PREVALENCE AND ASSOCIATION BETWEEN THE RISK OF OBSTRUCTIVE SLEEP APNEA AND ARTERIAL HYPERTENSION IN THE ADULT POPULATION IN POLAND: AN OBSERVATIONAL SUB STUDY OF THE PROSPECTIVE URBAN RURAL EPIDEMIOLOGY STUDY (PURE)

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Sleep apnea syndrome is a common breathing disorder affecting millions of people around the world. It is connected with serious consequences including hypertension, myocardial infarction, arrhythmias, coronary disease, cardiac insufficiency, stroke, transient ischemic attack and cognitive disorders. Epidemiological data assessing the prevalence of OSA in different countries varies in methodology, size and characteristic of group chosen and therefore are hard to compare. In Poland very few reports on the prevalence of OSA either the diagnostic accuracy of sleep questionnaires are available. We analyzed the STOP BANG results, age, sex, BMI, hypertensive and antidiabetic treatment in Polish subjects taking part in the Prospective Urban Rural Epidemiology (PURE) study, which is an ongoing population cohort study of individuals from urban and rural communities from 21 countries. This is the first large scale study using validated OSA screening tool in community based sample in Poland. Our results show that over a half of adult Polish population is at moderate to high risk of OSA (66.52% of men and 60.1% of women). Based on previous studies we can assume that a half of our high risk group will be diagnosed for sleep apnea. The results show also that after the adjustment for age, sex and BMI a high pretest probability of obstructive sleep apnea based on the STOP-BANG questionnaire was observed with arterial hypertension in a dose response fashion. This association was statistically significant amongst women, but not men.