

Reduction of Risk Factors Related to Cardiovascular Disease among Midlife and Older Women: A Patient Perspective.

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ABSTRACT

Background: Cardiovascular disease (CVD) is the leading cause of death in women. Even though cardiovascular disease develops over decades but it can be prevented by lifestyle modifications. Thus, the present study was conducted to understand knowledge and awareness about cardiovascular diseases in women. **Methods:** A sample of 74 women of age group 40-58 years were selected to evaluate the awareness of the cardiovascular disease among women. Participants were questioned regarding recent evaluation and knowledge of personal risk factors for CVD and on general knowledge of healthy levels. Statistical analysis was done by using SPSS, version 22 (SPSS, Inc., Chicago, IL) and $p < 0.05$ was considered statistically significant. **Results:** Out of 74 women, 34 women consider the leading cause of death was cardiovascular diseases. 5 women consider breast cancer was the leading cause of death, 7 considered cancer was the cause, 11 considered diabetes was the cause and 10 considered that there might be other causes whereas 7 answered that they don't know about it. 8 females correctly identify blood pressure levels, 26 identifies HDL cholesterol, 9 identifies LDL cholesterol and 11 identifies blood sugar levels. **Conclusion:** Awareness of Cardiovascular disease risk factors among women is associated with preventive action of cardiovascular diseases. Education regarding the risk factors can help in decrease in the cardiovascular diseases.

Keywords: Cardiovascular diseases, women, cholesterol.

INTRODUCTION

Cardiovascular disease (CVD) is the leading cause of death and disability for women claiming approximately 500000 women's lives each year.^[1] It is important to focus efforts on midlife and older women, because their numbers are increasing.^[2,3] Between 1997 and 2003, the percentage of women recognizing that heart disease was their leading cause of death rose significantly from 30% to 46%.^[4] A lifestyle that includes a healthy diet, weight control, and appropriate physical activity can dramatically reduce the risk of heart disease in women.^[5-11] General knowledge and awareness of a potential health hazard may be a necessary first step in taking action to reduce the threat of disease but may not be sufficient. Perceived personal susceptibility has been shown to increase prevention-seeking behaviors.^[12] The purpose of this

study was to assess the level of knowledge and awareness about Cardiovascular diseases in women.

MATERIALS AND METHODS

A sample of 74 women of age group 40-58 years were selected to evaluate the awareness of the cardiovascular disease among women. Participants were questioned regarding recent evaluation and knowledge of personal risk factors for CVD and on general knowledge of healthy levels. Statistical analysis was done by using SPSS, version 22 (SPSS, Inc., Chicago, IL) and $p < 0.05$ was considered statistically significant.

RESULTS

Our study include sample of 74 women of age group 40-58 years. Table 1 shows the pattern of awareness of the leading causes of death among women. Out of 74 women, 34 women consider the leading cause of death was cardiovascular diseases. 5 women consider breast cancer was the leading cause of death, 7 considered cancer was the cause, 11 considered diabetes was the cause and 10 considered

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Arora; Cardiovascular Disease among Midlife and Older Women

that there might be other causes whereas 7 answered that they don't know about it. Table 2 shows female correctly identifying healthy cardiovascular disease risk factor levels. 28 females correctly identify blood pressure levels, 26 identifies HDL cholesterol, 9 identifies LDL cholesterol and 11 identifies blood sugar levels.

Table 1: Pattern of awareness of the leading causes of death among women.

Response	Female n(%)	p-value
Cardiovascular disease	34(45.94%)	p<0.05
Breast cancer	5(6.75%)	
Cancer	7(9.45%)	
Diabetes	11(14.86%)	
Other causes	10(13.51%)	
Don't know	7(9.45%)	

Table 2: Female Correctly Identifying Cardiovascular disease Risk Factor Levels

Cardiovascular disease Risk Factor	Female
High Blood pressure	28
Low HDL cholesterol	26
High LDL cholesterol	9
High Blood sugar	11

DISCUSSION

Improvement in awareness has followed national efforts by the AHA and other organizations that have initiated campaigns to educate the public of the threat of heart disease in women. Although a direct causal effect cannot be determined, it can be inferred from the finding that awareness was greater among those women who reported seeing or having read information on the red dress symbol, a national representation of heart disease in women.^[13] Our study shows the pattern of awareness of the leading causes of death among women. Out of 74 women, 34 women consider the leading cause of death was cardiovascular diseases. 5 women consider breast cancer was the leading cause of death, 7 considered cancer was the cause, 11 considered diabetes was the cause and 10 considered that there might be other causes whereas 7 answered that they don't know about it. 28 females correctly identify blood pressure levels, 26 identifies HDL cholesterol, 9 identifies LDL cholesterol and 11 identifies blood sugar levels. Similar study conducted by Mosca L et al shows that the rate of awareness of CVD as the leading cause of death has nearly doubled since 1997 (55% versus 30%) was significantly greater for whites compared with blacks and Hispanics (62% versus 38% and 34%, respectively). Fewer than half of the respondents were aware of healthy levels of risk factors. Awareness that personal level was not healthy was positively associated with action. Most women took steps to lower risk in family members and themselves. The most frequently cited barriers for heart health were confusion in the media (49%), the belief that health is determined by a higher

power (44%), and caretaking responsibilities (36%).^[14]

Folta SC et al study suggest that the StrongWomen-Healthy Hearts program was effective in changing self-efficacy, a determinant of behavior, and several targeted behaviors. These changes likely contributed to the anthropometric changes in body weight and waist circumference associated with reduced risk of cardiovascular disease.^[15]

Folta SC et al study shows that most women were aware of the modifiable risk factors for CVD. Although they realized they were susceptible, they thought CVD was something they could overcome.^[16]

CONCLUSION

Awareness of Cardiovascular disease risk factors among women is associated with preventive action of cardiovascular diseases. Education regarding the risk factors can help in decrease in the cardiovascular diseases.

REFERENCES

- Rosamond W, Flegal K, Friday G, et al. Heart disease and stroke statistics—2007 update: a report from the American Heart Association Statistics Committee and Stroke Statistics Committee. *Circulation*. 2007;115:e69–e171.
- Gerberding G. *Healthy Aging: Preventing Disease and Improving Quality of Life Among Older Americans* 2006. Atlanta, GA: Coordinating Center for Health Promotion, Centers for Disease Control and Prevention; 2006.
- He W, Sengupta M, Velkoff V, DeBarros K. *65+ in the United States: 2005*. Washington, DC: US Census Bureau; 2005.
- Mosca L, Ferris A, Fabunmi R, Robertson RM. Tracking women's awareness of heart disease: an American Heart Association National Study. *Circulation*. 2005;109:573–579.
- Erkkila AT, Lichtenstein AH, Mazaffarian D, Herrington DM. Fish intake is associated with a reduced progression of coronary-artery atherosclerosis in diabetic women with coronary disease. *Am J Clin Nutr* 2004;80(3):626-32.
- Hu FB, Bronner L, Willet WC, Stampfer MJ. Fish and omega-3 fatty acid intake and risk of coronary heart disease in women. *JAMA* 2002;287(14):1815-21.
- Hu FB, Stampfer MJ, Colditz GA, Ascherio A, Rexrode KM, Willet WC, et al. Physical activity and risk of stroke in women. *JAMA* 2000;283(22):2961-7.
- Joshi KJ, Hu FB, Manson JE, Stampfer MJ, Rimm EB, Speizer FE, et al. The effect of fruit and vegetable intake on risk of coronary heart disease. *Ann Int Med* 2001;134(12):1106-14.
- Lichtenstein AH, Ausman LM, Jalpert SM, Vilella-Bach M, Jauhiainen M, McGladdery S, et al. Efficacy of a therapeutic lifestyle change/Step 2 Diet in moderately hypercholesterolemic middle-aged and elderly female and male subjects. *J Lipid Res* 2002;43(2):264-73.
- Schaefer EJ. Lipoproteins, nutrition, and heart disease. *Am J Clin Nutr* 2002;75(2):191-212.
- Lapointe A, Balk EM, Lichtenstein AH. Gender differences in the plasma lipid response to dietary fat. *Nutr Rev* 2006;64(5 Pt 1):234-49.
- Rosenstock IM. Historical origins of the health belief model. *Health Ed Monographs*. 1974;2:328–333.
- Mensah GA, Mokdad AH, Ford ES, Greenlund KJ, Croft JB. State of disparities in cardiovascular health in the United States. *Circulation*. 2005;111:1233–1241.

Arora; Cardiovascular Disease among Midlife and Older Women

14. Mosca L, Mochari H, Christian A, Berra K, Taubert K, Mills T, Burdick KA, Simpson SL. National study of women's awareness, preventive action, and barriers to cardiovascular health. *Circulation*. 2006 Jan 31;113(4):525-34.
15. Folta SC, Lichtenstein AH, Seguin RA, Goldberg JP, Kuder JF, Nelson ME. The StrongWomen–Healthy Hearts program: reducing cardiovascular disease risk factors in rural sedentary, overweight, and obese midlife and older women. *American journal of public health*. 2009 Jul;99(7):1271-7.
16. Folta SC, Goldberg JP, Lichtenstein AH, Seguin R, Reed PN, Nelson ME. Factors related to cardiovascular disease risk reduction in midlife and older women: a qualitative study. *Prev Chronic Dis* 2008;5(1). http://www.cdc.gov/pcd/issues/2008/jan/06_0156.htm.

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