

NOCTURIA PREVALENCE AND ASSOCIATION WITH CHRONIC MEDICAL ILLNESS, 2-YEAR MORTALITY IN OLDER PUERTO RICAN MEN.Hypothesis / aims of study

Epidemiological surveys from several countries have established that the prevalence of nocturia increases with age, is associated with several chronic medical illnesses, and may be a predictor of increased risk of death within 5 years. No population-based studies have described these variables in Latino men, in whom diabetes and hypertension are highly prevalent. Our objectives were to determine whether similar relationships between nocturia, chronic medical illness and mortality were present in a population of older Latino men.

Study design, materials and methods

We used data from a study that involved a multi-stage, stratified representative sample of Puerto Rican adults aged 60 and older. The study began in 2002 with 5,336 interviews and a 93.9% overall response rate. A second wave of the study was initiated in 2004, completed in the summer of 2008. A multistage probabilistic sample by clusters was used and a weighting factor for each individual was calculated based on a post-stratification by gender and age group. Respondents indicated history of fall in prior year and whether or not they usually urinated 3+ times nightly. Both univariate and multivariate logistic regression models were used to study the effect of chronic medical illness on the prevalence of nocturia after adjusting for age and BMI. We also explored the effect of nocturia on 2-year mortality using both univariate and multivariate logistic regression models.

Results

1496 men were included, of whom 586 (37.9%) urinated 3+ times nightly. Multivariate logistic regression indicated that after controlling for covariates, nocturia prevalence increased with age and with diagnosis of DM (OR 1.55 (1.21, 2.00)) and history of heart attack (OR 1.42 (1.02, 1.99)) but in contrast to other studies, not with diagnosis of HTN, depression or with increasing BMI.

220 (12.9%) men were deceased at the time of 2nd survey: the presence of nocturia at baseline increased the odds of mortality at 2 years by 59% (OR 1.59 (95% CI: 1.16-2.17; p= 0.003).

Interpretation of results

As found in other population-based studies, nocturia (3+ nightly) is highly prevalent in older Puerto Rican men and predicts significantly increased 2-year mortality.

Concluding message

We provide additional evidence that the presence of nocturia (3+) may be a clinically useful marker of frailty.

<i>Specify source of funding or grant</i>	USA National Institutes of Health
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	University of Puerto Rico Institutional Review Board
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes