

# IJOH: Indonesian Journal of Public Health

Vol 2, No 1, Maret 2024 Hal. 80-85 E-ISSN 2986-6138 P-ISSN 2987-4629



RESERARCH ARTICLE

https://jurnal.academiacenter.org/index.php/IJOH

# ANALYSIS OF THE EFFECT OF LONG USING GADGETS BEFORE SLEEPING WITH INSOMNIA SYMPTOMS IN ADOLESCENTS

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# Abstrak Info Artikel

Penggunaan gadget pada remaja akan memberikan dampak positif yaitu dapat mempermudah akses internet untuk mencari atau membuat tugas, namun penggunaan gadget yang tidak terkontrol seperti menggunakan media sosial atau bermain game secara berlebihan akan berdampak negatif pada pola tidur. , yaitu pola tidur yang terganggu (insomnia). Semakin lama seseorang menggunakan smartphone di malam hari, maka semakin sulit untuk tertidur. Gejala sulit tidur biasa disebut dengan insomnia. Pengguna smartphone di Indonesia terbanyak adalah masyarakat berusia 19-34 tahun (49,52%). Dampak insomnia pada siswa secara tidak langsung dapat menurunkan konsentrasi belajar sehingga dapat menurunkan prestasi siswa dalam bidang akademik. Pengguna gadget pada anak antara lain terganggunya kesehatan mata, terganggunya kesehatan otak, menjadi orang yang tertutup, terpapar radiasi, dan gangguan tidur atau insomnia. Insomnia merupakan suatu gangguan tidur yang gejalanya dialami oleh seseorang yang mengalami kesulitan tidur atau sulit untuk tetap tertidur, sering kali terbangun dari tidurnya. Tujuan penelitian ini adalah untuk mengetahui pengaruh durasi penggunaan gadget terhadap gejala insomnia. Metode penelitian yang digunakan dalam penelitian ini adalah metode penelitian kualitatif yang didasarkan pada fenomena-fenomena yang terjadi berupa perilaku dan penelitian ini dilakukan dengan cara mewawancarai informan utama dan informan pendukung. Kesimpulan : Semakin lama seseorang menggunakan gadget pada malam hari, maka semakin sulit untuk tertidur. Dari hasil wawancara diketahui bahwa para informan mengakui bahwa penggunaan gadget dapat mengganggu pola tidur mereka dan menyebabkan mereka susah tidur. Saran : Penggunaan gadget memang sangat penting bagi kehidupan kita sehari-hari, namun ada baiknya kita membatasi penggunaan gadget seperlunya dan bila tidak diperlukan sebaiknya kita menghindari penggunaan gadget terus menerus.

# Abstract

The use of gadgets in adolescents will have a positive impact, which can make it easier to access the internet for searching or making assignments, however, uncontrolled use of gadgets such as using social media or playing games excessively will have a negative impact on sleep patterns, namely disrupted sleep patterns (insomnia). The longer someone uses a smartphone at night, the harder it is to fall asleep. Symptoms of difficulty falling asleep are commonly known as insomnia. Most smartphone users in Indonesia are people aged 19-34 years (49.52%). The impact of insomnia on students can indirectly reduce learning concentration

# Diajukan : 7-10-2023 Diterima : 12-2-2024 Diterbitkan : 25-3-2024

Kata kunci:

pengaruh gadget, lama pemakaian, gejala susah tidur

# **Keywords:**

influence of gadgets, duration of use, symptoms of insomnia so that it can reduce student achievement in academic matters. Gadget users in children include impaired eye health, disturbed brain health, being a closed person, exposed to radiation, and sleep disorders or insomnia. Insomnia is a sleep disorder in which the symptoms experienced by someone who has difficulty sleeping or difficulty staying asleep often wakes up from sleep. The purpose of this study is to determine the effect of the duration of using gadgets on insomnia symptoms. The research method used in this study is a qualitative research method that is based on phenomena that occur in the form of behavior and this research was conducted by interviewing the main informants and supporting informants. Conclusion : The longer a person uses gadgets at night, the more difficult it is to fall asleep. From the interview results it was found that the informants admitted that the use of gadgets can disturb their sleep patterns and cause them insomnia. Suggestion: The use of gadgets is indeed very important for our daily lives, but it's a good idea to limit the use of gadgets as needed and if not necessary, we should avoid using gadgets all the time.

#### Cara mensitasi artikel:

Azzahra, Z., & Siregar, P.A. (2024). Analysis of The Effect of Long Using Gadgets Before Sleeping With Insomnia Symptoms in Adolescents. *IJOH: Indonesian Journal of Public Health, 2*(1), 80–85. <a href="https://jurnal.academiacenter.org/index.php/IJOH">https://jurnal.academiacenter.org/index.php/IJOH</a>

# **INTRODUCTION**

Gadgets are electronic media devices that have various functions and uses. The types of gadgets available today are quite a lot, some of which are cell phones, smartphones, desktop PCs (computers), tablets and laptop/netbook PCs. Gadgets are becoming an integral part of modern telecommunication. In many countries, more than half of the population uses gadgets and the market is growing rapidly. In 2014, it is estimated that as many as 6.9 billion people use gadgets (WHO, 2014).

The use of gadgets that is quite intense can cause several sleep disturbances or even depression. In addition, the use of gadgets that are connected to the internet will cause symptoms of insomnia in a person. The longer a person uses gadgets at night, the more difficult it is for someone to start sleeping, where sleep disorders are often called insomnia (National Sleep Foundation, nd).

The problem is that over the last few years, the use of gadgets has increased substantially and has given rise to growing concern about the effects on health associated with exposure to electromagnetic fields and microwave radiation generated by these gadgets. Radiation causing adverse effects on health will signal a wider public health problem. Using gadgets before going to bed can stimulate physiological and psychological effects that can affect sleep. Using gadgets before bed delays the human body's internal clock (circadian rhythm), suppresses the release of the sleep-inducing hormone melatonin, and makes it more difficult to fall asleep (National Sleep Foundation, nd). According to King (2014), the use of electronic media/gadgets is pathological before going to bed if used for more than 35 minutes. can cause sleep disturbances coupled with the use of gadgets before going to bed can delay the human body's internal clock (circadian rhythm), suppress the release of the hormone melatonin which stimulates sleep, and make it more difficult for a person to fall asleep (Amaliana, et al. 2015).

Several epidemiological studies state that excessive cell use phones/smartphones is more prone to causing health problems, including headaches, fatigue, impaired concentration, difficulty sleeping, and hearing problems (Choo et al, 2010 and Takao, 2014). High use of cell phones/smartphones can cause sleep disturbances which can lead to anxiety and even depression (Thomee et al, 2011 and Adams & Kisler, 2013). In addition, according to Jenaro, et al (2007), the use of cell phones/smartphones that are connected to the internet network causes symptoms of insomnia in college students. The longer a person uses a gadget at night, the harder it is to fall asleep (National Sleep Foundation, nd). Symptoms of difficulty falling asleep are commonly known as insomnia.

In Indonesia, the prevalence of insomnia is around 10%, which means that 28 million people out of a total of 237 million people in Indonesia suffer from insomnia (Amir, 2010). If the number of insomniacs is increasing year by year, it will cause harm to the sufferer. These disadvantages include causing daytime sleepiness and fatigue (Moul et al, 2002 and Fortier-Brochu et al, 2010), reduced psychomotor movement (Edinger et al, 2008), and other cognitive disorders (Altena et al, 2008). In addition, although there has been no research that reveals a direct relationship between insomnia and an increased risk of traffic accidents, the residual effect of hypnotics the next day due to insomnia can cause substantial damage in psychomotor function, resulting in mmunAccording to a survey by the Association of Indonesian Internet Service Providers (APJII) (2017), almost half of the total internet users (by accessing gadgets) in Indonesia are people in the age group of 19-34 years (49.52%). So, based on these data, this research was conducted on respondents in the age group of 19-34 years who were students. The impact of insomnia on students is very detrimental, as it can cause students to think more slowly, make lots of mistakes, and find it difficult to remember things. If this continues to occur in students' daily lives, it will reduce the concentration of learning so that it can reduce student achievement in academic terms. enable accidents while driving (Menzin et al, 2001).

Sleep is one of the most important human activities. If this activity is carried out by a person well, then the effect will be on the dimensions of a person's life when he is awake. Sleep has an influence on alertness, energy, concentration, etc. The time to sleep is at night, while the time not to sleep is during the day. At night, humans tend not to have excessive activity and also the quiet situation is the reason that makes the night the right time to rest.

The worst effect of poor sleep is not how we feel at night, but how it affects us during the day, both physically and emotionally. One of the most unique stages is bedtime in your teens. In general, adolescents' sleep needs will increase to 8.5-9.25 hours each day, however, their sleep time changes. Interestingly, when other people start to feel sleepy at 21.00 or 22.00, teenagers are excited to work, both studying and completing their jobs. Meanwhile, in the morning, teenagers have to wake up early to prepare themselves for school, college, or work.

In general, teenagers experience sleep deprivation so it is not surprising that there are many phenomena of students or students sleeping when class starts. Until now, in Indonesia it is still rare to do research related to sleep and its problems, especially among students. Ironically, based on research in the United States and Europe, high school students and college students are the most vulnerable group to suffer from chronic sleep

deprivation. As a result they have a higher risk of experiencing the negative impacts that are caused (Marpaun P.dkk, 2013)

## RESEARCH METHODS

This study uses a qualitative approach. Informants in this study were selected using interview techniques, namely samples selected using certain considerations according to the criteria to be studied, namely some late adolescents who use gadgets around the age (18-25 years). Those who experience symptoms of insomnia due to gadgets. By conducting interviews with key informants who experience symptoms of insomnia due to gadgets and supporting informants, namely the families of the main informants.

## RESULTS AND DISCUSSION

Based on research conducted by researchers that some teenagers have insomnia symptoms due to the influence of using gadgets. They use gadgets continuously for reasons of looking for information, doing assignments, using social media. And they also can't live without using gadgets, when they don't use gadgets for a day they feel something is missing and like they are missing something within themselves. The use of gadgets at night is very popular with teenagers. At night they feel free to use gadgets without any other activities so that using gadgets at night can make a person experience disturbed sleep patterns and can cause symptoms of insomnia.

Insomnia is difficulty initiating and maintaining sleep in Lopez (2011), about sleep disturbances in adolescents. People who experience insomnia have poor quality and quantity of sleep so that when they wake up, insomniacs feel unrefreshed and are still sleepy. The worst effect of poor sleep is not how we feel at night, but how it affects us during the day, both physically and emotionally. One of the most unique stages is bedtime in your teens. In general, adolescents' sleep needs will increase to 8.5-9.25 hours each day, however, their sleep time changes. Interestingly, when other people start to feel sleepy at 21.00 or 22.00, teenagers are excited to work, both studying and completing their jobs. Meanwhile, in the morning, teenagers have to wake up early to prepare themselves for school, college, or work. In general, teenagers experience sleep deprivation so it is not surprising that there are many phenomena of students or students sleeping when class starts.

From the results of interviews conducted, it was true that they had symptoms of insomnia. From the first informant said that it was true that he had difficulty falling asleep at night because according to him at night he felt that he was productive . Usually he sleeps after 00:00 and he has also slept at dawn. At night, even early in the morning, he always uses gadgets and at those times he chooses to do assignments and occasionally he also plays social media such as Instagram and Tiktok.

After conducting interviews with the main informants the researcher also conducted interviews with supporting informants, namely the parents of the main informants, from the results of the interviews conducted it was true that the parents knew that the child had been sleeping for a long time and was experiencing symptoms of insomnia. At first his parents were angry and advised him to sleep quickly, but for reasons the child was doing the assignments the parents didn't forbid him anymore, because according to the parents the child was doing something positive.

Then, from the results of subsequent interviews, several informants said that he could not fall asleep at night and it was difficult to fall asleep at night. At night, he was free to play gadgets so that he could forget the time, not only doing assignments, but time spent using gadgets, namely playing social media. such as using Instagram, TikTok, YouTube, Facebook and WhatsApp. Another informant also said that he used gadgets at night, namely playing games and making sleep calls with friends of the opposite sex, so that his sleep pattern was disrupted and he had difficulty sleeping.

The number of gadgets owned and the duration of daily use of gadgets by students is based on the need to access the internet to find material and references in completing academic assignments. Especially for final batch students who focus more on working on their thesis by using gadgets such as laptops/computers more often. According to research conducted by Suryadi (2008), students who are working on their thesis have higher insomnia than students who have not been working on their thesis. Students who are faced with several academic assignments that no less cause them to get bored and bored more quickly, so to get rid of boredom and boredom, they seek entertainment by accessing the internet to access social networks (social media), playing online games, watching online videos, etc. . Accessing gadgets can still be done without having to be connected to the internet, such as listening to music, watching videos that have been stored on their gadgets, playing offline games, drawing, reading stories/news, etc.

Other research also supports the results of this study seen in research conducted by Mohammed A et al, 2018 entitled Prevalence Of Insomnia And Its Association With Social Media Usage Among University Students In Selangor Malaysia, in his research he stated that using social media has something to do with insomnia and sociodemographic factors among university students. According to research, using gadgets for a long time causes them to need about 60 minutes longer to fall asleep than usual. Thus, these teenagers tend to sleep later than usual (Hudo, 2015).

The light from gadgets will disrupt biological mechanisms that will cause the body to delay sleep and circadian rhythms. Excessive use of gadgets will cause euphoria and cause insomnia. So it can be seen that the influence of gadgets on the duration of gadget use with insomnia symptoms in adolescents is very influential because teenagers who experience insomnia symptoms are definitely due to gadgets and they also have broken sleep patterns due to gadget use and without limiting gadget use. Because gadgets can make users fall asleep for a long time.

# **CONCLUSION**

The longer a person uses gadgets at night, the more difficult it is to fall asleep. From the interview results it was found that the informants admitted that the use of gadgets can disturb their sleep patterns and cause them insomnia. Using gadgets for a long time causes them to need about 60 minutes longer to fall asleep than usual. Thus, these teenagers tend to sleep later than usual (Hudo, 2015). The light from gadgets will disrupt biological mechanisms that will cause the body to delay sleep and circadian rhythms. Excessive use of gadgets will cause euphoria and cause insomnia. So it can be seen that the influence of gadgets on the duration of gadget use with insomnia symptoms in adolescents is very influential because teenagers who experience insomnia symptoms are definitely due to

gadgets and they also have broken sleep patterns due to gadget use and without limiting gadget use. Because gadgets can make users fall asleep for a long time.

## **SUGGESTION**

The use of gadgets is indeed very important for our daily lives, but it is better if the use of gadgets must also be limited, use gadgets as needed and if not necessary, we should avoid using gadgets continuously. And we as students have to be a lot in terms of using gadgets.

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