



KNOWLEDGE, AWARENESS AND PERCEPTION OF CORONARY HEART DISEASE (CHD) AMONG RESIDENTS IN KUANTAN, PAHANG, MALAYSIA

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DISCUSSION

CONCLUSION

- The level of KAP among Kerasida Residents are unsatisfactory stage
- We encourage for further investigations to find out regards to the KAP of CHD among workers in Kerasida.
- More public health promotion/ awareness/ intervention program for primary and secondary prevention of CHD can be done towards those target groups.
- With adequate basic knowledge of CHD may help people to change their lifestyle and lead towards optimum health of their life and improve their quality of life.

REFERENCES

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INTRODUCTION

- Coronary heart disease (CHD) had been found as **the global cause of death** of millions of people till now.
- **17.7 million people (31%) died due to CHD.**

World Health Organization (WHO) (2017)

- **Lack of knowledge of CHD** which consists of its symptoms and risk factors was believed to be the factor of **people getting CHD.**

INTRODUCTION

- **The knowledge of CHD** consists of its;
 - **warning signs of heart attack:** fatigue, anxiety, chest discomfort, indigestion, shortness of breath, and sleeping difficulties
 - **the symptom of heart attack:** chest sensation or pain, unusual fatigue, radiating pain to back jaw or arm and breathing difficulties

(Kaiman et. al, 2011).

- **Having awareness and perception of CHD:** people who had experience towards victims of heart attack included themselves, health care professional person or someone who worried about having a heart attack were able and have better reporting **the true symptoms of CHD.**

(Ratner et.al, 2008)

PROBLEM STATEMENT

- CHD has been the leading cause of death in Malaysian since the early 1980s till now.

(Ministry of Health Malaysia, 2017)

- A survey study done among 5195 participants of public: **71%** which are **female** unaware that CVD is the main cause of women's death and only **25%** of women aware.

(Rajadurai et al., 2012)

PROBLEM STATEMENT

- **Malaysia:**

- Risk factors, lack of knowledge and awareness towards CHD is still high in population. (Seong et.al, 2016)
- Inadequate basic knowledge, awareness and perception of CHD risk factors and symptom: **equipped with different thought and belief delay their time seek treatment;** study in sarawak (Chai, Putit & Siop, 2016).
- The prevalence of CHD risk factors: **hypertension, hypercholesterolemia, diabetes, overweight/obesity and smoking has been on an increasing trend** (Ministry of Health Malaysia, 2017).

LITERATURE REVIEW

Knowledge of CHD or heart attack

- Rural male adults (>65 years old) had knowledge deficit regarding heart attack. (Swanoski et. Al, 2016): **US**
- **Canadian** urban could not distinguish any heart attack symptoms (Ratner et al., 2008)
- 57.8% of **Singapore** residents have fair level of knowledge for signs and symptoms of heart attack. (Quah et al., 2014)
- **Malaysia** did not have many research done on CHD or heart attack risk factors and signs and symptoms (Seong et. al, 2016).

LITERATURE REVIEW

Awareness of CHD or heart attack

- Awareness of Heart Attack and Stroke Symptoms Among Adults: **65.4% did not able to distinguish the symptoms of heart attack**; pain or discomfort in the jaw, neck, or back (Lutfiyya et al., 2010).
- **38.6% had awareness** on signs and symptoms of heart attack (Pearlman, Affleck, & Goldman, 2011).
- People with **undiagnosed diabetes have poor awareness towards CHD risk factors** (Brown et al., 2013).
- **80% of female participants' awareness of CVD risk factors and symptoms were improved** after the nursing education intervention (Reeder, 2017)

LITERATURE REVIEW

Perception of CHD or heart attack

- **Two factors have relation to perception of CHD** in Chinese population which are perceived risk of CHD and perceived seriousness of CHD (Chan, 2014).
- Peoples' perception on their illness may varied if they get guided or being mentored by others (Junehag et. Al, 2014).
- They able to make **change in their lifestyle and improved the knowledge given by the mentors** (Junehag et. Al, 2014)
- People believe that the CHD disease was **not part of their concern or thoughts as they perceived that if they were healthy with no experience of symptoms** (Lefler, McSweeney & Garner, 2013).
- Low fact-based information and a lot of wrong conceptions about CHD and perception among public although they gained the information from pamphlets, television commercials and magazines but inadequate guidance from health care provider. (Lefler, McSweeney & Garner, 2013)

OBJECTIVES

General Objective:

- This study aimed to determine the level of knowledge, awareness and perception about CHD symptoms and risk factors among residents in Kuantan, Pahang.

Specific Objective:

- 1. To examine the level of knowledge, awareness and perception about CHD symptoms and risk factors among residents in Kuantan, Pahang.**
- 2. To determine the association between demographic characteristics and their knowledge, awareness and perception of CHD symptoms and risk factors.**

METHODOLOGY

- **Design** : A cross-sectional study
- **Setting: Four shopping malls; Kuantan** city; largest city in the East Coast of Peninsular Malaysia and the 17th largest city in Malaysia.
- **Sampling:** A convenient sampling
- **Sample Size:** Slovin's Sample Size Formula; $n = N / (1 + N e^2)$; **400 participants**
 - N= population size, e= error tolerance (95% C, error tolerance 0.05; to reduce the amount of error)
- **Inclusion Criteria:** People who live in Kuantan, aged 18 years old and above, willing to participate, able to read and write both English or Malay.

METHODOLOGY

- **Instrument:** adopted the validated self-administered questionnaire: KAP on CHD Sarriff et al. (2014)& Broadbent et.al (2006), Part A &B , Likert scales.
- **Reliability:** pilot study; 30 participants (Cronbach Alpha's 0.77)
- **Validity:** content and face validity; original questionnaire were English. Back to back translation done.
- **Ethical:** Obtained ethic from Kulliyyah of Nursing Postgraduate and Research Committee (KNPRC) & IIUM Research Ethical Committee (IREC) number IREC 2018-037. informed consent for participants, approval from shopping mall management.

METHODOLOGY

- **Data collection:** Jan-May 2018, Kuantan Parade Mall (KP), Kuantan City Mall (KCM), East Coast Mall (ECM) and Urban Transformation Centre (UTC) in Kuantan. Participant were give 20 minutes to answer the questions and collected by researcher. Answering questions done at resting area of mall.
- **Data analysis:** SPSS version 22, descriptive and inferential statistic; one way ANOVA

FINDINGS

Demographic characteristics

N = 400	Variables	Frequency(n)	Percentage(%)
Age	18-39 years	316	79.0
	40-59 years	73	18.3
	60+ years	11	2.8
Gender	Male	116	29.0
	Female	284	71.0
Race	Malay	363	90.8
	Chinese	22	5.5
	Indian	15	3.8
	Others	0	0.0
Educational Degree	Primary	12	3.0
	Secondary	203	50.7
	Tertiary	185	46.3
	Never attended school	0	0.0

FINDINGS

KNOWLEDGE OF CORONARY HEART DISEASE SYMPTOMS

Symptom	Variables	(n)	(%)
Shortness of Breath	Strongly Agree	134	33.5
	Agree	211	52.8
	Neutral	31	7.8
	Disagree	23	5.8
	Strongly Disagree	1	0.3
Chest discomfort (Pain or Pressure)	Strongly Agree	155	38.8
	Agree	215	53.8
	Neutral	20	5.0
	Disagree	10	2.5
	Strongly Disagree	0	0.0
Faster Heart Beats or Irregular Heart Beats	Strongly Agree	165	41.3
	Agree	173	43.3
	Neutral	45	11.3
	Disagree	16	4.0
	Strongly Disagree	1	0.3
Weakness or Dizziness	Strongly Agree	102	25.5
	Agree	168	42.0
	Neutral	116	29.0
	Disagree	14	3.5
	Strongly Disagree	0	0.0
Nausea	Strongly Agree	63	15.8
	Agree	92	23.0
	Neutral	179	44.8
	Disagree	64	16.0
	Strongly Disagree	2	0.5
Fullness, Indigestion (a feeling like heart burn)	Strongly Agree	64	16.0
	Agree	128	32.0
	Neutral	126	31.5
	Disagree	76	19.0
	Strongly Disagree	6	1.5
Sweating	Strongly Agree	116	29.0
	Agree	153	38.3
	Neutral	97	24.3
	Disagree	31	7.8
	Strongly Disagree	3	0.8
Discomfort radiating to the back, Jaw, throat or arms	Strongly Agree	73	18.3
	Agree	133	33.3
	Neutral	129	32.3
	Disagree	59	14.8
	Strongly Disagree	6	1.5

FINDINGS

KNOWLEDGE OF CORONARY HEART DISEASE RISK FACTORS

Life style/Behavior	Variables	(n)	(%)
Tobacco Smoking	Strongly Agree	240	60.0
	Agree	117	29.3
	Neutral	23	5.8
	Disagree	15	3.8
	Strongly Disagree	5	1.3
Alcohol consumption	Strongly Agree	194	48.5
	Agree	116	29.0
	Neutral	65	16.3
	Disagree	20	5.0
	Strongly Disagree	5	1.3
Physical Inactivity	Strongly Agree	195	48.8
	Agree	135	33.8
	Neutral	47	11.8
	Disagree	19	4.8
	Strongly Disagree	4	1.0
High Blood Cholesterol	Strongly Agree	235	58.8
	Agree	130	32.5
	Neutral	26	6.5
	Disagree	5	1.3
	Strongly Disagree	4	1.0
High Blood pressure	Strongly Agree	170	42.5
	Agree	170	42.5
	Neutral	43	10.8
	Disagree	13	3.3
	Strongly Disagree	4	1.0
low fruits and vegetables in daily Diets	Strongly Agree	135	33.8
	Agree	136	34.0
	Neutral	94	23.5
	Disagree	30	7.5
	Strongly Disagree	5	1.3
Obesity	Strongly Agree	195	48.8
	Agree	155	38.8
	Neutral	31	7.8
	Disagree	15	3.8
	Strongly Disagree	4	1.0

FINDINGS

KNOWLEDGE OF CORONARY HEART DISEASE RISK FACTORS

Stress	Strongly Agree	156	39.0
	Agree	138	34.5
	Neutral	70	17.5
	Disagree	30	7.5
	Strongly Disagree	6	1.5
Diabetes	Strongly Agree	106	26.5
	Agree	144	36.0
	Neutral	92	23.0
	Disagree	51	12.8
	Strongly Disagree	7	1.8
Old Age	Strongly Agree	142	35.5
	Agree	105	26.3
	Neutral	96	24.0
	Disagree	52	13.0
	Strongly Disagree	5	1.3
Family History of Cardiovascular Diseases	Strongly Agree	184	46.0
	Agree	138	34.5
	Neutral	46	11.5
	Disagree	26	6.5
	Strongly Disagree	6	1.5
High fat Diet	Strongly Agree	157	39.3
	Agree	144	36.0
	Neutral	63	15.8
	Disagree	30	7.5
	Strongly Disagree	6	1.5

FINDINGS

Level of knowledge among residents of Kuantan

N=400		Frequency	Percentage		Mean	SD
Percentage of knowledge level	<50% (poor)	207	51.7		80.26	11.223
	50-70% (moderate)	82	20.5			
	70%> (high)	111	27.8			
	Total	400	100.0			

FINDINGS

Level of awareness among residents of Kuantan

N=400		Frequency	Percentage	Mean	SD
Percentage of awareness level	<50% (poor)	217	54.3	18.19	1.988
	50-70% (moderate)	65	16.3		
	70%> (high)	118	29.5		
	Total	400	100.0		

FINDINGS

Level of perception among residents of Kuantan

N=400		Frequency	Percentage	Mean	SD
Percentage of perception level	<50% (poor)	222	55.5	38.16	7.424
	50-70% (moderate)	66	16.5		
	70%> (high)	112	28.0		
	Total	400	100.0		

FINDINGS

Association between demographic characteristics and level of knowledge, awareness and perception of CHD

N=400	Variables	Mean of knowledge level	Mean of awareness level	Mean of perception level	p-value of knowledge level	p-value of awareness level	p-value of perception level
Age	18-39	79.60	18.22	38.16	0.000	0.000	0.493
	40-59	82.73	18.08	38.90			
	60>	82.73	18.00	32.91			
Gender	Male	80.91	17.28	38.47	0.422	0.000	0.594
	Female	80.00	18.57	38.03			
Race	Malay	80.40	18.26	36.73	0.190	0.008	0.490
	Chinese	76.32	18.09	39.20			
	Indian	82.53	16.73	1.99			
Education	Primary	81.00	17.08	32.75			
	Secondary	77.82	18.20	37.66			
	Tertiary	82.89	18.25	39.05	0.020	0.857	0.000

DISCUSSION

- It was found that majority had high knowledge of CHD poor awareness and poor perception of CHD.
- This is same finding with Brown et al. (2013).
- There was an association between age, gender, race, and educational level with knowledge, awareness, and perception of CHD.
- **Female participants have better knowledge** : It was contradict with the studies; Mochari-Greenberger, Miller, & Mosca (2012), Gholizadeh et. al (2009) and Lutfiyya et al. (2010)

DISCUSSION

- The higher the education, the more knowledge and perception about CHD.
- It was parallel with previous study; Chan (2014) reported that people with educational level higher had higher perception level of CHD since they have a good in perceiving CHD risk factors and seriousness of CHD.
- Giardina et al. (2013) also reported that people with higher educational level have more knowledge and perception about CHD.

CONCLUSION

- The level of KAP among Kuantan Residence are on unsatisfactory stage.
- We encourage for further investigation to find out regards to the KAP of CHD among residents in Kuantan.
- **More public health promotion/ awareness/ intervention program for primary and secondary prevention of CHD** can be done towards these targeted groups.
- With adequate basic knowledge of CHD may help people to change their lifestyle and lead towards optimum health of their life and improve their quality of life.

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THANK YOU

