

Swiss Psychiatrists' Beliefs and Attitudes About Internet Addiction

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ABSTRACT

Aims To investigate the beliefs and attitudes of Swiss general psychiatrists toward Internet addiction.

Methods Ninety-fourth Swiss psychiatrists filled out a questionnaire at a conference of general psychiatry assessing their views on the concept of Internet addiction, their evaluation methods and treatment procedures they use.

Results A cluster analysis revealed three groups: DISBELIEVERS ($N = 20$) rejected the concept of Internet addiction and its importance, not considering it a real clinical problem and consequently not considering the existence of a specific treatment. The NOSOLOGY BELIEVERS ($N = 66$) and NOSOLOGY/TREATMENT BELIEVERS ($N = 8$) assumed that Internet addiction is a real problem. While NOSOLOGY/TREATMENT BELIEVERS asserted the availability of effective treatment (mainly psychological), NOSOLOGY BELIEVERS were less affirmative regarding treatment.

Conclusion Thought the concept of Internet addiction is largely acknowledged as a clinical reality by Swiss psychiatrists, routine screening and treatment remain uncommon, mainly due to the belief that efficient treatment is still lacking.

Introduction

Studies about Internet addiction have so far mainly concerned its prevalence in the general population, the diagnostic criteria and means of evaluation. As internet addiction represents a rather young diagnosis, it could until now not be introduced in the DSM- and ICD-manuals. On the other hand, its diagnostic criteria [1] and the evaluation methods [2] are still being debated and are subject for further modifications. It may therefore remain difficult to judge its importance in the general population and how the physicians perceive this problem. Recent prevalence studies have shown important variations between countries, studied populations and applied methods [3-5]. Medias also are an important vector of information about Internet addiction, relaying spectacular news and scientific information, which evidence may often be difficult to appreciate or exploit.

In this context, no studies have evaluated how health professionals in general and psychiatrists in particular may think about Internet addiction, and if and how this new nosology has been introduced in their clinical practice. Because no authoritative consensus concerning evaluation and treatment is available until now, clinicians have to make their own opinion about the problem. This leaves an important place to subjectivity in appraising the utility of Internet addiction as

diagnostic entity, or at contrary as a phenomenon overestimated by popular media. The Importance of non-evidence based personal beliefs and attitudes of practitioners has previously been reported on several controversial area of psychiatry such as the links between cannabis use and psychiatric symptoms [6] as well as ADHD diagnosis and treatment [7]. The aim of the present study was thus to investigate beliefs and attitudes of Swiss general psychiatrists toward Internet addiction.

Methods

An ad hoc auto assessment questionnaire was developed containing 10 items (see Table 1) to evaluate the beliefs concerning Internet addiction as a nosological entity, applied methods of evaluation as well as possible treatment. The questionnaire was administered to 98 mental health professionals attending a symposium of general psychiatry. They represented the three linguistic regions of Switzerland (German, French, Italian) and worked in different clinical settings (hospital, private practice, rural or urban environments) making the sample representative of psychiatric general practice in Switzerland.

STATISTICS

All statistics were done with Splus version 6.2. and SPSS 14.0. Data of the survey were analysed by hierarchical cluster analysis, which is an exploratory analysis designed to reveal natural groupings (or clusters) within a data set that would otherwise not be apparent. Analyses were performed using the Manhattan distance metric (the sum of the absolute differences in value for any variable distances used) and a complete linkage method (in which cluster objects are based on the maximum distance between them). Mojena criterion [8] for determining the number of clusters was adopted. Eight variables were included in the hierarchical cluster analysis. Four variables concern participant's beliefs on Internet addiction, namely (1) the consideration of Internet addiction as a clinical problem, (2) the tendency of the media to overestimate Internet addiction problems, (3) the increase of Internet addiction in the future, and (4) the existence of validated treatments for Internet addiction. The four other variables concern attitudes toward Internet addiction, namely (1) the tendency to ask about Internet usage (the general use of Internet), (2) the tendency to screen for Internet addiction (the addictive use of Internet), (3) an estimation of the proportion of their patients who have an Internet addiction, and (4) the management of Internet addiction problems (see Table 1). Pearson's Chi-square tests were performed to compare clusters with regard to the variables, which were included in the cluster analysis. Due to a relatively small number of participants for two clusters, non-parametric Kruskal-Wallis tests were used to determine whether significant differences existed among the four clusters by demographic characteristics.

Results

From the 98 physicians attending the symposium, 94 (95.9%) agreed to participate in the survey. Of the 94 questionnaires, four presented one missing data on one of the items relating to beliefs and attitudes toward Internet Addiction. In addition four participants (4.5%) did not report their gender, seven participants (7.5%) did not report their age, and one participant did not respond to the question related to his Internet access.

Table 1 Participants opinion regarding to Internet addiction

	Total sample (<i>N</i> = 94) (%)	Cluster 1 (<i>N</i> = 8) (%)	Cluster 2 (<i>N</i> = 66) (%)	Cluster 3 (<i>N</i> = 20) (%)
Cyberaddiction is a clinical problem	81.1	87.5	100	20
Cyberaddiction problems are overestimated by media	22.2	62.5	0	75
Cyberaddiction problems will increase in the future	93.3	87.5	100	75
Treatments are existing for cyberaddiction	24.4	62.5	19.7	20
How frequent do you ask your patients about their Internet use				
Never	10.0	0	12.1	10
Rarely	30.0	12.5	28.8	45
Sometimes	34.4	25	33.3	40
Often	18.9	25	21.2	5
Systematically	6.7	37.5	4.5	0
Are you looking for cyberaddiction in your patients				
Never	22.2	0	22.7	35
Rarely	34.4	12.5	33.3	45
Sometimes	28.9	25	31.8	15
Often	7.8	12.5	7.6	5
Systematically	6.7	50	3.0	0
What proportion of your patients suffer from cyberaddiction				
0%	5.6	0	0	25
From 0% to 2%	32.2	50	28.8	30
From 2% to 5%	16.7	12.5	19.7	5
From 5% to 10%	7.8	25	7.6	5
>10%	4.4	12.5	3.0	5
Does not know	33.3	0	40.9	30
How do you manage patients with cyberaddictions				
Psychotherapeutic treatment	32.2	62.5	25.8	35
Pharmacologic treatment	0	0	0	0
Combined (psychotherapeutic, pharmacologic) treatment	34.4	37.5	40.9	10
Transfer to a specialist	6.7	0	12.1	0
Not applicable	26.7	0	21.2	55

The age range was 26-65 years ($M = 45.22$, $SD = 9.32$). Among the 90 participants who indicated their gender, 36 (40%) were women. A total of 71 participants (75.5%) were Swiss Board

certified psychiatrists, four (4.3%) were specialists in other field of practice (psychologists or GP), and 19 (20.2%) were still in psychiatric postgraduate training. Among the participants, 13 (13.8%) were residents, 28 (29.8%) were attendants, 18 (19.1%) were head of a clinical department or medical director and 35 (37.2%) worked in private practice. 64 participants (68.1%) responded to the German version of the questionnaire and 30 (31.9%) to the French version. Seventy-two participants (76.6%) disposed of Internet both at work and at home, while 16 participants (17%) had only Internet at work and five participants (5.3%) only at home. A total of 65 participants (69.1%) remained between 0 and 1 h per day on the Internet, whereas 24 (25.5%) were online between one and 2 hours. Four participants (4.3%) reported not to use the Internet and one participant indicated a daily online-time between two and 3 hours. The 73 participants (77.7%) who indicated having encountered patients suffering from Internet addiction reported that these patients are addict to: chatting/blogs (58.5%), online gaming (50%), cybersex (37.2%), surfing (28.7%), or gambling (27.7%).

PARTICIPANTS' BELIEFS AND ATTITUDES TOWARD INTERNET ADDICTION

The descriptive statistics regarding participants' answers on the survey are given in Table 1. Internet addiction was considered by 81.9% participants as a clinical problem, and only 21.5% of the sample estimated that Internet addiction problems are overestimated by the media. Among the participants, 93.6% were convinced that Internet addiction problems will increase in the future, whereas only 24.2% thought that validated treatments exist. The majority of the participants (34%) sometimes investigate their patients' Internet use but rarely (34.4%) screen for Internet addiction. Although 32.2% of the participants reported a prevalence of 0-2% for Internet addiction in their patients, 33.3% could not answer this question. Finally, participants thought that Internet addiction could be managed with a psychotherapeutic treatment (32.2%) or a combined (psychotherapeutic and pharmacologic) treatment (34.4%). No participant reported that Internet addiction could be treated only by pharmacologic treatment.

COMPARISON OF THE CLUSTERS

According to Mojena criterion [8], a 3-cluster solution was retained. The characteristics of the three resulting groups of participants with regard of their beliefs and attitudes toward Internet addiction (see Table 1) can be summarized as follows.

Cluster 1

The eight participants included in this group could be characterized as believing that Internet addiction is a clinical problem which will increase in the future but that the problem is now overestimated by the media. This group is the one which is the more convinced that validated treatment exist (usually psychotherapeutic treatments were named) for managing Internet addiction problems, and 50% of them systematically look for Internet addiction in their patients. This group was labelled NOSOLOGY/TREATMENT BELIEVERS.

Cluster 2

This cluster constitutes the majority of the sample (66 participants). All participants of this group considered Internet addiction a current clinical problem and expected it to increase in the future. However, only 13 participants of this group (20.6%) believed that validated treatments exist. Although participants included in this cluster are interested in their patients usage of the Internet, a large part of this group (40.9%) does not know the proportion of their patients which suffering

from Internet relating problems. Twenty-seven out of the 66 participants (40.9%) of this cluster treat Internet addiction with a combined approach (psychotherapeutic and pharmacologic). This group was labelled NOSOLOGY BELIEVERS.

Cluster 3

The third cluster comprises 20 participants who were not convinced that Internet addiction is a clinical problem. They thus plausibly disagreed with the fact that validated treatments exist for Internet addiction. However, 75% of them believed that Internet addiction problems will increase in the future. The participants included in this group rarely (45%) or never (35%) look for Internet addiction in their patients. Moreover, five participants of this group (25%) thought that none of their patients have problems with the Internet. This group was labelled DISBELIEVERS.

The three clusters were compared with regard to age, sex, language region of activity, internet access (work and/or home), daily internet use, specialist title, hierarchical position and completed postgraduate training, and no significant differences were found.

Discussion

The goal of this study was the view of Swiss psychiatrists regarding the existence of Internet addiction, its future importance, the availability of validated therapies and their current diagnostic attitudes.

On one hand the present results indicate the awareness of a rising problem in a large proportion of the questioned psychiatrists, more than 80% of them considering Internet addiction as a clinical problem and more than 90% estimating it will become an even more important problem in future. On the other hand many participants were less confident about current therapeutic possibilities.

Previous studies [9] have suggested the lack of validated evaluation tools to be a main obstacle for practitioners to accurately detect Internet addiction. Accordingly, also in our sample more than 40% of the participants never or rarely ask their patients about Internet use.

That the minority of practitioners (24%) only believed in the current existence of validated treatments may, on one side points up the absence of published controlled pharmacological trials (none of the practitioners treat Internet addiction with medication only) and on the other side, the rarity of published psychotherapy studies [10].

The cluster distribution in our study reflects the controversy about the concept of Internet addiction arising, among other factors, from the lack of DSM-IV or CIM-10 criteria [6, 9]. And it also shows the important role of subjective factors, such as personal beliefs, in the way to consider and evaluate Internet addiction.

The results of this study need to be viewed against several limitations. Despite the fact that the sample seemed fairly representative of Swiss psychiatrists, the sample size is small and there could be some biasing factors. The Social desirability bias has to be taken in consideration here because Internet addiction is a new attractive concept and, in the context of a general psychiatric symposium, the desire to show some expertise in the field might be strong. Another bias is the absence of a consensus definition of Internet addiction and even if we proposed one in the questionnaire, the personal understanding of this concept may vary among the practitioners.

In conclusion, this is to our knowledge the first survey investigating mental health professional's

attitudes concerning Internet addiction. While the survey confirmed increasing awareness of the problem, the rather reserved attitude of many psychiatrists concerning screening, diagnosis and treatment emphasizes the need of further discussion concerning the clinical significance of this rather no diagnostic entity and regarding the therapeutic possibilities.

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References

1. Beard KW, Wolf EM: *Modification in the proposed diagnostic criteria for Internet addiction. Cyberpsychology & Behavior* 4(3):377-383, 2001. doi:10.1089/109493101300210286
2. Beard KW: *Internet addiction: A review of current assessment techniques and potential assessment questions. Cyberpsychology & Behavior* 8(1):7-14, 2005. doi:10.1089/cpb.2005.8.7
3. Cao F, Su L, Liu T, Gao X: *The relationship between impulsivity and Internet addiction in a sample of Chinese adolescents. European Psychiatry* 22(7):466-471, 2007. doi:10.1016/j.eurpsy.2007.05.004
4. Bayraktar F, Gun Z: *Incidence and correlates of Internet usage among adolescents in North Cyprus. Cyberpsychology & Behavior* 10(2):191-197, 2007. doi:10.1089/cpb.2006.9969
5. Ferraro G, Caci B, D'Amico A, Di Blasi M: *Internet addiction disorder: An Italian study. Cyberpsychology & Behavior* 10(2):170-175, 2007. doi:10.1089/cpb.2006.9972
6. Zullino DF, Kurt H, Broers B, Drexler A, Graf HP, Khazaal Y, et al.: *Swiss psychiatrists beliefs and attitudes about cannabis risks in psychiatric patients: Ideologically determined or evidence-based? Community Mental Health Journal* 44(2):86-96, 2008. doi:10.1007/s10597-007-9103-x
7. Rafalovich A: *Exploring clinician uncertainty in the diagnosis and treatment of attention deficit hyperactivity disorder. Sociology of Health & Illness* 27(3):305-323, 2005. doi:10.1111/j.1467-9566.2005.00444.x
8. Mojena R: *Hierarchical grouping methods and stopping rules: An evaluation. Computer Journal* 20:359-363, 1977. doi:10.1093/comjnl/20.4.359
9. Warden NP, Ogloff J: *Internet addiction. Psychiatry Psychology and Law* 11:280-295, 2004
10. Young KS: *Cognitive behavior therapy with Internet addicts: Treatment outcomes and implications. Cyberpsychology & Behavior* 10(5):671-679, 2007. doi:10.1089/cpb.2007.9971