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The Impact of Using Social Media on Sleep Pattern among Medical Students in Napta College 2026

A thesis Submitted in partial fulfillment for requirement of MBBS Degree in Medicine

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Abstract

Background and Aims: The excessive use of social media platforms has been found to have a negative effect on Sleep Pattern of university students. The results of a study on medical students showed that students who used social networks and internet more than average had tendency to loneliness and isolation when they use social media in range of 40 to 60% and this may affect their mental wellbeing. This study aims to find out the significant factors in students' irregular sleeping patterns, social media addiction negatively affects their sleep patterns.

Methods: This descriptive cross sectional facility-based study was conducted. In this study, 213 students were chosen to find the impact of too much social media sites use on their sleep patterns, self-satisfaction, anxiety, and depression. The collected data was analyzed by using the Statistical Package for Social Sciences program (SPSS version 25

Result: Therefore, the final sample consisted of 213 participants. Female participants were higher than male. Findings from the data gathered revealed that students were close age group but majority of students were in age 21-25 years. Students to social media has insignificant negative influence on their sleep patterns

Conclusion: Facebook, What's app and YouTube were more frequently type of social media using by medical students. Medical Students who stated that social media have negative influence on their sleep patterns

Keywords: Social Media, Mental health, Depression, Satisfaction, Social Comparison, Sleeping.

المستخلص

الخلفية والأهداف: وجد أن الإفراط في استخدام منصات التواصل الاجتماعي له تأثير سلبي على الصحة النفسية لطلاب الجامعات. أظهرت نتائج دراسة أُجريت على طلاب الطب أن الطلاب الذين يستخدمون الشبكات الاجتماعية والإنترنت أكثر من المتوسط يميلون إلى الشعور بالوحدة والعزلة عندما يستخدمون وسائل التواصل الاجتماعي تتراوح نسبة استخدامهم لوسائل التواصل الاجتماعي بين 40 و60%، وهذا قد يؤثر على انماط نومهم

الاهداف: تهدف هذه الدراسة إلى تحديد العوامل المهمة في أنماط النوم غير المنتظمة لدى الطلاب، وتأثير إدمان وسائل التواصل الاجتماعي سلبًا على انماط نومهم

المنهجية: أُجريت هذه الدراسة الوصفية المقطعية في مرافق طبية. في هذه الدراسة، تم اختيار 213 طالبًا لدراسة تأثير الإفراط في استخدام مواقع التواصل الاجتماعي على أنماط نومهم، ورضاهم عن أنفسهم، وقلقهم، واكتئابهم. تم تحليل البيانات المجمعة باستخدام الحزمة الإحصائية للعلوم الاجتماعية SPSS) الإصدار 25.(

النتيجة: بالتالي، تألفت العينة النهائية من 213 مشاركًا. كان عدد المشاركات الإناث أعلى من عدد المشاركين الذكور .كشفت نتائج البيانات المجمعة أن الطلاب كانوا متقاربين في الفئة العمرية، ولكن غالبية الطلاب كانوا في الفئة العمرية 21-25 عامًا. لم يكن لاستخدام الطلاب لوسائل التواصل الاجتماعي تأثير سلبي يُذكر على أنماط نومهم

الخلاصة: كان فيسبوك، وواتساب، ويوتيوب من أكثر أنواع وسائل التواصل الاجتماعي استخدامًا من قبل طلاب الطب. أفاد طلاب الطب بأن لوسائل التواصل الاجتماعي تأثيرًا سلبيًا على أنماط نومهم

Quran

قال الله تعالى :





صدق الله العظيم

Dedication

This thesis is dedicated to our parents for their love, endless support and encouragement, our brothers, sisters and friends who encourage us to continue develop myself and search for the best in every opportunity.

Acknowledgments

The realization of this work was only possible due to the several people's collaboration, to which desire to express my gratefulness.

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List of Abbreviations

Abbreviations	Meaning
ADHD	attention-deficit/hyperactivity disorder
ERP	event-related potential
FOMO	fear of missing out
OCD	obsessive-compulsive disorder
PTSD	post-traumatic stress disorder
PVS	Phantom vibration syndrome
LMS	learning management systems
SPSS	Statistical Package for Social Sciences program
SM	social media
SNS	social networking sites
UG	undergraduate

Chapter One

Introduction, Rationale &Objectives

1. Introduction, Rationale &Objectives

1.1 Background

Social media is a network of websites and applications that enables individuals to converse with each other [1]. It also allows users to generate, use, exchange and discuss the content available on the worldwide web. Content includes personal information, documents, videos, and photos. Users engage with social media via computer, tablet or smartphone via web-based software or web application, often utilizing it for messaging [2]. 2.31 billion Social media users were reported in 2016. The most commonly used social media among students were: Facebook, WhatssApp and Twitter. A breakthrough occurred in the period from 2005 to 2015 with the rise in social media utilization from 12% to 90% respectively [3]. As of 2019, statistics 2.7 billion people use Facebook, Instagram, or Messenger each month and more than 2.1 billion people use at least one every day. In 2022 more than 4.9 billion are using the internet globally. While approximately 4.6 are social media users [4] expected to exceed this number by 2036 with 6 out of 10 individuals will be active online on the planet. Overuse of social media has been linked to mental health issues [5]. Also, it is negatively affecting emotional wellbeing. Harassment, depression. eating disorders, anxiety and loneliness are also reported to affect a higher percentage among younger generations. This is attributed to less time spent in the real word which negatively affects their psychological wellbeing. These Psychological issues could lead to smoking and alcoholism. Academically, social media offer the chance for discussion groups which help find study materials and expand the academic horizons [6]. Despite this advantage, most of the students did not utilize it for academic purposes. Which had led to poor academic performance. Consequently, many universities restricted access to social media within their buildings [7] the use of social media has become a part of students' lives throughout the globe. Here in Sudan usage of social media has become one of the daily practices of most university students and almost all of those students have smartphones and spend their free time in it. The prevalence of internet addiction was found to be 80.15% (95% CI: 75-85) and an increase in the incidence of internet use [8].

1.2Statement of problem

The rapid advancement of media technology has had a great impact on the way people communicate on a daily basis. The growing dimension of the use of the social media among the youth of today cannot be over emphasized. Over the years, social networking among students has become more and more popular. It is a way to make connections, not only on campus but with friends outside of university. Social networking is a way that helps people feel they belong to a community. the researcher thoroughly analyzed and synthesized relevant literature on social media and various mental health-related issues. The topic's importance is determined by how social media use and poor mental health are related. Use of social media might be risky repercussions on the next generation since issues with mental health that arise in childhood can spread like an epidemic to anyone throughout their lifetime. Many paper provides insight into the nuanced relationship between youth mental health issues and social media use. Online harassment, depression, sexting/texting, stress, exhaustion, loneliness, a reduction in intellectual ability, cyber bullying, emotion suppression, and lack of attention are some of these issues. These factors all have an impact on young people's mental health, either directly or indirectly [8]. Globally High frequency (60%) of mobile phone usage was a risk factor (or marker) for developing symptoms of depression in both men and women. This study aims to determine impacts of social media usage on sleep patterns on undergraduate medical students of Napta College. Also, this study will help to know the positive aspects of social media usage and how to improve it. What are the adverse effects and how to avoid them?

1.3Justification

Students are one of the most important users of the virtual world and social networks. The overuse of social networks has positive and negative academic, social, and mental health consequences for the students. Medical students mainly access the internet for academic purpose. The irresistible urge to check social media, again and again, is Social Media Addiction. The results of a study on medical students showed that students who used social networks and internet more than average had tendency to loneliness and isolation when they use social media in range of 40 to 60% and this may affect their mental wellbeing.

1.4 Objectives

1.4.1 General Objective

- To study the impact of Using Social Media on Sleep Pattern among Medical Students in Napta College

1.4.2 Specific Objectives

1.4.2.1 To determine causes of use social media by students

1.4.2.2 To determinate life satisfaction while watch social media posts and statuses and Feeling when woke up

1.4.2.3 To evaluate Rate of general sleep quality over the last month

1.4.2.4 To determinate frequently of struggled to stay awake while driving, eating, or engaging in social activities in the last month.

1.4.2.5 To determinate utilize social media after gone to bed on device and Times a week go to bed intending to sleep only to be awoken by a text or other notification from a friend or social media

1.4.2.6 To determinate Time it typically take each night during the past month to fall asleep and time usually get out of bed over the past month

1.4.2.7 To determinate Number of hours that people slept at night during the previous month

Chapter Two
Literature Review

2 Literature Review

2.1. Social Media for Academic Purpose

Using social media by University students is certainly a fascinating portion of research for educationists and social scientists [9] Maintain that in the available literature there are beneficial designs and styles of employing it at school level. It describes the introduction of contents and focuses on how to share, interact, and collaborate and socialize by its use. There appear different top reasons to justify using social media in greater education. It usage was confirmed by preserve setup its familiar with enhance study encounters of students by provision of e-support services on their behalf [10]. It's familiar with facilitate communication among and between students in virtual cities. Amongst others, the Facebook appears being most likely probably the most favorite was suggested as a means of communication for reaching students [11]. Furthermore, instructors have reported that using online technologies can encourage online discussion among students outside the classes, beyond the traditional class setting [12] Inside the situation of internet sites or blogs, when students update their user profiles and personalize their unique pages, they could provide comprehensive particulars about themselves (e.g., full title, date of birth, address, educational background, and hobbies). Some social media such as Wikipedia and to some extent blogs encourage investigative-based and collaborative activities among students in higher education. This open access for active participation and can therefore create opportunities for effective learning. Linked with this principle of collaborative development among learners, social media enable learners and teachers to share and publish information as a result of the learning activity (e.g., course materials such as course syllabus, course notes, assignments, test cases, etc) and invite feedback from peers. By publishing and presenting their work to a wide audience through blogs, wikis, or podcasts, learners benefit from the opportunity to appropriate new ideas, and transform their own understanding through reflection [13].

2.2. Effects of social media on sleep

Sleep is essential to promoting good health. It is recommended that young and midlife adults obtain 7–9 h of sleep per night, 40% of American adults report getting less than 7 h of sleep per night on weeknights. Sleep disruption and inadequate sleep duration are linked to daytime drowsiness and a variety of negative health effects. Inadequate sleep and sleep disruption are caused by a variety of biological, psychological, and environmental variables in adolescents and young adults. This includes physiologic changes such as an increase in homeostatic sleep pressure (the chance of falling asleep), increased academic and professional expectations, and the use of stimulants such as alcohol and

caffeine [14]. However, little is known regarding the links between social media (SM) use and sleep quality and quantity.

2.3.Effect of Social Media on Mental Health

Mental health is described as a condition of well-being in which people comprehend their skills, solve day-to-day difficulties, work successfully, and make a substantial contribution to the lives of others. There is currently debate over the advantages and drawbacks of social media on mental health. Social networking is an important part of safeguarding our mental health. Mental health, health behavior, physical health, and mortality risk are all affected by the amount and quality of social contacts. A number of research on the effects of social media have been undertaken, and it has been suggested that extended usage of social media platforms such as Facebook may be associated with negative indications and symptoms of depression, anxiety, and stress [15]

The link between excessive usage of Social Networking Sites (SNS) and mental health is causing major worry among health and education experts. Problematic SNS usage has been linked to an increased risk of depression, anxiety, stress, obsessive-compulsive disorder (OCD), attention-deficit/hyperactivity disorder (ADHD), and excessive alcohol use. It may also increase sensitivity to aggressiveness, cyberbullying, and FOMO (fear of missing out). There is limited evidence for cognitive deficits, although there is early event-related potential (ERP) evidence indicating inefficiency in allocating and monitoring resources, as well as inhibitory control [16]. Students are increasingly spending time online and connecting to one another through digital tools. Mobile device ownership and social media usage have reached new levels, prompting fears that this constant connectedness is negatively impacting their mental health. As students spend more time interacting with digital technology, there is an urgent need to both understand the implications of this usage and harness new technologies in ways that support rather than hurt their mental health and well-being [17].

2.3.1. Social Media & Anxiety

It has been shown that 45% of British people get agitated when they are unable to access their social networking sites. It has also been shown that the younger generation gets restless when they are unable to read messages on their social networking programs, giving birth to Phantom vibration syndrome (PVS). Which is nothing more than an addict's impression of the vibration of his cell phone) each PVS victim reveals addiction of frequent checking of social communications demonstrates expression of anxiety induced by mobile phones [18].

2.3.2. Social Media & Stress

In today's society, practically every person between the ages of 11 and 93 is linked to social media. Young adults are the most active social media users, and they are disproportionately at risk of developing mental health issues. Acculturative stress among college students is positively related with social media applications such as Facebook. Students' mental health might suffer as a result of stress. Excessive use of social media might have a negative impact on the mental health of the younger generation [18].

2.3.3. Social Media & Depression

Excessive usage of social media leads to negative outcomes, beginning with anxiety and progressing to despair. Students who spend a lot of time on Facebook report feeling more lonely. It has also been discovered that social media use worsens psycho-social difficulties such as adjustment and self-esteem. Depression symptoms are related with fewer good and more negative social contacts in the younger generation [18]. Negative comparisons might be the underlying cause of depression/anxiety associated with SM. Young people use SM to portray the best image to their friends by sharing photographs of themselves having fun at parties and on vacation. This leads to comparisons and the sense that others are more wealthy and blessed than you. Furthermore, peer feedback becomes more frequent and faster with SM than without it. Such negative comparison and peer feedback may be at the root of any links between SM and anxiety and depression [19].

When social networks and the Internet in general are used to establish and preserve social bonds, particularly among family members and close friends, the resultant social support appears to be good to mental health. Extensive use of SNS outside of these groups, on the other hand, may erode existing close family and friend connections and raise feelings of loneliness and melancholy [20].

2.4. Positive Impact of Social Media

The advancement of technology and the variety of numerous social media platforms have altered the structure of our communication by erasing physical and temporal constraints. With continued technology improvements, social media will continue to evolve and affect its users in a variety of directions, including educational elements. In the context of education and learning, social media platforms provide venues for the exchange of knowledge and ideas and can be used to arrange events or discussions, support courses and reading groups and provide space for communication and interaction [21]. Today, social media plays an essential function in influencing the learning behavior of university students in order to attain long-term education. The influence of social media on long-

term schooling is becoming an important and motivating component. The globe has shrunk to the size of a hamlet as a result of social media and technological advancements in education. Social media is rapidly transforming our social conventions, values, and culture. Sharing information and distributing material are becoming increasingly essential societal demands. Social media has altered how individuals, especially university students—particularly female students—communicate, engage, and socialize during their learning processes at educational institutions [22]. Social media is becoming increasingly significant in higher education, both in course delivery and evaluation. This study investigates the use of social media as a support tool in undergraduate (UG) education from the viewpoints of both educators and students [21].

Social media websites and applications are online environments in which users may contribute, retrieve, and explore material created mostly by other users. Unlike more traditional kinds of information and communication technology used in health care organizations, social media material is often developed by users for users, allowing knowledge and assistance to flow more efficiently [23]. Many students utilize social networking sites to share information, debate subjects or concepts, and cooperate on homework assignments or term projects. SNS facilitate and accelerate peer-to-peer information exchange and cooperation, which appears to be a favored mode of learning. This new learner behavior promotes self-learning and is a major motivator for a move from traditional teacher-centered learning to student-centered learning [24].

Google and learning Google's technologies have aided approximately 20 million students in their schooling. Students get better experience with computers and other electronic devices by spending so much time working with new technology. With a greater emphasis on technology in education and industry, students will be able to develop skills that will benefit them throughout their life. The social networking sites place a strong emphasis on forming online communities around shared interests or activities. Social networking platforms can also assist pupils in developing leadership skills. talents ranging from low-level planning and organizing to acts that promote social change and democratic participation. Social media tools and networking sites empower students to interact with one another while also expressing and sharing their creativity. Such interpersonal contacts are critical for developing and maintaining a sense of belonging [25].

2.5. Negative Impacts of social media

Some of the influences of social media on student intellectual health include cyberbullying, social media addiction, comparison, Fear of missing out (FOMO), and sleep destruction [26]. Cyberbullying is a significant issue, with many students experiencing online harassment, bullying, negative

comments, and or exclusion. This can have severe consequences for their mental health, including stress, anxiety, and depression. Online bullying can cause feelings of loneliness, low self-esteem, suicidal threats, anxiety, and melancholy [27]. Some may end up committing suicide or having suicidal thoughts, which can affect them or lead to drug and substance abuse, resulting in stress and or mental challenges.

Fear of missing out (FOMO) is another reason students and some people use social media nowadays. Students might have the pressure to feel that they want to attend and know every event taking place, and this leads to inadequate sleep or sleepless nights, which can cause stress and a decline in mental health. The disrupted sleep patterns can lead to fatigue, decreased concentration, and poor academic performance. Checking messages regularly, even when there aren't any messages, and keeping an eye on the notification bar all the time are the signs and symptoms of FOMO. People tend to give more time to the alert messages and not concentrate on other things like education or business [26].

Addiction is another problem of social media, as it has become part of our lives in the present era. Students fail to manage their time, thus impacting aca demic performance and overall well-being. The platforms of social media are convenient and easy to use as they provide verbal exchange to its certain degree, hence students cannot live without them. Social media is used excessively in all societies, henceforth becoming very serious with sex tapes, nude pictures [28]. On the issue of nude pictures and pornography, many students are rushing into doing sex and early marriages, and dropping out of school. If one is not addicted to social media, then there is no need to quit it. The addition of social media is harmful to mental health as it leads to many things like cyberbullying, stress, anxiety, distraction, and more. Users need to be very careful and use it until they benefit from it [29]. Furthermore, studies have discovered that certain sports in social media, such as texting and getting a response, getting likes, notifications, and nice feedback, could be interesting and one becomes addicted. Such addiction has an instant effect on mental health, which leads to low self-esteem, feelings of envy, anxiety, sleeping sickness, and in the worst situation, they commit against the law.

Depression is a common mental disorder that causes individuals to experience changes in mood, loss of interest or enjoyment, feelings of guilt or low self-esteem, disturbed sleep or urge for food, low power, and negative attention. Likewise, anxiety is a sort of worry normally associated with the notion of a threat or something going incorrect in the future; however, it can also arise from something going on right now [30]. The relationship among depression, tension, stress and occasional vanity is interrelated as they can appear at any time, everywhere and from something. Immoderate use of social media is observed to be a critical driver of depression, anxiety and tension. A survey carried out by Woods showed that common social media use, nighttime precise use and emotional funding all had a significant impact on best of sleep quality, connected with a better degree of depression and anxiety.

The reasons for misery and anxiety amongst people are numerous, depending on the beliefs of human beings about the use of social media [28]

2.6. Previous studies

Previous research on SM usage and sleep has had inconclusive findings. Two recent evaluations in this field found an inverse relationship between electronic media usage and sleep metrics such slower falling asleep, later bedtime, and less overall sleep time. The fast-increasing rate of SM usage in recent years raises concerns that SM use may impair sleep quality and shift overall quantity of sleep. While almost all study in this area has focused on children and adolescents, 96% of young people aged 18 to 30 use technology before night, including mobile phones (67%), laptops (60%), and electronic music players (43%) [31]. Given the availability of devices that might be used for SM and the negative health effects of disturbed and inadequate sleep among young adults, research that specifically concentrate on the relationship between SM and sleep disruption in young adults are needed. In recent years, the usage of SM has increased substantially. Furthermore, disrupted and inadequate sleep has been linked to negative health effects. As a result, the substantial link between SM usage and sleep disruption has major therapeutic consequences for health.

In a study conducted by Jessica C Levenson et al. , they found that among a nationally representative sample of young adults, greater SM use in the 30 minutes before bed was independently associated with greater sleep disturbance, even when controlling for total SM use. A second major finding was that total SM use remained independently associated with sleep disturbance in the overall adjusted model. Their findings are consistent with a recent report showing that media use of various types in the 2 hours before bed was associated with shorter total sleep time and later bedtimes among university students.

The findings by Hjetland GJ et. al. support research on students and young adults that screen use has a major impact on sleep quantity and quality. The findings also show that social media addiction plays a significant effect, with greater rates of insomnia among individuals with higher levels of self-reported addiction and a curvilinear association with sleep length, sleep onset latency, and sleep efficiency. There is just a little variation between the completely corrected connections and the associations that have only been adjusted for age and gender. When compared to increasing overall screen time, increasing evening screen time is related with bigger declines in both sleep quantity and quality. Thus, the relationship between screen time and sleep may be predominantly driven by evening screen time. It would be interesting to analyze the sleep of people who only use screens during the day; unfortunately, far too few participants in the current research did not use screens in bed. Sleep issues are common among students, and lowering evening screen use may lead to better sleep, however more

data is needed to demonstrate cause-and-effect. The findings also point to a role for social media addiction, and addictive social media use may be a focus for intervention in order to minimize evening screen time [32].

In a study done by Kana Okano et.al, Longer sleep duration, higher sleep quality, and more sleep consistency were shown to be related with improved academic performance in this study. These three sleep indicators accounted for 24.44% of the variance in total grade performance, according to a multiple linear regression. As a result, there was a significant relationship between sleep and academic achievement. This study, on the other hand, greatly expands their understanding of the relationship between sleep and academic performance by utilizing numerous objective measurements of sleep over the course of a semester as well as academic evaluations done along the way. There is solid evidence that students who use social media and engage in media multitasking more frequently are more likely to experience attention issues in their daily lives. Furthermore, utilising digital media before going to bed is associated with decreased sleep and more sleep disorders [18]

In a cross-sectional study of young adult men and women, frequent mobile phone use was linked to present stress, sleep, and depressive symptoms. At 1-year follow-up, a prospective study found that high frequency of mobile phone usage was a risk factor (or marker) for developing symptoms of depression in both men and women [22]. The usage of social networking sites (SNS) that is problematic has a detrimental influence on mental health. It has been discovered that persons with high neuroticism are especially sensitive to participating in problematic SNS use, however it is unclear which psychological mechanisms underlie this association. In the study done by Nino Gugushvili et.al, they discovered that those with high levels of neuroticism are more likely to engage in problematic SNS use. Furthermore, neuroticism was linked to both high levels of Fear of Missing Out (FoMo) and low levels of self-control, but only fear of missing out was found to be a strong mediator of the association between neuroticism and problematic SNS usage. This suggests that FoMO might be a useful intervention target to keep people from participating in problematic SNS use and the negative effects that come with it [34].

In the study done by Doğan Aydogan et. al, they reported that the students' social media usage densities were evaluated, and the relationships between density levels and self-efficacy and stress concepts were examined. Although it was discovered that self-efficacy levels declined as the duration of social media usage rose, there was no significant rise in stress levels. Self-efficacy levels, on the other hand, fell as the frequency of social media usage rose, while stress levels climbed. They determined that the necessity to keep up with social media changes, rather than the time spent on social media, raises stress levels [35].

Dobrean, et.al, in his studies said that individuals suffering from social anxiety may find that online social networking sites, particularly Facebook, provide excellent possibilities for connection with others. Two ideas have been presented to explain why socially nervous people use computers, both of which are easily relevant to online social networking sites. The first theory suggested is the social compensation hypothesis, which states that people utilise online social networking sites to compensate for social skill inadequacies or discomfort in face-to-face interactions. The social improvement hypothesis is the second theory, which contradicts the first. This hypothesis proposes that socially talented individuals use online social networking sites to discover more possibilities to communicate with others [36].

Deepa M et al discovered that the majority of respondents use a variety of social networking sites and spend more than four hours per day on social networking sites in their study. They also discovered a link between the quantity of social networking sites and depressive symptoms in their study. Furthermore, the study discovered a clear link between anxiety and depressive symptoms. They also verified that there was a link between feeling concerned and being serious on social networking sites rather than in real life. As a result of the increased use of social media, the quantity of social networking sites, and excessive time spent on social networking sites, students' mental health, such as depression and anxiety, is suffering. Greater online time is associated with less communication with family members and a reduction in the Internet user's social circle, which may lead to greater feelings of despair and loneliness. One reason why time spent on social networking sites may be connected with depressed symptoms is because computer- mediated communication can lead to an altered (and frequently incorrect) impression of the physical and psychological qualities of other users. This may lead to inaccurate inferences about online friends' physical attractiveness, educational level, IQ, moral integrity, and a variety of other attributes. Certain depressed behavioral features of a social network user may be measured, and such quantification has the potential to be highly predictive of a future depression diagnosis [20]

Igor Pantic et al. stated in their research that online social networking has created major changes in the way individuals communicate and interact over the last ten years. However, it is uncertain if any of these alterations impact normal elements of human behavior and result in psychiatric diseases. Melissa G. Hunt et al's experiment clearly suggests that restricting social media usage has a direct and beneficial influence on subjective well-being over time, particularly in terms of reduced loneliness and despair. That is, their's is the first study to show a clear causal relationship between reduced social media usage and reduced loneliness and depression. It's interesting, but perhaps not surprising, that cutting back on social media, which promises to link us with others, actually helps individuals feel less

lonely and unhappy [37]. People regularly compare themselves to what they see on social media in order to gain acceptance, which leads to unhappiness and poorer life satisfaction [38].

In the study done by Michelle O'Reilly et.al, they found out that social media has the ability to improve healthy mental health. Second, teens commonly use social media and the internet to research mental health issues. Finally, there are advantages and disadvantages to using social media in this manner. They conclude that, despite the limitations and hazards of utilizing social media, social media may be used to educate and reach teenagers in order to enhance mental health [39]. Social media has provided a place for treating people's post-traumatic stress disorder (PTSD) symptoms. People have become more sensitive to exposure to potentially traumatic events as the number of disasters, violent conflicts, and other unpleasant occurrences has increased [40].

A study was done by Verlumun Celestine Gever et.al, to check the effectiveness of social media-based music, art and drama therapies in treating PTSD symptoms among Nigerian evacuees from the Russia-Ukraine war. According to the findings of this study, social media-based therapies are an effective technique for treating PTSD symptoms in those who have experienced conflict. The researchers also suggest that theatre is more beneficial than art and music treatments in mental recovery. Student engagement is an integral part of a successful learning experience. Student engagement has traditionally been achieved primarily through on-campus interaction and contact but is facilitated through the use of university-provided online tools such as Blackboard and other modern online learning management systems (LMS) [41].

In the study done by Almutairi M el.al, found evidence of the advantages of utilizing social media to increase nursing students' engagement with their course of study. In the study done by Whyte W et.al, they found that students from various universities highlighted that using social media was a more active process than traditional didactic lectures. They felt more confident in terms of knowledge and more able to readily discuss topics and share their thoughts [42].

Chapter Three

Materials & Methods

3. Materials & Methods

3.1.Study design

This study was descriptive cross sectional facility-based study

3.2.Study duration

Study was done during period from March to April 2026.

3.3.Study area

This study was conducted at Napta , which is a new college located at kaforie –North Khartoum is meant to contribute more substantially to the promotion, modernization and advancement of higher education values and has six faculties

3.4.Study population

The study population was comprised of all semester's students at Napta College, Khartoum- Sudan from first to fifth year, Faculty of Medicine and Surgery

3.5.Sampling techniques

The sample was recruited using by convenes non-probability sampling methods.

3.6.Sample size

It was calculated by using this equation:

$$n = \frac{N}{1 + (d)^2}$$

Where:

n = Sample Size

N = Total Population

d = Degree of Accuracy (0.05)

Total population 460

213 students

3.7. Inclusion criteria

- All Student at Faculty of Medicine at Napta College with age is 18 and above and both gender was included in this study.

3.8. Exclusion criteria

Students of other medical faculties like Faculty of Dentistry, Faculty of Nursing and Medical Laboratory was excluded from this study.
Post graduate student, Students who refused to participate was excluded from this study.

3.9.Study variables

Dependent variables: effect of social media on mental health (positive or negative)
Independent variables: sociodemographic data such as: age, gender, academic level (number of year in college), type of medical college, Rate life satisfaction while watch social media posts and statuses, Happiness with where live, Feeling when woke up, Rate of general sleep quality over the last month, Frequently of struggled to stay awake while driving, eating, or engaging in social activities in the last month, Sleep with cell phone and/or tablet, Text or use a messaging app before sleep, using cell phone or tablet to play games after gone to bed, utilize social media after gone to bed on device, Times a week go to bed intending to sleep only to be awoken by a text or other notification from a friend or social media, time normally go to bed at night over the past month, Time it typically take each night during the past month to fall asleep, time usually get out of bed over the past month and Number of hours that people slept at night during the previous month.

3.10. Data collection

Data was collected from respondents using a standardized self-administered questionnaire developed from questionnaire used in a previous study. Copies of the questionnaires, provide in English language, was distributed to study participants by research assistants. The purpose of the study was explained, and write consent obtain from the study participants. The participants had an opportunity to contact the research team for clarity on the questions in the questionnaire if the need arose. The questionnaires was completed and return within an hour or by the end of the working day. Questionnaires was coded with numbers and did not have any personal identification to maintain privacy and confidentiality.

3.11.Study Instrument

A predesigned questionnaire composed of two parts was used; the first one to assess the student's socio-economic level and mapping of social media use according to year level, age, gender, most visited social media, medium used, frequency of using social media, means of accessing the social media and the general weighted average through a valid reliable questionnaire. Second part contains the items about the effects of social media use to mental health. There are multiple sections in the questionnaire that was covered aimed to estimated effect of social media on mental health among medical students

3.12.Data analysis

The collected data was analyzed by using the Statistical Package for Social Sciences program (SPSS version 25). The investigation of the information gathered for the study is provided in this study. The findings of the demographic features of the participants are reported along with a basic analysis of the respondents. Additionally provided are the means, attitudes, and inferential statistics that aid in answering the study questions as well as a descriptive analysis of the findings.

3.13. Ethical Considerations

The study was approved by scientific committee of Faculty of Medicine-Napta College. The objective of the study was explained to all participants, and their consent was taken. Students who fulfilled the above criteria was included in the study after taking consent.

Chapter Four
Results

2. Results

2.1.Socio-demographic characteristics of medical student and related characteristics

Initial screening showed that some responses were incomplete so they were excluded. Therefore, the final sample consisted of 213 participants. Female participants were higher than males (57% vs. 43% respectively) Figure 4.1

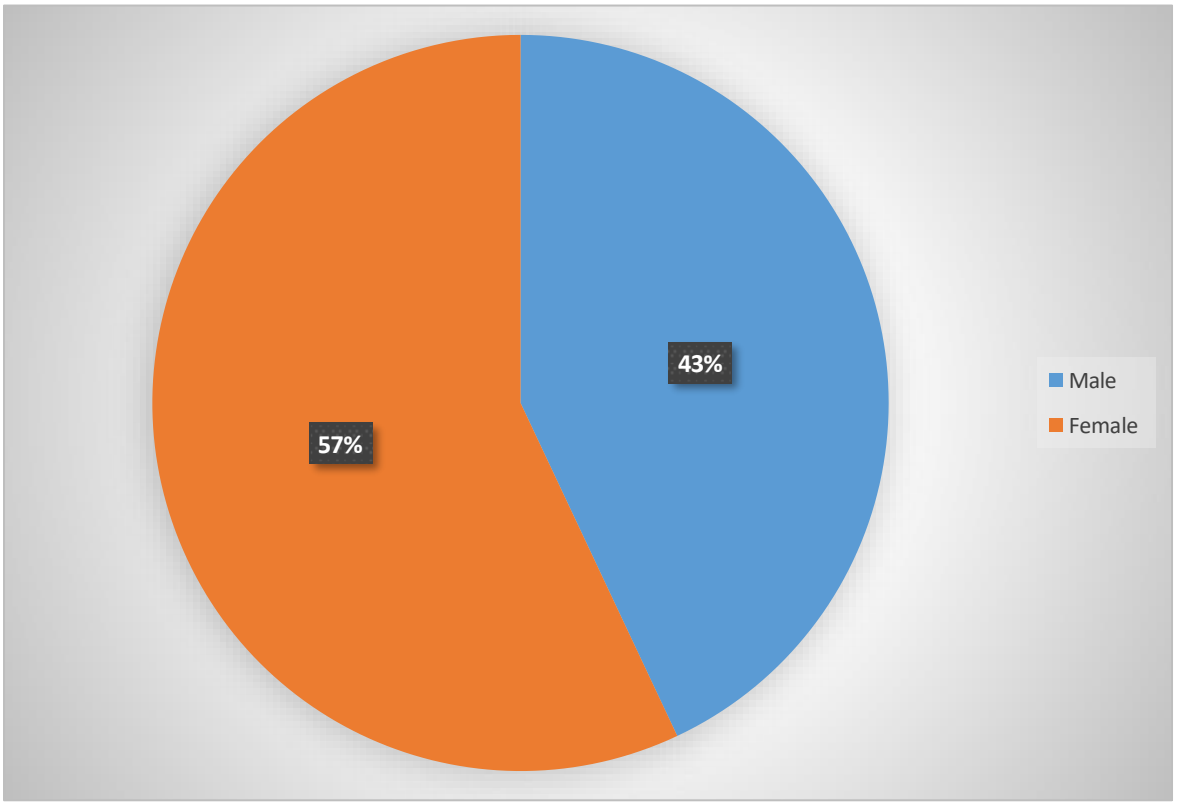


Figure 4.1 Distribution of medical students according to gender (N=213)

Findings from the data gathered revealed that students were close age group but majority of students were in age 21-25 years as were showed in figure 4.2

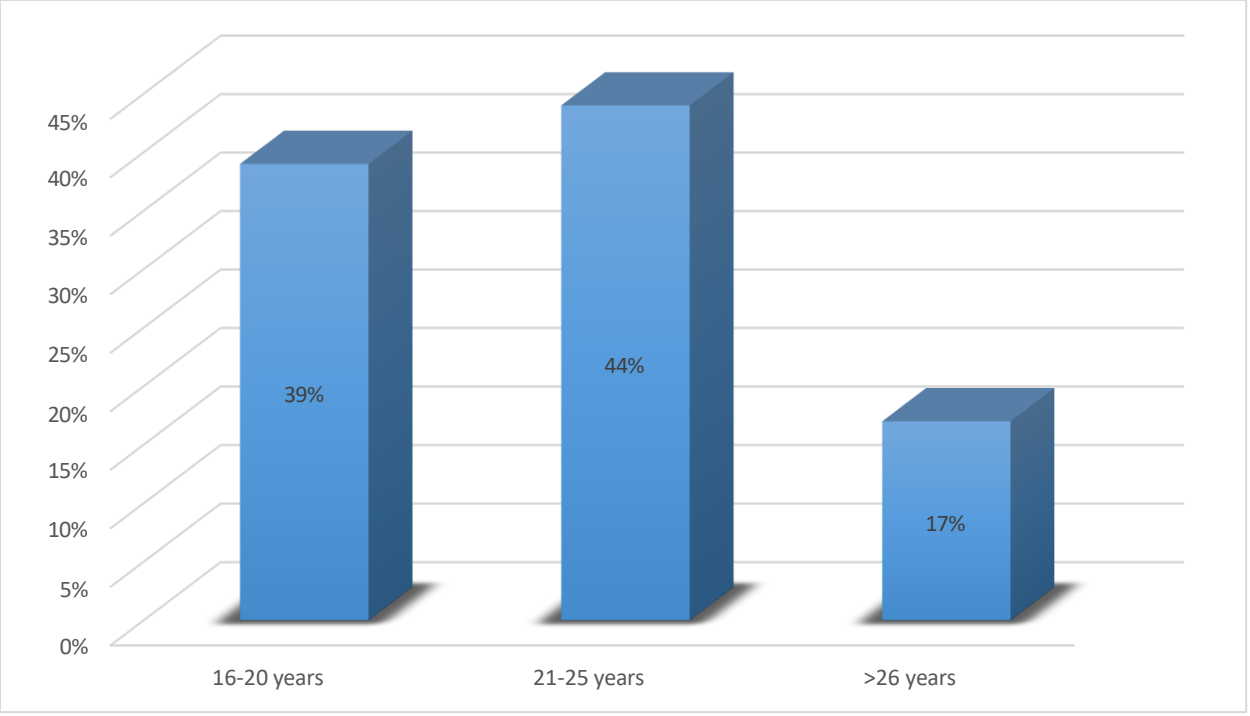


Figure 4.2 Distribution of medical students according to Age (N=213

Our findings showed majority of the respondents 64 out of 213 (30%) were from third academic level, followed by 55 out of 213 (26%) from fourth academic level, then 38 out of 213 (18%) from second academic level and 36 out of 213 (17%) from first academic level and the last one 20 of the respondents out of 213 (9%) from final year presented in figure 4.3

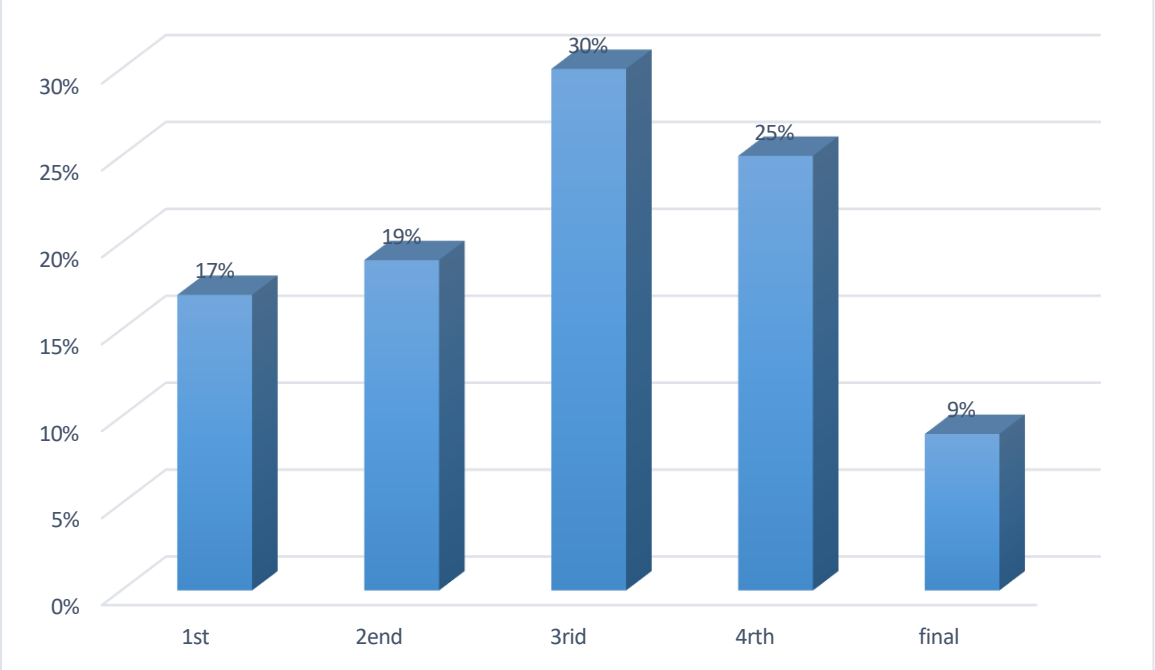


Figure 4.3 Distribution of medical students according to academic level (N=213)

When asked students about social media usage, high percentage of participants 98% were use social media frequently which as showed in figure 4.4, and the more than half of participants 62% were spent 3-6hrs/day which as showed in figure 4.5

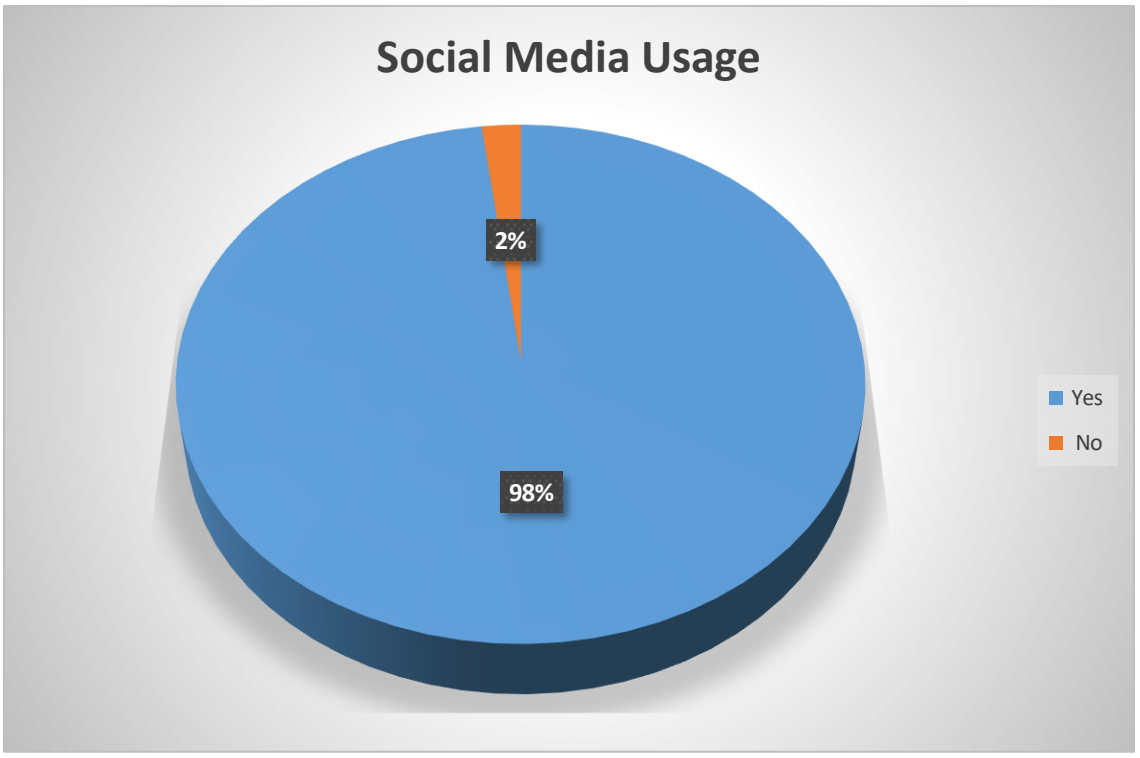


Figure 4.4 social media usage among medical students (N=213)

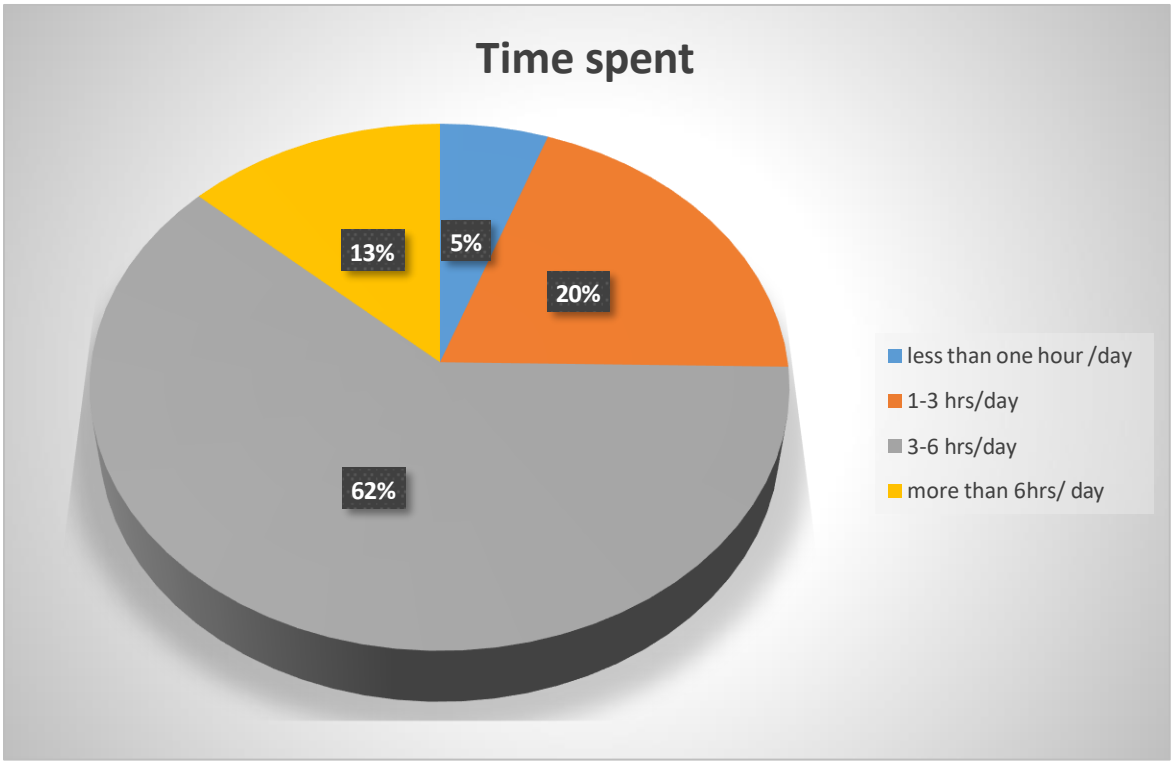


Figure 4.5 Average time spent by medical students on social media (N=213)

When asked students about most visited type of social media, Facebook, Whatsapp and YouTube were more frequently using by medical students which as showed in figure 4.6, and majority of them 77% were visited it by using their smart phone which others used laptop as showed in figure 4.7

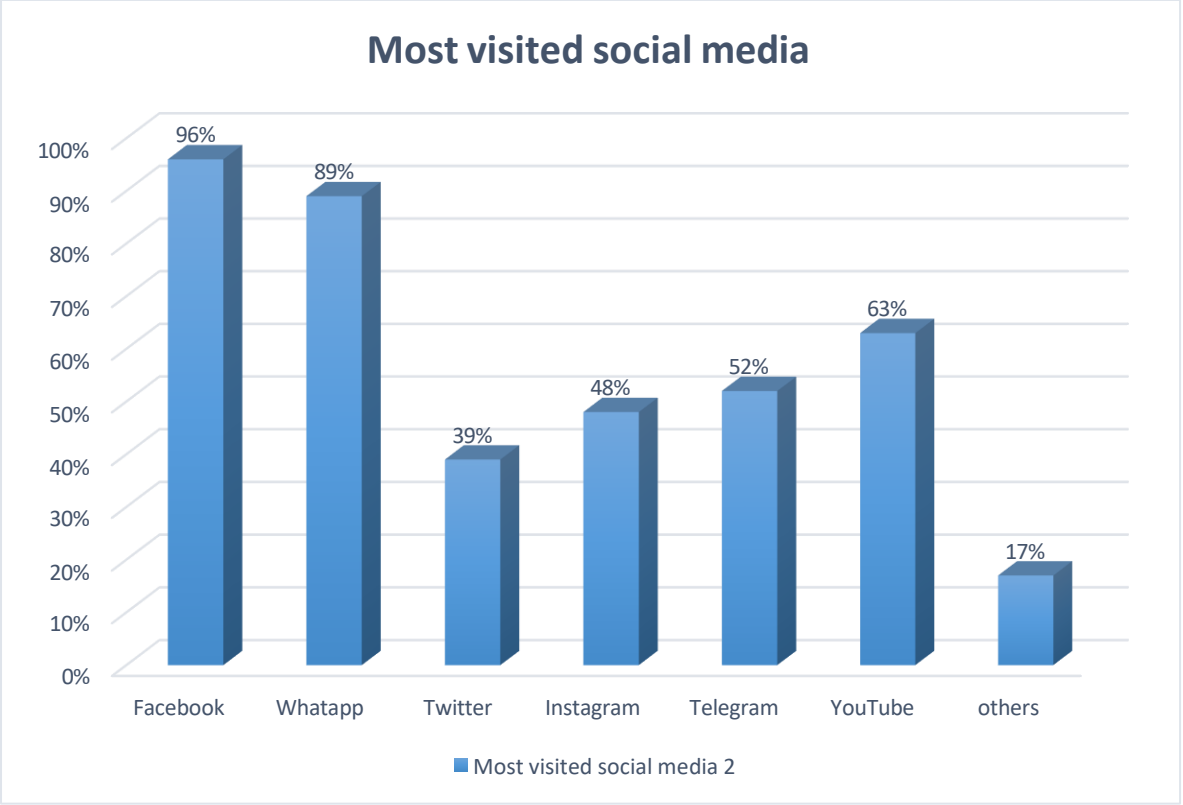


Figure 4.6 Most visited social media among medical students (N=213)

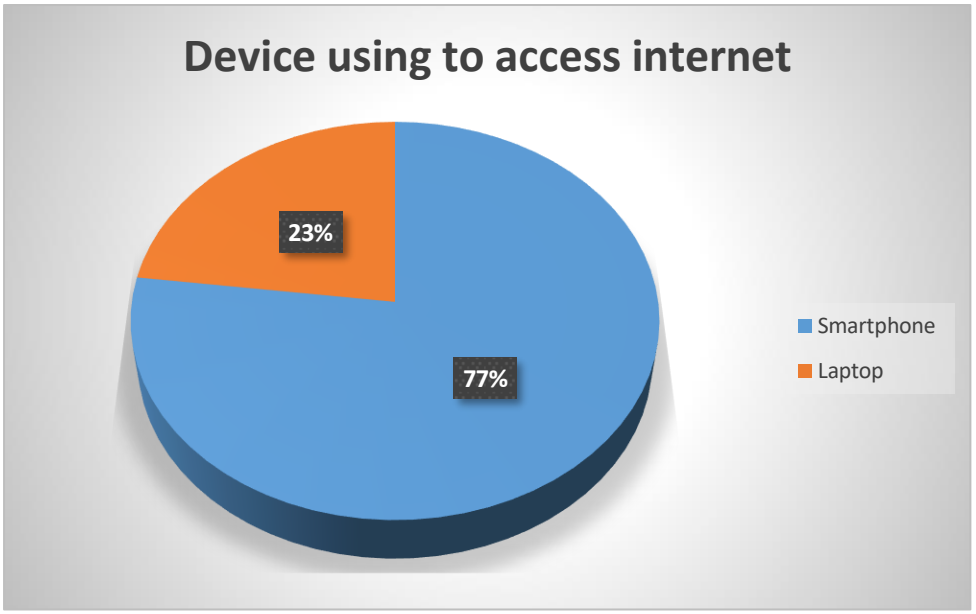


Figure 4.7 Device using to access social media among medical students (N=213)

2.2.Effects of Social Media to Mental health of Students

Table No. 4.1 demonstrates that n=78 respondents, or 34.8%, said they become satisfied while using social networking sites, whereas n=74 respondents, or 36.8%. When they view social life, which is based on their posted photos or postings, some respondents feel contented with their lives.

Table 4.1 Rate life satisfaction while watch social media posts and statuses (N=213).

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Unsatisfactory	19	9.0	9.0	**9.0**
Unsatisfactory	23	10.8	10.8	**19.8**
Fairly Satisfactory	78	36.8	36.8	**56.5**
Satisfactory	74	34.8	34.8	**91.3**
Very Satisfactory	19	8.8	8.8	**100.0**
Total	**213**	**100.0**	**100.0**	

Table No. 4.2 demonstrates that n=81 respondents, or 38.3%, said they become satisfied in their lives while using social networking sites. When they view social life, which is based on their posted photos or postings, some respondents feel contented with their lives. The influence of social media on someone's satisfaction with their current location is a complex issue. While social media can open users' eyes to various cultures and experiences, it can also foster feelings of envy and discontentment with their current living circumstances. But 21.8% of respondents are fairly happy in their lives or not. On the one hand, reading about fascinating happenings and seeing images of beautiful places in other people's articles could make you yearn for a different setting. In the end, how one uses social media, their perspective, and their capacity to tell the difference between carefully crafted online experiences and their realities will all determine how much of an impact social media has on how happy they are with where they live**.**

Table 4.2 Happiness with where live (N=213)

	Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Very Unhappy	19	9.0	9.0	**9.0**
Neither Unhappy	12	5.5	5.5	**14.5**
Fairly Happy	46	21.8	21.8	**36.3**
Happy	81	38.3	38.3	**74.5**
Very Happy	55	25.5	25.5	**100.0**
Total	**213**	**100.0**	**100.0**	

The table shows that the majority (n=112, representing 52.8%) of respondents feel tired on waking up in the morning time while (n=101, representing 47.3%) of respondents feel fresh and alert on feeling. The statement implies a study of how people feel when they wake up after using social media the night before they go to bed. Individual differences may exist in how using social media right before night affects them. Due to the stimulating nature of social media information, some people may have restlessness or interrupted sleep, resulting in grogginess or exhaustion when they wake up. Others might feel connected to or engaged with their social media networks, which could have a beneficial effect on their mood when they wake up. It is crucial to remember that excessive or bad social media experiences before bed, such as seeing upsetting content or spending too much time in front of a screen, may have a negative impact on the quality of your sleep and your general well-being. Promoting a happy waking experience requires evaluating individual experiences and keeping social media use and sleep hygiene in check.

Table 4.3 Feeling when woke up (N=213)

	Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Tired	112	52.8	52.8	**52.8**
Alert	101	47.3	47.3	**100.0**
Total	**213**	**100.0**	**100.0**	

Table 4.4 shows that 36% of respondents had acceptable sleeping quality while 21% of respondents said that they had bad sleeping quality overall. The category good indicates that 19.5% of respondents had good sleeping quality while 14.3% had bad sleeping quality. Individual differences in sleep quality can occur for a variety of reasons, including stress, way of life, and medical issues. The perception of respondents' sleep quality can be anything from poor to good. A high grade denotes regular and restful sleep, whereas a low rating could mean trouble falling asleep, remaining asleep, or waking up feeling rested. Since poor sleep directly affects everyday functioning and general well-being, measuring sleep quality is essential. To improve sleep hygiene and general sleep quality, it might help to understand individual sleep habits and treat any issues

Table 4.4 Rate of general sleep quality over the last month (N=213)

	Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Very Bad	31	14.3	14.3	**14.3**
Bad	45	21.0	21.0	**35.3**
Acceptable	77	36.0	36.0	**71.3**
Good	41	19.5	19.5	**90.8**
Very Good	19	9.3	9.3	**100.0**
Total	**213**	**100.0**	**100.0**	

The data in the table above reveals that 27% of respondents reported difficulty waking up while driving. once or twice a week, eating meals, or participating in social events. While 26% of respondents claimed they weren't experiencing those feelings in the previous month. This question is crucial since it relates to possible occasions of extreme exhaustion or sleepiness that can endanger one's general functionality and safety. A sleep disturbance, insufficient sleep, or other health issues that require attention and the right actions to guarantee appropriate wakefulness and safety throughout the day could be the cause of difficulties keeping awake while performing these crucial jobs.

Table 4.5 Frequently of struggled to stay awake while driving, eating, or engaging in social activities in the last month (N=213)

	Frequency	Percent	Valid Percent	Cumulative Percent
Not during the past month	56	26.8	26.8	**26.8**
Less than a week	57	27.0	27.0	**53.8**
Once or twice a week	60	27.3	27.3	**81.0**
Three or more times a week	21	10.0	10.0	**91.0**
Everyday	19	9.0	9.0	**100.0**
Total	**213**	**100.0**	**100.0**	

According to the table, a majority of respondents 44% indicated they always bring their phones to bed with them, while 18.8% claimed they do so sometimes. 9.8% of respondents fall into the "never" category while 15% fall into the "rare" category never bring their cell phone to bed

Table 4.6 Sleep with cell phone and/or tablet(N=213)

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	20	9.8	9.8	**9.8**
Rare	32	15.0	15.0	**24.8**
Sometimes	40	18.8	18.8	**43.5**
Often	27	12.5	12.5	**56.0**
Always	94	44.0	44.0	**100.0**
Total	**213**	**100.0**	**100.0**	

Table 4.7 evaluates whether people text or use messaging services after going to bed. The use of digital communication tools at night is reflected in this behavior, which may affect sleep patterns and overall sleep quality. 31.3% of all respondents admitted to using messaging apps or texts before going to bed, while another 22.5% admitted to doing so if they woke up in the middle of the night. As bright screens and exciting material can disturb the natural sleep-wake cycle and make it more difficult to fall asleep or sustain peaceful sleep, using electronic devices in bed can interfere with good sleep hygiene. Healthy bedtime practices that restrict screen time before bed can improve the quality of your sleep and your general well-being.

Table 4.7 Text or use a messaging app before sleep (N=213)

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	23	11.0	11.0	**11.0**
Rare	31	14.5	14.5	**25.5**
Sometimes	48	22.5	22.5	**48.0**
Often	44	20.8	20.8	**68.8**
Always	67	31.3	31.3	**100.0**
Total	**213**	**100.0**	**100.0**	

The data shows that 30.8% of respondents never play games before night, while 22% of respondents claimed they occasionally do. As a result, 19.5% of respondents rarely play games when they sleep. Their usage of social media apps before bed has become a habit.

Table 4.8 using cell phone or tablet to play games after gone to bed (N=213)

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	66	30.8	30.8	**30.8**
Rare	42	19.5	19.5	**50.3**
Sometimes	47	22.0	22.0	**72.3**
Often	27	13.0	13.0	**85.3**
Always	31	14.8	14.8	**100.0**
Total	**213**	**100.0**	**100.0**	

Using social media on mobile device after going to bed can negatively impact sleep quality. The table explains that the majority (n=63, or 29.8% of respondents) always use social media before bed, whereas 26% of respondents do so occasionally due to how it affects their sleep patterns. Regular sleep-wake cycle may be disrupted by the bright screens and interesting content, making it more difficult to fall asleep. To encourage better sleep and general well-being, it is advised to create a nightly ritual without the use of screens.

Table 4.9 utilize social media after gone to bed on device (N=213)

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	20	9.5	9.5	**9.5**
Rare	27	12.3	12.3	**21.8**
Sometimes	55	26.0	26.0	**47.8**
Often	48	22.5	22.5	**70.3**
Always	63	29.8	29.8	**100.0**
Total	**213**	**100.0**	**100.0**	

Majority of respondents, 27.8% said that they awakened about 2 nights a week by receiving text or notification on social media after sleeping. While 19.8% of respondents claimed that social media notifications kept them up three to four nights per week. Having your sleep frequently interrupted can have a big impact on how well you sleep and how rested you feel. It may vary from person to person how many evenings a week they are interrupted. Maintaining ideal sleep hygiene means minimizing interruptions to sleep brought on by digital notifications. Setting boundaries, such as turning on "Do Not Disturb" mode or turning off notifications, can contribute to the improvement of sleep overall quality.

Table 4.10 Times a week go to bed intending to sleep only to be awoken by a text or other notification from a friend or social media (N=213)

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	57	26.8	26.8	**26.8**
1 to 2 Nights a Week	59	27.8	27.8	**54.5**
3 to 4 Nights a Week	42	19.8	19.8	**74.3**
5 to 6 Nights a Week	16	7.5	7.5	**81.8**
Almost Every Night	39	18.3	18.3	**100.0**
Total	**213**	**100.0**	**100.0**	

The table 4.10 explains that the majority (n=82, or 38.5% of respondents) always use social media before bed they never turn off their cell phones, whereas 18.5% of respondents do so occasionally due to it affecting their sleep patterns.

Table 4.11 when go to bed, switch off tablet and/or cell phone (N=213)

	Frequency	Percent	Valid Percent	Cumulative Percent
Never	82	38.5	38.5	**38.5**
Rare	35	16.3	16.3	**54.8**
Sometimes	39	18.5	18.5	**73.3**
Often	20	9.3	9.3	**82.5**
Always	37	17.5	17.5	**100.0**
Total	**213**	**100.0**	**100.0**	

The majority of respondents (n=77, or 36.3%) went to bed between 12 and 1 am, while 28.3% did so between 10 and 11 pm. Their irregular sleeping patterns are caused by their late-night use of social media. 20% of the respondents who slept later awakened. The majority of respondents, it is concluded, have sleep patterns that are disturbed by social media use.

Table 4.12 time normally go to bed at night over the past month (N=213)

	Frequency	Percent	Valid Percent	Cumulative Percent
8 pm-9 pm	18	8.3	8.3	**8.3**
10pm-11pm	60	28.3	28.3	**36.5**
12am-1am	77	36.3	36.3	**72.8**
2am-3am	43	20.0	20.0	**92.8**
4am-5am	15	7.3	7.3	**100.0**
Total	**213**	**100.0**	**100.0**	

The majority of respondents (n=59, or 27.8%) went to bed between 12 and 1 am, and they fell asleep for up to 15 minutes, while 27.3% did so for up to an hour, according to the aforementioned data. Their erratic sleep patterns are a result of their late-night social media activity. It is concluded that the majority of respondents had sleep habits that are impacted by social media use.

Table 4.13 Time it typically take each night during the past month to fall asleep (N=213)

	Frequency	Percent	Valid Percent	Cumulative Percent
Don't Know	46	21.5	21.5	**21.5**
Up to 15 Minutes	59	27.8	27.8	**49.3**
1 Hour	58	27.3	27.3	**76.5**
2 Hours	21	10.0	10.0	**86.5**
More than 3 Hours	29	13.5	13.5	**100.0**
Total	**213**	**100.0**	**100.0**	

31.8% of respondents claimed to have woken up between 6 and 7 in the morning, while 25% claimed to have done so between 8 and 9 in the morning. However, 11.5% of respondents snooze till 11 a.m. during the day.

Table 4.14 time usually get out of bed over the past month (N=213)

	Frequency	Percent	Valid Percent	Cumulative Percent
4am-5am	38	17.8	17.8	**17.8**
6am-7am	68	31.8	31.8	**49.5**
8am-9am	53	25.0	25.0	**74.5**
10am-11am	30	14.0	14.0	**88.5**
After 11am	24	11.5	11.5	**100.0**
Total	**213**	**100.0**	**100.0**	

Data on the number of hours that people slept at night during the previous month are shown in Table 4.14. The 11.3% of the total responses, or 24 people, said they slept for fewer than 4 hours. The majority of respondents (75, or 35.3% of the total) said they slept for 5 to 6 hours at night. The second most common sleep length, indicated by 68 respondents (31.8% of the total), was 7-8 hours. 29 respondents, or 13.5% of the total, said they slept for 9 to 10 hours per night. More than 10 hours of sleep were reported by 17 respondents (8.3% of the total).

Table4.15 Number of hours that people slept at night during the previous month (N=213)

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 4 Hours	24	11.3	11.3	**11.3**
5-6 Hours	75	35.3	35.3	**46.5**
7-8 Hours	68	31.8	31.8	**78.3**
9-10 Hours	29	13.5	13.5	**91.8**
More than 10 Hours	17	8.3	8.3	**100.0**
Total	**213**	**100.0**	**100.0**	

Chapter Five
Discussion

3. Discussion

3.1. Discussion

Social media use by students has steadily increased in recent years. Especially medical students increasingly use social media and the internet, which is an easily and rapidly accessible means of mass communication, frequently for academic and other purposes. These tools are not merely a source of information, their use is also sought for other purposes such as social interaction, games and entertainment [43]. Social media websites and applications as well as the number of students using them have witnessed a dramatic increase over the last decade and became an integral part of students' daily life. In the current study, medical students at all academic level have participated in this current the study, incomplete responses were excluded from the study.

Most of respondents of this study were female, 21-25 years old. Our finding are similar to study carried in Ethiopia found 66.8% of medical students were female with mean age (20.93 ± 1.62) years [44], but dis agreement with previous studies like study carried in Uganda done by Wibabara et al, 2019 who found majority of medical students 65% were male, also other study done by Nazir et al, 2014 among Syrian Medical Students who found 62.5% of medical students were males and 37.5% were females but agree with our study in age which he found age of the participants ranged from 17 to 25 years (mean: 21.4) [45, 46].

The current study demonstrated the vast majority (98%) of medical students were use social media frequently which in consistent with Zahid et al which found majority (96.5%) of medical students have been also using social media [47]. In contrast, the prevalence of social networking among students in Singapore and India was reported to be 29.5 and 36.9% respectively [48, 49]. The results of a meta-analysis study (2018) on internet addiction showed that, the prevalence of internet addiction among medical students was 30.1% worldwide [50]. Results of a meta-analysis study (2017) suggest that, the prevalence of internet addiction in Iran is moderate [51]. our findings also reveal that smart phones are the most popular means of accessing the internet by students. These devices are portable and allow students to carry it along at any given time, these findings is in line with Asemah, and Edegoh, (2013) findings that shows all the students have access to the internet and that they do so through different mediums such as smart phones, tablets and computers [52]. This study also reveal that majority of students of napta college spend at least 3-6 hours or so daily

surfing the internet. This shows that most of them go online as revealed in the study. These findings are in line with Seyi, (2012), study which criticized seriously the obsessive attitude of Nigeria youths towards social media. It pointed out that the rate at which youths devote their quality time in chatting, calls for urgent attention [53]. In a previous Saudian study [54] it was found that the average time for usage of social media was 10 hours and there were 68% of students spent time above the average estimated time. A study was performed on medical students from the sixth year showed that most students spent 2 hours daily on social media and some other students spent more than 6 hours [55].

Our finding reflects the increasing popularity of Facebook, Whatsapp and YouTube among students and is consistent with the fact that Facebook and Whatsapp has the largest number of users in the world [56,57]. A study was conducted on medical students from Khartoum University [58] showed that Facebook and Whatsapp were the most social sites used by medical students. A recent study surveyed 100 students of Baghdad and Mustansiriya Universities, Iraq reported that Facebook was the preferred social media site in 61.5% of males and 54% of female's students followed by twitter and YouTube [59] but in Saudi Arabia there is a high number of twitter users [60]

By investigating the effect of social media on mental health of students, our study found excessive use of social media leads to cause depression in university students. High levels of anxiety and depression have been linked in previous research (Farahani et al., 2011)[61] to social networking site use in general. As with many of the recent studies, the nature of this link is still being determined. Social media use among teenagers who experience anxiety may increase (Hamburger & Ben- Artzi, 2000) [62]. Depressed teenagers may use social media more to control their negative mood, much as how children and adults use watching TV to control their emotions (Chen & Kennedy, 2005)[63].

Our study also found excessive usage of social media at night affects student's sleeping patterns. According to Lau, W. W. (2017) [64], teens' late-night social media use causes later bedtimes and less restful sleep, which in turn impacts their capacity to handle melancholy and anxiety. The compelling connections between midnight social media use, subpar sleep, anxiety, and depression support this claim. Although the precise link between online social networking use and depression or anxiety is still unclear, the available data clearly suggests that this interaction involves sleep

quality. Similar to adults, anxious students may use online platforms more at night when they can't sleep because concern is known to interfere with sleep Yang, C.C. and Brown, B.B. (2016), [65]. It is necessary to do more research to ascertain the direction of this association and the part disturbed sleep plays in linking online social networking use with anxiety and depression.

Our result reveled Social media use is correlated with feelings of anxiety. Instead of using personal communication networks for the purpose of learning, students spend a lot of time online during the day and night shopping, gaming, and resting. These behaviors prohibit students from participating in academic events, limit their opportunities to study, and distract them from learning, which results in certain understudies' academic performances declining (Yu et al., 2010) [66]. According to the most recent studies on sleep quality, students' emotional connections to specific websites and their use of social media

Chapter Six

Conclusion & Recommendations

4. Conclusion & Recommendations

4.1. Conclusion

According to the results obtained in the our study, we concluded

- Facebook, Whatsapp and YouTube were more frequently type of social media using by medical students
- excessive use of social media leads to cause depression among medical students
- excessive usage of social media at night affects student's sleeping patterns among medical students
- Social media use is correlated with feelings of anxiety

6.2 Limitations

Our study had several limitations. Due to the cross-sectional nature of this study, it was not possible to explain the causal relationships between the variables of social networking addiction and mental health of students. In the current study, the data were collected by self-reporting method that could have affected the accuracy of the results. However, the researcher tried to solve this limitation by reassuring the participants that their responses would remain confidential.

6.3 Recommendations

In the light of the findings of this study, the following recommendations are made:

1. Teachers should ensure they use the social media as a tool to improve the academic performance of students in schools without negative impact on their sleeping pattern
2. Students should be educated on the influence of Social media on their sleeping
3. Students should be monitored by teachers and parents on how they use these sites.
4. The students should create a balance between chit-chatting and academic activities.
5. Students should better manage their study time in and prevent distractions that can be provided by the social media. There should be a decrease in the number of time spent by students when surfing the net.
6. Social Networking Sites should be expanded and new pages should be created to enhance

academic activities and avoid setbacks in the students' sleeping pattern

7. The use of Social media network by students should focus on the sleeping pattern of those sites instead of using them for negative purposes
8. More attention should be directed to research.
9. Additional investigation could be done to determine how lifestyle and behavioral factors, in particular, affect sleep quality

6.3. References

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6.4 Appendix

Questionnaire

Napta College

Faculty of medicine

Questionnaire

Part 1 Socio-demographic characteristics of medical student

Age ..... Years

Gender:

Male ☐ Female ☐

Study year:

1st ☐ 2nd ☐ 3rd ☐ 4th ☐ Final ☐

Residence:

Khartoum ☐ Bahri ☐ Omdurman ☐

Department

Medicine ☐ Dentistry ☐ Nursing ☐

Medical Laboratory ☐

Social Media Usage: Yes ☐ No ☐

Time spent:

Less<1h/day ☐ 1-3h/day ☐ 3-6h/day ☐ >6h/day ☐

Most visited social media

Facebook ☐ Whatsapp ☐ Twitter ☐ Instagram ☐

Telegram ☐ YouTube ☐ Other ☐

Device using to access internet Laptop ☐ Smart phone ☐

Part 2: Effects of Social Media to sleeping pattern of Students

- Rate your life satisfaction while you watch social media posts and statuse

  Very Unsatisfactory ☐ Unsatisfactory ☐ Fairly Satisfactory ☐

  Satisfactory ☐ Very Satisfactory ☐

- Are you happy with where you live?

  Very Unhappy ☐ neither Unhappy ☐ Fairly Happy ☐

  Happy ☐ Very Happy ☐

- How did you feel when you woke up?

  Tired ☐ Alert ☐

- How would you rate your general sleep quality over the last month?

  Very Bad ☐ Bad ☐ Acceptable ☐ Good ☐ Very Good ☐

- How frequently have you struggled to stay awake while driving, eating, or engaging in social activities in the last month?

  Not during the past month ☐ Less than a week ☐ Once or twice a week ☐

  Three or more times a week ☐ Everyday ☐

- Do you sleep with your cell phone and/or tablet?

  Never ☐ Rare ☐ Sometimes ☐ Often ☐ Always ☐

- Do you text or use a messaging app before going to sleep?

  Never ☐ Rare ☐ Sometimes ☐ Often ☐ Always ☐

- Do you use your cell phone or tablet to play games after you've gone to bed?

  Never ☐ Rare ☐ Sometimes ☐ Often ☐ Always ☐

- Do you utilize social media after you've gone to bed on your device?

  Never ☐ Rare ☐ Sometimes ☐ Often ☐ Always ☐

- How many times a week do you go to bed intending to sleep only to be awoken by a text or other notification from a friend or social media?

  Never ☐ 1 to 2 Nights a Week ☐ 3 to 4 Nights a Week ☐

  5 to 6 Nights a Week ☐ Almost Every Night ☐

- When you go to bed, do you switch off your tablet and/or cell phone?

Never ☐ Rare ☐ Sometimes ☐ Often ☐ Always ☐

- What time did you normally go to bed at night over the past month?

8 pm-9 pm ☐ 10 pm-11 pm ☐ 12am-1am ☐ 2am-3am ☐ 4am-5am ☐

- How long did it typically take you each night during the past month to fall asleep?

Don't Know ☐ Up to 15 Minute ☐ 1 Hour ☐ 2 Hours ☐ More than 3 Hours ☐

- What time did you usually get out of bed over the past month?

4am-5am ☐ 6am-7am ☐ 8am-9am ☐ 10am-11am ☐ After 11am ☐

- How many hours of actual sleep did you obtain each night over the past month

Less than 4 Hours ☐ 5-6 Hours ☐ 7-8 Hours ☐ 9-10 Hours ☐

More than 10 Hours ☐

- How many Social Networking Sites do you use actively

One ☐ Two ☐ Three ☐ More than Three ☐

- Do you think use of Social Media Networking sites have positive impact on your studies?

Yes ☐ No ☐