The Description Of The Sleep Quality
From The Students Of Nursing Academy Of CCI Cikini
During The Covid-19 Pandemic

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Abstract
COVID-19 is a disease caused by a virus from the coronavirus group, namely SARS-CoV-2. This virus has caused a pandemic. The pandemic has had an impact on the world and also Indonesia. The impact is divided into 3 sectors, namely social, economic and health. In the health sector, there are physical and psychological disorders. Psychological impacts in the form of stress, anxiety, and depression. This kind of psychosocial impact also results in changes in sleep quality. Changes in sleep quality are also experienced by adolescents and students. The purpose of this study was to find out the description of the sleep quality from the students of Nursing Academy of CCI Cikini during the Covid-19 pandemic. The method used in this study is a descriptive method using a sampling technique that is random sampling. The data was obtained using a measuring instrument in the form of a Pittsburgh Sleep Quality Index (PSQI) questionnaire. The results showed that from 91 respondents, 69 students (75.8%) had poor sleep quality and 22 students (24.2%) had good sleep quality. This study illustrates that the majority of respondents experience poor sleep quality, therefore the government and those responsible for student education need to make this a concern in order to provide psychological support to students.
Keyword: Covid-19, Sleep Quality, PSQI

Introduction

COVID-19 (coronavirus disease 2019) is a disease caused by a virus from the coronavirus group, namely SARS-CoV-2. The virus infects the respiratory tract, The virus infects the respiratory tract, the symptoms will start from the common cold to severe symptoms such as difficulty in breathing. Currently, there are 213 countries that have contracted the SARS-CoV-2 virus and this condition has an impact on various parts of the world (Pakpahan & Fitriani, 2020). Indonesia as a country with a large population is also one of the countries affected by the Covid-19 pandemic (Hasibuan, 2020).

The impact of this pandemic in Indonesia is generally divided into various sectors, namely social, economic and health (Librianty, 2021). In the social sector, according to research that has been conducted (Suparman, Sakti, & Anwar, 2020) it is said that to

minimize the spread of this virus, the government enforces a policy of closing public places to limit social activities, and people are expected to work from home and also to stay at home as much as possible. In the economic sector, the government implements policies such as Work From Home, the closure of various public places and regional restrictions. Many Micro, Small and Medium Enterprises (MSME) have fired many of their employees (PHK), therefore this has caused these people to experience economic difficulties (Saniambara, 2020). In the health sector, the Covid-19 pandemic has an impact on the emergence of a symptom called digital fatigue which is a condition of feeling physically and psychologically tired due to accessing the internet, including continuous or excessive use of social media, this makes users experience complaints such as feeling tired both physically as well as mentally. The most common physical effects are feeling dizzy, sore, and feeling tired. As for the psychological/mental impacts that are often found are stress, anxiety, depression, difficulty in concentrating and disturbances in sleep patterns (Anastasia, 2021).

Sleep is a complex biological process, and the quality of sleep affects physical and mental health, thinking processes, and human daily functioning. Sleep disorder is one of the impacts of the pandemic caused by a person's daily activities changing very drastically. Sleep disorder can include fatigue, drowsiness, and high blood pressure. This sleep disorder also has a cognitive impact, including a decrease in motivation, a decrease in concentration, and an increase in easily forgetting things. Sleep disorders are found in people such as the elderly, adults, and are also found in adolescents and students (Ilpaj & Nurwati, 2020).

Sleep disorder in students during this pandemic are caused by changes in learning. Currently, all educational institutions implement a virtual learning system. According to (Brownlow, Miller, & Gehrman, 2020) sleep disorders experienced by students can affect the learning process, difficulty in memorizing, cognitive disorders, psychological disorders, and interfere with the functioning of the body. For students who have a short sleep period, it will have an impact on student performance, especially when studying which will have a lower level of learning and also have an impact on students' moods. Sleep is an essential physical need and is a basic human need according to Maslow.

Humans will have difficulty meeting other basic needs or subsequent needs if the need for sleep is not met properly. The essential human need is to sleep, especially to sleep soundly without experiencing disturbances during sleep (Khairiyah, 2017).

In the study (Bulan, 2021) during the Covid-19 pandemic, it was found that from 60 respondents there were 20 students (33%) with good sleep quality and 40 students (67%) with poor sleep quality. Poor sleep quality during the Covid-19 pandemic is related to anxiety and stress due to fear of the spread of infection and limitation of social interaction which can lead to physical and mental stress. However, from the results of research conducted (Aminuddin, 2020) that from a total sample of 24 people, most of the respondents had good sleep quality. This study shows respondents with good sleep quality are around 13 people (54.2%), and respondents who have poor sleep quality are 11 people (45.8%).

A preliminary studies have been conducted by researchers from January to May by conducting interviews with students who are in the final semester at the Nursing Academy of Cikini with a population of 34 students. The results showed that as many as 30 students (85%) had sleep disorder during the past month, and 4 people said they had no significant disturbances. Students said they often stay up late and also have trouble sleeping because they do activities at night such as playing games, watching movies longer than before the pandemic and also because they have to do lecture assignments, including final scientific papers.

This data makes researchers interested in knowing the overall picture of the sleep quality of all students at the Nursing Academy of CCI Cikini. The researcher chose the research place at the Nursing Academy of CCI Cikini because the respondents were the most accessible and easier to reach during the current pandemic and the researchers also wanted to know how the description of the sleep quality of students during the current Covid-19 pandemic. The population in this study were all students with an active status as students at the Nursing Academy of CCI Cikini with a total of 117 students. The sampling technique of this study was random sampling, using the Slovin calculation formula with the sample's results of 91 respondents.

Researchers used The Pittsburgh Sleep Quality Index (PSQI) questionnaire which has been used in various studies in the world and in Indonesia and is also used in related studies (Nafiah, 2019). This questionnaire has been tested for validity and the validity test value of r table = 0.361 is declared valid. Test the reliability of this questionnaire with the results of Cronbach's Alpha 0.753 which indicates that the PSQI questionnaire is reliable. The study examined 7 components of sleep quality including subjective of sleep quality assessment, sleep latency, sleep duration, sleep disorder, sleep eficiency, use of sleeping pills, and daytime dysfunction. Questionnaires were given to respondents in the form of a google form after previously being given an explanation by the researcher and the respondents agreed to become research respondents.

Methodology

This research method is carried out through quantitative research using a descriptive research design. The research was conducted from January to May 2021 at the Nursing Academy of CCI Cikini, Central Jakarta. The population used in this study were all students of the Nursing Academy of CCI Cikini with a total of 117 students. Sampling in this study using random sampling method. The sample in this study were students of the Nursing Academy of CCI Cikini, totaling 91 students calculated using the Slovin formula from 2012.

Results

Based on the results of a study conducted to describe the sleep quality of the students from Nursing Academy of CCI Cikini during the Covid-19 pandemic, there were 91 people who became respondents. Based on table 1, it is found that the characteristics of respondents based on age are at most 20 years old, namely 34 people (37.4%), and the least are 22, 23 and 24 years old as many as 5 people (5.5%). The average value in the age of the respondents was 20.33 (20 years). Characteristics of respondents based on gender are mostly women with a total of 77 people (84.6%) and men as many as 14 people (15.4%).

Table 1. Frequency Distribution based on Characteristics of Respondents

Characteristics	% (N)	Mean
AGE		
18 Years Old	12,1 % (11)	
19 Years Old	13,2% (12)	
20 Years Old	37,4% (34)	
21 Years Old	20,9% (19)	20,33
22 Years Old	5,5% (5)	
23 Years Old	5,5% (5)	
24 Years Old	5,5% (5)	
GENDER		
Male	15,4% (14)	
Female	84,6% (77)	

Tabel 2. Frequency Distribution based on Components of The Pittsburgh Sleep Quality Index (PSQI) Questionnaire for Students at the Nursing Academy of CCI Cikini.

Components of PSQI	Score	Meaning	F	%
Subjective of Sleep Quality	0	Very Good	8	8,8
	1	Good Enough	40	44,0
	2	Bad Enough	37	40,7
	3	Very Bad	6	6,6
Sleep Latency	0	0 Hours	16	17,6
	1	1-2 Hours	36	39,6
	2	3-4 Hours	31	34,1
	3	5-6 Hours	8	8,8
Sleep Duration	0	> 7 Hours	45	49,5
	1	6-7 Hours	30	33,0
	2	5-6 Hours	1	1,1
	3	< 5 Hours	15	16,5
Sleep Eficiency	0	<85%	76	83,5
	1	75%-84%	12	13,2
	2	65%-74%	1	1,1
	3	<65%	2	2,2
Sleep Disorder	0	0	5	5,5
	1	1-9	52	57,1
	2	10-18	32	35,2
	3	5-6	2	2,2
Daytime Dysfunction	0	0	3	3,3
	1	1-2	18	19,8
	2	3-4	39	42,9
	3	5-6	31	34,1
Use of Sleeping Pills	0	Never During The Last One Month	89	97,8
	1	Less than Once a Week	1	1,1
	2	Once or Twice a Week	1	1,1
	3	Three or More Times a Week	0	0

Based on table 2, from a total of 7 components of the Pittsburgh Sleep Quality Index (PSQI) assessment, it was found that the subjective of sleep quality component was quite good as many as 40 respondents (44.0%) and sleep latency with a score of 1 got 36 respondents (39, 6). For sleep duration > 7 hours per day, there were 45 respondents (49.5%) and those who had sleep efficiency with a score of 0 were 76 respondents (83.5%). It can be seen that some students with a score of 1 on the sleep disorder component were 52 respondents (57.1%) and 89 respondents (97.8%) had never used sleeping pills in the past month. It was also found that almost all students with a total of 39 respondents (42.9%) got a score of 2 on the component of daytime dysfunction. In table 3, it was found that from 91 respondents, 69 respondents (75.8%) had poor sleep quality.

Tabel 3. Frequency Distribution based on Description of Sleep Quality Level

Sleep Quality Level	Frequency	%
Good Sleep Quality	22	24,2%
Poor Sleep Quality	69	75,8%

Discussion

Characteristics of Respondents Based On Age and Gender

Based on the results of this study conducted on 91 respondents, the age of respondents was in the age range of 17-25 years, where this age was the age of late adolescence based on the criteria of the Ministry of Health in 2009. The age at most was 20 years (37.4%) which also is the average age of all respondents. Based on the results of research (Sari & Yulnefia, 2016) that sleep quality is influenced by age and also a history of drug use, physical activity, and the environment. Age is also one of the determining factors for the length of sleep a person needs. The older a person is, the less sleep they need. Characteristics of respondents based on gender in this study were mostly female with a total of 77 students (84.6%) and the least was male with a total of 14 students (15.4%). This condition is often found in nursing students, where nursing education is more attractive to female, although male are also interested but in a

smaller percentage. According to (Putri & Tri Agustina, 2021) factors that can affect sleep patterns are gender, age, marital status, income level and educational level.

Frequency Distribution based on Components of The Pittsburgh Sleep Quality Index (PSQI) Questionnaire for Students at the Nursing Academy of CCI Cikini.

The majority of respondents with a total of 39 respondents (42.9%) got a score of 2 on the component of daytime dysfunction, because from the data in the questionnaire that has been asked regarding the category of daytime dysfunction, it contains about how often do respondents feel sleepy when doing activities during the day and how many the problems they face. The results of the data in the questionnaires filled out by students explained that the majority felt sleepy 3 times or more in a week during the day and had many problems. This condition is caused by an increase in activities at night such as playing games, watching movies, and various other activities, resulting in respondents having difficulty sleeping and finally feeling sleepy during the day.

Frequency Distribution based on Description of Sleep Quality Level

This study shows the results of the data that there are 22 respondents (24.2%) who have good sleep quality while 69 respondents (75.8%) have poor sleep quality. This condition is a condition that is often found in the community, including teenagers and students during the Covid19 pandemic. According to research, poor sleep quality (Aminuddin, 2020) is influenced by activities at night.

Sleep is a basic human need and is very important to restore health both physically and psychologically. Poor sleep quality will have an impact on the respondent's ability to carry out daily activities as well as affect the level of cognitive ability and decrease the level of motivation in learning. This condition is a serious condition to be considered and handled because the respondents are the younger generation who will become the nation's successors and are the forefront in implementing health services at all levels of society, either individually or in groups or communities.

Conclusion

Based on the results of the study, the description of the sleep quality of the students from Nursing Academy of CCI Cikini during the Covid-19 pandemic, with a total of 91 respondents, it can be concluded as follows:

1. Characteristics of respondents based on age are in the range of 17-25 years, with an average age of 20 years, included in the late adolescent age group which is also a productive age. Gender with the majority being female with a total of 77 students (84.6%).

2. Based on the sleep quality component of the PSQI, the most dominant result was in the daytime dysfunction category where almost the majority of students with 39 respondents (42.9%) got a score of 2 in that category. This condition indicates that respondents experience sleepiness during the day because they have increased activity at night.

3. The level of sleep quality of students showed poor sleep quality (75.8%). This is a serious condition and needs to be followed up.

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