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A Global Perspective to Falling Asleep

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Abstract

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.

Keywords: Sleep; Patients; Sleep disturbance; Natural remedies; Sleep quality

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]. With these tabulations, the severity and treatment needs of sleep disorders have been identified [5,6]. 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. The questionnaire was in English and Portuguese (per the first author). A graphical and tabular summary of the individual responses across 26 countries to the questions about their pre-sleep and sleep onset behaviors will be given. Additionally, the clinical implications will be provided for the conclusions.

Method

Greater than 90% of the world's countries have an English speaking population. Study participants are often patients or undergraduates (i.e., homogeneous groups by demographic and medical diagnosis/symptom). Participants were gathered from invitations posted on sleep related blogs and social media. Additionally, a Facebook page was generated with a description of the aim of the research. Consent was gathered by agreement represented in completed questionnaires which was in line with Helsinki guidelines that specifically requests informed consent be given.

A five-item survey asking 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. The aim of the study was to identify personal, qualitative factors related to sleep and sleep disturbance.

Findings

A response rate of 181 surveys was collected. 24 male and 157 females in an age range of 18 to 65 years. The responses were collected during the period of August to November of 2014. Individuals responded from 13 countries: Albania, United States, Canada, Brazil, England, Ireland, China, Norway, Sweden, Jamaica, Mexico, Philippines and Italy.

49.7% of the respondents stated they had difficulty falling asleep; of this grouping initiating sleep was the most problematic (35%). Fragmented sleep resulting from frequent wake ups was the second most common reason for poor sleep. 48.9% of the participants that indicated trouble falling asleep had had this problem for ten years or greater. 28% of the respondents indicated that they take a supplement to fall asleep. Melatonin, chamomile and mineral/vitamin supplements were the most popularly used by the respondents. Table 1 lists the types of natural remedy by use in the subgroup of respondents that stated they take them. Table 2 represents alternative medicine practices that 28% of the respondents have tried as a method to fall asleep. Regulation of caffeine intake, co-sleeping and rest & digest (i.e., colloquial phrase for relaxing, sedentary behavior).

Which of the following natural remedies have you tried and regularly use to fall asleep?				
Natural Remedy	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 (Lactuca Virosa)	45	0	0	45
Other (please specify)				2
Answered question				**50**
Skipped question				**131**

Table 1: Responses to Facebook Question, "How Do You Fall Asleep?"

Which of the following techniques have you tried and/or regularly use to fall asleep?				
	Never tried	Have tried	Regularly use	Response Count
Acupuncture	39	8	0	47
Alter sleep arrangements (e.g., arrange bed away from window)	25	21	2	48
Co-sleeping	22	18	7	47
Guided imagery	32	13	2	47
Massage	32	15	2	49
Mindfulness	26	21	1	48
Regulate amounts of caffeine and/or energy drinks	11	23	15	49
Rest & digest	27	16	5	48
Savoring day's events	31	13	2	46

Tai chi chuan	42	4	0	46
Tapping (Emotional freedom technique)	45	2	1	48
Other (please specify)				8
Answered question				**50**
Skipped question				**131**

Table 2: Responses to Facebook Question, "How do you fall asleep?"

Discussion

Sleep disturbances have been considered as a worldwide agenda item to address when considering the health of an individual. Of the types of sleep disturbances, insomnia is the most prevalent [7-10]. Respondents posted their responses to a Facebook page about their sleep disturbance and importantly the ways in which they managed it. 50 of the 181 participants utilized alternative medicine and self-management strategies. We feel that the social media approach provided immediate information not commonly communicated in the formal health care system intake interview. The extensive listing of natural remedies and non-pharmaceutical approaches reflects an advantage, we feel, to this social media methodology. The impact of social media on the individual may provide an ease to being more forthcoming and detailed about self-behaviors given the anomy of the online encounter. We think further research with this social media method specific to alternative medicine/non-pharmaceutical approaches usage patterns and sleep quality measures would be useful in more fully understanding what individuals do, globally, to help themselves fall asleep. We think this implicitly implies how individuals consider their sleep quality, importance of sleep in their lives and behaviors, accordingly, that they will do to enhance their sleep. Additionally, the effectiveness of the strategies as well as the role of health care professionals to assist in this area needs exploration.

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