



OBSTRUCTIVE SLEEP APNOEA SCREENING IN THE TRUCK DRIVER POPULATION

L. Roberti¹, C. Causarano¹, P. Prosperi¹, T. Mastrogiacomo¹, Federtrasporti², G. Insalaco³

¹AAI (Associazione Apnoici Italiani Onlus-Non profit); ²Federtrasporti (Truck Drivers Cooperative); ³BIM-CNR, Palermo



INTRODUCTION

Obstructive Sleep Apnoea (OSA) is a common condition where the walls of the throat relax and narrow during sleep, interrupting normal breathing. This can cause snoring, disrupt sleep and affect people's quality of life, making them feel tired and sleepy during the day. Research has shown that someone who is deprived of sleep due to OSA may be up to 12 times more likely to be involved in a driving accident.

As a result, the European Union Directive 2014/85/EU, created to limit accidents arising from OSA, requires drivers with moderate or severe OSA to seek medical advice before their licences can be issued or renewed; drivers may be advised not to drive until confirmation of a diagnosis and steps are taken to control the condition. One of the main risk factors for OSA is being overweight.

The Italian Apnoeic Association and Federtrasporti proposed to carry out surveys of first screening for the possible presence of OSA and overweight in the population under consideration.



METHODS

On 44 days between March and December, volunteer expert patients, doctors and nurses questioned drivers at truck dealerships from north to south Italy, 50 companies that were part of Federtrasporti, at driver training days and at a truck driver show.

We measured height, weight and waist circumference, took details of medical conditions, such as diabetes, and of lifestyle factors, such as whether the drivers smoked or took drugs.

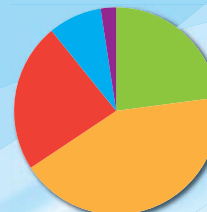
Acknowledgement

The study received no funding other than travel expenses from Federtrasporti. ResMed supplied technical support for the devices used in the validation part of the study.

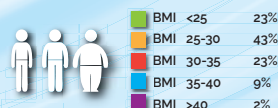
RESULTS

The sample tested was composed of **905 people** (887 males and 18 females), medium Age 46 (years)

POPULATION DISTRIBUTION BASED IN % BASED OF THE BODY MASS INDEX

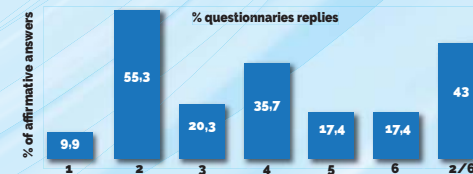


OVERWEIGHT AND OBESITY WERE PREVALENT:



QUESTIONS

QUESTIONS	"YES" ANSWERS
1 Do you sometimes stop breathing and have sleep apnoea during night?	90 (9,9%)
2 Do you snore?	508 (55,3%)
3 Do you wake up needing to urinate urgently?	184 (20,3%)
4 Are you dissatisfied with how you have slept?	323 (35,7%)
5 Do you frequently feel the desire or need to sleep during the day (except after lunch)?	157 (17,4%)
6 Do you take drugs for high blood pressure?	157 (17,4%)
Yes to at least 2 questions (2/6)	387 (43%)



- Fifty-six (56 people) 6,2% had diabetes
- Three hundred twenty-five (325 people) 36% they are smokers
- One hundred forty-three (143 people) 16% they are ex-smokers
- One hundred twenty-seven (127 people) 14% take drugs

CONCLUSIONS

The data collected in this first survey, suggest a careful consideration of the aspects relating to food hygiene and sleep disorders, in the category of truck drivers and suggests a high incidence of sleep-related breathing disorders. Therefore efforts should be made to develop a national screening guideline/protocol for professional driver for OSA risk assessment for driving license applicants in Italy. (Apnoici Italiani)

Bibliography

1. Obstructive Sleep Apnea in North American Commercial Drivers - N. Kales and G. Straubel - *Industrial Health* 2014
2. Prevalence of obstructive Sleep Apnea in the general population: a systematic review", by Chamara V. Senararatna. *Sleep Medicine Reviews*. August 2016

info: www.apneedelsonno.it

segreteria@apneedelsonno.it