

J Inj Violence Res. 2014 Jul; 6(2): 99.

doi: 10.5249/jivr.v6i2.577

Letter to the Editor

Obstructive Sleep Apnea Syndrome; a neglected cause of traffic collision among Iranian public transport drivers

Traffic collision ranks as the second most common cause of mortality among Iranian people.¹ Several studies have reported that Obstructive Sleep Apnea Syndrome (OSAS) increases the risk of car crash.^{1,2,3}

About 27% of the Iranian population suffers from OSAS.⁴ Some studies have revealed that a history of witnessed apnea is the most important predictor of motor vehicle crash.¹ In this report, we wish to present the results of our preliminary findings at the Sleep Disorders Research Center of Kermanshah University of Medical Sciences with regard to this problem among public transport drivers in western Iran. First of all, we screened 170 public transport drivers for objective OSAS using a Berlin Questionnaire.⁵ Among these, 50 cases (29.5%) were distinguished as high risk for OSAS. In the next

phase of the study, we evaluated these 50 cases using Actigraphy or Polysomnography. Results showed that 85% of them suffered from moderate to severe OSAS (AHI or RDI >15). Nearly all (95%) of them had daily sleepiness. Despite adequate education and advice about the necessity of treatment using CPAP, BiPAP or Auto CPAP; only two patients (4.5%) agreed to use Auto CPAP. Both of them showed poor compliance in their use of Auto CPAP and discontinued the treatment after only a few nights when followed up.

These preliminary results seem to indicate that most people with untreated OSAS in our country still continue to work in high-risk jobs, such as driving public transport vehicles. This risks not only their own lives but also those of other road-users and contributes to making Iranian roads among the most dangerous in the world.⁶

Future studies must focus on the prevalence of this syndrome among the population in general and among public transport drivers and others doing high-risk jobs in Iran in particular.

Funding: None

Competing interests: None declared.

Ethical approval: The study was approved according to the research ethics requirements of Iran universities and all participants provided informed consent.

References

1. Montazeri A. Road_traffic_related mortality in Iran:a descriptive study. *Public Health.* 2004 Mar;118(2):110-3.
2. Pizza F, Contardi S, Mondini S, Cirignotta F. Impact of sleep deprivation and obstructive sleep apnea syndrome on daytime vigilance and driving performance: a laboratory perspective. *G Ital Med Lav Ergon.* 2012 Jul-Sep; 34(3supp):375-7.
3. Birleanu LA, Rusu G, Mihaescu T. Obstructive sleep apnea(OSA) syndrome and traffic accidents. *Rev Med Chir Soc Med Nat Iasi.* 2010 Jul-Sep;114(3): 700-6.
4. Khazaie H, Najafi F, Rezaie L, Tahmasian M, Sepehry AA, Herth FJ. Prevalence of symptoms and risk of obstructive sleep apnea syndrome in the general population. *Arch Iran Med.* 2011 Sep; 14(5):335-8.
5. Abrishami A, Khajehdehi A, Chung F. A systematic review of screening questionnaires for obstructive sleep apnea. *Can J Anaesth.* 2010 May; 57(5): 423- 38.
6. Drake C, Roehrs T, Breslau N, Johnson E, Jefferson C, Scofield H, et al. The 10-year risk of verified motor vehicle crashes in relation to physiologic sleepiness. *Sleep.* 2010 Jun; 33(6): 745-52.

Habibolah Khazaie *

Sleep Disorders Research Center, Kermanshah University of Medical Sciences (KUMS), Kermanshah, Iran.

Azad Maroufi

Kurdistan University of Medical Sciences, Sanandaj, Iran.

Received: 2013-11-23

Accepted: 2013-11-27

* **Corresponding Author:**

Habibolah Khazaie, Department of Psychiatry, Sleep Disorders Research Center, Farabi Hospital, Kermanshah University of Medical Sciences (KUMS), PO Box: 6719851151, Fax: 0098-831-8264163, Email: hakhazaie@gmail.com (Khazaie H.).

© 2014 KUMS, All rights reserved

This is an open-access article distributed under the terms of the [Creative Commons Attribution 3.0 License](http://creativecommons.org/licenses/by/3.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.