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PITTSBURGH SLEEP QUALITY INDEX (PSQI-P) SCALE IN HOSPITALIZED PATIENTS

Introduction

Sleep-related problems and poor sleep quality are significant public health issues with high sentence searching prevalence worldwide [1, 2]. Poor sleep quality may be due to physical illness, side effects of medications, psychiatric disorders (such as depression, anxiety disorder, insomnia, schizophrenia), or use of psychoactive substances. Poor sleep quality and sleep disturbances can adversely impact quality of life by reducing productivity at the workplace and by making social activities less enjoyable [3, 4]. Thus, assessment of sleep quality is important for a wide range of clinical and behavioural research and for practitioners of medicine and psychology. Standardized questionnaires provide comprehensive assessments of sleep quality, but few such questionnaires are available. The Pittsburgh Sleep Quality Index (PSQI) [2], a standardized self-administered questionnaire, was introduced in 1989 and has gained widespread acceptances a useful instrument for the assessment of sleep problems that may be associated with anxiety, stress, depression, and schizophrenia. Its reliability and validity have been demonstrated for patients with psychiatric and sleep disorders and for patients with other somatic diseases. ThePSQI consists of seven clinically derived components that assess sleep difficulty, and the sum of these component scores yields a global score of subjective sleep quality.

Goal

This study aimed to evaluate the Pittsburgh Sleep Quality Index (PSQI-P) among the hospitalized patients in therapeutic departments.

Material and methods of research

This is cross sectional study of patients about sleep quality, conducted in the different therapeutic departments in Gomel city clinical hospital N3, Belarus. This study was conducted in a month January 2025.The mean onset of age starts from 25 years to 80 years. A total number of patients included in the study were 30 members with sleep cycle. The ratio of male to female was 1.34;1 of all Psqi scale showing female predominance. PSQI is a self-rating questionnaire with 19 questions and seven component scores: sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep disturbances, use of sleeping medication, and daytime dysfunction. It was originally designed as a simple and valid instrument for use in diverse

clinical conditions [5]. The 19 self-ratedquestions are grouped to form seven component scores. Each component score is rated from 0 to 3 (0, not in the past month; 1, less than once per week; 2, once or twice per week; and 3, three or more times per week). The global score ranges from 0 to 21, with higher scores indicating poorer sleep quality.

The results of the research and their discussion

The Pittsburgh Sleep Quality Index (PSQI) is a tool designed to assess sleep quality and disturbances over the past month. It helps identify sleep problems and can be useful in both clinical and research settings. Here's a breakdown of its components and scoring: Components of the PSQI 1. Subjective Sleep Quality: Measures the individual's overall perception of their sleep quality. Score: 0 (very good) n=7,1 (good) n=6,2 (bad) n=7,3 (very bad) n=10.2. Sleep Latency: Assesses how long it takes to fall asleep after going to bed. Score: 0 (less than 15 minutes) n=10 ,1 (less than 30 minutes) n=6,2 (less than 60 min) n=8,3 (more than 60 minutes) n=6.3. Sleep Duration: Evaluates the total amount of sleep obtained Score: 0 (more than 7 hours) n=12,1(between 6 to7 hours) n=5,2,(between 5to 6 hours) n=7, 3 (less than 4 hours) n=6. 4. Habitual Sleep Efficiency: The ratio of actual sleep time to time spent in bed. Score: 0 (greater than 85%) n=11, 1(greater than 75%) n=5,2(greater than 65%) n=8, 3(less than 65%) n=6.5. Sleep Disturbances. Frequency of issues such as waking up in the night or having trouble breathing. Score: 0 (not during the past month) n=13,1(less than 1 week) n=5 ,2(less than once or twice per week) n=6,3 (three or more times a week) n=6. 6. Use of Sleep Medication: Frequency of using medications for sleep. Score: 0 (not at all) n=12 ,1(one or more times a week) n=5,2(two or more times a week) n=5, 3 (three or more times a week) n=8.7. Daytime Dysfunction: Impact of sleep quality on daily activities and functioning. Score: 0 (no problems) n=16,1(mild problems) n=5,2(moderate problems) n=4,3 (severe problems) n=5. Each component is scored from 0 to 3. The total PSQI score ranges from 0 to 21.A higher score indicates worse sleep quality. A total score greater than 5 is typically indicative of significant sleep disturbances. Interpretation: 0–5: Good sleep quality ,6–10: poor Sleep quality, 11–15: very Poor sleep quality 16–21: extremely poor sleep quality (tab.1, fig.1).

Table 1 – Pittsburgh Sleep Quality Index scale

Sleep characteristics 0	Sleep score n(%)
Good sleep quality (0–5)	12 (40%)
Poor sleep quality (6–10)	5(16.6%)
Very poor sleep quality (11–15)	6(20%)
Extremely poor sleep quality (16–21)	7(23.3%)

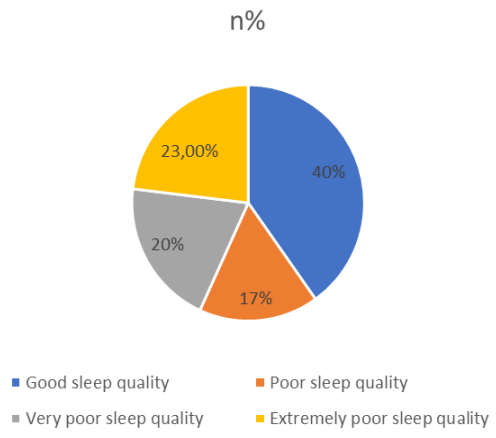

Figure 1 – Quality Index scale in hospitalized patients

Conclusion

By the study conducted among the patients in therapeutic departments. Overall response to sleep by the Pittsburgh Sleep Quality Index (PSQI-P) was positive approximately 40% and 60 % percentage sleep realeted issues. Here we can see more half of the patients suffering from significant sleep realeted issues by our index scale measurements. So, we need to do Improving sleep measurements involves adopting strategies that enhance the accuracy and effectiveness of assessing sleep quality. Keep a daily sleep diary for several weeks to identify patterns and variations. Track lifestyle factors include notes on caffeine intake, exercise, and stress levels, which can affect sleep. Sleep efficiency aim for high sleep efficiency (85% or higher). This can be monitored through diaries or devices. Reduce sleep latency like Aim to fall asleep within 20 minutes. Track time taken to fall asleep and make adjustments to bedtime routines. Ensure you're getting sufficient REM sleep, as it is crucial for cognitive function and emotional health. Create a Sleep-Friendly Environment Dark and Quiet Ensure the sleep environment is conducive to rest dark, quiet, and comfortable.Go to bed and wake up at the same time each day to regulate your body's internal clock.Educate yourself learn about sleep hygiene,familiarize yourself with best practices for improving sleep quality, such as limiting screen time before bed and avoiding heavy meals late at night improving sleep measurements involves a multifaceted approach that combines effective tracking, lifestyle adjustments, and education. By leveraging various tools and strategies, individuals can gain deeper insights into their sleep quality and make informed changes to enhance their overall sleep health.

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RISK FACTORS AND COMPLICATIONS IN DIABETES MELLITUS

Introduction

Diabetes mellitus has become a serious and chronic metabolic disorder that results from a complex interaction of genetic and environmental factors, principally characterized by hyperglycaemia, polyuria, and polyphagia [1]. Uncontrolled high blood sugar can result in a host of diabetic complications. Prolonged diabetes leads to serious complications some of which are life-threatening. The prevalence of diabetes patients is rising at epidemic proportions throughout the world. Every year, a major portion of the annual health budget is spent on diabetes and related illnesses. Multiple risk factors are involved in the etiopathogenesis of the