NOCTURIA AND QUALITY OF LIFE. RESULTS FROM THE BOSTON AREA COMMUNITY HEALTH (BACH) SURVEY.

Hypothesis / aims of study
Nocturia is a common complaint among aging men and women. Nocturia is frequently cited as the cause of nocturnal awakenings resulting in sleep loss, daytime fatigue, and subsequent reduced quality of life. The objective of this study is to investigate the impact of nocturia on quality of life among both men and women.

Study design, materials and methods
BACH is a population-based epidemiological study of urologic symptoms among men and women 30-79 years of age. A multi-stage stratified cluster sample design was used to randomly sample 5,503 adults from the city of Boston. Measures of quality of life include overall quality of life assessed using the physical (PCS12) and mental (MCS12) health component scores of the SF-12, and presence of depressive symptoms assessed by the abridged Center for Epidemiologic Studies Depression (CES-D) scale with presence of depressive symptoms defined as 5 or more symptoms on the CES-D scale. Multivariate analyses using linear and logistic regression methods controlled for anthropometric measures, comorbid conditions, and demographic and lifestyle factors, as well as relevant prescription medication use.

Results
Results show that nocturia is associated with a significant decrease in quality of life indicators, including sleep disturbance, depressive symptoms, and both the physical and mental health component scores of the SF12 (p-value<0.05 for all differences presented in the Figure). Differences in SF12 scores remained significant after adjusting for potential confounders. Nocturia was also associated with increased odds of depressive symptoms among both men (multivariate adjusted odds ratio (OR)=2.79, 95%CI: 1.81, 4.31) and women (adjusted OR=1.80, 95%CI: 1.29, 2.51). The association of nocturia and depression was present in women who reported sleep interference due to urologic symptoms (adjusted OR =3.37, 95%CI: 1.63, 6.94) but not among those who reported no sleep interference (adjusted OR=1.10, 95%CI: 0.74, 1.54).

Interpretation of results
The impact of nocturia on overall quality of life was comparable to chronic conditions such as hypertension, diabetes, and arthritis. Nocturia was associated with increased likelihood of depression, especially among younger men and women. This association seemed to be mediated by sleep disruption in women but not in men.

Concluding message
Nocturia is associated, in both men and women, with significant impact on overall quality of life and with an increased prevalence of depressive symptoms.
Nocturia and quality of life. Proportion with sleep interference and depressive symptoms, and mean SF-12 physical health (PCS12) and mental health (MCS12) component scores.

Specify source of funding or grant

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Is this a clinical trial? No
What were the subjects in the study? HUMAN
Was this study approved by an ethics committee? Yes
Specify Name of Ethics Committee New England Research Institutes’ Institutional Review Board
Was the Declaration of Helsinki followed? Yes
Was informed consent obtained from the patients? Yes