



## Assessment of Insomnia during Covid Pandemic: A Study among the General Population

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### ABSTRACT

Sleep is an essential entity of our day . A single day of sleep deprivation can produce significant mood disturbances and marked reduction in our immunity .

Urbanization saw an increase in sleep and mental disorders and Novel coronavirus is definitely adding to the burden .

To assess insomnia among a general population during the covid pandemic and demographic characteristics in relation to insomnia , a study was conducted in Bangalore ( Karnataka ) a city in India with the help of an online pre - designed proforma containing the Athens Insomnia Scale. Categorical data were reported as numbers and percentages and was analyzed.

A total of 260 subjects were investigated and 22.3 % were suffering from insomnia with almost 26.92 % in pre -insomnia phase.

Being a male was a risk factor . Insomnia was more among the age groups of 26 to 35 years . Insomnia was more among the working class.

Consumption of alcohol and tobacco was a risk factor for insomnia .

Increased screen time and decreased number of sleep hours definitely contributed to insomnia.

Covid pandemic has impacted the sleep patterns , as insomnia was more among individuals who were ambivalent and among the individuals who were stressed about the pandemic and believed the pandemic will not have a positive outcome.

In conclusion the covid pandemic has brought about minor and major changes impacting the sleep pattern of individuals.

### I. INTRODUCTION

Sleep is an essential entity of our day. A single day of sleep deprivation can produce significant mood disturbances and marked reduction in our immunity. (1)

Urbanization saw an increase in sleep and mental disorders among individuals of varying age

groups. Novel coronavirus pandemic is definitely adding to this burden and critically affecting both the physical and mental health. Many studies showed an increase in mental disorders including sleep disorders during the pandemic. (1)

There is a surge in sleep disorders to such an extent that the neurologists of 'Academy of Neurology of America' call this covid-somnia. (2)

Sleep health has multiple dimensions namely duration, regularity, timing and quality. Based on these dimensions multiple sleep disorders can be described. (3)

Insomnia is a highly prevalent type of sleep disorder which is defined as a condition in which the individual complains of inability to sleep and maintain sleep in spite of dedicating time for sleep. (4)

Insomnia is a major health issue and psychological burden during the times of pandemic. (5)

The covid 19 outbreak led to stay at home orders and isolation to prevent the spread of the virus and this brought unprecedented changes in human behavior. (3)

Isolation and lack of social life has had an impact on mental health and definitely contributed to a surge in sleep disorders. (6)

The pandemic has brought with it psychological stressors like that of anxiety, sudden change in lifestyle, limited social support and abundance of fear of infectivity due to the lack of complete knowledge on the behavior of the virus or the treatment being provided. (1 and 7)

Financial instability and an uncertain future is definitely making people stay up all night. (1) Ultimately all of these factors during the pandemic caused a surge in the prevalence of insomnia.

Establishing the fact that sleep disorders have long term effects and have increased risks of both mental (depression, substance abuse, anxiety and mood disorders) and physical (hypertension, diabetes mellitus and disabilities) health, it is very



important to understand the prevalence of sleep disorders and its epidemiological distribution. (1)

Knowing the relevant data it's very important to work towards a healthy society and improve the physical and mental health of all.

Spreading awareness and educating the population and early diagnosis and treatment are the stepping stones towards a society with improved mental and physical health.

## II. REVIEW OF LITERATURE

Insomnia is a major health issue associated with great psychological burden.

Research of insomnia during the pandemic crisis is limited. Since December 2019, the whole world has experienced a novel situation due to the outbreak of SARS-CoV-2, leading to the COVID-19 pandemic. Fear of contamination and radical changes to everyday life are expected to impose stress on individuals, seriously affecting mental health, including sleep hygiene.

The aim of this study was to explore sleep difficulties during the COVID-19 pandemic in a Greek population during April 2020. Three weeks after a national lockdown had been imposed in Greece (April 10-April 13). Of the 2,427 participants, a total of 2,363 subjects, provided all basic demographic data needed [1,800 females (76.2%); 563 males (23.8%); 55% within the age range 18-30 years; the majority (76.5%) were urban citizens]. The participants completed the following questionnaires : Athens Insomnia Scale (AIS) (Soldatos et al., 2003), Intolerance to Uncertainty Scale (IUS-12) (Carleton et al., 2007),

De Jong Gierveld Loneliness Scale (JGLS) (Gierveld and Van Tilburg, 2006), Brief Patient Health Questionnaire 2 (PHQ-2) (Kroenke et al., 2003). Additionally, they responded to questions assessing COVID-19-related negative attitudes (worry, unpredictability, lethality) and others exploring if they, or someone close to them, had contracted the virus.

In this study, 37.6% of the participants scored above the cut-off score for insomnia. This percentage is greater than the worldwide insomnia prevalence, estimated before the pandemic between 3.9% and 22% (Kay-Stacey and Attarian, 2016) indicating an exacerbation of sleep disturbances. With regard to socio-demographic factors, the women's insomnia score (MAIS = 13.31, SD = 4.35) was significantly higher than men's (MAIS = 11.78, SD = 3.75) [ $t(2358) = -751, p = 0.001$ ]. A multiple linear regression was conducted to predict insomnia (AIS) based on the significance of the positive correlation of the independent variables. This study revealed several interesting aspects

related to sleep health. Insomnia seems to be affecting more people during the COVID19 pandemic. Stress levels rise during a virus outbreak due to worry about health, financial consequences, changes in social life and the daily routine. Reduced physical fatigue and exposure to the sun, as well as increased use of electronic devices may also affect sleep homeostasis.

The study on prevalence of insomnia during the covid-19 lockdown was done in India by Kirti Gaur, Kunal Keshri, Avinash Sharma and Hariom Pachori. This cross-sectional study utilized primary data collected through an online survey carried out between April 24 to May 07, 2020, mostly during the second lockdown in India. Snowball sampling was used to conduct this Google-form based survey. A consent form with a brief description of the aim of study preceded the online structured questionnaire, with the questionnaire becoming accessible only after respondents consented to participate. The web link of the survey form was circulated amongst individuals aged  $\geq 18$  using highly accessed social media platforms like WhatsApp and Facebook (Indian Express, 2019; Investopedia, 2019). Respondents were requested to further circulate the questionnaire to their contacts. To get a nationally representative response the questionnaire was prepared in two major languages, viz. Hindi and English. This cross-sectional online study with 1015 respondents found a high prevalence of mental health symptoms during the COVID-19 lockdown. Using recommended cut-off scores of a validated scale, the prevalence of insomnia symptoms was found to be 21%.

## RESEARCH DESIGN

### OBJECTIVES :

1. Assessment of insomnia among people during Covid 19 pandemic using the ATHENS SCALE.
2. Assessment of demographic characteristics in relation to insomnia among study subjects.

### SCOPE OF STUDY :

The covid pandemic brought with it numerous changes in one's life. We know very little about the impact of this pandemic on the health of the individuals, especially mental health.

Our study would help in understanding the impact of the pandemic on sleep of individuals.

1. By conducting this study we can have an idea about the relationship between the covid pandemic and insomnia.
2. The results will help in further analysis of data.



- The results obtained from the study can be used to group individuals according to the severity and provide them with appropriate counseling and treatment.

**PLACE OF STUDY :** Bangalore

**STUDY DESIGN :** Descriptive study.

**STUDY PERIOD :** One Month.

**SAMPLING METHOD :** Snowball sampling.

The questionnaire with the consent form will be sent as a google form to a few people, who will be requested to forward it to a few more people until the sample size is achieved.

**SAMPLE SIZE :** 255

**INCLUSION CRITERIA :**

- Subjects in the age group of 15 to 55 years.
- Subjects who are asymptomatic.
- Those willing to provide consent.

**EXCLUSION CRITERIA:**

- Covid active subjects.
- Covid recovered patients.
- Health care professionals.
- Chronically ill patients.

- Specially abled persons.

- Persons on antidepressants and antipsychotic drugs.

**III. METHODOLOGY :**

Participation in the study will be voluntary and the questionnaire will be confidential and anonymous.

An informed consent will be obtained from the subjects on an online platform.

Using a predesigned pre structured proforma, data regarding demographic characteristics will be collected. Athens Insomnia Scale will be used to assess the insomnia among the subjects. These questionnaires will be provided to the subjects on an online platform.

**ATHENS INSOMNIA SCALE :**

This scale is intended to record your own assessment of any sleep difficulty you might have experienced. Please, check (by circling the appropriate number) the items below to indicate your estimate of any difficulty, provided that it occurred at least three times per week during the last month.

Sleep factors	Athens insomnia scale			
Sleep induction	0: No problem	1: Slightly delayed	2: Markedly delayed	3: Very delayed or did not sleep at all
Awakenings during the night	0: No problem	1: Minor problem	2: Considerable problem	3: Serious problem or did not sleep at all
Final awakening	0: Not earlier	1: A little earlier	2: Markedly earlier	3: Much earlier or did not sleep at all



Total sleep duration	0: Sufficient	1: Slightly insufficient	2: Markedly insufficient	3: Very insufficient or did not sleep at all
Sleep quality	0: Satisfactory	1: Slightly unsatisfactory	2: Markedly unsatisfactory	3: Very unsatisfactory or did not sleep at all
Well-being during the day	0: Normal	1: Slightly decreased	2: Markedly decreased	3: Very decreased
Functioning capacity during the day	0: Normal	1: Slightly decreased	2: Markedly decreased	3: Very decreased
Sleepiness during the day	0: None	1: Mild	2: Considerable	3: Intense

**INTERPRETATION OF AIS :**

Athens insomnia scale is internationally accepted and recognised scale for self assessment of sleep disorders specific to that of insomnia. The scale has eight questions; the first four are related to quantitative sleep variables, including sleep induction, night time awakenings, early morning awakenings and total sleep duration. The fifth question is about the quality of sleep in general, and the last three ones are about insomnia effects in the efficiency during the day. Each question could be rated from zero (no problem) to three (very serious problem), leaving two intermediate scores. AIS's total score is the sum of the scores on each question and may vary from zero to 24. Scores that are higher than six define the presence of insomnia. If the total score is below 4, it indicates no sleep disorders. If the total score is between 4 and 6, it indicates that the respondent may be developing insomnia.

If the total score is more than 6, it indicates insomnia.

**STATISTICAL ANALYSIS :**

The quantitative data collected will be entered into an EXCEL sheet and analyzed. Descriptive statistics will be used to analyze the data. After completion of the analysis the conclusive data will be presented in a report with relevant graphs and tables.

**IMPLICATIONS:**

The covid pandemic has majorly impacted the lives of the individuals in a short period of time making it difficult for them to adjust to the situations, resulting in deterioration of both physical and mental health. Sleep disturbances are definitely on a rise in the general population during the pandemic attributing to sudden change in lifestyle.



#### IV. DATA ANALYSIS AND INTERPRETATION

Table 1 : ATHENS SCALE AND INSOMNIA

Athens score	Number of study subjects	Percentage
Less than 4 ( Normal )	132	50.77%
4 - 6 ( Pre - Insomnia)	70	26.92%
More than 6 (insomnia)	58	22.31%
Total	260	100%

This table shows the distribution of study subjects based on the Athens score. According to the study, a maximum of 132 (50.77%) out of a total of 260 had no sleep abnormality.

This is followed by 70 (26.92%) out of a total of 260 who belonged to the category of pre insomnia. 58 (22.31%) out of a total of 260 had insomnia.

Table 2 : DEMOGRAPHIC DATA AND INSOMNIA

Athens score	Normal	Pre insomnia	Insomnia	Total
<b>GENDER</b>				
Male number	40	35	23	98
Male percentage	40.8%	35.7%	23.5%	100%
Female number	92	35	35	162
Female percentage	56.8%	21.6%	21.6%	100%
<b>AGE</b>				
18-25 years	85	45	32	162
18-25years percentage	52.5%	27.8%	19.7%	100%
26-35 years	10	9	10	29



26-35years percentage	34.4%	31.03%	34.4%	100%
36-45 years	19	6	9	34
36-45 years percentage	55.8%	17.6%	26.4%	100%
46-55years	18	10	7	35
46-55 years percentage	51.4%	28.6%	20%	100%
OCCUPATION				
Working	63	29	33	125
Working percentage	50.4%	23.2%	26.4%	100%
Non working	69	41	25	135
Non working percentage	51.1%	30.4%	18.5%	100%

TYPE OF OCCUPATION				
Professional	34	21	21	76
Percentage	44.7%	27.6%	27.6%	100%
Semi professional	2	4	3	9
Percentage	22.2%	44.4%	33.3%	100%
Skilled worker	1	0	1	2
Percentage	50%	0%	50%	100%
Homemaker	26	4	8	38
Percentage	68.4%	10.5%	21%	100%
Student	66	38	24	128
Percentage	51.5%	29.7%	18.8%	100%
Unemployed	3	3	1	7



Percentage	42.9%	42.9%	14.2%	100%
WORKING HOURS A WEEK				
Less than 48 hours a week	31	10	17	58
Percentage	53.4%	17.2%	29.3%	100%
More than 48 hours a week	32	19	16	67
Percentage	47.7%	28.8%	23.8%	100%

TOBACCO CONSUMPTION				
Tobacco consumption present	8	11	7	26
Percentage	30.7%	42.3%	26.9%	100%
Tobacco consumption absent	124	59	51	234
Percentage	53.0%	25.2%	21.8%	100%
ALCOHOL CONSUMPTION				
Alcohol consumption present	23	19	20	62
Percentage	37.1%	30.6%	32.3%	100%
Alcohol consumption absent	109	51	38	198
Percentage	55%	25.8%	19.2%	100%
NUMBER OF SLEEPING HOURS				
Less than 5 hours	0	1	14	15
Percentage	0%	6.6%	93.3%	100%
5-8 hours	89	59	38	186
Percentage	49.9%	31.7%	20.4%	100%
8-10 hours	42	9	5	56
Percentage	75%	16%	9%	100%
More than 10 hours	1	1	1	3



Percentage	33.3%	33.3%	33.3%	100%

Table 3 : SCREEN TIME AND INSOMNIA

PROFESSIONAL SCREEN TIME				
Less than or equal to 5 hours	94	47	33	174
Percentage	54%	27%	19%	100%
6-10 hours	37	22	23	82
Percentage	45.1%	26.8%	28.1%	100%
More than 10 hours	1	1	2	4
Percentage	25%	25%	50%	100%
NON PROFESSIONAL SCREEN TIME				
Less than or equal to 5 hours	114	59	44	217
Percentage	52.5%	29.2%	20.3%	100%
6-10 hours	14	11	13	38
Percentage	36.9%	28.9%	34.2%	100%
More than 10 hours	4	0	1	5
Percentage	80%	0%	20%	100%

Table 4 : REACTIONS TO COVID PANDEMIC AND INSOMNIA

WORRY FOR THE COVID 19 PANDEMIC				
Pandemic worries them	56	38	26	120
Percentage	46.6%	31.7%	21.7%	100%
Pandemic doesn't worry them	48	22	20	90
Percentage	53.4%	24.4%	22.2%	100%
They don't know if the pandemic worries them	28	10	12	50
Percentage	56%	20%	24%	100%





STRESS FOR THE COVID 19 PANDEMIC				
Stressed about the pandemic	39	34	27	100
Percentage	39%	34%	27%	100%
Not stressed about the pandemic	75	32	23	130
Percentage	57.7%	24.6%	17.7%	100%
Don't know if the pandemic stresses them	18	4	8	30
Percentage	60%	13.3%	26.7%	100%

REACTION TO A POSITIVE OUTCOME OF THE COVID 19 PANDEMIC				
Yes	88	34	35	157
Percentage	56%	21.7%	22.3%	100%
No	9	11	7	27
Percentage	33.3%	40.7%	25.9%	100%
I don't know	35	25	16	76
Percentage	46%	32.9%	21.1%	100%

### V. DISCUSSION

We conducted a study at VIMS AND RC to assess insomnia among people during the COVID-19 pandemic and surveyed 270 subjects who were assessed on the lines of age, gender, occupation, working hours, frequency of alcohol consumption and smoking, sleeping hours, screentime(professional and non professional), and their reactions to COVID-19 situations.

According to the study, classified based on the Athens Insomnia scale, a maximum of 132 (50.77 %) out of a total of 260 had no sleep abnormality.

This is followed by 70 (26.92%) out of a total of 260 who belonged to the category of pre insomnia.

58 (22.31%) out of a total of 260 had insomnia.

According to the study, a maximum of study subjects 162 (62.31 %) out of a total of 260

were females and 98 (37.69%) out of a total of 260 were males.

Among them, a maximum of 35 (21.6%) study subjects out of the total 162 females were insomniac and 23 (23.5%) out of the total 98 males were insomniac.

The age distribution is as follows, a maximum 162 ( 62.31%) out of a total of 260 belonged to the age group 18 - 25. This is followed by 35 (13.46%) out of 260 who belonged to the 46 - 55 age group followed by 34 (13.08%) out of the 260 who belonged to the 36 - 45 age group.

The least number of study subjects 29 (11.15%) out of a total of 260 belonged to the age group 26 - 35.

Among which, a maximum of 10 (34.4%) study subjects out of the total of 29 who belonged to the age group 26-35 years were insomniac. This is followed by 9 (26.4%) out of 34 who belonged to the age group 36-45 years and 7



(20%) out of 35 who belonged to the age group 46-55 years were insomniac. The least number of study subjects with insomnia 33 (19.7%) belonged to the age group 18-25years.

The study shows that a maximum of 135 (51.92%) out of a total of 260 were not working and 125 (48.08%) out of a total of 260 were working. Among whom, a maximum of 33 (26.4%) out of the total 125 working study subjects were insomniac and 25 (18.5%) out of the total 135 non working study subjects were insomniac.

Classified based on occupation, a maximum of 128 (49.23%) out of a total 260 were students. This is followed by 76 (29.23%) out of a total of 260 who belonged to the professional category. This is followed by 38 (14.62%) out of a total of 260 who belonged to the homemaker category.

Semi professionals accounted for 9 (3.46%) out of a total of 260. Unemployed study subjects accounted for 7 (2.69%) out of a total of 260. The least number of study subjects 2 (0.77%) out of a total of 260 were skilled workers.

Among them, a maximum of 1 (50%) out of the total 2 skilled workers were insomniac. This is followed by 3 (33.3%) out of the total 9 semi professional workers were insomniac. This is followed by 21 (27.6%) out of the total 76 professional workers were insomniac. 8 (21%) out of the 38 homemakers were insomniac. 24 (18.8%) out of the total 128 students were insomniac and 1 (14.2%) out of the total unemployed subjects were insomniac.

The study shows that a maximum of 67 (53.6%) out of 125 (no of working study subjects out of 260) worked for less than 48 hours a week. This is followed by 57 (46.4%) out of 125 working for more than or equal to 48 hours a week.

Among the study subjects, a maximum of 17 (29.3%) out of the total of 58 subjects who worked less than 48 hours a week were insomniac and 16 (23.8%) out of the total of 67 subjects who worked for more than 48 hours a week were insomniac.

According to the study, a maximum of 234 (90%) out of a total of 260 did not consume tobacco, while 26 (10%) out of a total of 260 consumed tobacco. Among which a maximum of 7 (26.9%) out of a total of 26 subjects who consumed tobacco were insomniac and 51 (21.8%) out of a total of 234 who did not consume tobacco were insomniac.

According to the study, a maximum of 198 (76.15%) out of a total of 260 did not consume alcohol, while 62 (23.85%) out of a total of 260 consumed alcohol.

Among which, a maximum of 20 (32.3%) out of the total of 62 subjects who consumed alcohol were insomniac and 38 (19.2%) out of the total 198 who did not consume alcohol were insomniac.

According to the study, a maximum of 186 (71.54%) out of a total of 260 slept for 5 - 8 hours a day. This is followed by 56 (21.54%) out of a total of 260 who slept for 8 - 10 hours a day and 15 (5.77%) out of a total of 260 who slept for less than 5 hours a day. The least number of study subjects 3 (1.15%) out of a total of 260 slept for more than 10 hours a day.

Among which, a maximum of 14 (93.3%) out of a total of 15 subjects who slept for less than 5 hours a day were insomniacs. This is followed by 1 (33.33%) out of a total of 3 subjects who slept for more than 10 hours were insomniac. 38 (20.4%) out of a total of 186 subjects who slept for 5 - 8 hours were insomniac and 5 (9%) out of a total of 56 who slept for 8 -10 hours were insomniac.

Classified according to the professional screen time use, a maximum 174 (66.92%) out of a total of 260 had a screen time of less than 5 hours per day.

This is followed by 82 (31.54%) out of a total of 260 who had a screen time of 6 to 10 hours per day. The least number of study subjects 4 (1.54%) out of a total of 260 had a screen time of more than 10 hours per day.

Among them, a maximum of 2 (50%) out of a total of 4 subjects who had a screen time for professional purposes of more than 10 hours a day were insomniac. This is followed by 23 (28.1%) out of a total of 82 subjects who had a screen time for professional purposes of 6 - 10 hours were insomniac and 33 (19%) out of a total of 174 subjects who had a screen time for professional purposes less than or equal to 5 hours were insomniac.

Classified according to the non-professional screen time use, a maximum of 217 (83.46%) out of a total of 260 had a screen time of less than 5 hours per day. This is followed by 38 (14.62%) out of a total 260 had a screen time of 6 - 10 hours per day. The least number of study subjects 5 (1.92%) out of a total of 260 had a screen time of more than 10 hours per day.

Among which, a maximum of 13 (34.2%) out of a total 38 subjects who had a screen time of 6 - 10 hours for non professional purposes were insomniac. This is followed by 1 (25%) out of a total of 5 subjects who had a screen time of more than 10 hours for non professional purposes were insomniac and 44 (20.3%) out of a total 217 subjects who had a screen time less than or equal to



5 hours for non professional purposes were insomniac.

According to the study, a maximum of 120 ( 46.15%) out of a total of 260 were worried about the covid pandemic, while 90 (34.62%) out of a total of 260 were not worried. The least number of study subjects 50 (19.23%) were not sure about their reaction towards the covid pandemic.

Among them, a maximum of 12 (24%) out of a total of 50 subjects who don't know how they feel about the covid pandemic situation, were insomniac. 26 (21.7%) out of a total of 120 subjects who are worried about the covid pandemic situation, were insomniac and 20 (22.2%) out of a total of 90 subjects who are not worried about the covid pandemic situation, were insomniac.

According to the study, a maximum of 130 (50%) out of a total of 260 were not stressed, while 100 (38.46%) out of a total of 260 were more stressed during the pandemic than before. The least number of study subjects 30 (11.54%) out of a total were not sure about their reaction towards the covid pandemic.

Among them, a maximum of 27 (27%) out of a total of 100 who are stressed about the covid pandemic situation, were insomniacs. This is followed by 8 (26.7%) out of a total of 30 who don't know how they feel about the covid pandemic situation, were insomniac and 23 (17.7%) out of a total of 130 who are stressed about the covid pandemic were insomniac.

According to the study, a maximum of 157 ( 60.39%) out of a total of 260 believed that the covid pandemic will come to a positive end, while 76 (29.23%) out of a total of 260 were not sure about their reaction towards the covid pandemic. The least number of study subjects 27 (10.38%) out of a total of 270 believed that the covid pandemic will not come to a positive end.

Among them, a maximum of 07 (25.9%) out of a total of 27 who don't think that the pandemic situation will have a positive outcome were insomniacs. This is followed by 35 (22.3%) out of a total of 157 subjects who think the pandemic situation will have a positive outcome were insomniac and 16 (21.1%) out of a total of 76 subjects who don't know if the pandemic will have a positive outcome were insomniac.

## VI. CONCLUSION

The study about the assessment of insomnia among the general population during a covid pandemic showed that around 22.31 % were suffering from insomnia.

The study also showed that insomnia was more prevalent among male gender and the age group of 26 to 35 years.

Insomnia was seen more among the working class .

Insomnia was seen more among individuals who consumed tobacco or alcohol.

Having less number of sleeping hours (less than 5 hours a day) and more screen time (more than 10 hours a day) contributed to insomnia.

Covid pandemic has definitely impacted individuals as insomnia was seen more among individuals who were ambivalent about the covid pandemic and among individuals who were stressed about the covid pandemic. and among individuals who believed the pandemic will not have a positive outcome.

The study has also shown that 26.92% were pre - insomniac and were in the process of developing insomnia. It is very important to identify the appropriate warning signs and work towards them and prevent them from developing insomnia.

Covid pandemic has caused some minor and major changes in everyone's life mostly impacting the mental health and sleep pattern.

Having the data supporting the implications it is very important to take action towards the raising problem of insomnia.

It is very important to spread awareness among the individuals about insomnia and its long term detrimental effects.

We must make sure that the individuals are grouped according to severity and receive the appropriate help either pharmacological or non pharmacological.

Counseling regarding reduction in screen time which has exponentially increased during the pandemic is a major step. It is important that we encourage people to talk about their insecurities about the pandemic to their families and friends seeking support of any kind.

We must also spread awareness about conscious efforts to lead a healthy lifestyle even with the surrounding chaos of the pandemic.

Encouraging activities like yoga, regular at home exercises, eating healthy and constant communications with family and friends in spite of



the limitations of the pandemic are stepping stones towards a healthier society.

Sleep abnormalities are indispensable aspects of health, considering a lot of stigma is attached to it, we must make sufficient efforts to combat the problem leading to a healthier society.

#### RECOMMENDATIONS

1. Reduce screen time.
2. Take small breaks and prevent long hours of screen time.
3. Yoga and meditation.
4. Healthy diet.
5. Avoid consumption of alcohol and tobacco.
6. Consciously make an effort to have a good sleep.
7. Spend time with family and friends.
8. Discuss insecurities regarding the covid pandemic with family and friends .
9. Adjust and adapt to new ways of life brought about by the covid pandemic.
10. Awareness about insomnia and attitude to seek help when warning signs arise.

#### REFERENCES

- [1]. Md Hossain. Epidemiology of sleep disorders during COVID-19 pandemic: A systematic scoping review protocol(internet).Researchgate.net.2020(cited on May 22). Available from: <https://www.researchgate.net/publication/341579292>
- [2]. Dan hurley. Sleep Neurologists Call It 'COVID-Somnia'—Increased Sleep Disturbances Linked to the Pandemic. Neurologytoday(internet).2020(cited on July 9). Available from: [https://journals.lww.com/neurotodayonline/Fulltext/2020/07090/Sleep\\_Neurologists\\_Call\\_It.1.aspx](https://journals.lww.com/neurotodayonline/Fulltext/2020/07090/Sleep_Neurologists_Call_It.1.aspx)
- [3]. Withrow, Vetter, et al. Sleep in university students prior to and during COVID-19 Stay-at-Home orders, Current biology. 2020(cited on June10);30: PR797-R798. Available from: <https://doi.org/10.1016/j.cub.2020.06.022>
- [4]. bolor,nayak.Exam preparatory manual for undergraduates:Medicine.2:2018;1093
- [5]. Voitsidis, Gliatas, et al. Insomnia during the COVID-19 pandemic in a Greek population, Psychiatry Res.2020(cited on May 12); 289: 113076.Available from : <https://doi.org/10.1016/j.psychres.2020.11.3076>
- [6]. Elseiver. Sleep quality in times of Covid-19 pandemic(internet). ncbi.nlm.nih.gov.(cited on july 17).Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7366086/>
- [7]. Fu, et al. Psychological health, sleep quality, and coping styles to stress facing the COVID-19 in Wuhan, China,Translational Psychiatry.2020(cited on July 9);10:225. Available from: <https://doi.org/10.1038/s41398-020-00913-3>
- [8]. Gaur, et al. A study of depression, anxiety and insomnia during COVID-19 lockdown in India, Demography India.2020(cited on July 18);49:140-152. Available from: <https://www.researchgate.net/publication/343040304>