Comorbidity of social media addiction and other mental disorders – an overview

Krzysztof Szczygieł, Piotr Podwalski

Summary

Behavioral addictions such as addiction to the Internet, computer games or social media are increasingly challenging our concern about the mental well-being, especially among the young generation. The youth more often and longer reach for electronic devices, which take them away from real world into virtual space, which is stimulating and pleasant at the same time. They have become the sources of entertainment, science, gaining knowledge or they can be used as tools to communicate. Accessibility and popularity of social media, which create the addiction pattern, seem to have a positive as well as negative impact on mental state. As we notice various types of social media in the current world, it is definitely worth having a look at how addiction to social media is connected with other different mental disorder comorbidity.

1. INTRODUCTION

The digitization of the society, especially the younger generation, over the last few decades has spread the prevalence of electronic devices offering an easy access to the Internet. It has become a source of information, entertainment, knowledge, but also a tool for work or learning. Its growing omnipresence contributes to excessive usage, and the achieved pleasure leads to addiction. The fact that draws attention is the co-occurrence of mental disorders and the Internet addiction. The coexistence of mental disorders among the Internet addiction users, problematic Internet users and the control group is illustrated by table 1 [1]. It compares the occurrence of some mental disorders in the three groups studied. The first of them consisted of 93 people addicted to the Internet, the second of 35 people who used the Internet in a problematic way, the third group was the control group and consisted of 79 people. In the group consisting of people addicted to the Internet, there were mental disorders that did not appear in the other two groups, such as ADHD, depressive disorder, PTSD, obsessive compulsive disorder or eating disorder. In turn, mental disorders, which also occurred in other groups, such as anxiety disorders or addiction to psychoactive substances were much more common in the group of patients addicted to the Internet. Along with usage of the Internet, the described addiction extends to the addiction to computer games, mobile phone or a wide range of social media (SM). They have become the method of the relaxing, leisure time or networking. Most of people who use them, do this in a rational way, to practice fast communication with friends, often overcome the geographic restrictions, which limit the real contact or they treat them as a practi-
cal source of news. However, the vast number of users treat the social media in excessive and compulsive style, creating the addictive pattern. Therefore, it is worth considering the connection between comorbidity of mental disorders and addiction to social media, forasmuch mobile devices have already become constant elements of our lives.

2. DIAGNOSIS

Social media addiction, beside computer games addiction, Internet addiction or mobile phone addiction, is an example of behavioral addiction, i.e. non-substantial addiction, connected with virtual reality. Among social media, the most frequent researches relate to media, such as Facebook, Twitter or Instagram. However, it does not exist explicitly applied definition about this issue, so in researches we can come across the phrases such as addiction to Twitter, dependency on Facebook, addiction to Facebook, problematic use of social media or addiction to social media. Unfortunately, we do not possess many diagnostic tools on our disposal, which could be used to do the researches. Not to mention the fact that many of them are addressed to specific media like Facebook Addiction Symptoms Scale, the Bergen Facebook Addiction Scale (BFAS), The Facebook Intrusion Questionnaire or Bergen Social Media Addiction Scale (BSMAS), which is modified scale of BFAS. These scales measure the model of using social media referring to criteria framed by Griffiths (Griffiths, 1996) [2].

By drawing the line between non-problematic and problematic use of social media, it is assessed the level of engagement, employment in order to modify the mood, whether constant use them have led to the tolerance, if stop of usage manifests some withdrawal syndrome, if usage has negative impact on other aspects of life, for example, creating some interpersonal conflicts, and finally, if after some period of time of not using, the tendency to use them intensifies.

3. EPIDEMIOLOGY

Social media exploitation is actually one of the most popular kind of entertainment or spending leisure time [3]. According to statistic data, in 2018 nearly 2.65 billion people used the social media. The most popular type of social media is Facebook, which contributes to 2.4 billion of active users (monthly active users) [4]. Since 2018 it has been noticed the increase in the level for 8% of active users per month [5]. People aged between 25-34 account for one-third of all Facebook users. About 71% teenagers use more than one type of social media. Thanks to electronic development, of smartphones and access to the Internet, about 24% adolescents are constantly online. According to the Centre for Public Opinion Research (CBOS), more than two-third of Polish cybersnauts use social media. 82% of them use social media regularly. Whereas among adolescents and young adults this proportion reaches 92-93%. The study from 2015 showed that the average social media user from USA was active in social media 1.7 hours daily, in UK it was 1.5 hours, whereas in Philippines it was 3.7 hours [6]. Addiction or excessive use of social media is the new phenomenon, which has been present for about two decades. Various studies estimate the prevalence of addiction to social media from 4.5% up to 47% [7,8,9,10]. The huge differences between these results may be explained by non-representative groups which were examined (most of studies are conducted among students). Also the cultural factors can significantly contribute to the results. In the Hungarian research, in which 5961 respondents were involved, among those who were assessed as highly at risk of addiction 58.2% were women. Their average age was about 17 years [7].

4. SOCIAL MEDIA ADDICTION AND OTHER MENTAL DISORDERS

The usage of social media in excessive and uncontrolled way, remains in diverse correlation with various mental disorders. Nowadays there are a lot of researches which try to connect the addiction to Internet, mobile phone, computer games or social media with the occurrence of numerous mental disorders. Frequency of their appearance is higher among people who are exposed to addiction to social media. Amidst mental disorders connected with these behavioral...
addiction there are depressive disorders, anxiety disorders or sleep disorders.

**Depressive disorder**

The most frequent social network, which dependence on depressive disorder is examined, is Facebook. The population study conducted on 1749 people in United States among 19-32-year olds showed that problematic pattern of social media usage was connected with significantly deeper symptoms of depressive disorder. Noteworthy is also the conclusion that symptoms of depressive disorders were much higher in case of more frequent usage of Facebook, whereas they were not connected with total time spent on Facebook. It can suggest that symptoms of depressive disorders may be connected with how social media are used, rather than total time spent on them [11]. Similar results concerning time spent on activities in social media were received by Jelenchick and al. 2013 [12]. Among 190 interviewees, whose average age was 19, the average time spent on social media was 29 minutes per day. Surprisingly, up to 16.8% participants were involved in that kind of activity for more than 2 hours per day. However, researchers did not notice the correlation between the total time spent on social media and the occurrence of depressive disorder. From the conducted studies related to the occurrence of depressive disorder and the activity in social media, the chosen websites matter as well. Thanks to comparing them, we know that people with symptoms of depressive disorders preferred activities on Twitter. Whereas Instagram was in stricter correlation with depressive disorder in comparison to Facebook [13].

**Anxiety disorder**

Anxiety is defined as an inner, unpleasant emotional state, which being distinct from fear, is non-associated with any particular stimulus. Anxiety often occurs with vegetative symptoms, which are typical for neurotic disorders. Researches referring to social media addiction indicate the correlation between the usage of them and the occurrence of anxiety disorder symptoms. The study conducted in 2015 among 526 participants showed that present symptoms of anxiety disorders were the positive, predictive factors of addiction to Facebook [14]. What is more, the people more addicted to this social media were characterized by the higher intensity symptoms of anxiety while being deprived of the access to this media. The more intensely participants used the Facebook, the biggest attachment and symptoms of anxiety were felt by them in case of separation from Facebook. Taking into consideration the kinds of activities in social media, the researchers divided them into two types. For the first type they ranked the activities like sending private messages to friends, sending messages to conversation groups, sending comments on friends accounts. For the second type they listed publishing, sharing private photos and movies on the Internet, and systematic updating private status of account. Statistical analysis highlighted the positive correlation between the addiction to Facebook and symptoms of anxiety among the second types of activities taken on Facebook [14].

**Sleep disorder**

Some social media users are online round the clock. Obviously, not without the influence on their circadian rhythm. Also, the compulsive and constant checking of message boxes or other users’ on-line activities so as not to miss any information, can have negative impact on length and quality of sleep. The time spent in bed before falling sleep generally allows us to limit the number of received and analyzed stimuli, which leads to calmness. However, more and more often routine is to reach for the mobile device with access to social media, which takes away the proportional length of sleep. Undoubtedly, new devices and technologies such as wi-fi modify sleep habits. According to study conducted by Exelmans’a and Bulck’s [15] on 844 participants, half of them had smartphones, six out of ten participants took them to the bedroom. Night usage of smartphones was connected with sleep quality decrease, more frequent insomnia occurrence, exhaustion during the day, and was the positive predictor of later waking-up time. The screen light impact is said to contribute to such sleep
disorders. Short wavelength of blue light emitted by the mobile device screen influences suppressively on melatonin production. This hormone prepares our organism to fall asleep [16].

5. The association between problematic internet use and non-clinical mental health outcomes

Scientific research exploring the issue of the Internet addiction or being more precise - the social media, computer games, online shopping, mobile phone, also describes the relations to feelings of mental well-being or personality traits. A meta-analysis conducted by Marino in 2017 out of 23 studies involving 13929 participants, highlights the positive correlation between the problematic use of Facebook with perceived psychological distress and a negative correlation with perceived mental well-being [17]. In a study of 23532 Norwegians, Andreassen showed a positive correlation between the narcissistic personality, measured by the Narcissistic Personality Inventory-16 questionnaire (NPI-16), and a social media addiction. On the other hand, self-esteem assessed by the Rosenberg Self-Esteem Scale (RSES) was negatively correlated with social media addiction [18].

6. Social media as a valuable tool for patients seeking help

The Internet offers social networks bringing together people suffering from various mental disorders. In a study of 1222 people with bipolar disorder, 81% of participants used the Internet and 77% of them took information about the disease from there. 21% of participants admitted being affiliated to different groups, forums or chats related to the disease. Online groups provide the participants with acceptance, understanding and current information about treatment and disease itself [19]. Noteworthy is the fact that the Internet is mainly used by the younger generation. Among the 1222 patients with bipolar disorder, Internet was used by 88 (47%) out of 187 over 60-year olds and 884 (87%) out of 1021 patients under 60 years old [20].

7. Conclusion

Behavioral addiction, such as social media addiction, is an increasing phenomenon, which presumably will be growing over time. Each of us can be affected, however the people who are most prone to it are adolescents. Co-occurrence of social media addiction with other different mental disorders is documented. Undoubtedly, it seems to be significant to use them in a sensible way and monitor the time spent on social media, especially by the youth. Many aspects of usage of social media still remain unclear. In the future, longitudinal scientific research could light up the causal link between mental disorders and social media addiction. An important question that remains unanswered is whether social media addiction precedes or is a consequence of the distress felt. Also the issue of nomenclature and diagnostic criteria still requires precise definition. We expect the results from currently conducting researches related to social media to provide us with new information soon.

Conflicts of interest: none

REFERENCES