

The History of Indian Society for Sleep Research (ISSR) from its Inception to the Launching of the Journal “Sleep and Vigilance”

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The Indian Society for Sleep Research (ISSR) was founded on 10th September, 1992. The founding ceremony was held during the “International Conference on Sleep–Wakefulness” in New Delhi on 9–11th September 1992. This conference also witnessed the formation of the Asian Sleep Research Society (ASRS). On 11th September, 1992, the Founding Committee for the ASRS was constituted with Prof. Shojiro Inoue, of Tokyo Medical and Dental University, as the Chairperson.

The International Conference on Sleep–Wakefulness was the first conference on this subject in India. It was attended among others by RW McCarley, JM Kruger, JM Siegel, PJ Shiromani, JC Rains and M Goswami from USA. K Honda, S Inoue, T Kodama, Y Koyama, Y Kayama, M Okawa, S Honma, K Honma, T Endo, Y Motohashi, S Shinkai, T Okuma, T Okada, T Ohta and Nazkawa were some of the eminent scientists from Japan who attended the conference. The European scientists included M Mancia, AA Borbely, DJ Currie, K Meier-Ewert, AW Katz and T Penzel. EP Sloan and CM Shapiro from Canada, J Trinder from Australia, JJM Askenasy from

Israel and SY Liu from China were the other prominent attendees from abroad [1]. This conference and the formation of ISSR marked the beginning of the practice of modern sleep medicine in India. The ISSR organized the Second Interim Congress of World Federation of Sleep Research and Sleep Medicine Societies (WFSRMS), during September 2005 at New Delhi [2, 3]. It also organized the 8th Congress of ASRS in September 2014 at Trivandrum, Kerala [4]. Apart from organizing national and international conferences, the activities of the society include conducting national sleep medicine and technology courses, certification programmes for physicians and technicians, and public lectures.

Sleep science and sleep medicine are not new to this part of the world. The importance of sleep and sleep hygiene has been amply advocated in ancient Indian literature. Ayurveda considers *Nidra* (sleep) as one of the three supporting sub-pillars of good health. Information about ayurvedic medicine is available in the *Samhitas* (encyclopaedias), written in Sanskrit around 1000 BC, by the great scholars Charaka and Sushruta [5–8]. Sleep research on human volunteers and animals started at the Department of Physiology, All India Institute of Medical Sciences (AIIMS), New Delhi, under the leadership of Baldev Singh in the 1960s. Sleep research got a boost when the International Brain Research Organization, led by DP Purpura, from Albert Einstein College of Medicine, held one of its earliest workshops at AIIMS in late 1960s. Another significant event was the holding of a symposium on “Consciousness” during the XXVI Congress of the International Union of Physiological Sciences in New Delhi in 1974, which had DP Purpura, M Steriade, M Mancia, NP Bekhtereva and MH Chase as some of the participants.

In this country of more than 125 million people, the health care system in India, which is free or subsidized,

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starts from primary health care centres. From there the patient goes to district headquarters hospital, to medical college hospitals and super speciality hospitals, to seek medical attention for more complicated cases. Doctors at the primary health care centres are general practitioners who usually do not have much training in sleep medicine. This was confirmed by National Academy of Medical Sciences, the pivotal medical organization in India, which conducted a symposium on sleep medicine for medical students. A pre- and post-assessment of the symposium showed the need for quality education in sleep medicine. A subsequent survey conducted by them showed that sleep medicine practically does not find a place in the medical curriculum in India [9].

Though there are more than 300 sleep centres in the country, the certified sleep specialists and technologists are very few. Keeping this background in view, the National Sleep Medicine Course (NSMC) was launched by the ISSR in 2006. This is the biggest annual teaching platform for sleep medicine in this country. The working philosophy of NSMC recognizes the fact that most of the doctors currently practicing in India have neither received sufficient formal education in the basic science of sleep, nor in the clinical practice of sleep medicine [10]. The ‘needs assessment analysis’ during the 2nd Interim Congress of WFSRSMS highlighted the urgent need for a sleep medicine education initiative in India. The first NSMC was organized at AIIMS, New Delhi during October 14–15, 2006 on an experimental basis with the academic faculty from the USA, Japan and India. The overwhelming response and clinical success of the NSMC 2006 have encouraged ISSR to continue the programme annually on a regional basis since 2006.

Partially owing to the initiatives of ISSR and to media publicity, there has been increased public awareness about sleep medicine. This has led to the growth of this field during the past few years. There is an acute shortage of trained and certified sleep technicians. However, sleep testing laboratories are coming up rapidly. With this growth has come the need for accessible educational opportunities for PSG Technicians/Technologists who perform a crucial role in the diagnosis and treatment of sleep disorders. Apart from the skill needed for PSG recording, the technicians should have some knowledge about sleep physiology, pathology and medicine to get certified by a competent professional body. To meet this need ISSR has been organizing a National Sleep Technology Course, every year since 2012.

There is also a need for certification of sleep professionals in India, along the lines of American Board of Sleep Medicine or American Board of Internal Medicine. The World Sleep Federation (WSF) came forward to help ISSR conduct Transitional Board Certification

Examination for Indian sleep specialists. Cleto Kushida, President of WSF, started International Sleep Medicine Board Certification in five countries including India. A ten-member Indian Board of Sleep Medicine headed by a Chair was constituted in 2010 by the ISSR for this purpose. The WSF has been conducting an examination in July every year (from 2012) on behalf of the Indian Board of Sleep Medicine.

Although we are going to be 25 years old, we have not been able to attract the attention of the government sufficiently to the importance of sleep health and disorders. Sleep hygiene is the major issue for the poorer section of the society in India. A nation which had witnessed Bhopal gas tragedy should have woken up to address the issue of inadequate sleep as a major public health problem. Inadequate sleep in growing children is a burning issue to be addressed without further delay. The taxi and truck drivers and night shift workers constitute a major sleep-deprived group [11]. India has a large workforce which works on night shifts, due to power shortage during the day. The labour law in the country should have stringent rules to ensure adequate sleep to these categories of workers. The ministries of health, labour and education need to put their act together to workout a solution to this issue.

The ISSR will continue to focus its efforts for greater recognition of the specialty of sleep medicine through its multiple initiatives. There is a need to heighten awareness of various sleep disorders among primary physicians and general public [10]. Ongoing public awareness programmes, including schools and transport industry and security forces continue as immediate objectives. ISSR intends to develop a talent pool of well-trained providers including sleep physicians, technicians, and educators through its courses and board certification initiatives. To ascertain the competency of sleep health providers, ISSR will continue its mission of accreditation of sleep clinics and laboratories. Studies have demonstrated that certified status results in improved patient care and outcomes [12]. In collaboration with other organizations, ISSR will develop integrated programs to include primary care providers, and promote the evolving concept of Chronic Disease Management Model of sleep apnoea. Maintaining its leadership position in the Indian sub-continent and South-east Asia, ISSR will continue to develop and foster strategic research and translational science in the field of sleep medicine.

The ISSR will also strive to give due importance to the Indian System of medicine. We need to find out the efficacy of Ayurvedic drugs for treatment of insomnia. *Yoga nidra* is a topic that needs to be investigated properly by modern sleep researchers. It is not a happy situation that there has not been much increase in the number of sleep research laboratories over the last 25 years, in spite of

several fold increase in the number of sleep clinics and laboratories. Basic research in sleep science is something that should not be neglected even if the funding agencies are not coming forward with their support. Most of the trained researchers are leaving the country for jobs overseas. We can be happy about the fact the country is witnessing the growth of sleep medicine as a multi-discipline. At the same time, we need a National Institute of Integrative Sleep Medicine to produce well-qualified sleep health professionals for a big country like India.

During the last 25 years, ISSR has achieved name and fame nationally and internationally. ISSR is going to celebrate its 25 years of service to the Nation in advancing sleep science and medicine. On this commemorative occasion, as an attempt to serve the global sleep science and sleep medicine community, we are undertaking our latest initiative, i.e. launching the international journal “Sleep and Vigilance”. Our earnest desire is that this journal will provide the platform for talented scientists to publish their latest findings on the basic, theoretical, applied and clinical aspects of sleep and vigilance, including wakefulness, attention, alertness and consciousness.

References

1. Kumar VM, Mallick HN, Nayar U. Sleep-wakefulness. New Delhi: Wiley Eastern; 1993. p. 250.
2. Kumar VM. Sleep Biol Rhythms. 2005;3(suppl) (**Blackwell Publishing Asia Pty Ltd., Victoria**).
3. Kumar VM, Mallick HN. 2nd Interim Congress of the World Federation of Sleep Research and Medicine Societies—WFSRSMS, Monduzzi Editore International Proceedings Division, Bologna. 2005. p. 207.
4. Honma K. Sleep Biol Rhythms. 2014;4:229–68 (**Wiley Publishing Asia Pty Ltd., Victoria**).
5. Kumar VM, Gulia KK. Sleep medicine in ayurveda. Sleep Med Rev. 2016;25:131. doi:[10.1016/j.smrv.2015.02.006](https://doi.org/10.1016/j.smrv.2015.02.006).
6. Kumar VM. Ancient concept of sleep in India. In: Shiyi L, Inoue S, editors. Sleep: ancient and modern. Shanghai: The Shanghai Scientific and Technological Literature Publishing House; 1995. p. 25–33.
7. Kumar VM. Sleep medicine in ancient and traditional India. In: Chokroverty S, Billiard M, editors. Sleep medicine, Chap. 4. New York: Springer; 2015. doi:[10.1007/978-1-4939-2089-1_4](https://doi.org/10.1007/978-1-4939-2089-1_4).
8. Gulia KK, Radhakrishnan A, Kumar VM. Approach to sleep disorders in the traditional school of Indian medicine. In: Chokroverty S, editor, Sleep disorders medicine: basic science, technical considerations and clinical aspects, Chapter 57, 4th ed. Springer Science + Business Media, LLC; 2017. ISBN: 978-1-4939-6576-2 (**in press**).
9. Kumar VM, Bajaj JS. Sleep Medicine Education in India: policy initiatives of National Academy of Medical Sciences (India). Ann Natl Acad Med Sci (India). 2015;51:39–44.
10. Sharma SK. Wake-up call for sleep disorders in developing nations! Indian J Med Res. 2010;131:115–8.
11. Mallick HN, Kumar VM. Sleep medicine education in India. Sleep Biol Rhythms. 2016;14(Suppl):37–44. doi:[10.1007/s41105-015-0011-0](https://doi.org/10.1007/s41105-015-0011-0).
12. Parthasarathy S, Haynes PL, Budhiraja R, Habib MP, Quan SF. A national survey of the effect of sleep medicine specialists and American Academy of Sleep Medicine Accreditation on management of obstructive sleep apnea. J Clin Sleep Med. 2006;2:133–42.