-Q II questionnaire cross culturally adapted in Filipino is a valid and reliable tool which can be used to assess Filipino patients' knowledge about their disease when participating in cardiac rehabilitation programs.

Keywords: coronary artery disease, patient education, health knowledge, cardiac rehabilitation

# Introduction

Cardiac rehabilitation (CR) is an evidence-based program recommended for patients with cardiovascular disease which involves a multidisciplinary approach of physical activity, lifestyle modifications, nutritional and risk factor management with the aims of improving survival and quality of life.1 One of its core components is patient education which helps promote knowledge and understanding of their disease.<sup>2</sup> Education is essential to enable the patient to make decisions regarding their health status which is important in the adoption of a healthy lifestyle and behavioral changes.3

\*Clinical Research Fellow in Cardiac Rehabilitation, Philippine Heart Center, Quezon City, Philippines

Corresponding author: Lucky R. Cuenza, M.D., Philippine Heart Center, Quezon City, Philippines Email:baldyboy\_182001@yahoo.com

Studies have shown that patients with heart disease seek knowledge on their disease, treatment options and overall prognosis.<sup>4</sup> Likewise in order to plan and deliver an effective CR educational intervention, it is important to have adequate information of the knowledge of patients regarding their condition. However the reality is that the education component of the CR program is frequently overlooked and there are currently no validated tools for use to assess the patient's knowledge level with regards to CR program participation and its components in our local setting.

The Coronary Artery Disease Education Questionnaire (CADE-Q) was initially developed to assess the level of patients' knowledge regarding coronary artery disease.5 Then the second version of the questionnaire, the CADE-Q Il was an update that was psychometrically validated to include all the core components of CR such as nutrition and psychosocial aspects.<sup>6</sup> There has been no validated questionnaire regarding patient's knowledge of CR and coronary artery disease for Filipinos. If translated and validated in Filipino the CADE-Q II can be a useful tool to assess the patient's knowledge gaps and evaluate educational delivery in CR for Filipinos.

<sup>\*\*</sup>Adult Cardiology Fellow, Department of Adult Cardiology, Philippine Heart Center, Quezon City, Philippines

<sup>\*\*\*</sup> Physical Therapist, Lead Coordinator, Section of Cardiac Rehabilitation, Philippine Heart Center, Quezon City, Philippines

<sup>\*</sup> Consultant, Section of Cardiac Rehabilitation, Philippine Heart Center, Quezon City, Philippines

### Objectives of the study

- To translate and culturally adapt the second version of the CADE-Q II into the Filipino language (Tagalog)
- 2. To determine the validity and reliability of the Translated Filipino version of the CADE-Q II questionnaire

# Methods

The study utilized a cross-sectional analytical design. The study population's crteria is as follows:

#### Inclusion criteria:

- Type of subject: patients with coronary artery disease who were referred and enrolled in the Comprehensive CR Program of the Philippine Heart Center (PHC) (post coronary artery bypass graft, post percutaneous catheter intervention, stable angina on optimal medical treatment)
- 2. Gender: male or female above 19 years of age

#### **Exclusion criteria:**

- Subjects who cannot read or speak Tagalog as the first and daily language
- 2. Subjects with any visual, cognitive or psychiatric condition that will prevent the individual from answering the questionnaire
- 3. Subjects who refused to give informed consent

We hypothesized that the translated Filipino version of the CADE-Q II will be a valid instrument to assess patient's knowledge, while the null hypothesis is that the questionnaire will be unreliable to determine the level of patient knowledge regarding heart disease and CR. We also hypothesize that the number of cardiac sessions attended will be correlated with the CADE-Q II scores attained.

The CADE-Q II was initially developed and validated by the authors in Canada for patients undergoing CR. The questionaaire is self administered and originally had 31 items covering five different domains: medical condition, risk factors, exercise, nutrition and psychosocial risk. Each item had four alternatives that correspond to knowledge level: A correct statement which showed complete knowledge, a correct statement showing incomplete knowledge, an incorrect statement showing wrong knowledge and an "I don't know" option indicating a lack of knowledge. Scores of knowledge items were given three points if they were perceived correct and zero if they were wrong. Responses were given a rating of one point if it pertained to incomplete knowledge while the other two responses had a numerical weight of zero points.

The original authors of the CADE-Q II (Ghisi et al.) were contacted via email and they gave permission to carry out the translation of the questionnaire in our native language. The initial process of translation and cultural adaptation

was carried out to provide the CADE-Q II for the Filipino population. The original English questionnaire followed the protocol proposed by Gullemin et al.<sup>7</sup> of initial translation from English to the native Filipino language of Tagalog followed by back translation and initial review. The translation was done by a committee of experts in bilingual translation from Sentro ng Wika of the University of the Philippines.

An expert panel assessed the content validity of the translated questionnaire. The panel consisted of the primary author, three cardiology consultants specializing in CR and three cardiology fellows. Included in the focused group were the physician and staff of the PHC section of CR who ensured proper wording of questions, appropriateness of the content, clarity, sequence and how the data will be sought from the respondents. The final draft of the questionnaire consisted of translated questions covered the same five different domains: medical condition, risk factors, exercise, nutrition and psychosocial risk. Many items were adapted to Filipino culture and what was typically learned during the education sessions of the CR program of the PHC. One question in the exercise domain pertaining to exercising during the winter months was deleted for a total of 30 items. No further deletions or modifications were made and this final version was used for validation. (Appendix A)

The study was conducted in the PHC section of CR where patients with heart disease are referred for the secondary prevention program. The mode of administration of the questionnaire was self-administered. Initially a pilot translated draft was given to 20 subjects for establishment of face validity. Any of the questions that were perceived to be vague due to grammatical rewording were rephrased. After the initial validation are test was done after two weeks using the same subjects. The questionnaire return rate for the pilot study was 100%. The final respondents to be analyzed were invited for participation. They were asked for informed consent and the complete objectives of the study were disclosed. Patient profiles were determined through interview by the investigators. Scores of knowledge items were given three points if they were perceived correct and zero if they were wrong. Unsure responses were given a rating of one point (Appendix B). The sums of the scores were computed to represent the mean total knowledge, with a highest possible score of 90 points representing excellent knowledge. (Table I)

Since using cronbach's alpha yielded a very small sample size because the power was high, the sample size calculation was based on Hair and Anderson's recommendations<sup>8</sup> of a sample of 10 participants per item or at least 100 participants in determination of responses from a questionnaire or survey.

Descriptive statistics included measures of central tendency (mean and their standard deviation) for continuous variables and percentage-frequency distribution

Table I. Classification of the patient's level of knowledge according to the questionnaire scores

Sum of the scores (points)	Percentage	Classification of knowledge	
81-90	90-100	Excellent	
63-80	70-89	Good	
45-62	50-69	Acceptable	
27-44	30-49	Little knowledge	
<26	<30	Insufficient knowledge	

for categorical data. Spearman rank correlation was used to determine the correlation between number of sessions attended and knowledge score. Criterion validity was assessed thru comparing the CADE-Q II scores by participant's level of education using T-test. This criterion was applied as there has been evidence that individuals with lower level of education have lower knowledge about their health and disease.9 Statistical significance will be set at p-value of <0.05. For internal consistency Cronbach's alpha was used with a minimum value of 0.610 All analyses were performed using STATA version 13 software.

The study was conducted in compliance with the ethical principles set forth in the declaration of Helsinki. Prior to study initiation, there was a review and approval of the study protocol and informed consent and subsequent amendments by the PHC Institutional Ethics Review Board (PHC IERB). Signed informed consent was taken from each respondent prior to study participation. The investigator preserved the confidentiality of all subjects taking part in the study and ensured that the subject's anonymity is maintained.

# Results

The characteristics of the study population are shown in Table I. A total of 109 patients were analyzed. The patients' average age was 57.1±9.4 years and 75% were males. Majority had risk factors such as hypertension (70.6%) and dyslipidemia (63.3). There were 93 (85.3%) who were post coronary artery bypass patients, 74 (67.9%) were college graduates and the mean number of cardiac rehab sessions participated was 5.8±3.8. The mean total CADE-Q Il scores were compared by educational attainment level, the procedure that they underwent and co-morbidities. It was shown that patients who were college graduates had significantly higher mean scores than non college graduates indicating higher knowledge ( $\bar{x}$ =61.7±1.5, p= 0.034). Patients with dyslipidemia were also noted to have higher mean scores (p=0.021). There were no significant differences in mean scores with regards to other comorbidities or whether the patient underwent percutaneous catheter intervention or coronary artery bypass. Using spearman rank correlation (p=0.35, p=0.007) it was shown that the number of sessions

Table II. Characteristics of the study respondents

Characteristic (n=109)	Total n (%) or ±SD	Mean scores ±SD	<i>P</i> -value
Age	57.1± 9.4		
Sex (Male)	82(75)		
Body Mass Index	25.1± 3.5		
History of previous CABG	93(85.3)	64.3 ± 3.3	0.2142
History of previous PCI	12 (11)	60.1 ± 1.2	
Stable CAD	4 (3.7)		
LVEF	55.7 ± 11.1		
College graduate	74 (67.9%)	61.7 ± 1.5	0.034
Number of sessions	5.8 ± 3.8		
Hypertension	77 (70.6)	61.1 ± 1.3	0.153
Dyslipidemia	69 (63.3)	62 ± 1.3	0.021
Diabetes	40 (36.9)	57.6 ± 2.1	0.332
Aspirin/Clopidogrel	104 (95.4)		
Beta Blocker	90 (82.6)		
Calcium Channel Blocker	31(28.4)		
Statin	96 (88.1)		
ACEI/ARB	72 (66.1)		
Nitrates	52 (47.7)		

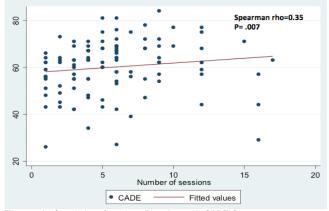


Figure 1: Correlation of number of sessions with CADE-Q scores

had a weak but statistically significant correlation with the level knowledge based on CADE-Q II scores thus rejecting one of our null hypothesis (Figure 1).

The mean scores per area are shown in Table III. Patients had the greatest knowledge related to their medical condition while the area of nutrition showed the least knowledge. Out of a possible perfect score of 90 points, the mean score of all the participants was  $60.1\pm11.5$ , which generally indicated knowledge of 67% or higher and classified as acceptable knowledge. The reliability of each area was assessed using cronbach's alpha. Individually four of the five subsets demonstrated internal reliability that was generally lower than acceptable. The overall scale had good internal consistency with an alpha of 0.75 enabling us to reject the null hypothesis.11

Table III. Mean scores and cronbach's alpha per area of the questionnaire.

Area	Mean CADE-Q II score per area	Cronbach Alpha		
Medical Condition	14.9 ± 3.5	0.53		
Risk Factors	10.5 ± 2.9	0.41		
Exercise	12.2 ± 3.4	0.63		
Nutrition	11.8 ± 4.1	0.51		
Psychosocial Risk	10.6 ± 2.9	0.47		
Total	60.1 ± 11.5	0.75		

# Discussion

Translation and validation studies of health questionnaires do not only entail simple semantic and literal analysis. It is necessary that the language and idiomatic expressions be conceptually adapted particularly to the culture that it aims to target and apply the instrument for. 12 While the Philippines is composed of multiple islands, ethnicities and dialects, 96% of Filipinos speak and understand Tagalog<sup>13</sup> so we opted to use it for our translation process. These aspects along with other social and cultural differences were all considered in the study.

The Filipino version of the CADE-Q II showed overall good internal consistency and reliability. The psychometric properties of the translated version are consistent with the original CADE-Q II not just in internal consistency ( $\alpha$ =0.75) but also in relation to criterion validity. This supports the use of this tool in assessment of knowledge of patients with coronary artery disease who are in a CR program.

Regarding participant characteristics, it was noted that patients with a higher educational attainment have higher scores ( $\bar{x}$ =61.7±1.5). This relationship has also been observed in other studies<sup>14</sup> indicating that knowledge is mediated by an individual's education as well as economic status. It must be noted that although the level of educational attainment presented significant differences in total scores, other factors such as comorbidities and type of procedure must be analyzed in relation to CR participation, as they can have an impact on the attainment of knowledge of coronary patients. 15 The higher mean scores of patients with dyslipidemia may be multifactorial and may indicate better compliance to statin medications and follow up in these patients although larger studies are warranted. It has been shown that patients with higher knowledge regarding dyslipidemia has had a more positive attitude towards its management.16

There are some limitations to this study that need to be pointed out. First, this was a single center study where generalizability may be limited. Secondly, while the overall reliability of the scale is good, some of the domains performed lower than acceptable. This may require further assessment by use of other psychometric evaluation methods such as exploratory factor analysis. Finally, it is worth noting in our study that there is a statistically significant correlation with the number of sessions attended with the level of knowledge, providing some evidence that the duration and attendance in a cardiac rehab program directly influences a patient's level of knowledge.<sup>17</sup> Future research is needed to assess whether this translated tool will be affected by CR as an intervention, such that participation in cardiac rehab will be associated with increased knowledge and in turn improved awareness and outcomes.

A multifaceted CR program consists not just the exercise component but also the educational component. The association between CAD and knowledge can be collaborated to promote proper lifestyle and risk factor modification as well as optimize treatment and compliance.<sup>18</sup> It has been shown that when all facets of CR are applied in a systematic fashion, including proper patient education, it can have a significant impact on recovery, reduction of admissions, quality of life improvement and mortality. 19 The Filipino version of the CADE-Q II is a useful tool capable of measuring the level of knowledge of patients which can potentially be a target goal in CR programs.

### Conclusion

The results of the study shows that the Filipino translation of the CADE-Q II has adequate validity and reliability in assessing the Filipino patient's knowledge regarding coronary artery disease who participate in CR. The questionnaire is a useful tool to evaluate a patient's overall level of knowledge as well as improve the educational component of CR programs.

# **Acknowledgments**

The authors would like to thank the Cardiac Rehabilitation Staff of the PHC for their invaluable contributions in the conduct of this study.

# References

- Balady GJ, Ades PA, Bittner VA, Franklin BA, Gordon NF, Thomas RJ, Tomaselli GF, Yancy CW. Referral, enrollment, and delivery of cardiac rehabilitation/secondary prevention programs at clinical centers and beyond: a presidential advisory from the American Heart Association. Circulation. 2011: published online before print November 14, 2011, 10.1161/ CIR.0b013e31823b21e2
- Leon AS, Franklin BA, Costa F, Balady GJ, Berra KA, Stewart KJ, Thompson PD, Williams MA, Lauer MS. Cardiac rehabilitation and secondary prevention of coronary heart disease: an American Heart Association scientific statement from the

- Council on Clinical Cardiology (Subcommittee on Exercise, Cardiac Rehabilitation, and Prevention) and the Council on Nutrition, Physical Activity, and Metabolism (Subcommittee on Physical Activity), in collaboration with the American Association of Cardiovascular and Pulmonary Rehabilitation. [published correction appears in Circulation. 2005;111:1717.] Circulation.
- Froelicher ES. Multifactorial cardiac rehabilitation: education, counseling, and behavioral interventions. In: Wenger NK, Smith LK, Froelicher ES, Comoss PM, editors. Cardiac rehabilitation. New York, Dekker, 1999: 187-191. Suaya JA, Shepard DS, Normand SL, Ades PA, Prottas J, Stason WB. Use of cardiac rehabilitation by Medicare beneficiaries after myocardial infarction or coronary bypass surgery. Circulation. 2007;116:1653-1662.
- Danish Regions, Copenhagen Hospital Corporation and Ministry of Health. Patienternes vurdering af landets sygehuse [Patients' assessment of Denmark's hospitals]. Glostup, Copenhagen County, 2000.
- De Melo G, Oh P, Thomas S, Benetti M, Development and validation of an English version of the Coronary Artery Disease Education Questionnaire (CADE-Q), Eur J Prev Cardiol. 2013 Apr;20(2):291-300. doi: 10.1177/2047487312437061.
- De Melo G, Grace S, Thomas S, Evans M, Oh P, Development and Validation of the second version of the Coronary Artery Disease Education Questionnaire (CADE Q II), Patient Educ Couns, 2015 Mar;98(3):378-83
- Guillemin F, Bombardier C, Beaton D, Cross Cultural Adaptation of Health related Quality of Life Measures: literature review and proposed guidelines. J Clin Epidemiol. 1993;46(12):1417-32
- Hair JF, Anderson RE. Multivariate data analysis. New Jersey: Prentice Hall; 1998, pp. 91-153, 660-706
- Potvin L, Richard L, Edwards AC. Knowledge of cardiovascular disease risk factors among the Canadian population:relationships with indicators of socioeconomic status. Canadian Medical Association 2000: 162:S5-11
- 10. Dancey CP, Reidy J. Statistics without maths for Psychology: using SPSS for Windows. 3rd ed. London: Prentice Hall; 2005.
- 11. Ghisi GLM, Leite CM, Durieux A, Schenkel IC, Assumpção MS, Barros MM, et al. Validação para o português do MargerI CaRdiac preventiOn- Questionnaire (MICRO-Q). Arq Bras Cardiol. 2010;94(3):372-8.
- 12. Educational Characteristics of the Filipinos (Special Release No. 153) (2005)
- 13. Sommaruga M, Vidotto G, Bertolotti G, Pedretti RF, Tramarin R. A self-administered tool for the evaluation of the efficacy of health education interventions in cardiac patients. Monaldi Arch Chest Dis. 2003;60(1):7-15.
- 14. Ghisi GLM, Oh P, Thomas S, Benetti M, Development and validation of the English Version of the Coronary Artery Disease Education Questionniare (CADE Q). European Journal of Preventive Cardiology 2013; 20:291-300
- 15. Alahmari AS, Alrashed FM, Afnan RA, Khozam SA, AlsharaniMM, Mahdi BA et al. (2016); Knowledge, Attitude And Practice Towards Dyslipidemia among Patients Attending Primary Healtch Care Centers Abha City, Saudi Arabia. Int. J. of Adv. Res. 4 (11). 1937-1946]
- 16. Kayaniyil S. Ardern CI, Winstanley J, Parsons C, Brister

- S, Oh P, et al. Degree and correlates of cardiac knowledge and awareness among cardiac inpatients. Patient Educ Couns. 2009;75(1):99-107.
- 17. Roter DL, Steshefsky-Margalit R, Rudd R. Current perspectives on patient education in the US. Patient Education Counseling 2001: 44: 79-86
- 18. Thompson DR, Lewin RJP. Coronary disease: management of the post myocardial infarction patient:rehabilitation and cardiac neurosis. Heart 2000; 84:101-105

### APPENDIX A:

#### The Filipino CADE-Q II Questionnaire

Ikaw ay inaanyayahan na sagutan itong questionnaire na ito dahil ikaw ay kasama sa isang programa ng cardiac rehabilitation. Ang inyong kaalaman tungkol sa inyong kondisyon, mga gamot at mga salik ng dahilan ng inyong sakit sa puso ay isang mahalagang aspeto ng inyong pag galing.

Gusto naming malaman ang inyong kasalukuyang nalalaman tungkol sa inyong sakit.

Ang layunin ng pagsagot ninyo ng questionnaire na ito ay:

- Alamin ang inyong kabuuang kaalaman ng pasyente tungkol sa kanyang sakit sa puso
- Alamin ang inyong tiyak na kaalaman na nauukol sa inyong medikal na kondisyon, mga kasanhian ng sakit, ehersisyo, nutrisyon, at mga sikososyal na aspeto.

Ang mga tanong ay nakalathala sa pamamagitan ng sumusunod na pamamaraan:

- may mga pagpipilian na apat na posibleng kasagutan
- bawat sagot ay may katugon na antas ng kaalaman
  - Sagot na nagpapakita ng sapat na kaalaman
  - Sagot na nagpapakita ng hindi hustong kaalaman
  - Sagot na nagpapakita ng maling kaalaman
  - Sagot na nag papakita ng kulang na kaalaman

Bawat sagot ay may katugon na puntos at ang kabuuan nito ang magsasaad ng iyong kaalaman

Mga direksiyon sa pagsagot:

Ang mga tanong ay nakagrupo sa iba't ibang saklaw ng kaalaman

Pakisagutan po ang lahat ng mga katanungan kung ano sa tingin ninyo ang tamang sagot. At huwag po mang iwan ng bahagi na hindi nasaqutan.

Maaari pong piliin ang sagot na "hindi ko alam" kapag hindi sigurado sa sagot.

• Pagkatapos sagutan pakibalik po ang questionnaire sa taong nagbigay sa inyo. Ang mga laman at kasagutan na inyong ilalagay ay boluntaryo at mananatiling konpidensyal

Unang Saklaw: Medikal na Kondisyon (Medical Condition)

Question 1

Ang Coronary Artery Disease ay:

- a) Sakit sa ugat ng puso na pagkakaroon ng matigas na deposito ng calcium sa ugat ng puso dahil sa katandaan
- b) Sakit sa ugat ng puso na nangyayari sa pagtanda ng tao na mataas ang kolesterol o paninigarilyo.
- c) Sakit na nagbabara ang ugat sa puso. Ito ay naiimpluwensiyahan ng mga pagkain, bisyo at lahi at konektado ito sa pamamaga ng ugat ng puso.
- d) Hindi ko alam

#### Question 2

Ang Angina (pagsakit ng dibdib) ay nangyayari:

- a) Kapag masyadong mabigat ang trabaho ng masel ng puso
- b) Kapag ang masel ng puso ay hindi nakakakuha ng sapat na dugo at oxygen upang gumana ng mabuti
- c) Kapag ang utak ay hindi nakakakuha ng sapat na oxygen.
- d) Hindi ko alam

# Question 3

Sa taong may coronary artery disease o sakit sa ugat ng puso, ano ang karaniwang paglalarawan o deskripsyon sa angina (pagsakit ng dibdib)?

- a) Pagsakit ng ulo pagkatapos kumain
- b) Pagsakit ng dibdib kapag kumikilos o may ginagawa o kahit nakapahinga, na maaari din maradaman sa may braso, sa likod o sa leeg
- c) Pagsakit ng dibdib habang kumikilos o may ginagawa
- d) Hindi ko alam

## Question 4

Ang atake sa puso ay nangyayari:

- a) Kapag nag bara ang ugat sa puso
- b) Kapag bumilis ang tibok ng puso dahil sa stress.
- c) Kapag biglang nagbara ang ugat na pinagdadaluyan ng dugo papunta sa masel ng puso. Kung hindi ma ayos ang pagdaloy ng dugo, mapipinsala ang bahagi ng puso na walang daloy ng dugo.
- d) Hindi ko alam

# Question 5

Ang pinakamainam na pinanggagalingan ng impormasyon para maintindihan ng pasyente ang kanyang mga gamut ay:

- a) Ang doctor, ang cardiac rehab team, ang pharmacist at iba pang impormasyon mula sa mga healthcare professional
- b) Ang mga nababasa natin sa internet

- c) Ang doctor at ang cardiac rehab team
- d) Hindi ko alam

#### Question 6

Ang mga gamut katulad ng aspirin at clopidogrel ay mahalaga sapagkat:

- a) Pinapababa nya ang blood pressure
- b) Pinalalabnaw ang dugo
- c) Binabawasan ang aktibidad ng mga platelets sa dugo kaya mas mainam ang pagdaloy ng dugo sa ugat ng puso
- d) Hindi ko alam

#### Question 7

Ang mga gamut na "statin" tulad ng atorvastatin, rosuvastatin, or simvastatin, ay may mabuting epekto sa katawan sa pamamagitan ng:

a)pagpapababa ng masamang kolesterol o LDL cholesterol sa dugo

- b) Binabawasan ang paggawa ng masamang kolesterol o LDL cholesterol sa atay, pinapababa ang LDL cholesterol sa dugo at tinatangal ang kolesterol para hindi maipon sa mga ugat.
- c) binabawasan ang pag ipon ng kolesterol sa dugo
- d) Hindi ko alam

Ikalawang Saklaw: Kasanhian ng Sakit (Risk Factors)

Question 1

Ang mga sanhi ng sakit sa puso na maaaring mabago at maagapan ay:

- a) altapresyon, kolesterol at paninigarilyo
- b) Edad, may sakit sa puso ang lahi, at kasarian
- c) altapresyon, mabuti (HDL) at masamang (LDL) kolesterol, paninigarilyo at pagkakalantad sa usok ng sigarilyo, katabaan, malaking tiyan o waistline
- d) Hindi ko alam

#### Question 2

Ang mga hakbang upang ma kontrol and kolesterol sa katawan ay :

- a) lwasan ang pagkain ng itlog
- b) Alamin ang antas ng mabuting kolesterol ("good cholesterol o HDL") at ng masamang kolesterol ("bad cholesterol o LDL"), paginom ng tamang gamut, pag kain ng pagkain na maraming fiber, pagbawas ng pagkain ng matataba, at pag ehersisyo ng mga limang beses sa isang lingo
- c) Alamin ang antas ng kolesterol at paginom ng gamut sa kolesterol na binigay ng doktor
- d) Hindi ko alam

# Question 3

Ang mga hakbang upang ma kontrol ang altapresyon ay:

- a) Damihan ang paginom ng gatas sa dyeta
- b) Bawasan ang pagkain ng maaalat at paginom ng gamot para sa altapresyon o high blood
- c) Bawasan ang pagkain ng maaalat at ang asin sa pagkain na mas kaunti pa sa 2000 mg o isang kutsarita sa isang araw, pag ehersisyo, paginom ng gamot sa altapresyon, at pagtuto ng mga pamparelax na aktibidad para mabawasan ang aburido
- d) Hindi ko alam

#### Question 4

Ang unang hakbang sa pag control ng mga kasanhian ng sakit sa puso tulad ng altapresyon o kolesterol ay:

- a) Alamin kung maaari kang magkaroon ng mga sanhi ng sakit
- b) Magpacheck up upang alamin ang antas o level ng kasanhian ng sakit sa puso
- c) Magkaron ng adhikain o hangarin na ma kontrol ang mga kasanhian
- d) Hindi ko alam

# Question 5

Ang mga hakbang upang maiwasa ang diabetes ay:

a) Diet na mabuti sa puso, mag ehersisyo ng 150 minuto sa isang lingo at panatilihing mainam ang pangagatawan

- b) Bawasan ang carbohydrates tulad ng kanin at ang pagkain ng matataba sa dyeta.
- c) Kung ikaw ay may lahi ng diabetes, maaari kang magkaroon din nito dahil hindi mo ito maiiwasan
- d) Hindi ko alam

Ikatlong Saklaw: Ehersisyo (Exercise)

Question 1

Ano ang mahahalagang aspeto ng pag sailalim ng ehersisyo?

- a) Pagalam kung ano ang maaaring kainin bago mag ehersisyo
- b) Gaano katindi, gaano katagal, gaano kadalas at anong klaseng ehersisyo ang dapat gawin
- c) Gaano katindi at gaano katagal ang pag ehersisyo
- d) Hindi ko alam

#### Question 2

Sa isang tao na may sakit sa puso, mahalaga ang pag warm up bago simulant ang pag ehersisyo sapagkat:

- a) Unti unti nitong pinapabilis ang tibok ng puso, maaaring bawasan ang pagsakit ng masel at bawasan ang pagkakataon ng angina o pagsakit ng dibdib
- b) Para tumagal ang ginagawa nating ehersisyo
- c) Hinahanda nya ang katawan para sa maayos na pag ehersisyo
- d) Hindi ko alam

#### Question 3

Ang pulso ay matatagpuan:

- a) sa may kamay sa may pulsuhan malapit sa hinlalaki
- b) sa may kamay malapit sa hinliliit
- c) sa may pulsuhan sa kamay o sa ugat ng leeg sa gilid
- d) Hindi ko alam

# Question 4

Ang mga kabutihan na maidudulot ng paggawa ng resistance training (pagbubuhat ng weights o ng pabigat) ay:

- a) Nagpapalakas ng katawan at ng mga masel
- b) Nagpapabagal ng tibok ng puso
- c) Nagpapalakas ng masel, nagpapaganda ng kakayahan na gawin ang mga aktibidad na pang araw araw, nakakabuti ng blood sugar
- d) Hindi ko alam

#### Question 5

Kung sumasakit ang dibdib habang naglalakad na ehersisyo, ang tamang gawin ay:

- a) Bilisan lalo ang paglakad at tingnan kung mawawala ang sakit
- b) Bagalan ang lakad at huminto mag ehersisyo
- c) Bagalan ang paglakad. Kung hindi mawala ang sakit sa loob ng isang minute huminto sa pag ehersisyo. Kung higit isang minuto pa at hindi pa rin nawawala ang sakit, maaaring uminom ng gamut sa ilalim ng dila na nitroglycerin. Kung hindi pa rin nawawala ang sakit, humingi ng konsulta at tulong
- d) Hindi ko alam

#### Question 6

Paano malalaman kung nasa tamang antas o gaano katindi ang pag ehersisyo?

- a) Ang heart rate o ang bilang ng tibok ng puso ay umaabot sa target, ang paglarawan ng pasyente sa hirap ng ehersisyo ay "medyo mahirap" (RPE of 13) at nakapagsasalita ang pasyente
- b) Ang heart rate o ang bilang ng tibok ng puso ay umaabot sa target
- c) matinding pawis at pagod na nararamdaman
- d) Hindi ko alam

Ikaapat na Saklaw: Nutrisyon (Nutrition)

Question 1

Ano any pinakamagandang pinanggagalingan ng omega 3 sa pagakain?

- a) bacon at hotdog
- b) Pasta at noodles
- c) mga malalansang isda tulad ng tuna, salmon at tawilis
- d) Hindi ko alam

#### Question 2

Ang mga halimbawa ng trans fat ay:

- a) pagkain ng itlog
- b) mga cake at biskwet
- c) margarina o mantikilya
- d) Hindi ko alam

#### Question 3

Ano ang mainam na paraan upang mag dagdag ng fiber sa dyeta?

- a) kumain ng wheat bread
- b) Uminom ng juice
- c) Kumain ng prutas at gulay
- d) Hindi ko alam

#### Question 4

Alin sa mga sumusunod na pagkain ang pinakamaraming laman na asin:

- a) pasta at noodles
- b) mga sawsawan tulad ng gravy at soy sauce
- c) Prutas at gulay
- d) Hindi ko alam

## Question 5

Anong kombinasyon ng pagkain ang nakakapagpababa ng altapresyon?

- a) Karne, mga manok at isda
- b) Prutas at gulay
- c) Prutas at gulay, pag kain ng whole wheat at pagkain ng hindi maalat o maraming asin
- d) Hindi ko alam

#### Question 6

Kapag nagbabasa ng mga label ng pagkain, ano ang pinakamahalagang tinitingnan o binibigyan ng pansin

- a) gaano karami ang laman ng taba
- b) pangalan ng brand
- c) serving size o gaano kalaki ang nilalaman ng putahe
- d) Hindi ko alam

# Question 7

Gaano karami dapat ang kinakain na prutas at gulay?

- a) mga pito hanggang sampu (7 to 10) na servings sa isang araw
- b) isang beses lang sa isang araw
- c) Kung gaano karami ang kaya
- d) Hindi ko alam

Ikalimang Saklaw: Sikolohikal (Psychosocial Risk)

Alin sa mga sumusunod ang epektibong pamamahala ng stress?

- a) Paghinga ng malalim
- b) lwasan ang pakikipagkomunikasyon
- c) Pag relax at huwag gaano magalala, pakikisama ng mabuti sa iba, pag ehersisyo, paghinga ng malalim
- d) Hindi ko alam

#### Question 2

Anung klaseng stress ang napagalaman na may kaugnayan sa atake sa puso?

- a) Talamak na stress sa buhay, mga malungkot na nangyari sa buhay, mahirap makatulog, kalumbayan o pagiging matamlay
- b) Talamak na stress sa tirahan o sa trabaho and pakiramdam ng kalumbayan
- c) Stress ng pag ehersisyo
- d) Hindi ko alam

#### Question 3

Alin sa mga sumusunod ang naglalarawan ng mga paraan upang maiwasan ang kalumbayan o depression?

- a) Uminom ng gamut sa depression at panatilihing mag ehersisyo
- b) Mag ehersisyo, alagaan ang sarili, maayos na pananaw sa buhay, at kung kailangan uminom ng tamang gamot
- c) Mahirap malunasan ang ang sakit sa puso dahil sa depresyon o kalumbayan
- d) Hindi ko alam

#### Question 4

Mahalagang huwag balewalain ang sakit sa pagtulog na malakas na paghilik o ang "sleep apnea" dahil:

- a) maaaring magkaroon ng pang matagalang sakit sa baga
- b) Ito ay konektado sa mataas na altapresyon, abnormal na pagtibok ng puso at mataas na pagkakataon na magkarron ng atake o sakit sa puso
- c) Maaaring magkaroon ng mas malubhang sakit sa puso
- d) Hindi ko alam

#### Question 5

Ang "Chronic stress" o stress na talamak o matagal na at mahirap na lunasan ay maaaring mailarawan na:

- a) mga kasalukuyang tension o kahirapan sa isang bahagi ng iyong buhay
- b) Mga nangyayari sa bahay, sa trabaho o sa iyong lovelife na dahilan ng iyong pagiging iritable, aburido o hirap makatulog
- c) Stress dahil sa ingay ng paligid o ng kapitbahay
- d) Hindi ko alam

Maraming salamat po sa inyong partisipasyon!

# APPENDIX B. CADE-Q II Scores

		Alternatives				
	Question	Α	В	С	D	
Area: Medical Condition						
	1	0	1	3	0	
	2	1	3	0	0	
	3	0	3	1	0	
	4	1	0	3	0	
	5	3	0	1	0	
	6	0	1	3	0	
	7	1	3	0	0	
Area: Risk Factors						
	1	1	0	3	0	
	2	0	3	1	0	
	3	0	1	3	0	
	4	1	3	0	0	
	5	3	1	0	0	
Area: Exercise						
	1	0	3	1	0	
	2	3	0	1	0	
	3	1	0	3	0	
	4	1	0	3	0	
	5	0	1	3	0	
	6	3	1	0	0	
Area: Nutrition	Area: Nutrition					
	1	1	0	3	0	
	2	0	3	1	0	
	3	1	0	3	0	
	4	1	3	0	0	
	5	0	1	3	0	
	6	1	0	3	0	
	7	3	0	1	0	
Area: Psychosocial	Area: Psychosocial Risk					
	1	1	0	3	0	
	2	3	1	0	0	
	3	1	3	0	0	
	4	0	3	1	0	
	5	1	3	0	0	