Predictors of Hypertension Awareness and Control among Arab and Jewish Adults in Israel

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Objective:

To identify what are the predictors of hypertension awareness and control among Arab and Jewish adults in Israel.

Methods:

Participants (n=1,104, aged 25-74) were randomly selected from the Hadera district urban population, stratified by gender, age and ethnicity (Arab or Jewish). Socio-demographic, lifestyle, chronic morbidity, and drug therapy data were collected during 2002-2007. The analysis was conducted on a subsample (n=764) who also provided anthropometric and blood-pressure (BP) measurements. Hypertension was defined either as physician diagnosis, anti-hypertension drug therapy, or ≥140 systolic or ≥90 diastolic mmHg BP levels. Predictors of BP stage (across JNC-7 categories) and hypertension awareness and control were evaluated in multivariate regression models controlling for year of interview.

Results:

Hypertension prevalence was 41.6% (46.7% for men, 36.1% for women). The odds ratio (OR) (95% CI) of being in a higher JNC-7 category was 1.67 (1.44-1.95) for age (10y-increment) and 1.05 (1.02-1.08) for BMI. There was an interaction between gender and marital status, with married women having the lowest and single/divorced men having the highest odds of being in a higher JNC-7 category. Of those with hypertension (n=335), 70% were aware, 44% of whom exhibited adequate BP control. The OR (95% CI) of being "aware-and-uncontrolled" vs. "aware-and-controlled" was 1.78 (1.20-2.66) for age (10y-increment), and 3.14 (1.10-8.97) for widowed vs. married participants. The OR of being "unaware-and-uncontrolled" vs. "aware-and-controlled" was 3.33 (1.35-8.22) for Arabs vs. Jews, 4.71 (1.27-17.48) for single/divorced vs. married participants, 5.52 (2.51-12.14) for those with <3 visits to the family physician in the past year, and 0.44 (0.22-0.90) for those with a family history of hypertension.

Conclusion:

Hypertension prevalence is high, and gender differences in BP stage depend upon marital status. Social factors (e.g., marital status, family history of hypertension) and primary healthcare service utilization predict hypertension awareness and control. Awareness needs improvement among Arabs.