

Nurses' Role in Educating Women about Heart Disease: A Literature Review

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Abstract

Coronary heart disease (CHD) in women is an enormous problem and remains the number one killer of women. As a result, there is a great deal of research available. However, in spite of the research and the media attention focused on educating women, there are still misconceptions about this life-threatening disease. Nurses must work to bridge the gap between the evidence and the women who are failing to heed the signs and symptoms of CHD. Education is essential to overcoming these barriers. As client advocates, nurses have key roles in the areas of assessment, education, and referral. Formal and informal culturally appropriate education programs need to be developed and implemented to disseminate CHD information. A wealth of information is available regarding women and CHD. However, limited research has been conducted regarding the role of the nurse as educator. Nurses must take advantage of their leadership position to educate the public and identify women at risk for CHD, while working collaboratively between all healthcare disciplines.

Coronary heart disease (CHD) is the number one cause of death and disability for women over 50 in the United States (Lefler, 2002). Despite all the media attention and the efforts to educate the public by various health organizations, there is still a misconception among many that women do not develop CHD until a later age and that it is not the number one killer of women in the U.S. (Miracle, 2006). Many people, especially women, still believe that heart disease is a man's problem. Research confirms that factors such as socio-economic status and gender do influence perceptions and understanding of the illness (King, 2002). This paper will review some of the research about women and heart disease, statistics, various signs and symptoms of CHD in women, and the role of the nurse in educating the public about CHD in women. Throughout this paper, primary research reports will be analyzed for their contribution to the research question, and implications for nursing will be discussed. This literature review will answer the research question: What role should nurses provide in educating women about the symptoms and risks of heart disease?

Women have insufficient knowledge and understanding about heart disease and its treatments (Kärner, Dahlgren, & Bergdahl, 2004). CHD alone is the cause of death for more than 500,000 women in the U.S. each year (Lefler, 2002). However, a survey in 2004 showed that more than 50% of women did not know this (Miracle, 2006). These statistics are very alarming, considering the great advances in treating CHD and the efforts to educate the public through information and awareness campaigns.

Major Findings

Risk Factors

Understanding women's knowledge of risk factors and health promotion behavior is critical because CHD may be prevented or delayed if women practice appropriate risk factor modifications (Thanavaro, Moore, Anthony, Narsavage, & Delicath, 2006). A recent study conducted by Thanavaro et al., was developed to identify health promotion behavior (HPB) and predictors of HPB in women without previous history of CHD. The study involved 119 women who completed surveys regarding their CHD knowledge, HPB, and perceived benefits and barriers to CHD risk factor modification. The results of this study revealed that the women did not practice HPB regularly, had low CHD knowledge levels, and a moderate level of perceived barriers to CHD risk modification (Thanavaro et al.). Understanding benefits and barriers to CHD risk modifications is supported by this study. Smoking and family history of CHD in this study were the only personal risk factors identified as being associated with and predictive of HPB and had a high correlation with perceived barrier. Clearly, there is an obvious disconnect between awareness of risk factors and preventive strategies. This indicates that a better understanding of what women perceive as their barriers to a healthy lifestyle is vital in developing health promotion interventions that are effective in reducing life-threatening risk factors. The researchers suggest that the generalizations of this study are limited because the women were all from the same city and had no prior history of CHD. It is essential to develop a list of women's common and predictive symptoms of CHD so that they may be included into educational materials to assist both women and nurses to recognize their importance. Early recognition, diagnosis, and treatment are vital to improving mortality and disability rates (Thanavaro et al.).

Gender Differences

The question has been raised: Do the signs and symptoms of CHD in women differ from those experienced by men (DeVon & Zerwic, 2003)? These gender differences in CHD have been widely investigated. Women have different signs and symptoms of CHD than men (DeVon & Zerwic). This is perhaps one explanation of why CHD is harder to detect in women. One study was conducted by DeVon and Zerwic (2003) to determine if there were gender differences in the symptoms of unstable angina (UA) and if so, to investigate if the factors related to the symptoms. The study included a convenience sample of 50 males and 50 females who were hospitalized with UA. The respondents completed a questionnaire designed by the research authors based on extensive literature review. The results suggest that women experienced more shortness of breath, weakness, difficulty breathing, nausea, back pain, fatigue, fear, and loss of appetite than men. The study included only respondents admitted to the hospital via the emergency department, which can be seen as a limitation. It is possible that clients who did not seek treatment experienced different symptoms than those who received care in the hospital.

Similar findings were reported in several additional articles. Zuzelo (2002) researched the symptom experience of acute myocardial infarction (AMI) for women and men and compared the symptoms based on gender. A purposively selected sample of ten men and ten women diagnosed with AMI by a board-certified cardiologist was chosen. Data were collected through

audiotaped interviews. The results showed that women experienced more fatigue, breathing distress, chest symptoms, back and arm pain, loss of appetite, fear, and lack of alertness than men. Men reported feeling chest sensations, changing breathing patterns, upper limb pain and numbness, and noticed head and neck symptoms. The main differences reported were the differences in breathing, pain locations, and pain intensity. Some women reported no pain at all, unlike men who typically report crushing chest pain. Additionally, women delayed longer in seeking out medical intervention than did men. The study was limited by the number of respondents and should not be generalized to all men and women who have had an AMI. However, this study has several implications for nurses. Nurses should individualize assessments, paying close attention to every symptom presented by the client. Additionally, they should incorporate teaching materials and information specifically geared toward women and the risks of delaying of seeking treatment. Women must be educated and warned repeatedly that CHD is not just a man's disease and that immediate treatment is essential.

Treatment Seeking

Numerous clinical trials have clearly established the benefits of reducing morbidity and mortality if individuals receive treatment shortly after the onset of symptoms (Zerwic, Ryan, DeVon, & Drell, 2003). However, it has been determined that women lack knowledge and understanding about CHD and its treatment. Studies have shown that women delay seeking help longer than men, resulting in higher rates of mortality and morbidity among women (Rosenfeld, 2004). Fifty-two semi-structured interviews were conducted in which women were asked to describe their experiences from the onset of symptoms to their arrival at the hospital. The reported average delay time of 4 hours was influenced by four factors including social support, personal control, perceived heart disease threat, and neuroticism (Rosenfeld). The study sample was small, limited geographically, and the majority of the participants were Caucasian. Therefore, the findings cannot be generalized to non-Caucasian women. Nurses can, however, benefit from and utilize the findings to help recognize common barriers for a delay in seeking treatment.

Summary

Women's perceptions of their CHD risk and its implications for their health need to be studied further. There is a need to continue to research women's perceptions of CHD risk factors and motivational influences that enhance health-promoting behavior, barriers that influence delay in seeking treatment, conflict between gender and race in recognizing symptoms, and of the role of the nurse as educator.

Nurses can take a central role in working with clients to promote the best outcomes (Garvin et al., 2003). Women in the studies identified numerous inhibitors and facilitators in making changes. Nurses may utilize this provided information to assist them in helping women to identify obstacles and inhibitors and to develop strategies to initiate health behavioral changes (McSweeney & Coon, 2004). Given the magnitude of CHD, nurses should support any effort to reduce the extent of delay and time to treatment (Blank & Smithline, 2002), stressing the vital importance of prompt medical attention.

Nurses are often a woman's initial point of contact within a health care setting, interacting with their clients more frequently than other care providers (Arslanian-Engoren, 2002). Historically, women's complaints have been seen as less urgent than men's and it appears that gender differences still exist in delay in seeking care, misdiagnosis, and less aggressive treatment (Edwards, Albert, Wang, & Apperson-Hansen, 2005).

One of the most important implications of this review relates to teaching. Culturally appropriate education programs need to be developed and implemented to disseminate CHD information. Nurses must take advantage of their leadership position to educate the public and identify women at risk for CHD, while working collaboratively between all healthcare disciplines. Nurses have a vital role in educating women about the risks and symptoms of CHD, the number one killer of women in the United States.

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