Study on Sleep Status, Influencing Factors and Countermeasures of the Elderly

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Abstract. Objective: to investigate the sleep status of the elderly and the influencing factors of sleep in the elderly. Methods: 582 elderly in Nanchang were randomly selected as the research object, using the Pittsburgh sleep quality scale (PSQI) was investigated as a tool. Results: 44.5% of the elderly sleep quality problems, the elderly sleep by physiological, psychological, social, environmental and behavioral factors. Conclusion: the sleep problem of the elderly is serious, and it should be regulated from the aspects of cognition, psychological counseling, sports, medicine and so on.

Introduction

Sleep is an inevitable physiological phenomenon of individual. Only through sleep, in order to restore the body's normal physiological function, so that the spirit and physical recovery. Compared with other groups, the incidence of sleep disorders is high due to the gradual decline of physiological function and the increase of negative emotion. A survey shows that the proportion of elderly people with sleep disorders are: 60 years of age of 53.6%, at the age of 50% for the age of 80, is 46.4%[1]. Sleep problems not only affect the daily life of the elderly, physical health, but also increase the negative emotions of the elderly. So many old people will often produce negative emotions such as anxiety, depressed [2]. Therefore, the elderly should pay great attention to sleep problems.

Objects and Methods

Objects

This study randomly selected several large communities in Nanchang aged 60 and above as the research object of investigation, a total of 600 questionnaires, 582 valid questionnaires, the effective rate was 97%; the subjects age distribution between 60-80 years old, average age (67±6.9) years old.

Tools

This study adopts questionnaire survey method, mainly by the “Pittsburgh” sleep quality scale (PSQI) as the survey tool. The total score of PSQI 7 as the critical value of quality evaluation of individual sleep, the higher the PSQI score, said individuals worse sleep quality, of which 8~12 was divided into mild sleep disorders, 13~17 was divided into moderate sleep disorders, 18~21 for severe sleep disorders [3].

Method

In the course of the investigation, the main test used a unified guide to the subjects to answer the questions, in the confirmation of the test to understand the requirements of the measurement. After the
completion of the test, the questionnaire was collected from the main test, and the demographic data of the subjects were obtained.

**Sleep Status of the Elderly**

This research shows (Table 1), in the survey of 259 people aged PSQI score more than 7 points, that is to say there are problems in the elderly sleep quality of 44.5%; the total score of PSQI 8-12 consists of 113 people, accounting for 19.42%, showed a mild sleep problem; 13-17 95 people, accounting for 16.32%, showed that moderate sleep problems; the total score of PSQI 18-21 51 (9.76%), showed severe sleep problems.

**Table 1. PSQI Score of the Elderly.**

<table>
<thead>
<tr>
<th>PSQI Score</th>
<th>Number (n)</th>
<th>Percentage (%)</th>
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<tbody>
<tr>
<td>&lt;=7</td>
<td>323</td>
<td>55.5</td>
</tr>
<tr>
<td>8-12</td>
<td>113</td>
<td>19.42</td>
</tr>
<tr>
<td>13-17</td>
<td>95</td>
<td>16.32</td>
</tr>
<tr>
<td>18-21</td>
<td>51</td>
<td>9.76</td>
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**Sleep Characteristics of the Elderly**

Due to the decline of physical function of the elderly, and most of them are disturbed by the body disease, the sleep physiological rhythm of the elderly has changed, the sleep ability is decreased, and the sleep quality is much lower than other groups. The sleep of the elderly showed the following characteristics: difficulty sleeping, sleep latency, sleep time, sleep wake rhythm changes, more performance for the sleep phase in advance, that is, early to bed and early to rise. The survey found that 43.73% of the elderly sleep time more than 30 minutes, and with the increase of age, sleep time showed an extended trend. The average sleep time was 6.26 hours, and the sleep time was significantly shorter than that of other age groups.

**Factors Affecting Sleep in the Elderly**

**Physiological factors.** With the growth of the age, the probability of the occurrence of chronic disease is greatly increased. Studies have shown that 78.2% of the elderly suffer from various chronic diseases. The individual's physical health status is closely related to the quality of sleep. Physical and mental illness can increase their sleep, and sleep disorders will increase the incidence of age-related chronic diseases or increase the severity of the disease. For example, the common body of elderly coronary heart disease, arthritis or rheumatism, glaucoma or cataracts, mental disease, urinary system disease, emphysema or bronchitis and other diseases will slow old have a significant impact on the quality of sleep. In addition, the elderly are often due to bladder muscle atrophy, prostatic hyperplasia and other degenerative changes in the urinary system and the emergence of the disease in the night of urine and easy to wake up, thus affecting the quality of sleep [4].

**Psychological Factors.** In the old age, all kinds of negative life events, such as retirement, widowed, illness, loneliness, children’s problems, and so on. However, due to the low psychological tolerance of the elderly, it is easy to appear different levels of anxiety, depression, loneliness and other adverse psychological problems. Related studies have shown that sleep disorders and depression are associated with sleep disorders in older people with a relatively high proportion of depression. Depression will not only increase the sleep disorders of the elderly, but also may be an early manifestation of mental disorders, so strengthening the psychological care of the elderly is particularly important. The results showed that the sleep quality of the empty nest elderly was lower than that of the elderly. The sleep quality of the elderly in nursing homes was significantly lower than
that of the elderly [5]. This shows that many older people often because children are not around and prone to loneliness, and some elderly people also tend to worry about their children not to visit sick, no one to take care of such things into emotional anxiety and other negative emotions and difficult to sleep.

**Social Factors.** As a result of retirement, the social role of the elderly has changed, thus reducing the social interaction of the elderly. Research shows that the retired but continued work on the sleep quality of the elderly is better than that of retired unemployed elderly; participate in the activities of the sleep quality of the elderly are better than non participation. In addition, the quality of sleep is related to the social support and psychological experience. The higher the social support, the better the psychological well-being is, the better the sleep quality of the elderly is [6].

**Environmental and Behavioral Factors.** Environment has an important effect on sleep. For the elderly, due to the characteristics of the elderly with a unique sleep, easy to wake up, so they are more stringent requirements of the sleep environment. The survey shows that patients often feel strange because of the hospital environment and affect the quality of sleep, especially in elderly patients. Most of the elderly apartments for the elderly to change the original sleep environment caused by the decline in sleep quality. In addition to the environmental factors, the sleep behavior of the elderly, especially the poor sleep habits will also affect the quality of sleep. Poor sleep habits of the elderly are mostly manifested in the following aspects: irregular sleep time, daytime sleepiness, bedtime coffee, tea, etc. A survey by Liu Lianqi et al. Showed that older people with good health were more likely to have a nap. However, the nap time should not be too long, the elderly during daytime sleepiness will affect the quality of their sleep at night.

**Countermeasures**

**Cognitive Correction**

There are many reasons for sleep problems in the elderly, because many elderly people have a false understanding of sleep, sleep disorders caused by anxiety, thereby increasing the degree of sleep disorders, the formation of a vicious cycle. Through the health education for the elderly, the elderly to change the perception of sleep, establish a rational belief, develop good sleep habits, so as to achieve the purpose of improving the quality of sleep. It can also be used to help patients reduce sleep-related behaviors and establish a good sleep wake pattern. By limiting the time in bed, artificially mild sleep deprivation, or let insomnia face insomnia, eliminate the psychological fear and anxiety in a suitable environment for sleep, open your eyes stay awake so as to improve the quality of sleep in sleeping state.

**Psychological Counseling**

For the elderly, attention should be paid to their psychological changes, especially for widowed, elderly people living alone, should actively help them deal with negative events in life. The psychological problems of the elderly to make targeted psychological counseling. Actively encourage the elderly to participate in social activities to promote emotional communication between the elderly and catharsis.

**Style Movement**

The research shows that moderate exercise can not only strengthen the body, but also improve mood, reduce anxiety and depression [7]. Regular exercise can regulate the biological rhythm of human beings. Therefore, proper exercise can not only increase the demand for sleep in the elderly, but also improve the ability to sleep. Older people should be encouraged to take part in aerobic exercise, such as Tai Chi, square fitness (Dance), which have been shown to help improve sleep quality. Older
people can also improve sleep through music. At present, the more popular music therapy, is a simple and easy, no harm to the art therapy, with ease anxiety, emotional stability, relax the role of physical and mental. Music therapy can not only shorten the time to sleep, but also to improve other physical and mental symptoms, especially psychological symptoms. Therefore, for the lonely, depressed, due to worry about things too difficult to sleep and the elderly can choose this method.

**Appropriate Drugs**

In the face of severe sleep disorders, the elderly should be guided by the help of doctors. However, the long-term use of sleeping pills can temporarily alleviate the symptoms of sleep disorders, but also make the body dependence and tolerance to drugs. At the same time, the elderly long-term use of sleeping pills can affect the balance of the brain and maintain the ability to keep awake, increase the risk of falling. Therefore, in the face of treatment options for sleep disorders, the elderly should be given priority to non pharmacological methods to improve the quality of sleep. If you have to choose the drug treatment, but also to understand the role of drugs, dosage, side effects, appropriate, safe medication.

In summary, sleep problems of the elderly are more serious, should cause attention of the society we should expand the content and form of health education, popularize knowledge of sleep, strengthen the elderly sleep guidance, improve the elderly on sleep disorder in self management, so as to improve sleep quality, promote physical and mental health.

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