The Social Media Addiction: What Have We Learned So Far? – A Review

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Abstract: *In the last 20 years, computer technology has developed rapidly, and internet-based social networks (e.g. Facebook, Instagram, WeChat, or Twitter) have proliferated even faster, becoming a very important part of people's lives. But in recent years, a dependence to these sites has emerged, called by many authors social media addiction.*

In the present study, we aim to analyze if there really is an addiction to social media networks, what are its demographic aspects, which are the health problems that occur in these addicted people, and how to intervene therapeutically in these cases.

Currently, social media addiction is not recognized as a disorder in the Diagnostic and Statistical Manual of Mental Disorders, but is considered more of a behavioral addiction or a subtype of Internet addiction.

If we look at this matter from an anthropological and philosophical point of view, such type of addiction can originate in what is related to the specificity of man in the contemporary world.

Symptoms of excessive use of SM networks may include decreased ability to concentrate and decreased academic performance, insomnia, altered self-perception, decreased self-esteem, anxiety, depressed mood, and psycho-emotional lability.

SM addiction prevention strategies should be implemented based on behavioral risk factors and demographic characteristics. The goal of treatment for this type of addiction, unlike other addictions, is not total abstinence, but rather controlled use of social networks, and relapse prevention should use strategies based on cognitive-behavioral therapies.

Keywords: *social media addiction; behavioral risk factors; anthropological views; psychiatric symptoms; therapeutic intervention.*

1. Introduction

Since the 2000s, the World Wide Web has evolved from Web 1.0 to Web 2.0, at which time certain features were implemented allowing users around the world not only to passively receive information, but also to participate creatively because the new network could connect all devices regardless of the type of operating system used (Can & Kaya, 2016).

With the development of mobile Internet technology, social media networks (social networking sites and messenger platforms) have proliferated and expanded more and more. As a result, social interaction has become part of people's lives, especially the young generation of the Internet, particularly during the COVID-19 pandemic. Thus, at the end of 2021, more than 3 billion people were using social networks (Zhao 2021; Zhao & Zhou, 2021), but their number is increasing because users were allowed to create profiles, blogs and making friends. In 2003, *Facebook* changed the definition of social media networking as it gave the user the ability to change the entire front aspect of their profile. Since then, there has been a continuous progress of social networks until today (Desai, 2017)

Social networks are made through interactive platforms between individuals who will later form a very large community. Each member of this virtual community builds their own profile identity from the start and communicates with friends from their list, which they manage as they wish. On a social network site, like *Facebook*, *LinkedIn*, *Instagram*, *TikTok*, *Twitter*, *WhatsApp*, *YouTube*, *Snapchat*, etc.) etc., the user has the advantage that he can register freely, without any fees (Desai, 2017).

Through SM networks, the users can obtain certain advantages such as: 1). to create a public or semi-public profile; 2). to create a list of other users with whom they feel they can connect and thus form friend groups; 3). to visualize and thus "investigate" the profiles of other users in their connection list as well as those made by others within the system (Naveen & Agarwal, 2016).

SM networks are open to people of all ages and races. The main purpose of social media networking is for people to be able to meet, even if virtually, and communicate with each other, even if they are at great distances from each other, even from different countries, if they share common interests (Naveen & Agarwal, 2016). People use social media networks for self-presentation, to know the social activities of their friends, to search for partners, entertainment and jobs, to participate in political spheres, etc. (Kocabiyik, 2021; Naveen & Agarwal, 2016;). In this virtual

environment, they share ideas, interact socially, form relationships, thus managing to create a social image for themselves (Singh et al., 2020). SM networks have increasingly become a necessary tool for maintaining connections and transferring experiences globally. In addition, SM networks help to improve teaching and learning processes in online educational programs implemented during the COVID 19 pandemic. These networks also provide platforms for conducting scientific meetings in any field, thus allowing the accumulation of experiences and the analysis and discussion of different points of view on academic issues (Yousif et al., 2021).

Firstly, people connect with each other and then post news, information, fake news, etc., including their own or others' photos and videos. But secondly, each network member can control access to his profile by accepting or deleting friend request from other network members (Naveen & Agarwal, 2016).

The distribution of social network users worldwide shows considerable variation in the number of users from one place to another, depending on the types of social sites, their features and the support for different natural languages. *Facebook* usage dominates in most Western countries, currently having 2.3 billion users, followed by *YouTube* with 1.9 billion users and *WhatsApp* with 1.5 billion users (Yousif et al, 2021).

Even from the year 2000, Mark Griffiths already highlighted the fact that a great number of articles already appeared in the mass media emphasizing the existence of an excessive use of the Internet, which he called "Internet addiction", "Internet Addiction Disorder" and "Internet Addiction Syndrome" (2000).

The British Professor defined the individuals addicted to SM communication as those who excessively use SM networks, devoting a large proportion of their waking hours to the activity of "surfing and chatting in this environment", neglecting other aspects of their daily lives (Griffiths, 2000; 2012). If in the year 2000 it was estimated that about 1-3% of Internet users were addicted, Griffiths announced an increase in the number of "potentially addictive behaviors" that do not involve the ingestion of psychoactive drugs. In this category he included "gambling, computer game playing, exercise, sex, and now Internet" (Griffiths, 2000; 2012). In the last few years, more articles have been published and have announced the emergence of the ″social media addiction″ (Dumitrescu, 2022; Prasad et al., 2014).

In the present study, we aim to analyze if there really is an addiction to SM, what are its demographic aspects, which are the health problems that

occur in these addicted people, and how to intervene therapeutically in these cases.

2. Is there a social media addiction?

In the context of spending more and more time on social media networks every day, a mental health problem could arise. To define the negative aspects of Social Media Networks usage, some authors use the term "social media addiction", but this is criticized by other researchers, who prefer to use the term "Problematic Social Media Use" (Marino et al., 2021; Paakkari et al., 2021), "Excessive use of SM" (Zendle & Bowden-Jones, 2019), "Social Network Abuse" (Cuadrado et al., 2020) or, according to recent developments in ICD-11, "Social Media Use Disorder" (Youssef et al. , 2020) or "Social Networks Use Disorder" (Hussain et al., 2020), especially because, relatively recently,

Compared to the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1994, p. 481), in the fifth edition (DSM-5) some changes were made, among which the chapter "Substance and Addiction Disorders″. Regarding the addictive disorders, the new DSM expanded and included "gambling disorder" in the category of behavioral addictions as a diagnosable condition as scientific research has shown that it "activates reward systems similar to those activated by drugs abuse and produces some behavior symptoms that appear comparable to those produced by substance use disorders″ (American Psychiatric Association, 2013). But, in DSM-5, "Internet gaming disorder", as a pattern of excessive behavior, was included in another section of the manual, ie "Emerging Measures and Models", in the subsection entitled: "Condition for further study". Also, DSM-5 does not include, even if it mentions them, some "groups of repetitive behaviors″, called with the term "behavioral addictions", which list as subcategories "sex addiction," "exercise addiction," or shopping addiction" because there is still not sufficient peer-reviewed evidence "to establish the diagnostic criteria and course descriptions needed to identify these behaviors as mental disorders" (American Psychiatric Association, 2013). On the other hand, even if, in recent years, relatively numerous studies have appeared analyzing "excessive use of social media", in DSM-5 no mention was made of "social media addiction" or social media as a "behavioral addiction". "Emerging Measures and Models", in the subsection entitled: "Condition for further study". On the other hand, even if in recent years relatively numerous studies have appeared analyzing "excessive use of social media", in DSM-5 no mention

was made of "social media addiction" or social media as a "behavioral addiction".

Therefore, SM addiction is not recognized as a disorder in the Diagnostic and Statistical Manual of Mental Disorders, but may be considered more of a behavioral addiction or a subtype of Internet addiction.

However, it is necessary to differentiate between frequent SM use and SM addiction as an addictive behavior because the latter can have negative implications for an individual's mental health or academic performance when online SM use becomes uncontrollable. and compulsive. "Addictive behavior" is defined as: "a repetitive habit pattern that increases the risk of disease and/or associated personal and social problems" or "the behavior continues to occur despite volitional attempts to abstain or moderate use" (Marlatt et al., 1988).

People can easily become addicted to SM for many reasons, namely multiple forms of Internet activity, from sending e-mails, downloading files, to participating in SM discussion groups, without any installation and that users they can use freely, without any payment, at any time (Szczegielniak et al., 2013). An important role in this addiction may also be played by the anonymity of the user. The SM user can get what they want easily and without much worry. The anonymity of the user is also a factor in encouraging people who suffer from social phobia or who have problems with relationships in the family or school environment to contact other people. It is also significant that many of the users research SM at least once a day, even if they are on transport, in the car and even, extremely dangerously, while driving (Szczegielniak et al., 2013).

3. What tools can be used to identify Social Media addiction?

While pathological gambling is the only "addiction" that is recognized as a formal psychiatric disorder, there is currently increasing research into other potential behavioral addictions, including online gaming and Internet use. As early as 2005, an addiction model was developed (Griffiths, 2005), which highlighted the fact that a person can be considered to be suffering from an addiction, be it chemical or behavioral, when they present six basic elements: preoccupation, mood alteration, tolerance, conflict, withdrawal and relapse.

Applying this model to an individual's SM addiction, the following symptoms should be taken into consideration:

1. using of SM networks represents the person's greatest concern, as well as the motivation with the highest priority,

2. using of SM sites regulate the person's negative emotions (mood alteration),

3. the person wants to use SM networks more and more to achieve the same level of pleasure (tolerance),

4. the person spends so much time in the virtual space of SM networks that he/she suffers damage to work, life and normal interpersonal relationship (conflict),

5. the person suffers from psychological symptoms (discomfort, restlessness and irritability) and even physical symptoms when unable to use SM networks (withdrawal),

6. the person cannot handle trying to quit SM networking (relapse).

Subsequently, a group of Norwegian researchers (Andreassen et al., 2012) designed the Bergen Facebook Addiction Scale (BFAS) to quantify the extent to which behavioral addiction symptoms may be related to social networks. The Bergen Facebook Addiction Scale measures the 6 items already mentioned by Griffith, and the questionnaire used to determine Facebook Addiction includes the following questions:

1. You spend a lot of time thinking about Facebook or planning how to use it?

2. You feel an urge to use Facebook more and more?

3. You use Facebook in order to forget about personal problems?

4. You have tried to cut down on the use of Facebook without success?

5. You become restless or troubled if you are prohibited from using Facebook.

6. Do you use Facebook so much that it has had a negative impact on your job/studies?

To the six basic criteria, the participants must give one of the five response options: (1) Very rarely, (2) Rarely, (3) Sometimes, (4) Often and (5) Very often. Andreassen and colleagues suggest that scoring "often" or "very often" on at least four of the six items may suggest that the respondent is addicted to Facebook (Andreassen et al., 2012).

Criticisms against this scale also came immediately. Mark Griffiths, who as early as 2005 had proposed "*A 'components' model of addiction within a biopsychosocial framework*" (Griffiths, 2005), on which he had already worked and published numerous data since 1993 (Griffiths, 1993), did not accept the term "Facebook addiction" because, he believes, this term is far too narrow as there are many activities a person can engage in on *Facebook* (e.g. sending messages to friends, or gambling). He argues that it is necessary to design a new psychometric scale that examines potential addiction to a particular

social media network rather than activity on a particular website, such as for example *Facebook* (Griffiths, 2012).

Andreassen immediately countered by pointing out that the term "*Facebook*" can also be used in a generic sense, being used as a synonym for social networks by many users. The authors also pointed out that researchers who want to assess addiction to certain social networks can use the Bergen Scale which they can adjust by replacing the term "*Facebook*" with the name of the specific networking site they are studying (Andreassen & Pallesen, 2013). But in the specialized literature, the Bergen Scale prevailed.

The validity of the *Bergen Facebook Addiction Scale* has been highlighted by several researchers, including a group of authors from Spain in 2020, who developed and validated "a multidimensional scale of social media addiction, based on the six basic components of addiction (SNAddS-6S) by using and adapting the *Bergen Facebook Addiction Scale*" (Cuadrado et al, 2020). This scale can serve researchers and practitioners to identify addiction to any of the SM platforms.

In Romania, Stanculescu analyzed the Validity of the Bergen Social Media Addiction Scale (BSMAS) on a sample of 705 participants (39% male, aged 18–54). The author concluded that the most relevant criteria for the diagnosis of SM addiction in Romanians are salience, conflict, withdrawal, and mood modification and claims that the robust psychometric properties of the BSMAS-RO provide health professionals with a valid tool for assessing the BSMAS (Stanculescu, 2022).

4. Causes of social media addiction

More and more authors are wondering what could be causing SM addiction. Szczecielniak et al. considers that mainly people living alone and not having a steady job, those with depression, impaired assessment esteem and social anxiety can become addicted to social media networks (Szczegielniak et al., 2013).

Two authors from Malaysia performed a systematic review of articles published in the period 2010-2020 and analyzing the relationship between SM addiction and young people. They identified three types of causes that determine SM addiction in young people, namely: economic problems, psychological disorders and physical disabilities. All these factors contribute to young people immersing themselves in virtual communities to escape from the real world (Xuan & Asyraf, 2020).

More recently, analyzing the literature of the last decade, a group of researchers identified several causes of SM addiction, such as: 1). The Big Five Factor Model of personality traits, i.e. Neuroticism, Extraversion,

Openness to Experience, Conscientiousness, and Agreeableness; 2) "Being alone together", which reflects the loneliness of the individual in the era of new technology and their desire to belong to a community, be it virtual; 3). Excessive cell phone use, leading to an addiction pattern characterized by excessive use of text messages and SM platforms; 4). Fear of missing out; 5) Excessive and uncoordinated use of digital technology (Akhtar & Hak, 2021).

Another study highlighted more comprehensively the causes of SM addiction and classified them into four large well-defined groups, namely: 1). Mental factors (e.g. depression and anxiety); 2). Social factors (e.g. self-esteem, peer and family pressure, loneliness, sense of belonging, fear of missing out and extended privacy); 3). Technological factors (e.g., parental technological literacy, website accessibility, Internet access, passive co-use of technology); and 4). Behavioral factors (e.g., self-control, gambling, oversharing, personality, involvement in mobile phone use) (Al-Samarraie et al., 2021).

It is becoming increasingly apparent that factors influencing SM addiction must be sought among physical and psychological characteristics as well as social and cultural factors when one investigates the causes of this global problem (Dhammathattariya et al., 2021).

If we look at this matter from an anthropological and philosophical point of view, such type of addiction can originate in what is related to the specificity of man in the contemporary world. The German philosopher Günther Anders, in his work *Die Antiquiertheit des Menschen*, originally published in 1956, a period when television was beginning to assert itself in people's homes, described a process of transformation of the human being under the impact of the mass reproduced images offered by television at the time (Anders, 2013, pp. 147-181). We can say that this process has been refined in the last two decades in the presence of the screens of phones, laptops and computers. He stated that in the sensational images offered by the screens lies the source of the danger that the human being will become unable to judge because these images only offer small parts of the world we live in and in fact even those are not as real as we think. By bringing this new reality before the viewer, man becomes a real "mass hermit". Although the human beings are apparently connected to the whole global world, every individual becomes an isolated person in a large community of isolated persons.

Through the TV screen, "the world comes to man", but in fact "man is no longer in the world", so gradually he turns into a "docile minor", "inexperienced", who will soon know alienation (Anders, 2013, pp. 147-181).

All these transformations led to a new phenomenon that some authors, like Sartori, compared it to a kind of imbecile status, to a functional illiteracy (Sartori, 1999).

Just as 70 years ago, when man was conquered by television, nowadays, on SM platforms, we spend our existence "in the company of fake acquaintances", but it seems that we will inevitably move towards an "artificially produced schizophrenia" (Anders, 2013). Like television, SM networks offers us a new reality – the artificial one, magical in its essence, which places us in a new space, a global one, built by the technical means of image reproduction and remote transmission, but which in fact leads to social inadequacy and degradation (Bauman, 2005).

5. Demographic aspects of social media addiction

Involving 63 independent samples with 34,798 respondents from 32 nations from almost over the world, a recent meta-analysis (Cheng et al., 2021) indicates that there is a prevalence of SM addiction of 24% among the interviewed population. In addition, the prevalence estimating SM addiction also differs by geographic region. In North America and Western/Northern Europe, this prevalence tended to be lower than those in Africa, Asia and the Middle East. SM dependence in Eastern/Southern Europe is midway between the two broad geographic areas. These authors pointed out that also from a cultural perspective there are also significant differences between individualist versus collectivist societies. Higher prevalence is found in collectivist nations than in individualistic ones, because the former are characterized by strong group norms and their members must conform to group values. In contrast, individualistic societies allow different norms to co-exist between groups, and deviations from group attitudes and behaviors are largely tolerated. As a result, collectivist cultures may be subject to both internal and external demands (e.g., group norms) that may increase their vulnerability to SM addiction, but members of individualistic cultures may be primarily subject to internal demands (e.g., mood modification) to use SM networks.

The SM networks represent nowadays a facility that simply invites any teenager and even adults to addiction. More recently, children at a young age, because they imitate their parents, become themselves addicted to SM networks. It can therefore be considered that SM addiction affects all users of the global network, regardless of gender or age. But many authors claim that teenagers and young people, especially students, as they spend a lot of time on social networks, are more likely to develop addiction to social media networks (Al-Samarraie et al., 2021; American Psychiatric Association, 1994,

p. 795; Azizi et al., 2019; Cheng et al, 2021; Dhammathattariya et al., 2021; Hussain et al., 2020; Jafarkarimi et al., 2016; Xuan & Asyraf, 2020; Yaman, 2016).

A recent study (Youssef et al., 2020) carried out on a sample of Lebanese with an average age of 27 years showed that those who present "social media use disorder" have the following characteristics: they are mostly female, have higher or secondary education, but with low incomes, i.e. bellow $1000, are single/divorced or widowed, use mobile phones more than other devices, are non-smokers and spend on average about 6 hours a day on SM networks.

The prevalence of SM addiction is higher among teenagers and young adults, because this population group has their higher levels of digital literacy and competence (since they have access to social media networks at a much younger age and thus feel more comfortable to use SM networking as a means of communication, but at the same time they are more vulnerable to SM addiction (Cheng et al., 2021).

There seem to be differences in the type of higher education. A study conducted in Iran at a university of medical sciences showed that undergraduate students had the highest level of addiction, but doctoral students had the lowest (Azizi et al., 2019).

On the other hand, students in the Physical Education and Sports Teaching Department in a public university in Turkey had a low level of *Facebook* addiction, but male students have higher scores than female students (Yaman, 2016). At Universiti Teknologi Malaysia, almost half of the investigated students were identified as *Facebook* addicted persons (Jafarkarimi et al., 2016). This ratio was almost the same among women and men, postgraduate and undergraduate students, and among Malaysians and non-Malaysians. Investigating some variables such as age, religion, income level, citizenship, education level, the number of years they have used social media networks, the authors of this study did not find any influence of these factors on the risk of *Facebook* addiction.

There are different reports of SM addiction in correlation with the gender of the people who develop this addiction. In Western countries and Central and South-Eastern Europe (Andreassen et al., 2017; Biernatowska & Balcerowska, 2017; Castrén et al., 2022; Sampasa-Kanyinga et al., 2022; Szczegielniak et al., 2013;), and in Turkey (Simsek et al., 2019), SM addiction is more common among women, but in Far East countries (Azizi et al., 2019; Basu et al., 2021) it is more common among men.

Anna Szczegilniak et al. conducted a pilot study involving 221 respondents from Poland, who completed questionnaires. The authors

found that women represented the overwhelming majority (95.38%) of social network users and correlated this result with the fact that women are more attracted to sharing, while men focus more on self interest (Szczegielniak et al., 2013).

Another study conducted in Spain (Cuadrado et al., 2020) demonstrated that women score higher on the Social Network Addiction Scale (SNAddS-6S), hypothesized that they have used the Internet more for social interaction and are more likely than men to be involved in social interaction.

6. Clinical manifestation of social media addiction

The Internet can be a highly addictive medium. As such, Internet addiction, as well as its subtype, - social media addiction-, are becoming growing social problems in any country, whether Western or Eastern (Azizi et al., 2019; Hussain et al., 2020; Szczegielniak et al., 2013; Yaman, 2016).

While SM networking can create a sense of community for the user, overuse of SM networks, especially among those who are vulnerable, results in various mental health disorders (Ulvi et al., 2022).

Studies that analyzed SM addiction focused mainly on *Facebook* addiction, as it is the most popular online social network (Busalim et al., 2019; Hou et al., 2019), but there is also research conducted on *Twitter*, *Instagram* or *WeChat*® addiction (Ardiana & Tumanggor, 2020; Hussain et al., 2020; Ndasauka et al., 2016; Saaid et al., 2014). Regardless of the SM platform, all studies have shown that addiction to one is positively associated with depression, anxiety, and insomnia, and negatively associated with subjective well-being, social life satisfaction, and academic performance.

The symptoms of SM networks overuse are similar to those experienced by people with chemical or non-chemical addictions. Addiction to SM networks negatively affects self-esteem, mental health, ability to concentrate and academic performance of addicted individuals (Ardiana & Tumanggor, 2020; Kircaburun & Griffiths, 2018; Saaid et al., 2014).

The higher the SM addiction in adolescents, the more significant the stress, anxiety and depression will be, all of which leading to reduced academic performance and ultimately affecting life satisfaction (Masoed et al., 2021).

Among adult Lebanese it was identified that the greater the SM use disorder, the greater the alexithymia (defined as the inability to cognitively process emotions, which is accompanied by a diminished ability to recognize and express emotions), depression, perception stress, anxiety, insomnia and loneliness will be (Youssef et al, 2020).

In 2013, the study by Anna Szczegilniak et al. demonstrated that excessive activity on SM platforms affects the daily routine of website users, especially sleep hygiene. These authors showed that almost a quarter of their respondents, who were young adults, allocated restricted hours to sleep, and 12.50% had insomnia (Szczegielniak et al., 2013).

Insomnias caused by the excessive use of social networks can lead to changes in the perception of one's own person, anxiety, depressive mood and psychoemotional lability, thus having a negative impact on the subjective well-being of pupils and students and on their relationship in the offline environment (Kircaburun & Griffiths, 2018).

In addition, young people with SM addiction no longer eat their meals on time (Desai, 2017), thus leading to the development of diverse gastrointestinal conditions.

Even if a user addicted to SM networks has a very long list of friends, in the real world he is socially isolated as he can no longer communicate effectively with real persons (Desai, 2017), mostly because he lives in a fantasy world that he manufactures and organizes to his own pleasure.

Some users create an anonymous profile in order to spy on the profile of their virtual friends (Szczegielniak et al., 2013). Others follow and copy the life, actions, manner of behaving or dressing like those whom they spied on and whom they take as their life model (Dumitrescu, 2021). But when they realize they cannot live up to these standards, their self-esteem drops and they can become depressed.

The most significant thing appears in the education of young people who have become addicted to SM networking. They no longer solve their homework at home, they easily clone other materials. As such, because there is no longer motivation for creativity and originality, an increase in plagiarism in research work will appear in the future (Desai, 2017).

Recently, two researchers (Koehler & Parrell, 2020) pointed out that uncontrolled use of social media networks is associated with low self-esteem, increased depression and increased anxiety.

In the new context of social media networks developing, e.g. *Facebook*, a new element appears, namely the evaluation of one's image through the "emoticons", such as: "*Like*", "*Love*", "*Laughing Face*", "*Surprised Face*", "*Crying Face*", or "*Angry Face*", which express the opinions and feelings of virtual friends towards the person who posted moments from his life (Dumitrescu, 2022). These constant evaluations by others lead to permanent changes in ones self-image because the SM addicted person maintains

his/her self-esteem only if he/she finds himself in the attention of other users.

Sometimes, the addiction to SM networks takes on a commercial aspect because one's image can be used for pecuniary gain when it is employed to promote products of different companies. Thus "a new type of image appears, this time an intersubjective ones" (Dumitrescu, 2021), as the self-image must satisfy the client's requirements and not his/her own desires. As such, the one who is effectively selling a self-image may at some point develop neurosis or anxiety as this self-image is an imposed one and not the desired one.

7. How can we intervene in case of social media addiction?

The SM addicted person would like to limit his/her online presence, but lacks sufficient motivation and determination (Szczegielniak et al., 2013) because he/she believes that SM is part of his/her life.

The most important stage of intervention is prevention. SM addiction prevention programs must focus on social anxiety (Stanculescu, 2022). As a result, SM addiction prevention strategies should be implemented based on demographic and cultural characteristics, as well as behavioral risk factors.

First of all, preventive measures are needed among children, the age group most prone to this type of addiction. Public awareness is needed so that not only young SM users, who may easier become addicted, but also their parents should know the potential risks of excessive SM networks use (Simsek et al., 2019).

Secondly, since, regardless of age, women represent the group most prone to SM addiction, attention must also be directed towards this type of users of SM networking sites.

A recent study proposes, as a way to fight against the installation of SM addiction, a behavioral strategy that involves families and organizations to encourage more offline healthy social activities, such as family parties, meetings with friends, and participation in cultural events; 2). Government agencies, SM platform administrators and parents should warn young users about the possibility of developing addiction when using the site for long periods of time. Families should encourage discussions about SM addiction and be alert to any signs of SM addiction or neglecting of other social functions, such as offline family and friends in everyday life. The most important fact is that young people need to know how to consciously use SM networks (Al-Samarraie et al., 2021).

Because currently, in the SARS-CoV2 pandemic, with self-isolation and quarantine imposed to reduce the spread of the COVID-19 disease, young people especially, but not only, were experiencing more stress caused by COVID-19 and as such they have used SM networking excessively. As such, many of them became addicted and developed symptoms of depression and anxiety (Zhao & Zhou, 2021). Much more seriously, it seems that they may develop a "digital dementia", similar to Alzheimer's dementia, which would represent an impairment of the nervous system the mechanism of which being not yet known, but which is related to the frequent and long-term use of digital communication technologies (Sandu & Nistor, 2020). Under these circumstances, special attention should be paid to these high-risk populations in order to avoid a possible SM addiction.

In the situation of COVID-19 pandemic, in order to prevent these consequences in quarantined people, some authors recommended a consciously reduction of the daily online activity and engaging in physical activity as much as possible (cleaning the house, cooking, exercise with the equipment in the house). In addition, in order to feel less alone and to have good quality sleep, quarantined people should communicate with family and friends through phone contact and not text messaging (Brailovskaia et al., 2021; Fernandes et al., 2020).

SM addiction should be removed from the addicted people's life without feeling forced. This action requires proper counseling and proper awareness of the effects of SM addiction (Prasad et al, 2014) and this is possible now because of parental counseling or/and psychological and psychiatric counseling.

In recent years, and especially in the current period marked by the pandemic, it has been concluded that the goal of treatment for this type of addiction, unlike other addictions, should not be total abstinence, but rather the controlled use of social media networks (Fernandes et al., 2020), enabling addicted individuals to have good quality sleep.

Some authors have also proposed software solutions to block SM networks or limit access to SM sites for a certain period. Prasad et al. made a breakthrough in the field when they provided the interested public with a software/application that limits the user's access to SM networks, but at the same time encourages other addicted users to become non-addicted in an interactive way (Prasad et al., 2014).

Relapse prevention should use strategies based on cognitive-behavioral therapies. Last but not least, psychological services and health units are needed for the adequate treatment of SM addiction (Simsek et al., 2019), but also trained specialists in the field.

8. Conclusions

Even though the DSM-5 did not recognize the excessive use of social media as a mental disorder, articles and studies that use the term "social media addiction" continue to be published.

There are currently many data on the demographic and clinical characteristics of *social media* addiction, but new research is needed to identify new therapeutic interventions.

The most vulnerable groups are those that include young students, mostly female, from medical and technical faculties, from collective nations, from Central and South-Eastern Europe. Therefore, it is imperative that university authorities must take intervention measures to help students who are addicted to these communication networks, primarily by informing them about the negative consequences of social media addiction.

In addition, there is a need to allocate more public resources to mental health services that can treat this addiction. Last but not least, medical staff in mental health services must know the impact of the use of social media networks on vulnerable groups in order to design their future prevention and intervention plans and for this reason training courses in the field are necessary.

Addiction to social media is becoming an unmistakable feature of contemporary man, who lives in a global interconnected world on a scale unimaginable until now precisely because of the existence of the cyberspace created by the new communication technology. Currently, the human being is undergoing a revolution similar to that which marked medieval man with the advent of printing at the beginning of the modern era, but is now experiencing the shock of adapting to the communication technologies of the postmodern world. Faced with this new reality, just like the people of previous worlds, the recent or post-modern man must learn to manage their new world until the novelty of it is exhausted, avoiding, as much as possible, the falls and excesses that can befall them when abandoning common sense or reason.

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