The Association between Passive Smoking and Acute Coronary Heart Diseases among Arab Israeli Women in Northern Israel

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Background:
Cardiovascular diseases are the leading cause of death worldwide. The deleterious effect of exposure to passive smoking on many pathophysiological intermediaries of coronary heart disease (CHD) is as great as the effect of active smoking. Exposure of passive smoking has not been studied as an independent risk factor for CHD among Arab women.

The study objectives were to examine the association between the exposure to passive smoking and CHD among Israeli Arab Women in the Northern Israel. Furthermore, to examine the Israeli Arab women attitudes toward smoking.

Method:
A case control study of non-smoking Israeli Arab women was done, the subjects were interviewed, using a general questionnaire and, passive smoking questionnaire. Anthropometric measurements (Weight, BMI, and Waist/Hip ratio), blood pressure (BP) and pulse were obtained during the interview.

Results:
A total of 146 women whom agreed to be interviewed (90.12% response rate). After adjustment for HTN, BMI25 and Family history of CHD, the significant, independent risk factors were: exposure to passive smoking during last five years of marriage (odds ratio (OR) 6.1; 95% confidence interval (CI) 1.93-19.3), exposure to passive smoking during 2-6 hours level a day (OR 5.67; 95% CI 1.48-21.73), exposure to passive smoking more than six hours a day (OR=26.11; 95% CI 4.26-159.91). In examining Arab women attitudes to smoking at home, in public places and at family events, women from the cases group significantly tended to agree more with the prevention and prohibition of smoking in these places. However, in assessing the ability to limit the smoking in their environment women from the cases group showed a weaker position than women from the control group.

Conclusion:
Among Arab Israeli women, passive smoking is a significant risk factor independently associated with CHD and with a positive dose-response relationship.