



## Letter to Editor

### Traumatic Brain Injury and Its Related Sleep Disorder Research in India

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India is a rapidly developing country with modern urbanization and industrialization. Through its progress it has to challenge multiple problems. Health is one of such major issue. Neurological disability is likely to be 3<sup>rd</sup> epidemic in developing India. Traumatic Brain Injury (TBI) forms a dominant part of it [1]. In 2002 it was estimated that 1.6 million Indian population sustain traumatic brain injury with 2,00,000 deaths [2]. In spite of improvement in medical researches only few percentages of neuro-trauma patients are benefited, still majority of patients are suffering in one or multiple aspects of post traumatic symptoms.

Spectrum of sleep disorders that include insomnia, hypersomnia, drowsiness, daytime sleepiness, hyperarousal, flashbacks and nightmares are manifested in all the categories of brain injury [3]. Our longitudinal study on natural course of post traumatic symptoms among mild brain injury patients reveals that sleep disorder was present both in acute and chronic phase after injury [4]. Studies have also documented sleep disorders in moderate and severe category both in acute and chronic phase [5,6]. Irrespective of severity of injury, sleep disorder is present in initial and in later phase after injury [3].

An estimate from global perspective study reports that nearly 3-3.5 million patients are due to TBI alone [1]. And India is generating approximately 1.5 million neurologically disabled individuals due to TBI [1]. Post traumatic symptoms following injury manifest in multi spectrum. Sleep disorder forms a major part of it. Early diagnosis and undertaking specific treatment or rehabilitation measure is very crucial, because this has significant affect on quality of life of injured individual.

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TBI and its related sleep disorder forms a huge burden on our developing country. The organized literature of same from our country is very limited. India has around 300 sleep laboratories and there is tenfold increase in doctors specifically trained in sleep disorder from 2011 to 2014 [7]. There is plenty of resource available in our country but the research outcome is very meagre.

The treating neurosurgeons, sleep specialist and neuroscientist should integrate to improve the research quality in TBI and sleep related disorders. With this enormous burden, harmonize translational research and its implication is very crucial. Implementation of proper treatment protocol, sleep hygiene and rehabilitation measure is very essential for suffering individuals. If not all, majority of injured individuals will benefit.

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