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THE PREVALENCE AND DETECTION OF OBSTRUCTIVE SLEEP APNEA IN PROFESSIONAL BUS DRIVERS

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Background: Obstructive Sleep Apnea Syndrome (OSAS) is the most common type of sleep apnea in general population, especially obese. Due to the manner of work, professional drivers are particularly exposed to the effects of sleep breathing disorders. Public safety and financial responsibility require an adequate assessment of drivers' health condition.

Aim: the aim of the study was the assessment of the prevalence of breathing disorders during sleep in the population of professional public transport bus drivers.

Material and methods. The study was conducted in a group of 364 public bus drivers and in 191 controls from epidemiological study BialystokPlus. A survey, including the ESS, STOP-BANG questionnaire (SBQ), presence of OSAS symptoms, cardiovascular and respiratory illnesses, smoking habits and diabetes was performed. An additional question regarding irresistible day sleepiness leading to stopping the bus/car was also asked. Additionally, type 3 sleep study was performed.

Results. In the studied population the frequency of significant OSAS (AHI>30 or >15 with daytime sleepiness) was observed in 7,9% of bus drivers vs. 9% of controls ($p<0,05$). Twenty nine bus drivers required CPAP treatment according to EU directive guidelines, but only 13 subjects (47%) agreed for CPAP treatment and followed the protocol. In this group, in all cases, AHI normalization was observed. SBQ questionnaire was most accurate (in comparison to NoSAS and ESS) to predict the OSAS in the studied group.

Conclusions. OSAS prevalence in drivers' populations is similar to the prevalence in general population. STOP-Bang questionnaire proved to be the best scale to assess OSAS in this study.