



Awakening to sleep: Sixteen years of World Sleep Day global initiatives and future directions

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ARTICLE INFO

Keywords:

Sleep medicine
Sleep awareness
Global sleep
Sleep disparities
World sleep day
Sleep equity

ABSTRACT

World Sleep Day is an international campaign to raise public awareness of sleep health. Since 2008, the WSD campaign has grown from a small group of advocates to include hundreds of volunteer organizers in over 70 countries. A historical database of 2047 World Sleep Day (WSD) awareness activities recorded over 16 years was examined to characterize the growth of WSD and to delineate areas for further development. Between 2014 and 2024, WSD activity grew in Europe from 24 to 132 activities and in Asia from 10 to 94; however, WSD activity grew in Africa from one to 20 activities and Oceania from five to 18. Growth has been considerable, yet organizing and outreach work needs to accelerate in Africa and Asia to further advance the purpose of WSD.

1. Introduction

International campaigns are known to raise awareness about various disorders. Organized by World Sleep Society (WSS), World Sleep Day is an annual campaign to raise awareness of healthy sleep and its essential role in maintaining high-quality health and wellbeing.

World Sleep Day was founded in 2008 by the World Association of Sleep Medicine (WASM), a predecessor organization to WSS. Since its origin, the purpose of World Sleep Day has been to promote and celebrate healthy sleep in itself; narrower focuses on disorders of sleep are consciously avoided. For example, rather than communicating the signs and symptoms of obstructive sleep apnea, a WSD message would instead focus on how breathing well at night helps one to wake up feeling well-rested.

While education regarding specific disorders is necessary and is provided within WSD materials, the rhetorical foundation of WSD is broader and more fundamental: good quality sleep is one of the pillars of good health along with a balanced diet and regular exercise and is a

positive, sustaining force for physical and mental wellness. The messaging and tone of WSD are consequently positive and celebratory.

Each World Sleep Day occurs in March on the Friday before the vernal equinox. Months before World Sleep Day, a positive theme (Table 1) is chosen for the year. Members of WSS and other sleep health advocates are then encouraged to become “World Sleep Day Delegates” and organize sleep health awareness activities in their local area or region. These activities range from relatively simple communications (e.g., blog post, interview appearance) or events (e.g., educational lectures, classroom activities) to national multimedia campaigns that reach millions. WSD Delegates submit descriptions of their activities to World Sleep Society for endorsement, promotion, and archiving on the official WSD website at worldsleepday.org. As the organizer of World Sleep Day, World Sleep Society does not organize activities *per se* but coordinates and empowers its WSD Delegates to advance awareness of healthy sleep. This decentralized structure is intended to simultaneously promote a unified, celebratory message around sleep while allowing Delegates to organize activities that are responsive to local needs and cultures.

From a handful of awareness activities in the early years to many

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Abbreviations	
WSS	World Sleep Society
WSD	World Sleep Day
WHO	World Health Organization
NGO	Non-governmental Organization

Table 1
Slogan by year.

Year	Slogan
2008	Sleep Well, Live Fully Awake
2009	Drive Alert, Arrive Safe
2010	Sleep Well, Stay Healthy
2011	Sleep Well, Grow Healthy
2012	Breathe Easily, Sleep Well
2013	Good Sleep, Healthy Aging
2014	Restful Sleep, Easy Breathing, Healthy Body
2015	When Sleep is Sound, Health and Happiness Abound
2016	Good Sleep is a Reachable Dream
2017	Sleep Soundly, Nurture Life
2018	Join the Sleep World, Preserve Your Rhythms to Enjoy Life
2019	Healthy Sleep, Healthy Aging
2020	Better Sleep, Better Life, Better Planet
2021	Regular Sleep, Healthy Future
2022	Quality Sleep, Sound Mind, Happy World
2023	Sleep is Essential to Health
2024	Sleep Equity for Global Health

hundreds in 2024, the reach and impact of World Sleep Day has grown considerably since its origin. However, the character of that growth has remained undefined. Who organizes WSD activities? Where do they occur? What form do the activities take? The purpose of this manuscript is to quantify and further characterize the historical growth of World Sleep Day in order to delineate underserved areas of the world and better reach them in the future.

2. Methods

Data on WSD activities were collected from records provided by World Sleep Society. The records included all activity submissions that World Sleep Society received and published on worldsleepday.org since 2008. Each individual activity submission was described by year, country, type of activity (event, resource, media), organizer type (individual, clinic/hospital, corporate, academic), and targeted audience (public, healthcare professional, patients). When appropriate, a single activity received multiple descriptors (e.g., an activity that targeted both the public and professional audiences, an activity that included both a public event and a press conference).

For analysis, the dataset was organized by year to examine temporal trends in participation across countries and continents. Summary metrics, including the number of activities and unique countries involved each year, were calculated. Countries were categorized by continent to analyze geographic distribution and regional trends. Activity types and audience focus were further aggregated to understand the diversity of approaches across different regions. Proportional analyses were performed to highlight the share of total events per continent, and visualizations were generated to illustrate engagement trends over time and by region.

3. Results

The World Sleep Day activity dataset contains a total of 2047 recorded activities since 2008. Annual activity counts vary: one event

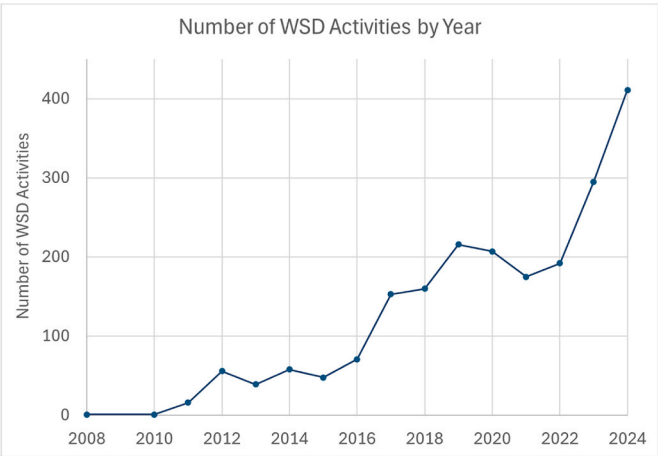


Fig. 1. Number of WSD activities by year.

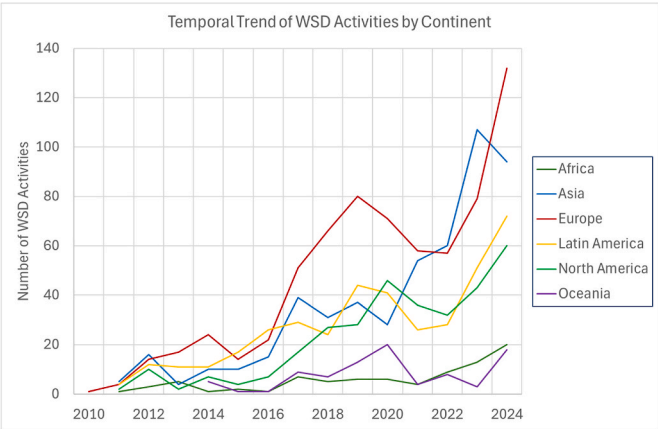


Fig. 2. Temporal trend of WSD activities by continent.

occurred in 2008, 16 in 2011, 56 in 2012, and generally sustained growth in engagement through subsequent years (Fig. 1). The diversity of participating countries has also expanded, ranging from few countries in the early years to over 60 in 2024.

Events were the most common activity type with 1248 instances between standalone and mixed formats; resources (991 instances) and media-related activities (423) followed. The audiences targeted were predominantly the public (1333 instances) and professionals (864) with some overlap where both the public and professionals were engaged in a single activity (128). Patients were also a target group with 72 instances focused specifically on this audience and several activities designed to reach both public and patient groups.

For organizer types, corporate entities were the most frequent (534 instances) followed by clinic or hospital-based organizations (391), academic institutions (363), individual contributors (297), and societies (248).

The distribution of World Sleep Day events (Fig. 2) shows that Europe leads with the highest proportion, accounting for 33.8 % of total activities. Asia and Latin America follow closely, each contributing approximately 23.3 % of the total counted activities. North America represents 11.5 % of events while Oceania and Africa have smaller shares at 5.4 % and 2.6 % respectively.

4. Discussion

The results show that World Sleep Day has effectively raised global awareness of sleep health, engaging diverse stakeholders from

healthcare providers to the general public. Over its history, World Sleep Day has expanded its reach to over 70 countries, emphasizing the importance of sleep across multiple dimensions of health, including physical, mental, and societal well-being. However, much room remains for improvement, particularly in regions with limited participation like Africa. Comparisons with other health awareness initiatives reveal both the strengths of World Sleep Day and areas for further development.

Similar to World Sleep Day, other initiatives have successfully mobilized global actors, often by focusing on specific health issues with clear public health implications. Examples include World Mental Health Day and World Heart Day, each promoted by international organizations like the World Health Organization (WHO) and various non-governmental organizations (NGO). These initiatives provide valuable insights into strategies that World Sleep Day can adopt to enhance its impact. For example, World Mental Health Day, organized by the World Federation for Mental Health, has successfully attracted widespread attention and participation through partnerships with governmental bodies, NGOs, and community organizations. Very similar to World Sleep Day, this event fosters a sense of inclusivity and support for individuals affected by mental health challenges.

Another relevant comparison is World Heart Day, organized by the World Heart Federation. This day has achieved global recognition through its strong partnerships with national health departments, resulting in widespread awareness campaigns, screenings, and community-based activities. World Heart Day leverages local healthcare infrastructure to provide community-level interventions, such as free screenings for blood pressure and cholesterol levels, helping to make the day actionable. World Sleep Day could adopt similar community-level interventions by encouraging local health organizations to provide accessible screenings and education on sleep disorders like sleep apnea, insomnia, and excessive sleepiness, which are prevalent but often underdiagnosed in low-resource settings.

While World Sleep Day has grown substantially, certain limitations remain, especially regarding its impact in regions with low participation. One of the main challenges is the lack of culturally relevant educational materials for areas that do not have a long history of sleep-specific health care and where sleep may not be recognized as a priority. Additionally, logistical challenges to organizing activities in low-resource settings can limit participation; organizing an awareness activity often requires volunteer labor and Y resources. Unlike some international awareness campaigns, World Sleep Day lacks significant governmental and NGO support and mostly relies upon the volunteer actions of its individual Delegates, the efforts of the associate societies of WSS (e.g., Brazilian Sleep Association, Sleep Society of Thailand), and a small number of corporate partners.

5. Future directions

Africa and Oceania are found to be the most underrepresented regions in the total set of WSD activities. Addressing this gap requires a targeted approach that accounts for the unique socioeconomic and cultural landscapes of these regions.

To enhance the impact and reach of World Sleep Day, several strategies can be considered.

1. **Strengthening Partnerships:** Building collaborations with local health organizations, NGOs, and governmental bodies in under-represented regions, especially in Africa, would help to broaden the reach of WSD. Partnerships with organizations that already have a presence in these communities, such as WHO and national health ministries, can facilitate the integration of sleep awareness into existing health programs, similar to the successful models seen in World Heart Day and World Mental Health Day.
2. **Culturally Responsive Messaging:** Developing culturally responsive educational materials that resonate with local beliefs can improve engagement. For example, highlighting the importance of

healthy sleep on family life may align more with some communities whereas a focus on healthy sleep's promotion of mental focus and productivity may align effectively with a different community. Collaborating with WSD Delegates to create and share these materials would ensure that the information is accurate, relevant, and impactful for local audiences.

3. **Leveraging Digital Platforms:** Digital platforms are necessary and powerful tools for health education, particularly in regions with limited healthcare access. Expanding the presence of WSD on these platforms would increase opportunities to recruit more WSD Delegates and to deliver messaging directly to remote audiences.
4. **Focus on Training Local Healthcare Providers:** Training local healthcare providers with basic sleep health education and screening techniques could help to sustain the impact of WSD. These healthcare providers could serve as sleep health advocates in their communities, increasing the likelihood that sleep health becomes a recognized component of primary care.
5. **Incentivizing Participation in Low-Resource Settings:** Providing financial and logistical support to organizers in under-resources areas could incentivize participation. Grants or sponsorships for hosting World Sleep Day events could alleviate some of the burdens that local organizers face in low-resource contexts.

6. Conclusion

World Sleep Day has grown exponentially since 2008 and communicated the importance of sleep health on an international scale, yet gaps in reach remain, particularly in Africa and Oceania. Lessons from other health awareness days like World Mental Health Day and World Heart Day demonstrate the importance of partnerships, culturally relevant messaging, and community-based interventions. To strengthen World Sleep Day's global impact, efforts should focus on establishing partnerships, creating culturally appropriate resources, leveraging digital platforms, and providing financial support for local organizers. Implementing these strategies can help World Sleep Day evolve into an even more inclusive and effective initiative, advancing sleep health worldwide.

CRedit authorship contribution statement

Lourdes M. DelRosso: Conceptualization, Methodology, Writing – original draft. **Fang Han:** Writing – original draft, Writing – review & editing. **Richard P. Allen:** Investigation, Project administration. **Antonio Culebras:** Project administration, Writing – review & editing. **Christian Guillemineault:** Conceptualization, Methodology. **Liborio Parrino:** Conceptualization, Writing – review & editing. **Sophia Hendrickson:** Data curation, Formal analysis, Software, Visualization. **Tyler Ringstad:** Data curation, Formal analysis, Visualization, Writing – review & editing. **Allan O'Bryan:** Conceptualization, Methodology, Supervision.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: The authors declare the following potential competing interests:

- Tyler Ringstad and Sophia Hendrickson are employees of the World Sleep Society.
- Allan O'Bryan serves as the Executive Director of the World Sleep Society.
- Lourdes DelRosso serves as Secretary in the Executive Committee of the World Sleep Society.
- Liborio Parrino, Antonio Culebras, Fang Han, and Lourdes DelRosso have co-chaired World Sleep Day initiatives.

The authors affirm that these affiliations and roles have not influenced the content or conclusions of this manuscript.

For all other authors, no competing interests are declared.