Nursing and no Drug for the Management of Insomnia Treatment
Enfermería y Tratamiento no Farmacológico para el Manejo del Insomnio

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ABSTRACT:
Introduction: Insomnia is defined as the inability to initiate or maintain sleep. It is the most common sleep disorder and can produced consequences for health in all aspect. Non-pharmacological measures have shown better effect in the long management of insomnia, so the use of drugs should be restricted as a second-line treatment. Methodology: In order to learn about non-pharmacological management procedures of insomnia from primary care nursing, we conducer a literature review through primary and secondary sources. Results: As first line treatment include therapies behavioural and cognitive-behavioural associated with education for health and the sleep hygiene measures. According to some studies, nine 30-minute, non-pharmacological interventions queries, reduce chronic insomnia with effectiveness of 70 to 80%. Also there are alternative therapies such as the use of valerian to associate as complementary therapy can help the Management of insomnia with good level of evidence. Conclusions: Non-pharmacological measures should be used as a first line of treatment. However in our country to penalties are prescribed and there is high consumption of drugs for this problem, with the resulting consequences for the health of tolerance and dependence producing the maintained consumption of these dugs. Addressing the situation is considered essential to an improvement of the professional human resources and training.

Key words: Nursing; Insomnia; Treatment; Dream.

RESUMEN:
Introducción: El insomnio es definido como la incapacidad para iniciar y/o mantener el sueño. Es el trastorno del sueño más frecuente y puede producir consecuencias para la salud en todas las dimensiones. Las medidas no farmacológicas han mostrado mejor efecto a largo plazo para el manejo del insomnio, por lo que el uso de fármacos debe restringirse como segunda línea de tratamiento. Metodología: Con objeto de conocer procedimientos no farmacológicos para el manejo del insomnio desde Enfermería de Atención Primaria, se realizó una revisión bibliográfica a través de fuentes primarias y secundarias. Resultados: Como primera línea de tratamiento destacan las terapias conductuales y cognitivo-conductuales asociadas a la educación para la salud y medidas de higiene de sueño. Según algunos
estudios, nueve consultas de 30 minutos, con intervenciones no farmacológicas, reducirían el insomnio crónico con efectividad del 70 al 80%. Además existen terapias alternativas que asociadas como terapias complementarias pueden ayudar al manejo del insomnio con nivel de evidencia suficiente.

**Conclusiones:** Las medidas no farmacológicas deben utilizarse como primera línea de tratamiento. Sin embargo, en nuestro país, apenas se prescriben y existe un alto consumo de fármacos destinados a solucionar este problema, con las consiguientes consecuencias para la salud que producen. Para poder abordar la situación se considera fundamental una mejora de los recursos humanos profesionales y formación al respecto.

**Palabras clave:** Enfermería; Insomnio; Tratamiento; Sueño.

**INTRODUCTION**

Sleep is a basic physiological activity of the organism that occupies one – third in the life of human being (1). Insomnia disorder is described as the personal disagreement as to the amount and quality of sleep (2). The term refers to the amount and quality of sleep according to the health sciences descriptors (3), due to a constant state of alert (1).

Insomnia has been described as the sleep disorder most often, estimated that between 30 and 50% of the adult population suffers from it along his life, plus 10% suffer chronic (4). The prevalence of this disorder, between young people of different sex, is similar (5). But in increases insomnia with age in a more pronounced way in the female sex, being more frequent insomnia in women of advanced age (1). The difficulty is most common sleep in young people, and adults, the difficulty to keep it (2).

Lack of sleep produces evil be, changes in the performance of daytime activities and labour and social functioning (2,6). Insomnia has been linked to serious health consequences, such as for example the increase of health attacks among people 18-34 that you suffer from insomnia (7). Also has been linked to risk of serious depression and multiple somatic complaints (gastrointestinal, respiratory, headache).

For the management of insomnia there are pharmacological, non pharmacological and combined measures. According to the Guide clinic of Jesus Alberdi et to the (2). For the treatment of insomnia, you must follow a phased, gradual process starting with education for health and non – pharmacological measures.

For the approach to the problem, only considered indicated use of pharmacologic measures with hypnotic effect if non- pharmacologic measures fail and insomnia interferes with ADL (2,8). In addition, in all cases, must be prescribed for periods of time short giving priority to non – pharmacological therapy.

The drug used for excellence is benzodiazepines, whose use must not extend in time, since they create dependency (9). Hypnotic drugs, used chronically, interfere in deep sleep and aggravate the problem of insomnia (10).

However, according to a study carried out in the USA and 5 European countries, consumption of benzodiazepines per capita in Spain is among the highest worldwide (1). Other studies of the Spanish population show the low percentage of patients receiving non – pharmacological therapies on occasion for the treatment of insomnia (5).

Knowledge and application of non-pharmacological interventions by health professional’s interventions by health professionals is fundamental to the management of the problem.
These therapies are the first step for the treatment of insomnia, must be kept during the entire treatment and avoid excess in the use of drugs, with better results in the long run.

**OBJECTIVE**

The present work aims to strengthen knowledge on the guidelines on the management of insomnia to be able to address comprehensively the situation and take active role.

**METHODOLOGY**

To achieve the objectives, was conducted a literature review on the non-pharmacological treatment of insomnia.

Relevant aspects for the non-pharmacological treatment of insomnia, addressed especially from primary care nursing.

The following resources have been used to search for documents:

- Scientific databases: Cuiden, Pub Med and Science Direct.
- Repositories of health: Clinical Key and DeCS.
- Websites of national government agencies: ANESARCO, General Council of schools of Nursing in Spain, and Fisterra.

For the search of information through these resources, has been used controlled language. The controlled language (DeCS-MeSH), has been used for the review of scientific databases of health, using the key words used in the present work and Boolean them “and” and “or” as a mediator between them. The key words were: nursing, insomnia, treatment and sleep. The criteria for inclusion in the search have been selection of 10 years (2008-2017), giving priority to those with less than 5 years old, reviewing articles in Spanish, English and Portuguese.

We have obtained 574 articles after searching for information with the inclusion criteria set out, discarding those without sufficient relevance or quality. 16 articles have been used for the elaboration of this study.

We have also obtained documents of interest by language on the websites of national government agencies.

**RESULTS**

At present, there are various non-pharmacological therapeutic interventions for the treatment of insomnia: education for health, hygiene of sleep, psychological interventions, and other alternative therapies\(^1\)\(^2\).

Non-pharmacological measures for the management of insomnia do not present risks to health and produce better long-term effects.
According to Gancedo A. et all (8). A weekly 30 minute consultation for 9 weeks approximate, achieved benefits with an effectiveness of 70 to 80 % in patients with insomnia for more than 4 weeks or chronic (1,9). Patients with chronic insomnia are those who experience more anxiety, cognitive inefficiency, motor impairment request for lower disease and increased frequentation of health (8) services.

Insomnia may result in many pathologies or treatment there of, so the basic problem should be treated first (1). The health education is essential, and should be the first step of therapeutic intervention (2).

The first performance to be performed is to give brief information about insomnia to the patient and their family members: What is it? How is it produced? What treatment options are there? Knowing the characteristics of the problem (the influence of the age, the structure of sleep, frequent in situations of stress, physical illness or existence of stress factors such as sudden life changes...), you can help the patient to control the situation important to remember that the concern for the day time impact of insomnia can exacerbate the problem (2). Some of the beliefs that increase the level of anxiety are:

“I need to sleep al least eight hours…","I can not give the next day if I don’t sleep eight hours…","my head may not think to falls sleep…","It gives me fear losing my ability to voluntarily control myself and losing consciousness the rest on my…”

All these thoughts should be avoided, since they create a picture of frustration and alert in the individual who aggravate the problem of insomnia (2). Subsequently, it is important to conducting assessment of the patient sleep habits. Since up to 30% of patients with sleep disorders have alteration in the hygiene of sleep. The sleep hygiene measures are guidelines that are given to the patient to redirect their behaviours and facilitate sleep. The guidelines to be followed are as follows (2,12):

- Keep a fixed Schedule to lie down and get up.
- Use the bed only for sleep and go to it only when you feel sleep.
- Avoid NAP.
- Alcohol sometimes favour sleep, but produces a restless sleep and frequent waking up early. Avoid taking three hours before bedtime.
- In the evening, avoid stimulants (caffeine, tobacco, tea)
- Practice exercise, preferably first thing in the afternoon avoiding doing the 3 hours before sleep.
- Avoid copious dinner and go to bed soon after dinner.
- Keep daily routines: brushing teeth, relaxing exercises, a glass of warm milk or read.
- Environmental measures: keep quiet room, no noise and low light.

The sleep hygiene measures do not allow solving if solo Pictures of insomnia, so are recommended as AIDS other interventions (13).

We then focus on developing a strategy to alleviate the anxiety and fear to not sleep, which aggravates the problem.

There are different psychotherapy interventions that have demonstrated its efficacy for the treatment of insomnia, as the behavioural therapies (CT) and cognitive – behavioural (CTB) (2). The TC consists of change learned behaviours and decreases
the thoughts that distort the relaxation to fall asleep. The most commonly used measures and stimulus control, sleep restriction and relaxation and breathing techniques.

- Stimulus control: the purpose of this strategy is to reduce the anxiety that may cause the patient with insomnia bed and bedroom (12). The strategy will be as follows, if not reconcile sleep in 30 minutes, get up and make a relaxing activity, as drinking a glass of warm milk or relaxation techniques, and return to bed only when you feel sleep. In addition, to control the sleep-wake cycle, you'll need to always sleep in the same schedule and maintain measures of sleep hygiene (1). Provide the patient with objective data over time using studies that show sleep image to show you who sleep more than you think. It can help suppress the bad personal perception of sleep, help reduce thoughts and sleep (14).

According to the study of Coronado and Lopez Fernandez (15), control of stimuli along with sleep hygiene measures, have been effective for the treatment of chronic insomnia of the patients studied.

- Sleep restriction: many people with insomnia spend long time in bed to try to recover the lost hours of sleep. This alters the sleep-wake rhythm and aggravates insomnia later. The aim of this therapy is to increase efficiently of sleep. This will be equal to the time between the time in bed, sleeping time so much less time asleep and greatest in bed, and the lower sleep efficiently.

The guideline for action for the restriction of hours of sleep, according to Sara Diez et all (1), is as follows: Is restricted while the patient remain in bed until 5 hours a week and the following changes will take place weekly:

- If the sleep efficiency is greater than 85%, should be increase from 15 to 20 minutes the time in bed.
- If the sleep efficiency is less than 80%, should decrease the time in bed for 15 to 20 minutes.
- If the efficacy of sleep is between 80-85%, keep the previously established hours of sleep.

The limitation of this intervention are people with manic disorders and people who need daily driving, since the sleep deprivation, can respectively, aggravate these disorders and be a contraindication the management of the vehicle (1).

- Relaxation strategies: must be performed prior to sleep. The aim is to reduce the level of anxiety at the time prior to sleep. There are different techniques of muscle relaxation, Jacobson is the most widely used and consist of collapse and relax different muscles in the body. In addition there are other techniques like control of the breath through the diaphragm directed imagination and the feedback or biofeedback with that reduce the level of anxiety (1,11,13).

The CCT used different types of CT along with cognitive structuring and the paradoxical intention (1). The CCT demonstrated in multiple studies that it significantly improves the efficiency of sleep, its latency and awake time after sleep on set (16,17). The CCT are especially recommended in patients who are contraindicated drug treatment, for example during pregnancy, elderly or in case of disease pulmonary, hepatic or renal (1).
Currently the CCT form the first line of treatment for the management of insomnia. The time of each session is 30 to 60 minutes \(^{(4,13)}\). In the case of primary insomnia, abbreviated alternatives of CBT, for insomnia management are designed. Two sessions of CCT, supported by brochures or telephone follow-up, produce significant clinical improvements \(^{(4)}\).

The following interventions are cognitive-behavioural:

- **Paradoxical intention**: aims to decrease the anxiety associates with neither the fear of nor sleeping. Advise the patient intends to not fall asleep in case if anxiety and fear to not sleep the focus changes and anxiety decreases, making it easy to sleep \(^{(1,14)}\).

- **Cognitive restructuring**: targeted therapy to eliminate thoughts distorted on sleep and anxiety producing. Medication or practice of consciousness-raising (mindfulness) has enough scientific evidence for its application in cases of insomnia \(^{(1)}\).

There are other alternative therapies, which can be beneficial as additional therapies for patients with insomnia:

- **Chronotherapy**: delay time of getting up and going to bed three hours every two days until the desired schedule \(^{(18)}\).

- **Light therapy or phototherapy**: the administration of bright light in the morning, between 6:00 and 9:00 o’clock, advances the circadian rhythm \(^{(18)}\).

- **Stimulation of exogenous melatonin during the night management advances the circadian rhythm** \(^{(18)}\).

- **Herbs**: Valerian, which possesses evidence, highlights 1b in efficacy for the treatment of insomnia \(^{(9)}\).

- **There are other therapies which require further studies for use in insomnia, such as acupuncture or aromatherapy** \(^{(1,17)}\).

The handling of the situation by the TC and the associated other adjuvant measures CCT and avoiding as far as possible the use of pharmacological therapy. It improves the quality of sleep in the long run and resources \(^{(9)}\). If these measures fail and the problem interferes with the activities of daily life, the most suitable will be the use of combination therapies since they show earlier than non-pharmacological therapies alone effects. However these measures should not be extended in time, drugs should be used for 4 weeks and with the effective dose lower then continue only with the non-pharmacological therapy \(^{(9,19)}\).

**DISCUSSION**

Insomnia is a major problem of public health, since it affects a high volume of population and produces consequences for health in all dimensions. Knowledge and application of non-pharmacological measures avoid excessive medication of patients and are considered essential.

Non-pharmacological measures, especially the CT and the CCT associated with other therapies are more effective long-term pharmacological measures. However, they
require a series of material and human resources, as well as health education on the subject to be able to educate the community.

Health education is a work, in turn, time health, which is affected by the high volume of queries. On the other hand nursing shows little active for the adequate management of insomnia, which may be to the same causes, fundamentally few resources and little training in this context.

Correct and appropriate treatment to all persons according to article 15 of the code of ethics of Spanish Nursing must however be guaranteed (20). So it does not do so, nurses will be in breach of that article of the code of ethics of the profession.

On the other hand, nurses must learn about the non-pharmacological measures for insomnia and be involved in the solution of the problem from its scope which decreases the excess of medication of the patients, the consumption of health care resources and promotes the development of the nursing profession.

Limitations of the study

The scarcity of scientific research and systematic reviews on some non-pharmacological measures for the management of insomnia, limit this study. In addition it is unusual to apply a single technique to a patient with insomnia an effectiveness of each intervention.

CONCLUSIONS

Insomnia is the most common in Spain sleep disorder. It can produce consequences for health in all dimensions, so the approach health services are essential. There are pharmacological and non-pharmacological measures for the management of insomnia.

Non-pharmacological measures should be used in first line. The pharmacological measures they should be used as a second option, and for short periods of time. Due do that you produce tolerance, dependence and multiple side effects. However, according to various studies in our country patients are overly medicalized.

To manage insomnia disorder from health services, they must know the different non-pharmacological therapies and apply them as first choice.

Non-pharmacological measures include therapy behavioural and cognitive behavioural, which has shown by it self alone, sufficient evidence to be prescribed as a treatment for insomnia. There are also other measures such as sleep hygiene and health the education of psychological techniques is considered essential and adjuvant.

Primary care nursing is the profession responsible for promoting health and preventing disease, being the healthcare professional best suites to deal with the problem by frequent contact that stays with patients and professional competences community nursing.
The high volume of people suffering from insomnia in Spain and multiple implicated ions for health which produces, it makes essential attention from the problem from health system.

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