Научный сетевой журнал
МЕДИЦИНСКАЯ ПСИХОЛОГИЯ В РОССИИ

INTERNET ADDICTION: DIAGNOSIS, COMORBIDITY AND TREATMENT

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Abstract. Problematic internet Use (PIU) or excessive internet use is characterized by excessive or poorly controlled preoccupations, urges or behaviors regarding computer use and internet access that lead to impairment or distress. Surveys in the US and Europe have indicated prevalence of between 1.5% and 8.2%, with varying diagnostic methods between countries. Cross-sectional studies on samples of patients report high co-morbidity of internet addiction with psychiatric disorders. This paper will describe Internet Addiction in terms of diagnosis as well as co-morbidity with other psychiatric disorders and treatment.

Key words: internet addiction; problematic internet use; behavioral addiction.

For citation
Weinstein A. Internet Addiction: diagnosis, comorbidity and treatment. *Med. psihol. Ross.*, 2015, no. 4(33), p. 3 [in English, in Russian]. Available at: http://mprj.ru

Received: June 24, 2015 *Accepted: July 10, 2015* *Publisher: July 23, 2015*

Introduction: Internet addiction and its treatment

Problematic internet use, or internet addiction, is characterized by excessive or poorly controlled preoccupations, urges or behaviors regarding internet use that lead to impairment or distress. Early studies by Young (1998) Griffiths (1998; 2000) and Aboujaoude (2010) defined this disorder and have done extensive research on it. The condition has attracted increasing attention in the popular media and among researchers, and this attention has paralleled the growth in computer use and internet access (Shaw et al., 2008). Phenomenologically, there appear to be at least three subtypes: excessive gaming-gambling, sexual preoccupations (cybersex), and socializing or social networking including e-mail/text messaging. Internet addicts may use the internet for extended periods, isolating themselves from other forms of social contact, and focus almost entirely on the internet rather than broader life events. Adolescents with problematic internet use showed dysfunctional coping strategies with problems in school and home and showed worse interpersonal relations (Milani et al., 2009). Internet addiction can be also explained by a need to escape from oneself and that may account for the excessive playing of internet games (Kwon et al., 2011).

There are three different models have been proposed for PIU (Grant et al., 2010; Weinstein and Lejoyeux, 2010, 2013; Weinstein et al., 2014). Some researchers have considered the impulse-control disorders as part of the obsessive-compulsive disorder spectrum a model. This model is supported by brain-imaging and pharmacological treatment studies with SSRIs (Dell'Osso et al., 2006), although other treatments and brain-imaging studies may challenge it. PIU has also been conceptualized as an impulse control disorder, characterized by the urge to repeatedly engage in a behavior—going online—that is pleasurable in the moment but can lead to negative downstream effects (Aboujaoude, 2010). Third, internet addiction was suggested to be included in the behavioral addiction spectrum since it shows the features of excessive use, despite adverse consequences, withdrawal phenomena, and tolerance that characterize many substance use disorders. The frequent appearance of internet addiction in the context of numerous co-morbid conditions raises complex questions of causality.

Diagnosis and clinical criteria

Four components were originally suggested as essential to the diagnosis of internet addiction for DSM-V inclusion (Block, 2008): 1) excessive internet use, often associated with a loss of sense of time or a neglect of basic drives, 2) withdrawal, including feelings of anger, tension, and/or depression when the computer is inaccessible, 3) tolerance, including the need for better computer equipment, more software, or more hours of use, and 4) adverse consequences, including arguments, lying, poor school or vocational achievement, social isolation, and fatigue.

A major survey was conducted to develop diagnostic criteria for internet addiction disorder (IAD) and to evaluate its validity and reliability in the general population (Tao et al., 2010). The diagnostic criteria consisted of a symptom criterion (seven clinical symptoms of IAD), a clinically significant impairment criterion (functional and psychosocial impairments), a course criterion (duration of addiction lasting at least 3 months, with at least 6 hours of non-essential internet usage per day) and an exclusion criterion (exclusion of dependency attributed to psychotic disorders). Internet addiction was listed as a condition for further study in the DSM-V from 2013 but it is not recognized as a disorder. Internet Gaming Disorder, however, was included in the appendix of the DSM-V, published in May 2013. Thus, the DSM-5 still does not offer sufficient guidance on how to approach individuals with suspected Internet-related psychopathology or how to design or interpret research studies into this topic. Instead, clinicians and researchers have to rely on proposed definitions, along with several screening and assessment instruments developed for PIU and problematic video game use.

Assessment of internet addiction

The questionnaires for diagnosis of internet addiction have used items from substance dependence questionnaires, as well as new items related to internet addiction. The most commonly used questionnaire is Young's Internet Addiction Scale (IAT) which has been validated (Widyanto et al., 2004; Bernardi and Pallanti, 2009; Korkeila et al., 2009; Han et al., 2009; Chong Guan et al., 2012; Barke et al., 2012; Ghamari et al., 2011; Jelenchick et al., 2012). The Internet Addiction Scale (IAS) was developed by Griffiths (1998) and was validated by Nichols and Nicki (2004) and Canan et al., (2010). Other questionnaires include the Chen Internet Addiction Scale (CIAS) (Yen et al., 2012), the Questionnaire of Experiences Related to Internet (Beranuy Fargues et al., 2009) the Compulsive Internet Use Scale (CIUS) (Meerkerk et al., 2009; Khazaal et al., 2012), the Problematic Internet Use Questionnaire (PIUQ) (Demetrovics et al., 2008), and the Internet-Related Problem Scale (IRPS) (Widyanto et al., 2011).

Prevalence rates

International prevalence rates for internet addiction range from 1.5 % to 8.2 % (Petersen et al., 2009), and in the US 6% (Greenfield, 1999) 0.3—0.7% (Shaw and Black, 2008) and 4% (Christakis et al., 2011) and 25% among Southern US university students (Forston et al., 2007) see Moreno et al., (2011) for evaluation. In Europe, rates vary between 3% in Germany (Woelfling et al., 2009), 5.4% and 5% in Italy (Poli and Agrimi; Pallanti et al., 2006), 10.4% in Greece (Tsitsika et al., 2009) and 18.3% in the UK. A major survey of 11 European countries found a prevalence rate of 4.4% (Durkee et al., 2012).

Internet addiction has been most studied in the Far East. In China, prevalence rates vary between 10.2% of moderate users and 0.6% of severely addicted (Lam et al., 2009), 6.44% in Shaanxi Province (Ni et al., 2009) between 2.4% and 5.52% in Hunan province (Deng et al., 2007; Cao et al., 2007). In Shanghai, 8.8% (Xu et al., 2012) and in Hong Kong 6.7% (Fu et al., 2010). In Taiwan 17.9% of students were addicted (Tsai et al., 2009) and in South Korean middle school students 16% were potential at-risk users and 3.1% were high-risk users (Seo et al., 2009). Other studies in South Korea have found 4.3% (Jang et al.,

2008), 10.7% (Park et al., 2008) 20.3% (Ha et al., 2007) 1.6% (Kim et al., 2006), and 3.5% (Whang et al., 2003) of adolescents with internet addiction.

Psychiatric Comorbidity

Cross-sectional studies on samples of patients report high co-morbidity of internet addiction with psychiatric disorders such as affective disorders, anxiety disorders (including generalized anxiety disorder, social anxiety disorder), and attention deficit hyperactivity disorder (ADHD). See review by Weinstein et al., (2014).

See table 1 for a list of studies showing Internet addiction comorbidity with other psychiatric disorders and symptoms. The table is divided between adult and adolescent studies.

Table 1

Internet addiction-comorbidity with other psychiatric disorders and symptoms
(References in brackets)

Co-morbid Clinical diagnosis	Studies	Country
	Adults	
Depression Depressive mood disorder	te Wildt et al. (2007) Morrison and Gore (2010) Liberatore et al. (2011) Alavi et al. (2012) Cho et al. (2012)	Germany UK Puerto Rico Iran South Korea
Anxiety	Kratzer and Hegerl (2008) Alavi et al. (2012) Cho et al., (2012)	Germany Iran South Korea
Alcohol abuse	Yen et al. (2009) Ken et al. (2008)	Taiwan
Alexithymia and child maltreatment	Yates et al. (2012)	US
Impulse control disorders	Mazhari (2012)	Iran
Aggression	Alavi et al. (2012)	Iran
	Adolescents	
Personality disorders: hypomania, dysthymia, obsessive compulsive, borderline personality disorder, and avoidant personality disorder	Bernardi and Pallanti (2009)	Italy
Alexithymia, dissociative experiences, impulse dysregulation	De Berardis et al. (2009)	Italy
Alexithymia	Dalbudak et al. (2013)	Turkey
Dissociative symptoms	Canan et al. (2012)	Turkey
Conduct disorder and hyperactivity	Kormas et al. (2011)	Greece
Depression	Tsitsika et al. (2011) Ha et al. (2007) Kim et al. (2006) Park et al. (2012) Yen et al. (2007) Xiuqin et al. (2010) Cheung and Wong (2011) Guo et al. (2012) * Morrison and Gore (2010)	Greece South Korea South Korea South Korea Taiwan China Hong Kong Hong Kong UK

Social phobia	Yen et al. (2007) Wei et al. (2012) Weinstein et al. (2015)	Taiwan Israel
Somatic pain	Wei et al. (2012)	Taiwan
ADHD	Yen et al. (2007) Yen et al. (2009) Weinstein et al. (in press)	Taiwan Israel
OCD	Xiuqin et al. (2010)	China
Insomnia	Cheung and Wong (2011)	Hong-Kong

*In children

Abnormal obsessive-compulsive measures were identified before participants became addicted to the Internet (Dong et al., 2011). A relationship between withdrawal and anxiety/depression and future Internet addiction was also found among South Korean males (Cho et al., 2012). Finally, a review on 20 studies correlating problematic internet use and mental disorders found that 75% reported significant correlations of PIU with depression, 57% with anxiety, 100% with symptoms of ADHD, 60% with obsessive-compulsive symptoms, and 66% with hostility/aggression (Carli et al., 2013).

Relationship of internet addiction with drug and alcohol use

Very few studies looked at the relationships between drug and alcohol use and internet addiction. Subjects with cannabis use had higher mean score on the IAT in Finland (Korkeila et al., 2009). Parental problem drinking had a significant direct effect on internet addiction in boys but not in girls in early adolescence in the US. Significant indirect effects of parental problem drinking on internet addiction were evidenced via anxiety-depression and aggression for boys and via family function and aggression for girls (Jang and Ji., 2012). Problematic internet use was also associated with substance use experiences among Greek adolescents on the island of Kos (Fisoun et al., 2012). Adolescents who have used illicit substances and were abusing the Internet as well appear to share some common personality characteristics, such as psychoticism. Finally, internet addiction was associated with harmful use of alcohol among Taiwanese students (Yen et al., 2009; Ken et al., 2008). It is unknown whether internet addiction and these co-morbid disorders could be explained by shared risk factors or are best considered as secondary disorders.

phenomenology of internet addiction The

There are several reasons that certain individuals are vulnerable to internet addiction. These include coping with stress (Grusser et al., 2005), expanding social networks (Campbell et al., 2006), greater control and social anxiety (Lee and Stapinski 2012; Kuss and Griffiths (2011), coping with developmental challenges (Ko et al., 2006; Israelashvili et al., 2012); and creating a virtual "ideal self" and escapism (Achab et al., 2011; Zanetta et al., 2011I; Billieux et al., 2011; Li et al., 2011). Other contributing factors may be sex addiction, leading to people to the internet to pursue cybersex (Southern, 2008; Ross et al., 2012; Brand et al., 2011).

Treatment

Cognitive-Behavior Therapy

Treatment for internet addiction is based on interventions and strategies used in the treatment of substance use disorders. Psychosocial approaches are the mainstay of current treatment research, with very little study of pharmacological treatment. There is preliminary evidence for success of an "initiated abstinence" program in 12—15 year old students in Austria, Germany, and Italy (Kalke et al., 2004), and for a counseling program in Hong Kong

(Shek et al., 2009). Preliminary results from a study of 114 patients receiving cognitive behavior therapy indicated that most clients were able to manage their presenting complaints by the eighth session, and symptom management was sustained at 6-month follow-up (Young ,2007).

A treatment study using group cognitive behavioral therapy (CBT) for Internet addiction in adolescents is reported by Du et al. (2010). A total of 56 patients, who met Beard's (2005) diagnostic criteria for internet addiction, aged 12—17 years, were divided randomly into an active treatment group (n = 32) and a clinical control group (n = 24). Participants in the active treatment group were treated with an eight-session multimodal school-based group CBT while participants in the clinical control group received no intervention. Internet use, time management, emotional, cognitive and behavioral measures were assessed for both groups at baseline, immediately after the intervention and at 6 month follow up by investigators blind to the participants' group status. Results showed that internet use decreased in both groups while only the multimodal school-based group CBT evidenced improved time management skills and better emotional, cognitive and behavioral symptoms. The authors suggested that multimodal school-based group CBT is effective for adolescents with internet addiction, particularly in improving emotional state and regulation ability, behavioral and self-management style. Marital and family therapy may also help in selected cases, and online self-help books and tapes are available. Lastly, self-imposed abstinence from computer use and Internet access may be necessary in some situations (Shaw and Black, 2008).

Pharmacological treatment

Pharmacological studies used agents that were previously used for treatment of disorders such as ADHD and OCD. A pharmacological open-label treatment study using extended release methylphenidate in Korean children with internet video game addiction and co-morbid ADHD found that, after 8 weeks of treatment, measures of internet use and internet use duration were significantly reduced, and this improvement was positively correlated with improvement in measures of attention. Another study has identified the co-morbidity of impulsive-compulsive internet use with OCD to examine whether selective serotonin reuptake inhibitors (SSRIs) such as escitalopram can be useful for treatment of internet addiction (Dell' Osso et al., 2007). A pharmacological open-label treatment study using escitalopram with impulsive-compulsive internet users showed significant decrease in the number of hours spent on the internet during the first phase of treatment but not later. Finally, bupropion, a dopamine and norepinephrine inhibitor medication used for treatment of nicotine and substance dependence was used for treatment of internet videogame addiction in patients with Internet video game addiction (IAG) (Han et al., 2010). After a 6 week period of bupropion SR, craving for internet video game play, total game play time, and cue-induced brain activity were decreased in the Internet videogame addiction players. A following study by Han and Renshaw (2012) has shown that bupropion reduced internet addiction scores and mean time of online game playing in a group with co-morbid excessive online videogame playing (EOP) and Major Depressive Disorder (MDD) as well as Beck Depression Inventory (BDI).For review on existing pharmacological treatment see Camardese et al. (2012).

Other Treatments

A treatment study combining comprehensive therapy (CT) with electro-acupuncture (EA) in combination with psycho-intervention (PI) on cognitive function and event-related potentials (ERP), in patients with internet addiction (IA) was described by Zhu et al., (2012). After treatment, in all groups, the IA score was lowered significantly and scores of short-term memory capacity and short-term memory span increased significantly while the decreased IA score in the comprehensive therapy group was more significant than that in the other two groups.

Evaluation of treatment

For an evaluation of treatment of internet addiction see King et al. (2012).

A meta-analysis of pharmacological and psychological treatment studies of internet addiction by Winkler et al., (2013) based on 16 studies, suggested that psychological and pharmacological interventions were highly effective for improving IA time spent online, depression and anxiety.

Conclusions

At least three subtypes of internet addiction have been identified: excessive gaming, sexual preoccupations, and e-mail/text messaging. All of the variants share the following four components: 1) excessive use, often associated with a loss of sense of time or a neglect of basic drives, 2) withdrawal, including feelings of anger, tension, and/or depression when the computer is inaccessible, 3) tolerance, including the need for better computer equipment, more software, or more hours of use, and 4) adverse consequences, including arguments, lying, poor achievement, social isolation, and fatigue. There is debate as to whether internet addiction stands as its own diagnosis or is more a product of other, existing disorders such as anxiety, depression, ADHD or impulse control disorders. There is growing evidence that internet addiction is a behavioral addiction but the patho-physiological mechanisms underlying internet addiction are still under investigation. The few published treatment studies for internet addiction are based on interventions and strategies used in the treatment of substance use disorders adapted to this population. Thus, it is premature to recommend any evidence-based treatment of internet addiction although preliminary results of psychological such as cognitive-behavior therapy and pharmacological interventions such as with Bupropion seem promising and the field of behavioral addictions will benefit from current and future research in this area.

Declaration of interest:
The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

Acknowledgements
Prof. Weinstein is supported by grants from the National Institute for Psychobiology in Israel and the Israeli anti-drug authority.

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ИНТЕРНЕТ-ЗАВИСИМОСТЬ: ДИАГНОСТИКА, КОМОРБИДНОСТЬ И ЛЕЧЕНИЕ

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Аннотация. Проблемное использование Интернета (ПИИ), или чрезмерное использование Интернета, характеризуется непреодолимой тягой к компьютеру и поглощенностью использованием компьютера и Интернета, приводящими к дистрессу и ухудшению состояния человека. Различные исследования показали, что в США и Европе от данного расстройства страдает 1,5—8,2% людей. Результаты исследований методом поперечных срезов свидетельствуют о высокой коморбидности интернет-зависимости и разных психических заболеваний. В данной статье рассматриваются проблемы диагностики, лечения интернет-зависимости и коморбидности интернет-зависимости и других психических расстройств.

Ключевые слова: интернет-зависимость; проблемное использование Интернета; поведенческая зависимость.

УДК 159.9:316.628

Библиографическая ссылка по ГОСТ Р 7.0.5-2008
Вайнштейн А. Интернет-зависимость: диагностика, коморбидность и лечение // Медицинская психология в России: электрон. науч. журн. – 2015. – N 4(33). – С. 3 [Электронный ресурс]. – URL: http://mprj.ru (дата обращения: чч.мм.гггг) [На английском, на русском].

Поступила в редакцию: 24.06.2015 Прошла рецензирование: 10.07.2015 Опубликована: 23.07.2015

Введение: интернет-зависимость и ее лечение

Проблемное использование Интернета (ПИИ), или чрезмерное использование Интернета, характеризуется непреодолимой тягой к компьютеру и поглощенностью использованием компьютера и Интернета, приводящими к дистрессу и ухудшению состояния человека. В предыдущих исследованиях Янг (1998), Гриффитс (1998; 2000) и Абужаудэ (2010) определили данное расстройство и получили много информации о нем. Проблему стали освещать в СМИ, и она привлекла внимание многих исследователей. Вместе с тем отмечался рост использования компьютера и Интернета [80]. Феноменологически выделяется как минимум три подтипа интернет-зависимости: зависимость от компьютерных игр (гэмблинг), киберсексуальная зависимость и зависимость от общения в социальных сетях или по электронной почте/посредством текстовых сообщений. Люди, зависимые от Интернета, используют его в течение длительных периодов времени, изолируют себя от других форм социальных контактов и отдают предпочтение Интернету, а не другим жизненным событиям. Подростки с интернет-зависимостью пользуются неэффективными стратегиями совладания с проблемами в школе и дома. Кроме того, у них часто бывают проблемы в сфере межличностных отношений [59]. Интернет-зависимость также может рассматриваться как попытка сбежать от самого себя. То же самое касается зависимости от онлайн-игр [53].

Для ПИИ было предложено три разных модели [44; 102; 103; 37]. Так, некоторые исследователи относят расстройства привычек и влечений к расстройствам обсессивно-компульсивного спектра. Доказательствами могут служить данные сканирования мозга и результаты исследований, в которых лечение интернет-зависимости проводилось с использованием селективных ингибиторов обратного захвата серотонина (СИОЗС) [21]. Однако другие исследования способны опровергнуть данную теорию. Также ПИИ называли расстройством привычек и влечений, характеризующимся сильным желанием часто выходить в Сеть. Такое поведение сначала доставляет удовольствие, но в итоге может привести к негативным последствиям [1]. Наконец, некоторые авторы предлагают считать интернет-зависимость поведенческой зависимостью. Они уверены, что для нее характерны злоупотребление, несмотря на негативные последствия, синдром отмены, развитие толерантности. Все это имеет место в случае зависимости от ПАВ. Интернет-зависимость часто сопровождается другими расстройствами. Из-за этого возникает вопрос о том, что первично.

Диагностика и клинические критерии

Для включения интернет-зависимости в DSM-V было предложено 4 критерия [11]: 1) чрезмерное использование Интернета, часто — с потерей чувства времени или пренебрежением базовыми потребностями, 2) синдром отмены, включая злость, напряжение и/или депрессию, когда компьютер недоступен, 3) толерантность, включая потребность в лучшем компьютерном оборудовании, большем количестве компьютерных программ, увеличении периода времени, проводимого за компьютером и 4) негативные последствия, включая споры, ложь, проблемы с учебой и отдыхом, социальную изоляцию и утомление.

Для разработки диагностических критериев интернет-зависимости и оценки их валидности и надежности в общей популяции было проведено масштабное исследование [75]. Диагностические критерии включают симптоматические критерии (семь

клинических симптомов интернет-зависимости), критерии клинически значимых нарушений (функциональных и психосоциальных), критерии течения (длительность зависимости не менее трех месяцев и использование Интернета в течение как минимум 6 часов в день при том, что человек вполне мог бы без этого обойтись) и критерии исключения (исключение зависимости, вызванной психическими расстройствами). Интернет-зависимость в 2013 году была упомянута в DSM-V как состояние, требующее дальнейшего изучения, но она не считается психическим расстройством. Между тем зависимость от онлайн-игр была включена в приложение к DSM-V, опубликованное в мае 2013 года. Так, до сих пор в DSM-V не прописан подход к людям, которые, вероятно, зависимы от Интернета. К тому же там не прописано, как организовывать и интерпретировать результаты исследований интернет-зависимости. Однако определения разрабатываются, а диагностические инструменты создаются врачами и исследователями ПИИ и зависимости от онлайн-игр.

Оценка интернет-зависимости

Опросники для диагностики интернет-зависимости — это модифицированные опросники для диагностики зависимости от психоактивных веществ, включающие вопросы по интернет-зависимости. Наиболее часто используемый опросник — это валидизированный тест Кимберли — Янг на интернет-зависимость (IAT) [106; 10; 7; 93; 100; 8; 35; 48]. Шкала интернет-зависимости (IAS) была создана Гриффитсом (1998) и валидизирована (Nichols and Nicki (2004) [63] и Canan et al. (2010)). Другие опросники: «Шкала интернет-зависимости Чен» (CIAS) (Yen et al., 2012), Опросник «Опыт, связанный с Интернетом» [99], шкала компульсивного использования Интернета (CIUS) [92; 25], опросник проблематичного использования Интернета (PIUQ) [16] и шкала проблем, связанных с Интернетом (IRPS) [105].

Коэффициент распространенности

Коэффициент распространенности интернет-зависимости во всем мире варьируется между 1,5% и 8,2% (Petersen et al., 2009). В США он составляет 6% [27], 0,3—0,7% [80] и 4% [71], а также 25% среди студентов университетов Северной Америки [42; 72]. В Европе коэффициент варьируется между 3% в Германии [26], 5,4% и 5% в Италии [68; 65], 10,4% в Греции [43] и 18,3% в Великобритании. Согласно крупному исследованию, проведенному в 11 европейских странах, коэффициент равен 4,4% [70].

Больше всего исследований на тему интернет-зависимости было проведено на Дальнем Востоке. В Китае коэффициент распространенности варьируется между 10,2% для интернет-зависимости средней степени тяжести и 0,6% для тяжелой зависимости [23]. Он составляет 6,44% в провинции Шэньси [24], от 2,4% до 5,52% в провинции Хунань [3; 94]. В Шанхае коэффициент равен 8,8% [67], в Гонконге — 6,7% [40]. В Тайване зависимы 17,9% студентов [96]. В Южной Корее в группе риска оказались 16% учащихся средней школы. Среди них 3,1% были подвержены высокому риску (Seo et al., 2009). Другие исследователи из Южной Кореи обнаружили 4,3% [46], 10,7% [66], 20,3% [16], 1,6% [38] и 3,5% [104] подростков с интернет-зависимостью.

Коморбидность с психическими расстройствами

Поперечные исследования свидетельствуют о высокой коморбидности интернет-зависимости и психических расстройств, таких как аффективные расстройства, тревожные расстройства (включая генерализованное тревожное расстройство, социальное тревожное расстройство) и синдром дефицита внимания и гиперактивности (СДВГ) [37].

В таблице 1 представлены данные о коморбидности интернет-зависимости и других психических расстройств/симптомов. В таблице разделены исследования, проведенные в среде взрослых и подростков.

Таблица 1

Коморбидность интернет-зависимости и других психических расстройств/симптомов

Коморбидный клинический диагноз	Исследования	Страна
	Взрослые	
Депрессия, депрессивное расстройство	te Wildt et al. (2007) Morrison and Gore (2010) Liberatore et al. (2011) Alavi et al. (2012) Cho et al. (2012)	Германия США Пуэрто-Рико Иран Южная Корея
Тревожное расстройство	Kratzer and Hegerl (2008) Alavi et al. (2012) Cho et al. (2012)	Германия Иран Южная Корея
Злоупотребление алкоголем	Yen et al. (2009) Ken et al. (2008)	Тайвань
Алекситимия и плохое обращение в детстве	Yates et al. (2012)	Великобритания
Расстройства привычек и влечений	Mazhari (2012)	Иран
Агрессивность	Alavi et al. (2012)	Иран
	Подростки	
Личностные расстройства: гипомания, дистимии, обсессивно-компульсивное, пограничное расстройство личности и тревожное расстройство личности	Bernardi and Pallanti (2009)	Италия
Алекситимия, диссоциативный опыт, нарушение контроля импульсов	De Berardis et al. (2009)	Италия
Алекситимия	Dalbudak et al. (2013)	Турция
Диссоциативные симптомы	Canan et al. (2012)	Турция
Расстройство поведения и гиперактивность	Kormas et al. (2011)	Греция
Депрессия	Tsitsika et al. (2011) Ha et al. (2007) Kim et al. (2006) Park et al. (2012) Yen et al. (2007) Xiuqin et al. (2010) Cheung and Wong (2011) Guo et al. (2012) * Morrison and Gore (2010)	Греция Южная Корея Южная Корея Южная Корея Тайвань Китай Гонконг Гонконг Великобритания
Социофобия	Yen et al. (2007) Wei et al. (2012) Weinstein et al. (2015)	Тайвань Израиль
Соматическая боль	Wei et al. (2012)	Тайвань
СДВГ	Yen et al. (2007) Yen et al. (2009) Weinstein et al. (in press)	Тайвань Израиль
ОКР	Xiuqin et al. (2010)	Китай
Бессонница	Cheung and Wong (2011)	Гонконг

Примечание: * — у детей.

Симптомы обсессивно-компульсивного расстройства наблюдались у участников исследования до того, как они стали зависимыми от Интернета (Dong et al., 2011). Связь между синдромом отмены, тревожным расстройством/депрессией и будущей интернет-зависимостью была обнаружена среди мужчин из Южной Кореи [18]. Наконец, обзор 20 исследований, в которых изучались корреляции между проблематичным использованием Интернета и психическими заболеваниями, показал: у 75% участников интернет-зависимость коррелировала с депрессией, у 57% — с тревожным расстройством, у 100% — с симптомами СДВГ, у 60% — с симптомами обсессивно-компульсивного синдрома и у 66% — с враждебностью/агрессивностью [90].

Связь интернет-зависимости с употреблением алкоголя и наркотиков

Проблема связи интернет-зависимости с употреблением наркотиков и алкоголя мало изучена. Исследование, проведенное в Финляндии [7], показало, что у субъектов, употреблявших каннабис, средний балл в тесте Кимберли — Янг на интернет-зависимость превышал норму. В США злоупотребление родителей алкоголем влияло на интернет-зависимость у мальчиков, но не у девочек младшего подросткового возраста. Злоупотребление родителей алкоголем косвенно влияет на риск интернет-зависимости через тревожность/депрессию и агрессивность среди мальчиков и функции семьи и агрессивность среди девочек [47]. ПИИ также было связано с употреблением психоактивных веществ греческими подростками с острова Кос [36]. Подростки, употреблявшие ПАВ и зависевшие от Интернета, имели схожие личностные черты, например психотизм. Наконец, интернет-зависимость оказалась связана с чрезмерным употреблением алкоголя учащимися с Тайваня ([86]; Ken et al., 2008). Не известно, имеют ли эти расстройства общие факторы риска или же одно влечет за собой другое.

Феноменология интернет-зависимости

Существует несколько факторов, повышающих риск интернет-зависимости. Это желание справиться со стрессом [22], расширить круг общения [12], повысить уровень контроля, социальная тревожность [54; 52], нарушения развития (Ko et al., 2006; Israelashvili et al., 2012 [45]), создание виртуального «идеального Я» и эскапизм [56; 61; 76; 55]. К другим факторам относится сексуальная зависимость, которая становится причиной возникновения киберсексуальной зависимости.

Лечение

Когнитивно-бихевиоральная терапия

Для лечения интернет-зависимости применяются вмешательства и стратегии, используемые при лечении расстройств, вызванных употреблением психоактивных веществ. Психосоциальные подходы являются основным направлением современных исследований методов лечения. Фармакологическое лечение мало изучено. Существуют предварительные доказательства эффективности программы Initiated abstinence для 12—15-летних учащихся из Австрии, Германии и Италии [49] и программы консультирования в Гонконге [81]. Предварительные результаты исследования 114 пациентов, проходивших когнитивно-поведенческую терапию, показали, что большинство клиентов смогли справиться с первоначальными симптомами к восьмой сессии. Положительный эффект сохранялся в течение последующего 6-месячного наблюдения [109].

Также существует исследование эффективности метода групповой когнитивно-поведенческой терапии (КПТ) для интернет-зависимых подростков [19]. 56 интернет-зависимых пациентов в возрасте 12—17 лет разделили на группы. Первая группа активно лечилась (n = 32), а вторая была контрольной (n = 24). Участники из первой группы посещали сеансы мультимодальной групповой КПТ в школе, а добровольцы из второй группы не лечились. В начале, в конце исследования и спустя 6 месяцев после начала лечения ученые оценили особенности эмоциональной, когнитивной,

поведенческой сфер участников и то, как те распоряжались своим временем и использовали Интернет. Добровольцы из обеих групп стали реже пользоваться Интернетом. Однако только подростки из первой группы стали лучше управлять своим временем, и у них уменьшилось число эмоциональных, когнитивных и поведенческих симптомов зависимости. Авторы предположили, что школьные сеансы мультимодальной групповой КПТ эффективны для подростков с интернет-зависимостью. В частности, они улучшают эмоциональное состояние и способность к контролю, развивают навыки управления поведением и самоуправления. Супружеская и семейная терапия тоже может помочь в отдельных случаях. Доступны онлайн книги и аудиозаписи для самопомощи. Наконец, в некоторых ситуациях необходимо добровольное воздержание от использования компьютера и Интернета [80].

Фармакологическое лечение

В фармакологических исследованиях использовались препараты, которые ранее применялись для лечения таких расстройств, как СДВГ и ОКР. Открытое исследование фармакологического лечения корейских детей с интернет-зависимостью и СДВГ с использованием метилфенидата пролонгированного действия показало: через 8 недель лечения частота и продолжительность использования Интернета значительно снизились. Это положительно коррелировало с повышением уровня внимания у детей. В другом исследовании, показавшем, что импульсивно-компульсивное использование Интернета коморбидно с ОКР, изучалось, можно ли вылечить интернет-зависимость с помощью селективных ингибиторов обратного захвата серотонина (СИОЗС), таких как эсциталопрам [21]. Согласно данным проведенного открытого исследования, в первой фазе лечения эсциталопрамом участники с интернет-зависимостью стали проводить в Интернете гораздо меньше времени. Потом эффект исчез. Наконец, для лечения зависимости от онлайн-игр использовался бупропион, ингибитор дофамина и норэпинефрина. Его обычно назначают при зависимости от ПАВ [30]. Спустя 6 недель лечения у участников исследования ослабла тяга к онлайн-видеоиграм. Они стали проводить за видеоиграми меньше времени. Кроме того, у них снизился уровень соответствующей мозговой активности. Следующее исследование, которое провели Хань и Реншоу, показало, что лечение бупропионом приводило к снижению средних баллов в тесте для диагностики интернет-зависимости. Помимо этого, участники исследования, также зависимые от онлайн-игр и страдавшие от клинической депрессии, после лечения стали меньше играть в видеоигры [5].

Другие методы лечения

Проводилось сравнительное исследование комплексной терапии интернет-зависимости, электроакупунктуры в сочетании с психологическим вмешательством в когнитивную сферу и метода вызванных потенциалов [20]. После лечения во всех группах уровень интернет-зависимости значительно снизился. Кроме того, у участников исследования улучшилась кратковременная память и увеличился ее объем. Сильнее всего уровень интернет-зависимости снизился в группе комплексной терапии по сравнению с двумя другими группами.

Оценка лечения

Оценку лечения интернет-зависимости можно найти у King et al. [14]. На основании метаанализа 16 исследований фармакологического и психологического лечения интернет-зависимости [97] можно предположить, что психологическое и фармакологическое вмешательство весьма эффективно. Оно помогает уменьшить время, проводимое интернет-зависимыми в Сети, снижает уровни тревоги и депрессии.

Выводы

Были определены, по крайней мере, три подтипа интернет-зависимости: зависимость от видеоигр, киберсексуальная зависимость и зависимость от электронной

почты/текстовых сообщений. Для всех вариантов характерны следующие составляющие: 1) чрезмерное использование Интернета, часто — с потерей чувства времени или пренебрежением базовыми потребностями, 2) синдром отмены, включая злость, напряжение и/или депрессию, когда компьютер недоступен, 3) толерантность, включая потребность в лучшем компьютерном оборудовании, большем количестве компьютерных программ, увеличении периода времени, проводимого за компьютером и 4) негативные последствия, включая споры, ложь, проблемы с учебой и отдыхом, социальную изоляцию и утомление.

Не существует единого мнения по поводу того, является ли интернет-зависимость отдельным расстройством или же это компонент других расстройств, таких как тревожное расстройство, депрессия, СДВГ или расстройства привычек и влечений. Появляется все больше доказательств того, что интернет-зависимость можно отнести к поведенческим зависимостям. При этом патофизиологические механизмы данного расстройства пока неясны. Некоторые исследования показали, что интернет-зависимость можно лечить так же, как зависимость от ПАВ. Однако пока рано рекомендовать какие-то определенные методы лечения интернет-зависимости, хотя когнитивно-бихевиоральная терапия и фармакологическое лечение с использованием бупропиона могут оказаться эффективными. Дальнейшие исследования на данную тему помогут узнать больше.

Декларация интересов
Автор сообщает об отсутствии конфликта интересов. Только автор несет ответственность за содержание и написание статьи.

Благодарности
Проф. А. Вайнштейн поддержан грантами от Национального Института Психобиологии в Израиле и израильским управлением по борьбе с наркотиками.

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