

Barriers to Cardiovascular Screening among Malay Women in East Coast Malaysia

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Abstract

Introduction: Cardiovascular disease (CVD) is a major cause of death among women worldwide. The major risk factors for CVD in women are similar to men. However, women often show different symptoms from men, which contribute to the under diagnosis of heart disease in women.

Objective: To understand the barriers for CVD screening among healthy pre and post menopausal women

Methods: A qualitative study was designed to explore and understand the barriers for CVD screening among the pre and post menopausal women in the East Coast of Malaysia. Data was collected using focus group discussions (FGDs). A total of eight FGDs were done among subjects from urban and rural areas. The interviews were audio recorded, transcribed and they were coded and analysed using NVivo 7 software.

Result: Majority of the participants claimed that the main reasons for not undergoing screening are being healthy and did not perceive themselves to have any disease. CVD was not considered as a major health issue among them as compared to breast cancer and cervical cancer. They perceived CVD as a men's disease. They also agreed that the majority of health personnel in government clinics or hospitals are too busy handling sick patients and it was inappropriate to ask for screening if they are healthy. Other reasons

include concern in case they actually have CVD and lack of information on the availability of the preventive services in health facilities.

Conclusion: The barriers for CVD screening are similar to the other screening programmes. The concept of preventive health is new to our women. Barriers to CVD screening include lack of understanding about the disease and unfriendly environment in health facilities towards cardiovascular screening. Health seeking behaviour is dominated by illness concept which prevents them from seeing health care providers when they are well.

Key words: Cardiovascular disease, screening, barrier, post menopausal

Introduction

Cardiovascular disease (CVD) is one of a major causes of death among women worldwide.¹ The major risk factors for CVD in women are similar to men. However, for women the risk to get CVD multiply enormously when they reach post menopausal age.^{2,3} Clear gender differences exist in the epidemiology, symptoms, diagnosis, progression, prognosis and management of cardiovascular risks. Menopause compounds many traditional CVD risks and these risks have a different impact in men and women.^{2,4,5}

There is an evidence that CVD risks can be reduced through healthy lifestyle and the prevention should aim to reduce the global risks rather than treating individual risk factors.⁵ Guidelines from the American Heart Association (AHA) recommend a 10-year risk assessment beginning at the age of 40 years and is repeated every 5 years (or more frequently if risk factors change).⁶ A combined statement from AHA and American College of Cardiology supported the assessment of risks using the Framingham risk score for adequate primary prevention. The best approach for CVD evaluation and prevention lies in routine testing for cardiovascular risk factors and risk score assessment. Appropriate intervention guided by risk assessment has the potential to bring about the significant reduction in long term risk.⁷

In Malaysia, CVD is the main cause of death in women accounting for about 25% of all female death in the government hospitals. This trend has remained unchanged since 1999. In the third National Health and Morbidity Survey (NHMS III), the prevalence of lifestyle related diseases (hypertension, diabetes, overweight and obesity) has increased significantly.⁸ In addition, the longer life expectancy of Malaysian women (76.4 years) will further increase the CVD burden.⁴ A study done by Noraza *et al.*⁹ among apparently healthy school teachers showed that the proportion of those who had done optimum screening for CVD was only 29.3%. Another recent study among women in Kelantan

showed that the percentage of good CVD practices was around 50% which indicates the behavior to reduce-CVD risks was still not optimum.¹⁰

To have a better understanding of women's behavior towards maintaining their CV health, we had chosen the health belief model (HBM) as the conceptual framework for this study. The original HBM was formulated to explain why so few people were participating in programmes to prevent and detect diseases.¹¹ On top of that, this model has been used frequently in studies that explore the health behaviour on CVD prevention.^{12,13} The objective of this qualitative study is to explore the barriers for CVD screening among apparently healthy women in the East Coast of Malaysia. This information is important to guide health care providers to plan the CVD preventive activities.

Methodology

Study design

This is a qualitative study using phenomenology¹⁴ as its theoretical framework. A phenomenological study describes the meaning of life experiences of a phenomenon of several individuals, which was CVD screening in this study. It was conducted from February to June 2009, including pre and post-menopausal Malay women in the East Coast of Malaysia. Written approval was obtained prior to the study from the Research Ethics Committee of Universiti Sains Malaysia.

Participants who fulfilled the inclusion criteria were selected from the community in the two states at the East Coast of Malaysia. The criteria were Malay ethnic group, not diagnosed with any CVD before, a minimum age of 35 years old for the pre-menopausal group and amenorrhoea for at least one year for the post-menopausal group. A stratified purposive sampling was applied based on urban-rural and pre and post-menopausal status. The eligible participants were identified through the help of community leaders and health staff. They were invited to participate in the study by the researcher through telephone. None of them have had any previous relationship with the researchers, who were lecturers in the field of family medicine, family health and sociology.

Data Collection

Data was collected through focus group discussion (FGD). FGD was started with a group of pre-menopausal women from the urban area followed by a group of pre-menopausal women from the rural area, a group of post-menopausal women from the urban area, and a group of post-menopausal women from the rural area. An interview guide was developed on the potential issues to be discussed. It covered the participants' understanding, belief, and experiences in the CVD screening.

A moderator, a note-taker and an assistant were present during each FGD. The FGDs were conducted at various places including the department meeting room, health clinics meeting room, and the community centre. All the discussions were conducted in the Malay language. Before starting the FGD, the moderator explained on the conduct of the FGD and the participants' roles, and also obtained written informed consent from the participants. Once the FGD started, the discussions were recorded by the note-taker through note taking and audio-recording. The note taker also took notes on the sequence of the talk to help identify individual speakers. The notes, together with the recording of any relevant non-verbal cues, were compiled by the note taker as field notes. The field notes and quotes from the participants were important data for this study.

Each FGD consisted of six to eleven participants, and lasted for about one to one and a half hours. No one else besides the participants and the researchers was present. The FGD was analyzed before another FGD was conducted. From each stratum, another FGD was conducted making a total of two FGDs among urban pre-menopausal women, two FGDs among rural pre-menopausal women, two FGDs among the urban post-menopausal women and two FGDs among rural post-menopausal women. Data saturation was achieved with these eight FGDs among the 66 participants.

Data Analysis

The analysis involved several steps and started with the transcription of the interviews by a single researcher. The recordings were burned to a compact disc and played back on a computer to assist the transcription. The field notes taken during FGDs were also used as a reference. The transcript was then verified by the researcher who moderated the FGD. It was then read through repeatedly by two researchers. Significant statements or quotes were identified and the emerging themes were noted. The Qualitative Software NVivo 7 was used to assist in handling data and streamline the coding process. Themes were identified independently by two researchers. Then, the themes were compared, inter-rater agreement was analyzed and further discussions were conducted to resolve any discrepancies. The process was repeated for all the FGDs.

Results

Out of 66 participants, 30 of them were in pre menopausal and 36 were in post menopausal group. About 57.6 percent of participants were from urban area. The mean age was 43.8 (SD 6.1) years for the premenopausal group and 62.3 (SD 8.5) years for post menopausal group.

From the analysis, four themes were finally derived to explain the barriers for CVD screening. These include women's perception of CVD, the perception of being healthy, doctor-patient relationship and issues related with the health care system.

a. Perception of CVD

Cardiovascular disease was not considered a major problem among women's as compared to breast cancer and cervical cancer. They perceived cardiovascular as a men's disease due to men's smoking habit and lack of exercise. Some of them claimed that men are too busy working and this leads to stress at work which made them more susceptible to CVD.

Some of the participants stated that:

..Heart problem is more common in men because they have more responsibility than women since they need to support their family. Also, men expose to stress at work place...(P, U, T)

We seldom heard heart disease in women but mostly in men. Diseases commonly heard in women are breast cancer, ovarian cancer (M, R, T)

When asked about what disease they feared most, many of them answered 'cancer'.
I would think cancer because so many types of cancer in women such as breast cancer, cervical cancer and many more...(M, U, T)

They thought that having cancer is like a death sentence as treatment is mostly ineffective and chronic diseases such as CVD are not as serious as cancer.

Cancer is more serious, for which I heard cancer can cause death which means if you got it, it will slowly get worse and you just wait to die...(M, U, ,K)
For cancer, even if you go to the hospital, there is no treatment, no cure. That is why we are scared. We just have to face it...(M, U, K)

On the other hand, some rural older women regarded heart disease as serious illness because of no available alternative treatment and it can also cause sudden death. We noticed that women who said that they were more concerned with CVD were those who have family members with CV disease.

Heart problem, there is no traditional treatment to treat heart disease...(M, R, K)
I am very worried about heart disease. If high blood pressure we have symptoms like giddiness, headache but if heart disease I think, no signals.....(M, R, ,K)
For me, heart disease is what I worry most because my husband has a heart problem, diabetes, high blood pressure. (M, R, T)

b. The Perception of Being Healthy

Both pre and post menopausal women expressed that the main reason for not undergoing CVD screening is because they think that they are healthy. They also do not perceive themselves to have any disease because they have no symptoms. The concept of being healthy and having no symptoms were hindering women from coming forward for screening. This was agreed by most of the participants in the groups.

...Although I am old I have no diseases, so for what reason should I go to clinic. (M, R, T)

I have no high blood pressure and no diabetes. If I am not very ill, I would not go to clinic (P, R, T)

I need to have severe condition to see a doctor, if just a mild one, it is still ok if I am not going to the clinic. (P, R, T)

Because I feel healthy, I don't need any medication, when I don't feel well, only then will I go and see a doctor. (M, R, K)

Furthermore, participants are also worried of unnecessary stress caused by knowing the result of the screening activities especially if they really have the disease.

If we go to clinic, and find out we have the disease, it would cause distress (M, R, K)

If we are detected to have an illness, we will be worried, so it's better not to go. (M, U, K)

We are already anxious when entering the clinic, worried of finding out any disease... (M,U, T)

c. Doctor-patient Relationship

Majority of the participants were not sure of what to tell the doctor if they had no complaint. Most of them agreed that it is inappropriate to ask for screening if they were healthy. They were also worried about the doctor's response if they come to the clinic without any health complaint.

If we go, the doctor will ask what is the problem but because we are healthy, what can we say... (M, U, K)(M, R, K)

If we ask the doctor to check whether we have a heart problem or not, they might ask back why we asked such question... (M, R, T)

... It is inappropriate because we are healthy and asking the doctor to check... (P, U, K)

d. Health Care System

Although the government health clinic was easily accessible, most of them agreed that the majority of health personnel are too busy in handling ill patients. Therefore, it is inappropriate to ask for screening if you are healthy. They considered that health clinics are meant for those who are ill and not for healthy people.

Clinic is for ill patients and we are not ill (M, U, T)

Those people who come to the clinic have a reasons like some problems or complaint....(P,U, T)

Shame on those who are sick, they have to wait longer because too many patients in the clinic. We are healthy, so those who are ill need to wait longer to see a doctor.. (P,U, K)

Most of the participants refused to undergo screening as they think that they might disturb the clinics daily services for sick people as they are not sick. Some of elder women said that they hardly go to the clinic because have no more young children to bring for schedule follow-up at the clinic.

Other reasons for not undergoing the screening include lack of information and knowledge about the availability of the preventive services in health clinic. They also claimed that there is lack of advice by the health care staff on screening activities.

Actually, I've never heard about CVD screening. So, I'm not very sure (M, U, T)

I will come if I were advised by the nurses (M, R, T)

Discussion

The results provide some ideas on the belief and attitude of Malay women with respect to cardiovascular disease and its screening. The key findings of this study are as follow:

1. The majority of women perceived cardiovascular disease as a men's disease and breast cancer is a more serious health problem
2. The perception of being healthy and worried of unnecessary distress prevents them from performing the screening.
3. Almost all women were concerned of how to inform the doctor if they do not have symptoms.
4. Issues related to health care system such as high patient load, long waiting time, unaware of the availability of CVD screening activities, and perceiving clinic as only for ill patients.

We observed that these findings are not much different in all groups.

Similar to previous studies, the present study found that cancer was the first disease mentioned when women were asked what disease they are worried about when they get old.^{12,13,15} They generally perceived that women are not at risk of cardiovascular diseases. Although CVD contribute largely to the morbidity and mortality among women, from their observation, most women are suffering from cancer instead. This was reflected in a recent study by Rosediani *et al*¹⁰ who found that women had poor knowledge about CVD as the main cause of death among Malaysian women. Another study by Mosca *et al*¹⁵ also stated that only 22% of women cited heart disease as their greatest health threat and they perceived breast cancer as their greatest health concern. This showed that women who perceived high susceptibility to CVD were those who had annual check-up and discussed their risk of heart disease with a healthcare professional.¹³ Our findings support the HBM which states that perceived susceptibility and the seriousness of a certain condition will determine the likelihood of taking action or changing behaviour in individual.^{11,16}

According to HBM, perceptions of personal risk occupy a central role in the theories of individual health behaviour. Perceptions of CVD risk appear to be positively correlated with the desire to make risk-reducing behavioural changes and with the actual behavioural change.¹⁶ So once women do not perceive that they are at risk of CVD and put their concern more on cancer, these will make their behavior changes towards CVD preventive activities are less likely. Women who perceived themselves to have a high risk and were aware that heart disease is the leading cause of death were more likely to see health care provider and practice healthy lifestyle.¹³ Thus, effort to promote the uptake of CVD screening should focus on informing women the CVD risk factors and how it changes around the time of menopause.^{17,18,19}

In contrast to the study done on cardiovascular health among rural woman by Krummel *et al.*, we did not see any different in the perception of CVD between pre and menopausal women. In Krummel *et al.*, the women were younger, so they still had young children at home and this made them more concerned on their children health instead of their own.¹²

In our study, we found that being healthy and having no symptoms were the main reasons that prevented women from going to health facilities for screening activity. This perception is consistent in both pre and postmenopausal women. This finding was supported by a study among Malaysian women who never had a Pap smear. These women would only need Pap smear if they develop symptoms of pelvic infection.²⁰ Similar reason was also observed in a study done by Lasser *et al*²¹ for colorectal cancer screening. Furthermore, performing a screening test will lead to the fear of discovering a disease and this will lead to emotional stress and worries.

Disapproving perception with regards to the health system and personnel can act as barriers for screening. They believed that doctors are there to cure; therefore, they would only seek medical attention if they are ill. They were worried of seeing a health

professional if they had no symptoms and hence creating unnecessary request for screening. This finding was observed among the ethnic minority where they see providers as a distant group of people and foster high respect which restrain them from asking questions.²² Other possible explanation is that the concept of preventive health is still new in our society as shown in few local studies^{10,20} Further emphasis on improving early screening and effective behavioural preventive strategy should be established.²³

Our result is in agreement with the previous studies which showed that the barrier for preventive activity is the lack of doctor's recommendation.^{13,20,21} More than 70% of women reported that the physician did not discussed heart disease with their patients when discussing health.¹³ Reminder or recommendation from health providers is known as one of the cues that move people to change their behaviour.¹⁶

Menopausal women expressed that they seldom go to a health check-up because there is no proper routine follow-up unlike during their reproductive age when they have to go for antenatal check-up, family planning follow-up and childhood immunization on a regular basis. These regular visits allow them to use the opportunity to check their health status and get updated with the preventive services. This is in contrast to post reproductive age where a programme for women of this age is lacking. This may lead to women not going to see medical staff unless they are unwell or have symptoms. Furthermore, health promotion on women's health is focusing more on cancer than CVD screening.

In Malaysia, the Ministry of Health has actively carried out the integrated health care services provided in Primary Health Care (PHC) where the management of illness and wellness is carried out comprehensively.²⁴ The PHC services, through a program named '1 Malaysia' is emphasizing on health promotion and preventive activities and focusing on community empowerment and participation.²⁵ The present study showed that, the preventive activities may not achieve their objectives if these women are still not aware of the availability of the programme. Furthermore the idea of 'seeing a doctor only when you are sick' is not being tackled. This idea may be the main reason of poor participation in CVD screening. The health promotion activities should therefore initially focus towards stressing on health education on the target population. Correcting their misconception of illness concept is important because this is the main barrier for preventive activities.

This study was limited to only Malay women in the East Coast; it might represent Malay women health behavior toward CVD screening. Thus, this study provides an evaluation of the belief and barriers of Malay women towards CVD screening. Future study which involves all the ethnics in Malaysia should be done to see whether it shows similar pattern. In the mean time, the health authority should be made aware that the public are not aware of the availability of the health promotion activities. Therefore, the health care providers should also involve in promoting the preventive services to the public.

Conclusion

We observed that the barriers for CVD screening activities involve multiple factors which are: patient, healthcare provider and related health system which are similar to other screening programmes. The concept of preventive health is new to our women and the majority of them are not screened for cardiovascular risk factors because health seeking behaviour is dominated by the illness concept which prevents them from coming to the clinic when they are well. Other factors include lack of knowledge, poor communication and unfriendly health facilities towards screening programmes. All these issues need to be reviewed in order to create a positive environment for preventive activities among apparently healthy pre and post menopausal women

Competing interests: None

Authors' contributions

Juwita S: Conception and design of the study, data collection, interpretation, drafting and final approval

Norwati D: Conception and design of the study, data collection, interpretation, drafting and final approval

Harmy MY: Conception and design of the study, data collection, interpretation and final approval

T ALina TI: Conception and design of the study, data collection, interpretation, drafting

Siti Hawa A: Conception and design of the study, data collection, interpretation

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