

Sleep Disorders in General Hospital: A Cross-Sectional Study in 253 Patients Hospitalized In Different Medical and Surgical Services

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Abstract

Original Research Article

Introduction: Sleep is a fundamental physiological need. It is important to understand the prevalence of sleep disorders, especially in patients with a somatic disease. **Method:** The study had as scope patients admitted to the medical and surgical services of general hospital, during a period of one month. The approach used in this study is a qualitative approach, based on a semi-structured, concise, and clear questionnaire. **Results:** The main aim of this study was to estimate the frequency of sleep disorders and their management by somatician doctors in the Moulay Ismail military hospital. This present study has 2 important results; the first one, sleep disorders are common in patients with somatic pathology. The second one, and against the recognition and management of these disorders by health professionals is rare. **Conclusion:** It is essential to alert both public and health practitioners to this subject through public education campaigns creating awareness of the consequences of sleep disorders but also through adequate training of physicians for a better screening and treatments of insomnia problems.

Keywords: Sleep disorders, insomnia, general hospital, medical services, surgical services.

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INTRODUCTION

Sleep is a fundamental physiological needs, man spends one-third of his life sleeping, and this time significantly impacts the remaining two-thirds [1].

The impact of sleep disorders on public health seemed to be obvious. However, public and medical professionals are not yet fully informed about their issue.

Sleep disorders affect one in three people at some point in their life. Often transient, unrecognized and untreated, they tend to become chronic and worsen [2]. These disturb not only the quality of their night but also the quality of their day. The duration of sleep, especially its reduction, is associated with increased mortality. In fact, short sleep time (compared to a standard of seven hours of sleep on average) increases the risk of being obese by 55% for an adult and by 89% for a child, is associated and predictive of diabetes (independent of obesity), arterial hypertension, coronary heart disease and cardiovascular mortality [3],

and is associated with poor mental health, low work productivity and high use of health services [4].

Despite the high cost of the obvious problems with sleep disorders, both on health and on the quality of life, they remain unrecognized as a public health problem, particularly concerning the training of health professionals in diagnosis and the management of these disorders, their causes and consequences [5].

A reason for this ignorance is that sleep disorders are most referred to as a symptom than a disease and the distinction between the two is unclear to practitioners. The second difficulty lies in the fact that it is difficult for patients, as well as for health professionals, to know from what degree of severity insomnia requires treatment. Many consensuses have been devoted to studying sleep disorders and its impact on terms of public health, on the economy and quality of life. The management of sleep disorders is in fact still poorly understood.

Seen the social and economic burden, generated by sleep disorders, more frequent in patients with organic disease [5], it is important to know its prevalence to increase awareness of health professionals.

METHODS

The study-concerned patients admitted to the medical and surgical departments of the Moulay Ismail Military Hospital in Meknes, outside the intensive care units, emergencies and intensive care units, during a period of one month from 01st as of July 31st.

Patients were informed about the voluntary nature of participation. The consent for participation was verbal after explanation of the aims and means of the study.

The approach used in this study is qualitative, based on a semi-structured questionnaire, made for the purpose but not validated. Interviews lasted on average 10 to 15 min. The questionnaire was developed in a clear, simple (1 page) and a discreet way, making understood and accepted by the population questioned and accordingly maximizing the feedback quantity and quality.

This tool collects general information including Sociodemographic data on sex, age, marital status, level of education, and occupation. A few additional questions specifying the reason for admission, medical history, the concept of medication taken and the current reason for admission. Finally, a question assesses the presence and nature of any stressful events experienced by the patient.

The Sleep Disorders Survey is made up of a series of questions assessing the presence and nature of the sleep difficulties encountered by these patients over the past 12 months.

Assessment was done on the first day of admission for overnight admissions and the next day in the afternoon or evening inpatients. We paid particular attention to the sleep habits of these patients putting aside their somatic pathology, the reason for their admission. The pathology from which these patients suffer was taken from the patient's file.

Patient responses were recorded and collected data were then analyzed and compared to data from the literature.

RESULTS

Out of the 256 people approached, 03 people declined due to lack of interest or due to their illness. Thus, 253 people (80% of those approached) agreed to participate in the study.

The men were predominant, namely, 195 men against 58 women. Married subjects are predominant and represent more than $\frac{3}{4}$ of our population. The average age of our population is 48.39 years with extremes between 78 years and 15 years. The level of education is low with a predominance of patients who have never attended school and subjects with basic education. Patients who have a university level represent only 3%. The subjects are retirees, half, or without a job. Civil servants represent $\frac{1}{3}$ of our population. Most subjects without occupation office are housewives. The consumption of toxicants in our population is low, tobacco is smoked by only 23 people, followed by alcohol by 08 people and cannabis by 03 people.

Among the 253 participants, 165 reported sleep disorders or 65.2% of our population. Insomnia is the predominant disorder, accounting for three quarters of the disorders. No patient reported nighttime leg movements or hypersomnia. Six patients with snoring have a diurnal impact of sleep disorder, ie 15%. Insomnia was severe (significant impairment of daytime functioning: fatigue, irritability, memory and concentration impairment, etc.) in 34 patients, or 15.38%.

Sleep disorders, in particular insomnia, are distributed evenly for all ages over 25, with a slight predominance in patients over 55.

An obvious male predominance, $\frac{3}{4}$ of the population is made up of men. For the Weight; the average weight of patients with insomnia was 67.8 kg, while for those with snoring was 79.13 kg.

Naturally all patients suffer from a somatic problem.

The distribution of patients in the medical services was homogeneous. Fewer numbers were seen in the rheumatology department where most patients are seen in the consultation. A slight predominance of the internal medicine service, which brings together several services (hematology, nephrology, etc.).

The predominance of patients hospitalized in the urology department, which represents half of the population hospitalized in the surgical departments, compared to other departments where the distribution of patients was homogeneous.

Most patients, 62%, relate their insomnia to the onset of the disease or to its exacerbations. Not all patients who snore relate their disorder to their somatic condition.

The treatment taken by these patients to improve their sleep disorder is varied, between herbal medicine, represented by herbal tea, and other

treatments, presented by taking antihistamine in 06 people and neuroleptics in 03 people. The others took their treatment from the neighborhood pharmacist without specifying it. Patients with severe insomnia take more hypnotics while patients with mild insomnia take more herbal teas to promote sleep. Five patients were taking both a hypnotic and herbal tea.

Almost most our population has not received any medical treatment for their sleep disorder. 12% spontaneously reported their complaints to the attending physician wishing a treatment. However, 10% did not see their complaints followed by a prescription and only 4% received specific treatment.

DISCUSSION

The size of our population is comparable to that of other studies [5, 6] over a period comparable to ours and under similar conditions.

Higher rates of sleep disorders including insomnia are reported in elderly subjects [7, 8] where they are secondary to physiological variations (phase advance and frequent decrease in circadian rhythm) and are associated with illness or drug use. The frequent insomnia in the elderly seems to be rather consequence of medical or psychosocial comorbidities or to the use of drugs [8, 9].

Other studies suggest a more important relationship between insomnia other somatic condition (namely pain, nocturia, dyspnea, nocturnal myoclonus...) than with age [6], which is consistent with the result of our study conducted in patients with obvious somatic disorders, with a slight predominance of sleep disorders in patients over 55 years of age.

While several studies highlight the frequency of sleep disorders in adolescents [10-12] and link them to pubertal development [13], other studies also show that these disorders are frequently associated with signs of physical, mental and psychological suffering [14], Number of adolescents participating in our study was statistically insufficient to conclude.

Although the risks of sleep difficulties increase significantly in women during certain periods of life (eg, during menopause, pregnancy) [15, 16], a female predominance of sleep disturbances has been reported in some studies [17-21] but not significant [5, 6].

Studies conducted in military hospitals like ours show a male predominance of sleep disorders, which is overwhelming (96.8%) [22] making the interpretation of this result difficult.

The prevalence of sleep disorders and in particular insomnia in our population is comparable to other studies carried out on hospitalized patients [4, 22] or consultants [5, 20]. Studies on sleep disorders related

to hospitalization and especially to surgical interventions [23] show a higher rate, seemed to be related to the major stress caused by such a change of environment, drug intake, duration of hospitalization or simply attributable to postoperative pain [20, 23]. The use of hospitalization is correlated with an exacerbation of somatic pathologies, hence the importance of sleep disorders in these patients compared with the general population [6, 24, 25].

Insomnia is the most common sleep disorder [18], its relationship to somatic conditions is bidirectional; The use of health services increases with the severity and chronicity of insomnia [5]. reduction and increase in sleep duration, and various sleep disorders including obstructive sleep apnea and insomnia can be causal factors in the development of various somatic conditions including cardiovascular [26] and metabolic diseases [27, 28]. Pain [29], respiratory disorders during sleep [30], Urinary disorders of the nocturia type [31, 32] have a logical influence on sleep, with the consequences of difficulty falling asleep and waking up at night, the bad sleep itself contributes to a lowering of the pain threshold [33].

The absence of periodic sleep movement disorder, occurring in about 80% of subjects with restless legs syndrome, can be explained by patients ignorance [34] and by the fact that the collection of this information was made in the absence of the partner who could be the main witness of this disorder (kicking in the night) [35].

Many chronic medical conditions affect the quality of sleep and can cause or contribute to the perpetuation of insomnia. Several recent epidemiological studies suggest a link between poor sleep and these chronic pathologies [24].

In our study, the small percentage of patients who represent each department, make us unable to obtain a significant correlation between a type of somatic impairment and sleep disorder.

An exception made for the urology department where 2/3 of its patients had insomnia, and total insomnia in 62%, secondary to nighttime pain or nocturia in patients with different conditions (prostate adenoma, renal tumor or lithiasis, urethral stricture). Which is agrees with the data in the literature [31, 32].

The use of sedative products in our sample is low compared to other studies, especially concerning the use of benzodiazepines and/or hypnotics [1, 6, 36, 37] while the use of herbal teas is more important.

The frequent use of herbal teas is favored by their reputation as sedative products with proven efficacy [38] and of low cost, but also by a fear of

taking a sedative which is still considered a “drug” by patients and as a “bad solution” by practitioners [35], especially in the long term [36].

Indeed, the use of health services increases with the severity and chronicity of insomnia [36]. On the one hand, patients with severe insomnia take more hypnotics while patients with mild insomnia take more herbal teas to promote sleep. These results support data from previous studies [6, 20, 23] that also indicate that people with insomnia are more likely to use health services than good sleepers. However, low studying rate and poor access to care (favored by the low socio-economic level of our population in majority retirees), can partially explain the use of natural products or the neighborhood pharmacist to obtain a “medical” product without consultation.

Despite the severe consequences, and recognized by doctors, of sleep disorders on the mental and physical health of their patients, the management of insomnia, even severe, by the attending physician is far from certain [24].

A countless number of people who complain about their sleep considered their illness was mild and are not anxious about it [38] and have their own non-medical solution to deal with it: watching TV, reading, taking medication. without prescription or drinking alcohol [18, 20], which explains the low recourse to the doctor specifically for insomnia.

As for the attending physicians, their identification and management of sleep disorders in their patients remain low in our sample as well as in the other ones [22, 38].

Several factors explain this phenomenon:

- Insomnia is difficult to objectify and assess by the treating physician because it is primarily a subjective complaint, with a difficult to grasp severity [19, 20].
- Lack of training and awareness of physicians on the importance and the severity of sleep disorders [37].
- Doctors' fear of the adverse effects of hypnotic drugs [20, 35].

Therefore, our study highly recommends educating and alerting health practitioners about this.

CONCLUSION

This study has two important results:

1. Sleep disturbances are common in patients with somatic pathology.
2. The recognition and management of these disorders by health professionals, on the other hand, remains low.

Sleep disorders are frequent and serious by their consequence but remain unrecognized and supported by the medical community. It's mainly attributed to a reciprocal doctor-patient reluctance concerning the question of the quality of sleep of these patients.

Our study recommends alerting both public and health practitioners on this subject, through public education campaigns on the consequences of sleep disorders and via adequate training of doctors so that they can screen insomnia problems and initiate the appropriate treatments.

Finally, in terms of research, much remains to be done to better distinguish the causes and consequences between insomnia and pain, respiratory diseases, urinary disorders or metabolic diseases.

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