

Alternative Medicine/Supplement Use to Induce Sleep: A Global Perspective

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Abstract

Sleep medicine has considered a worldwide perspective to investigate and treat sleep disturbances and disorders. Large scale epidemiological studies along with World Health Organization sponsored studies using the International Classification of Functioning, Disability and Health system, have categorized patient complaints about their sleep. The current study was designed as a qualitative investigation of an aspect of a common patient sleep complaint—difficulty falling asleep. The aim of the study was to identify some of the sleep onset practices which may or may not include a treatment for sleep onset. A social media approach was used to capture the qualitative comments about sleep from individuals responding to a Facebook questionnaire. The questionnaire was in English and Portuguese (per the second author). The individual responses were from 12 countries/6 continents. Modal responses in terms of alternative medicine use and day time practices to promote sleep are represented.

Keywords: Alternative medicine; Supplements; Sleep disturbance; Sleep disorders

Introduction

The scope of sleep medicine has been examined worldwide [1-3]. Results from studies of sleep medicine describe the incidence and prevalence of sleep disorders by population by country [2,4-6]. With these tabulations, the severity and treatment needs of sleep disorders have been underscored [7-9]. In an effort to determine factors precipitate to sleep disorders, a survey asking about sleep disturbance and sleep related behaviors was administered to a worldwide audience [10]. The aim of the study was to identify personal, qualitative factors related to sleep and sleep disturbance.

Methods

Greater than 90% of the world's countries have an English speaking population. Study participants are often patients or undergraduates (i.e., from similar demographic and medical diagnosis/symptom status).

In this study Participants were gathered from invitations posted on sleep related blogs and social media to respond to a "Pre-Sleep questionnaire" posted on a facebook page. The Facebook page was generated with a description of the aim of the research and linked to the survey for those interested in responding. Consent was gathered by agreement represented in completed questionnaires.

The five-item "pre-sleep questionnaire" asked about sleep difficulty, natural remedies, strategies to fall asleep and other treatments used when sleep is disrupted. The questions were designed with 4-15 choices per item – in a checklist fashion. Each question was treated as a separate variable, coded and entered into an Excel spreadsheet. Survey statistics were used to represent the tabulations among the items by participant. (Contact the first author at kathysr@elmhurst.edu for a copy of the questionnaire).

Results

49.7% of the participants reported having difficulty falling asleep on a regular basis. The sample had 62% females and 38% males ranging ages of 18 – 80 years with 30-39 as the median age range.

Sleep disturbances were reported to range from 2 to 18 months: initiating sleep difficulty 16 months history on average, Disrupted sleep at a eleven month length on average, Sleep maintenance at a fifteen month length on average and non-restorative sleep at an eighteen month length on average.

Table 1 displays the responses provided by the participants of the types of alternative medicines used to induce sleep. Melatonin, lavender and wild lettuce were the most common substances reported by the participants.

Which of the following natural remedies have you tried and regularly use to fall asleep?				
Answer Options	Never tried	Have tried	Regularly use	Response Count
Amino acids	45	0	1	46
California poppy (Eschscholzia California)	46	0	0	46
Camphor odor	45	1	0	46
Chamomile	26	17	4	47
Feverfew	46	0	0	46
Homeopathic supplement	38	7	1	46
Kava kava	45	1	0	46
Lavender	33	12	2	47
Melatonin	23	18	7	48

Mineral supplements	39	4	3	46
Passion flower	41	4	1	46
Quinoa	44	1	1	46
Soy products	43	1	1	45
Spirulina	44	2	0	46
St John's wort	40	6	0	46
Sulfur	46	0	0	46
Tryptophan	43	2	0	45
Valerian	41	3	2	46
Vitamin supplements	32	11	5	48
Wild lettuce (<i>Lactuca virosa</i>)	45	0	0	45
Other (please specify)			2	
Answered question				50
Skipped question				131

Table 1: Alternative medicines/Supplements used by participants to induce sleep.

Figure 1 depicts the medical and allied medical approaches used to induce sleep. The regulation of caffeine/energy, co-sleeping and rest and digest (colloquial phrase for relaxing in sedentary calming activity) were the most common methods used by the participants to induce sleep.

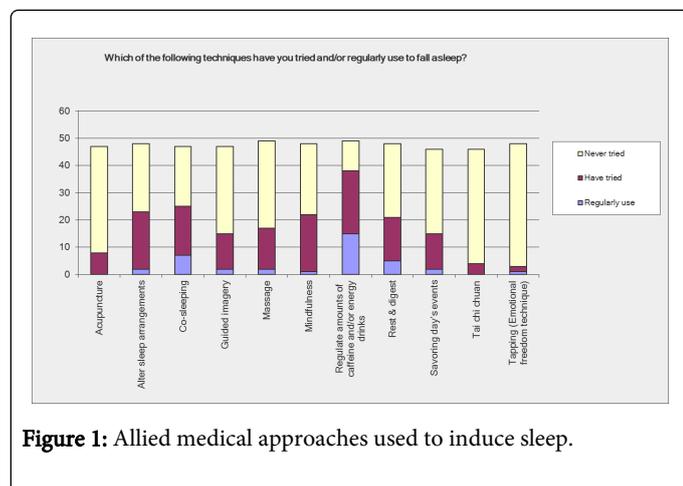


Figure 1: Allied medical approaches used to induce sleep.

Discussion

The International sampling and method used in this study provided a unique approach to the study of sleep in a more naturalistic fashion.

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The immediacy of response with a social media posting of a survey as well as the social media status allow for authentic responding that may not be fully detected in formal design approaches.

Relevant, new information was identified in this study. The participants, collectively, engaged in broad usage of alternative medicine and naturalistic approaches to induce sleep. While the implications of this self-directed approach merit further study, we conclude that the participants' use of varied sources are resourceful and very much a seeking behavior to be encouraged and monitored by health care professionals for the individual's health safety. We believe that future study of sleep patterns and alternative medicine/allied medicine approaches is needed.

Conclusions

Social media approaches such as the questionnaire posted on a facebook page with emailings and postings to other pages to encourage responses provided a unique and volumous sampling of individual responses about their presleep behaviors.

Further attention to individual practices of consuming alternative medicines and monitoring of caffeine intake associated with sleep quality is necessary to define these relationships to sleep.

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