Complementary Therapies Used by Indonesians With Myocardial Infarction

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This descriptive, cross-sectional study was conducted to identify types, frequency, methods, duration, and purpose of complementary therapies used by Indonesians with myocardial infarction. The majority of the respondents used biologically based therapies, with the most common subtype being herbs. The purpose of using biologically based therapies was for health promotion. **KEY WORDS:** *complementary therapies*, *Indonesians*, *myocardial infarction*

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BACKGROUND

Myocardial infarction (MI) is the leading cause of death and disability in the world.[1] Worldwide, the number of people with MI is 32.4 million every year.[2] From 2011 to 2014, 7 900 000 (3.0%) adults 20 years and older had MI in the United States.[3] The results of Basic Health Research in 2013 showed that more than a million (0.5%) of the total population in Indonesia were diagnosed with coronary heart disease including MI.[4] In the year 2016, cardiovascular diseases including MI were the number 1 cause of mortality in Indonesia compared with other noncommunicable diseases.[5]

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Persons with MI face several problems, which have an effect on the physical, psychological, and spiritual domains. There are some consequences for patients in the early phase of MI, for example, a physical impact such as chest pain, which most persons with MI reported.[6] Moreover, patients had anxiety or anger 2 hours prior to their MI.[7] The long-term complication of MI is heart failure and recurrent MI.[8] Patients also had anxiety and depression after MI.[9-11] Depression affected heart-related quality of life and sexual dysfunction.[12] A study reported that patients had impaired health-related quality of life 1 month after having MI.[13] The quality of life was more impaired among Turkish women after MI.[14] Moreover, a qualitative study reported that patients with MI experience stress and fear of death.[15] Therefore, persons with MI seek alternative ways to be healthy, and many studies found that persons with MI used complementary therapies (CT).[16-21]

The use of CT in cardiovascular disease including patients with MI has become more popular in many countries, and there are several types and reasons for the use of CT. A systematic review with a total of 27 studies conducted in several countries (the United States, Canada, the United Kingdom, Hong Kong, India, Italy, Korea, Nigeria, Spain, and Turkey) revealed that 4% to 61% of patients with cardiovascular disease used CT, 22% to 68% used biologically based therapies, between 2% and 46% used herbal medicine, and 2% to 57% used mind-body therapies. The main reasons for using CT to treat cardiovascular disease is that they were perceived to be safer or have fewer side effects and have more benefits than conventional medicine, as well as promoting

good health, and well-being.[22] A study in the UK regarding CT used among patients with coronary heart disease including MI revealed that 39 of 123 patients used CT.[19] In addition, a study in Beijing reported that 69% of patients with coronary artery disease including MI used CT, with the most common types being Chinese patent prescription 90.7%, herbal decoction 74.3%, and nutrient supplements 54.1%. The reasons the patients used CT were due to its being effective and mild acting with fewer side effects, for treating the root cause, for economical reasons, having a health-preserving effect, and that it could be used without invasive examination.[17]

There is no reported study assessing the use of CT among persons with MI in Indonesia. However, there are some previous studies conducted in Indonesia that describe the use of CT for the most common contributing factors of MI such as hypertension, diabetes mellitus, and hyperlipidemia. The result of 1 study in Indonesia showed that 70.9% of patients with hypertension in a health center used natural medicines such as herbal medicine to reduce blood pressure.[23] A study conducted in Indonesia showed that the most common type of complementary therapy used among type 2 diabetes mellitus was biologically based therapy (100%), and most of the respondents (67.5%) used herbs.[24] The results of a study in 7 provinces in Indonesia showed that 62.9% of patients with hyperlipidemia were treated with *jamu* (Indonesian herbal medicine) for 1 to 2 weeks, and the rest were treated with *jamu* in combination with conventional and/or other alternative medication, and the most *jamu* used was branded herbal capsules (55.7%) containing *Guazumae folium* and *Murrayae folium*.[25]

Persons with MI experience many problems, which are not only physical but also psychological such as anxiety and depression.[9-11] Furthermore, physiological, psychological, and spiritual needs of people can be managed by complementary therapy as holistic care.[26] Complementary therapy is included in the holistic care approach.[27] Therefore, this study explored CT used by Indonesians with MI. The benefit of knowing this is to provide knowledge about the use of CT that can holistically overcome problems experienced by persons with MI.

PURPOSE

To identify types, frequency, methods, duration and purposes of CT used by Indonesians with MI.

RESEARCH QUESTION

What are the types, frequency, methods, duration, and purposes of CT used by Indonesians with MI?

CONCEPTUAL FRAMEWORK

The conceptual framework used in this study was the CAM Healthcare Model.[30] The aim of the CAM Healthcare Model is to create more understanding regarding complementary and alternative medicine (CAM) health behavior including the use and the purpose of CT. The CAM Healthcare Model guided this study to identify the use of CT and the purposes of the use of CT.

METHODS

Design and setting

A descriptive, cross-sectional study was conducted at the cardiovascular outpatient department (OPD) clinic in one of the national referral hospitals in Indonesia.

Population and sample

Target population

The target population of this study was the persons with MI who visited the cardiovascular OPD clinic from February to April 2019.

Sample and sample size

The total number of new cases of patients with MI in the cardiovascular OPD clinic was 1519 in 2016. The proportional estimation formula for a population of 1 000 to 9 999 is 10%.[28] Therefore, the estimation sample for this study of 10% of the population (1519 patients) is at least 152 people with MI. The researcher obtained 200 respondents during 3 months of data collection. Moreover, the sampling technique used was purposive sampling.[29]

Inclusion criteria

The inclusion criteria were (1) 18 years and older, (2) diagnosed with MI (based on medical records), (3) has experience of using complementary therapy (use of at least one kind of complementary therapy), (4) willing to participate this study, and (5) able to communicate in Indonesian language, both orally and in writing.

Exclusion criteria

The exclusion criteria were patients who have chest pain, dyspnea, or other symptoms of discomfort while attending the cardiovascular OPD clinic.

Instrumentation

The instruments consisted of 2 parts: (1) sociodemographic questionnaire, and (2) Complementary Therapies Use Questionnaire (CTUQ), which was modified from a previous study.[23] The CTUQ consists of questions about types, frequency, methods, and duration based on 5 types of complementary therapy. The researcher modified the CTUQ by adding the question regarding the purpose of complementary therapy use (health promotion, illness treatment, and symptom management) based on the CAM Healthcare Model. The CTUQ was validated by 3 experts and the CTUQ was tested among 20 samples for reliability testing. The result of content validity (scale-level content validity index) was 1, and test-retest reliability κ coefficient of each item of the CTUQ was 0.937 to 1.000.

Ethical consideration

The researcher conducted the study after obtaining approval from the Social and Behavioral Sciences Institutional Review Board (IRB) of Prince of Songkla University (PSU IRB 2018—NSt 055) and permission from the Director of the Hospital. This study was conducted with the intention of protecting the human rights of all subjects. All subjects received verbal and written explanation about the purpose of the study, the benefit, risk, rights, and responsibility while participating in this study. The subjects were reassured that their participation was voluntary, and they could refuse to participate and could withdraw at any time without any negative impact on their care. There is no risk in participation in this study, and the data were kept confidential by the researcher. The patients who agreed to be participants in this study signed the informed consent.

Data collection

The steps for data collection were as follows:

1. The researcher met the nurses at the cardiovascular OPD clinic and asked the nurses to introduce the researcher to the patients.
2. The researcher met MI patients and asked whether they used CT or not.
3. The researcher asked permission and informed the participants of consent to participate in this study and explained the purpose of this study.
4. The researcher gave the questionnaire to the patient and asked the patient to completely answer all questions.

Data analysis

The continuous data consisting of age and income per month were presented as a mean, and standard deviation. The categorical data consisting of gender, marital status, education, ethnicity, employment, health insurance, geographic location of residence, and the use of CT (types, frequency, methods, duration, and purposes) were presented as frequency and percentage.

RESULTS

Sociodemographic characteristics

A total of 200 persons with MI were enrolled into this study. Table 1 shows the sociodemographic characteristics of the persons with MI in this study. The present study reported that the age of the majority of respondents ranged from 46 to 60 years (58.5%) with a mean age of 58.4 years, gender was male (76.5%), marital status was married (92%), religion was Muslim (82%), income per month ranged from 3 000 000 to 5 000 000 Indonesian rupiah (IDR) or approximately US $209 to $348 (58.5%) with a mean income per month of 3 168 120 IDR, and all of the respondents had public health insurance (100%). Moreover, most of the respondents had graduated from high school (39%), were of Javanese ethnicity (31.5%), were retired (37%), and were living in urban areas (46%).

Types and subtypes of complementary therapies

The findings showed 5 types of CT had been used by persons with MI as follows: biologically based therapies (BBT), manipulative and body-based methods (MBM), mind-body intervention (MBI), alternative medical methods (AMM), and energy therapies (ET). Table 2 shows the percentage of types and subtypes of CT use among persons with MI. Among the types of CT, BBTs were used by the

TABLE 1. Sociodemographic Characteristics (N = 200)

Sociodemographic Characteristics	n (%)
Age, y—range = 35-80, mean = 58.4, SD = 8.4	
35-45	12 (6.0)
46-60	117 (58.5)
61-75	68 (34.0)
>75	3 (1.5)
Gender	
Male	153 (76.5)
Female	47 (23.5)
Marital status	
Single	1 (0.5)
Married	184 (92.0)
Widow/widower	15 (7.5)
Education	
No education	2 (1.0)
Primary school	39 (19.5)
Secondary school	37 (18.5)
Higher school	78 (39.0)
University (diploma, bachelor, master)	44 (22.0)
Ethnicity	
Javanese	63 (31.5)
Banjar	48 (24.0)
Bugis	17 (8.5)
Dayak	13 (6.5)
Kutai	25 (12.5)
Other (Chinese, Batak, Toraja, Bima, Manado, Mandar, Madura, Sunda)	34 (17.0)
Religion	
Islam	164 (82.0)
Christian	30 (15.0)
Catholic	5 (2.5)
Konghucu (Chinese belief)	1 (0.5)
Income/mo, IDR—range = 1 000 000-7 000 000, mean = 3 168 120, SD = 1 235 488.44 (US $1 = 14 379 IDR)	
1 00 000-2 999 999	77 (38.5)
3 000 000-5 000 000	117 (58.5)
>5 000 000	6 (3.0)
Employment	
Government employee	15 (7.5)
Private employee	52 (26.0)
Businessperson	17 (8.5)
Farmer	6 (3.0)
Retired	74 (37.0)
Other (housewife, army, police)	36 (18.0)
Health insurance	
Public	200 (100.0)
Residence geographic location	
Urban	92 (46.0)
Suburban	52 (26.0)
Rural	56 (28.0)

Abbreviation: IDR, Indonesian rupiah.

TABLE 2. Types and Subtypes of Complementary Therapies (N = 200)

Types and Subtypes of Complementary Therapies	n (%)
Biologically based therapies (n = 154; 77.0%)	
Herbs[a]	120 (77.9)
Nutrition (oatmeal, goat milk, nonfat milk, low-calorie sugar, and others[a])	36 (23.4)
Vitamins (B_1, B_3, B_5, B_6, and B_{12})	17 (11.0)
Animal extracts (deer placenta, fish oil)	2 (1.3)
Traditional medicine (water and decoction from traditional healer)	3 (1.9)
Swallow nest	1 (0.6)
Manipulative and body-based methods (n = 51; 25.5%)	
Massage	39 (76.5)
Other (cupping, hot stones in mattress, acupressure, anaerobic exercise)	13 (25.5)
Mind-body interventions (n = 22; 11.0%)	
Religious practice (read holy Qur'an, prayer, fasting, *zikir*, ablution)	20 (91)
Music therapy	1 (4.5)
Deep breathing	1 (4.5)
Alternative medical methods (n = 6; 3.0%)	
Chinese medicine (Chinese medicine capsule, Chinese mushroom)	6 (100.0)
Energy therapies (n = 1; 0.5%)	
Acupuncture	1 (100.0)

[a]The detail about types of herbs and nutrition in Table 3.

majority of the respondents (77%). Some of the respondents used MBM (25.5%) and MBI (11.0%). A few of the respondents used AMM (3%) and ET (0.5%). The most common subtype used in BBT was herbs (77.9%), in MBM was massage (76.5%), and in MBI was religious practice (91%).

Types of herbs and nutrition

Table 3 shows that the most common types of herbs and nutrition were coriander seeds (18.8%), garlic (9.7%), ginger (9.7%), apple cider vinegar (9.1%), and saba banana (8.4%).

Frequency, methods, and duration of using biologically based therapies

Table 4 presents the frequency, methods, and duration of using BBT, which included herbs, nutrition, vitamins, animal extracts, traditional medicine, and swallow nest. Among BBT used, most of the respondents used herbs. The data revealed that 44.2%

TABLE 3. Top 10 Types of Herbs and Nutrition (N = 154)

Scientific Name	Common Name	Indonesian Name	Parts Used	Mode of Use	n (%)
Coriandrum sativum	Coriander	*Ketumbar*	Seeds	Brewed	29 (18.8)
Allium sativum	Garlic	*Bawang putih*	Bulbs	Eaten, blended	15 (9.7)
Zingiber officinale	Ginger	*Jahe*	Bulbs	Decoction	15 (9.7)
	Apple cider vinegar	*Cuka apel*		Mix with other herbs	14 (9.1)
Musa acuminata × *balbisiana*	Saba banana	*Pisang kepok*	Fruit	Steamed	13 (8.4)
Citrus × *limon*	Lemon	*Jeruk lemon*	Fruit	Decoction	12 (7.8)
Eleutherine bulbosa	Tiwai onion	*Bawang tiwai/bawang dayak*	Bulbs	Decoction	9 (5.8)
Curcuma longa	Turmeric	*Kunyit*	Bulbs	Decoction	9 (5.8)
Malus pumila	Apple	*Apel*	Fruit	Juice	9 (5.8)
Allium sativum "solo garlic"	Solo garlic	*Bawang putih tunggal*	Bulbs	Blended	6 (3.9)

TABLE 4. Frequency, Methods, and Duration of Using Biologically Based Therapies (N =154)

Item	Herbs n (%)	Nutrition n (%)	Vitamins n (%)	Animal Extracts n (%)	Traditional Medicine n (%)	Swallow Nest n (%)
Currently used	68 (44.2)	29 (18.8)	6 (3.9)	2 (1.3)	1 (0.6)	1 (0.6)
Frequency						
1/d	40 (26.0)	12 (7.8)	6 (3.9)	1 (0.6)	...	...
2/d	11 (7.1)	2 (1.3)	...	1 (0.6)	...	...
3/d	5 (3.2)	7 (4.5)	...	...	...	1 (0.6)
Often in a day	1 (0.6)	...	...	...	...	...
1/wk	2 (1.3)	1 (0.6)	...	...	1 (0.6)	...
2/wk	4 (2.6)	3 (1.9)	...	...	...	...
3/wk	5 (3.2)	4 (2.6)	...	...	...	...
Methods						
Orally	68 (44.2)	29 (18.8)	6 (3.9)	2 (1.3)	1 (0.6)	1 (0.6)
Duration						
<3 mo	25 (16.2)	8 (5.2)	3 (1.9)	...	...	1 (0.6)
3-6 mo	20 (13.0)	10 (6.5)	...	1 (0.6)	...	...
>6-12 mo	10 (6.5)	3 (1.9)	1 (0.6)	...	...	...
>1 y	13 (8.4)	8 (5.2)	2 (1.3)	1 (0.6)	1 (0.6)	...
Previously used	57 (37.0)	7 (4.5)	11 (7.1)	...	2 (1.3)	...
Frequency						
1/d	33 (21.4)	5 (3.2)	11 (7.1)	...	1 (0.6)	...
2/d	9 (5.8)	1 (0.6)	...	...	...	...
3/d	8 (5.2)	1 (0.6)	...	...	...	...
1/wk	5 (3.2)	...	...	...	1 (0.6)	...
2/wk	...	...	...	...	...	...
3/wk	3 (1.9)	...	...	...	...	...
Methods						
Orally	57 (37.0)	7 (4.5)	11 (7.1)	...	2 (1.3)	...
Duration						
<3 mo	25 (16.2)	3 (3.9)	5 (3.2)	...	1 (0.6)	...
3-6 mo	15 (3.2)	4 (2.6)	6 (3.9)	...	1 (0.6)	...
>6-12 mo	11 (7.1)	...	...	...	...	...
>1 y	6 (3.9)	...	...	...	...	...

of the respondents currently used herbs and 37% of the respondents had previously used herbs. Most of the respondents currently used herbs once a day (26%) and previously (21.4%). All respondents used BBT orally currently and previously. The duration of using herbs was mostly less than 3 months (16.2%) currently and previously.

Frequency, methods, and duration of using manipulation and body-based methods

Table 5 shows the percentages of using MBM. The data revealed that, among MBM used, most of the respondents used massage. In this study, 25.5% of respondents currently used massage and 51% of respondents had previously used massage. The respondents mostly used massage once a month (11.8%) currently, and (23.5%) previously. The methods of massage were mostly practice locally (16%) at current time, and practice whole body (33.3%) at previous time. The duration of using massage was more than 1 year (19.6%) currently, and more than 6 to 12 months (15.7%) previously.

TABLE 5. Frequency, Methods, and Duration of Using Manipulation and Body-Based Methods (N = 51)

Item	Massage n (%)	Other n (%)
Currently used	13 (25.5)	8 (15.7)
Frequency		
1/d	1 (2.0)	6 (11.8)
1/wk	3 (5.9)	. . .
2/wk	1 (2.0)	2 (3.9)
1/mo	6 (11.8)	. . .
2/mo	1 (2.0)	. . .
1/2 mo	1 (2.0)	. . .
Methods		
Practice	. . .	3 (5.9)
Practice locally	8 (15.7)	. . .
Practice whole body	5 (9.8)	5 (9.8)
Duration		
<3 mo	1 (2.0)	1 (2.0)
3-6 mo	. . .	. . .
>6-12 mo	2 (3.9)	2 (3.9)
>1 y	10 (19.6)	5 (9.8)
Previously used	26 (51.0)	5 (9.8)
Frequency		
1/d	. . .	3 (5.9)
2/d	1 (2.0)	. . .
1/mo	12 (23.5)	2 (3.9)
2/mo	2 (3.9)	. . .
1/2 mo	2 (3.9)	. . .
1/3 mo	9 (17.6)	. . .
Methods		
Practice	. . .	2 (3.9)
Practice locally	9 (17.6)	2 (3.9)
Practice whole body	17 (33.3)	1 (2.0)
Duration		
<3 mo	6 (11.8)	3 (5.9)
3-6 mo	6 (11.8)	1 (2.0)
>6-12 mo	8 (15.7)	. . .
>1 y	6 (11.8)	1 (2.0)

Frequency, methods, and duration of using mind-body interventions

Table 6 presents the percentages of using MBI. Among MBI used, most of the respondents used religious practice. This study revealed that 86.4% of respondents used religious practice currently, and 4.5% of respondents used religious practice previously. Most respondents currently used religious practice 5 times per day (54.5%), and had practiced for more than 1 year (72.7%).

TABLE 6. Frequency, Methods, and Duration of Using Mind-Body Intervention (N = 22)

Item	Religious Practice n (%)	Music Therapy n (%)	Deep Breathing n (%)
Currently used	19 (86.4)	1 (4.5)	1 (4.5)
Frequency			
1/d	1 (4.5)	. . .	1 (4.5)
2/d	. . .	1 (4.5)	. . .
3/d	. . .	. . .	. . .
5/d	12 (54.5)	. . .	. . .
1/wk	1 (4.5)	. . .	. . .
2/wk	4 (18.2)	. . .	. . .
3/wk	1 (4.5)	. . .	. . .
Methods			
Practice	19 (86.4)	1 (4.5)	1 (4.5)
Duration			
<3 mo	1 (4.5)	. . .	1 (4.5)
3-6 mo	1 (4.5)	. . .	. . .
>6-12 mo	1 (4.5)	. . .	. . .
>1 y	16 (72.7)	1 (4.5)	. . .
Previously used	1 (4.5)	. . .	. . .
Frequency			
2/wk	1 (4.5)	. . .	. . .
Methods			
Practice	1 (4.5)	. . .	. . .
Duration			
3-6 mo	1 (4.5)	. . .	. . .

TABLE 7. Frequency, Methods, and Duration of Using Alternative Medical Methods (N = 6)

Item	Chinese Medicine n (%)
Currently used	3 (50.0)
Frequency	
1/d	1 (16.7)
1/wk	1 (16.7)
3/wk	1 (16.7)
Methods	
Orally	3 (50.0)
Duration	
3-6 mo	3 (50.0)
Previously used	3 (50.0)
Frequency	
1/d	1 (16.7)
2/d	1 (16.7)
1/mo	1 (16.7)
Methods	
Orally	3 (50.0)
Duration	
<3 mo	2 (33.3)
>1 y	1 (16.7)

Frequency, methods, and duration of using alternative medical methods

Table 7 shows the use of AMM, and all of the respondents among AMM users used Chinese medicine. In this study, 50% of respondents used Chinese medicine currently and previously. The frequency of using Chinese medicine was different for each respondent, once a day (16.7%) currently and previously, twice a day (16.7%) currently and previously, 3 times per week (16.7%) currently, and once per month (16.7%) previously. All Chinese medicine users took their medicine orally. The duration of using Chinese medicine was mostly 3 to 6 months (50%) currently, and less than 3 months (33.3%) previously.

Frequency, methods, and duration of using energy therapies

This study revealed that only 1 respondent had the experience of using energy therapy (0.5%), particularly acupuncture; the respondent previously used acupuncture 2 times a day, practiced whole body, and the duration of using was less than 3 months.

Purpose of using complementary therapies

Table 8 shows the purposes of using CT. The most common purpose of using BBT was for health promotion (64.2%), using MBM was for symptom management (53%), and using MBI for symptom management (54.5%). Moreover, all respondents who used AMM and ET did so for illness treatment (100%).

TABLE 8. Purpose of Using Complementary Therapies

Types and Subtypes of Complementary Therapies	Health Promotion n (%)	Illness Treatment n (%)	Symptom Management n (%)
Biologically based therapies[a] (n = 154)	99 (64.2)	72 (46.7)	8 (5.2)
Herbs	44 (28.6)	68 (44.2)	8 (5.2)
Nutrition	36 (23.4)	. . .	. . .
Vitamins	17 (11.0)	. . .	. . .
Animal extracts	1 (0.6)	1 (0.6)	. . .
Traditional medicine	1 (0.6)	2 (1.3)	. . .
Swallow nest	. . .	1 (0.6)	. . .
Manipulative and body-based methods[a] (n = 51)	17 (33.4)	8 (15.7)	27 (53.0)
Massage	11 (21.6)	2 (3.9)	26 (51.0)
Other	6 (11.8)	6 (11.8)	1 (2.0)
Mind-body intervention (n = 22)	8 (36.4)	2 (9.1)	12 (54.5)
Religious practice	7 (31.8)	2 (9.1)	11 (50.0)
Music therapy	1 (4.5)	. . .	. . .
Deep breathing	. . .	. . .	1 (4.5)
Alternative medical methods (n = 6)	. . .	6 (100.0)	. . .
Chinese medicine	. . .	6 (100.0)	. . .
Energy therapies (n = 1)	. . .	1 (100.0)	. . .
Acupuncture	. . .	1 (100.0)	. . .

[a]More than one purpose.

DISCUSSION

The present study found that the majority of respondents used BBT; the most common subtypes were herbs followed by nutritional therapy. Some previous studies also had similar results, with BBT the most popular used CT among persons with MI and underlying diseases (hypertension, diabetes, and hyperlipidemia) 29.1% of urban Nigerians with hypertension used CT, the main types used were herbs only (63%).[31] Moreover, a study conducted among patients with chronic disease used herbs, which were lemon (39.6%) and garlic (11.1%) for hypertension, cinnamon (12.7%) for diabetes mellitus, and walnut (6.3%) for hyperlipidemia.[32] Research conducted among patients with hypertension in Palestine revealed that 85.7% of hypertension patients used complementary therapy, with the most widely used types of complementary therapy were herbs such as garlic, roselle, and olives (62.13%).[33] Similarly, a study conducted among adults in Turkey revealed that they primarily used herbal products.[34] A study in China showed that the majority of subjects with coronary artery disease including MI used herbal decoctions (74.3%) and nutrient supplements (54.1).[17] In addition, a survey study regarding CT use among respondents with cardiovascular disease showed that the majority used dietary supplements (75.4%).[20]

After BBT, the most commonly used CT was MBM, especially massage. In Indonesia, there is a traditional massage called "*urut*," which was popular among the respondents. This result is similar with a survey study regarding CT use among people with cardiovascular disease, and the data revealed that 19.2% of respondents used massage.[20] In this study, only some of the respondents used MBI, with the most common being religious practice as a CT, which means the respondents practiced for a better health status, not only for routine practice or religious purposes. Actually, other respondents also did religious practice but only for religious purposes not for health purposes. Moreover, this study reported that only a few respondents used AMM (Chinese medicine) and ET (acupuncture). This was due to the high price of Chinese medicine in Indonesia. A study conducted in China, where traditional Chinese medicine originated, showed that among people with coronary artery disease including MI the most popular CTs used were Chinese patent prescriptions (90.7%) and acupuncture (13.8%).[17]

This study revealed that 44.2% of the respondents used herbs currently and 37% of the respondents had used herbs previously. Moreover, the result of this study showed 25.5% of respondents currently used massage, and 51% of respondents had previously used massage. The reasons respondents who had previously used CT and had now stopped were they did not experience any health effects, some herbal products were more expensive, and they were worried the CT could influence their heart problem. Moreover, the reasons to continue using CT were because of received benefits, no side effects, easy to get the ingredients, to maintain heart health, and the desire to be healthy. The highest frequency of currently using herbs was once a day (26%). The method for using BBT was orally. The current duration of using herbs was less than 3 months (16.2%). The respondents used herbs for less than 3 months because of having MI less than 3 months ago, and they had just started to use CT since having a heart attack.

This study showed that the most common purpose of using BBT was for health promotion, using MBM was for symptom management, and using MBI for symptom management. Moreover, the respondents used AMM and ET for illness treatment. The respondents described using CT for symptom management to reduce chest pain, fatigue, dyspnea, and back pain. CT was used for illness treatments and not only for MI but also for underlying diseases such as hyperlipidemia, hypertension, and diabetes mellitus. A previous study revealed using CT for treating the root cause (28.1%).[17] Moreover, a narrative review study explained that most research revealed the effect of using CT in patients after cardiac surgery improved outcomes.[35]

LIMITATION

This study was only conducted in one of the referral hospitals in Indonesia, which is a hospital that only covers 3 provinces. Therefore, a more generalized study needs to be undertaken in more hospitals in other parts of Indonesia.

CONCLUSION

The findings of this study provided more understanding, which nurses can apply to promote the effective safe use of CT in Indonesians with MI. Moreover, the results of the study can also help nurses to provide more holistic care for persons with MI by using CT.

RECOMMENDATION

The researcher suggests further studies on the outcomes of CT use such as the effect on symptoms perceived by persons who experienced MI. The findings also can guide future research regarding factors related to the use of CT in persons with MI, and the relationship to the use of CT with the benefits received. More research is needed to test the effect of the specific CT used, especially in regard to herbs and traditional massage.

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