

Inclusion of gaming disorder criteria in ICD-11: A clinical perspective in favor

Commentary on: Scholars' open debate paper on the World Health Organization ICD-11 Gaming Disorder proposal (Aarseth et al.)

SUSUMU HIGUCHI*, HIDEKI NAKAYAMA, SATOKO MIHARA, MASAKI MAEZONO, TAKASHI KITAYUGUCHI and TAKUMA HASHIMOTO

Treatment of Internet Addiction and Research Section, National Hospital Organization Kurihama Medical and Addiction Center, Yokosuka, Japan

(Received: May 26, 2017; revised manuscript received: July 16, 2017; accepted: July 31, 2017)

Data from a specialist treatment facility for Internet addiction (IA) in Japan showed that (a) the vast majority of treatment seekers are addicted to online games, (b) their symptoms are often quite severe, and (c) there is a significant demand for IA treatment. In addition, systemic obstacles to the delivery of medical services in Japan exist due to the exclusion of IA criteria from ICD-10. Consequently, the inclusion of GD criteria in ICD-11 will almost certainly increase the capacity and quality of treatment through advances in research and possible changes in national medical systems to meet treatment demand.

Keywords: gaming disorder, ICD-11, treatment seekers, clinical symptoms, treatment demand

The latest beta draft version of the 11th revision of the International Classification of Diseases (ICD-11), which was released in October 2016, included the definition of a new disorder, “gaming disorder” (GD) (World Health Organization, 2016). According to this definition, GD is characterized by (a) impaired control over gaming, (b) increasing priority given to gaming over other activities to the extent that gaming takes precedence over other interests and activities, and (c) continuation of gaming despite the occurrence of negative consequences. It also stated that “the behavior pattern is of sufficient severity to cause significant impairment in personal, family, social, educational, occupational or other important areas of functioning.”

In response to the change contained in the draft version of ICD-11, a group of scholars recently published a commentary in which they criticized the inclusion of GD (Aarseth et al., 2016). They raised several points and stated that, “given the immaturity of the existing evidence base, it will negatively impact the lives of millions of healthy video gamers while being unlikely to provide valid identification of true problem cases,” and suggested the removal of the proposed category of GD from ICD-11. Responses to this commentary, prepared by a group of scholars, most of whom have been involved in the development of the definition and diagnostic guidelines of GD, have been or will be published soon. Among these, Saunders et al. (in press) have published a short but comprehensive review of GD in which they addressed several comments, including those related to the low quality of the research based on GD and the reliance on criteria applied to substance use and gambling, in defining GD. Billieux et al. (in press) argued

that the inclusion of functional impairment as a core criterion in the definition of GD is important and an advancement in the field of disordered gaming, and can serve to prevent overdiagnosis and the generation of moral panic, which Aarseth et al. (2016) have claimed. In this short commentary, we argue for the inclusion of GD criteria in ICD-11 based on our clinical experience.

Our center, the National Hospital Organization Kurihama Medical and Addiction Center, in Yokosuka, Japan, opened a specialist clinic for the treatment of what has been described as “Internet addiction” (IA), the first of its kind in Japan, in 2011. Since then the number of patients who have visited our center for the treatment of IA has steadily increased. According to the statistics compiled by our center, approximately 90% of these patients play online games excessively and suffer health and social consequences as a result. In 2016, the center had 252 new patients. However, only 153 of these patients actually showed up at our center for treatment. In the remaining 99 (39.3%) cases, only the parents and/or other family members met with us. Almost every parent showed a desire to bring their children to our center for the treatment of IA, but they refused to come, despite the fact that their IA symptoms were often severe, especially in terms of health and social impact.

* Corresponding author: Susumu Higuchi, MD, PhD; National Hospital Organization Kurihama Medical and Addiction Center, 5-3-1 Nobi, Yokosuka, Kanagawa 239-0841, Japan; Phone: +81 46 848 1550; Fax: +81 46 849 7743; E-mail: h-susumu@db3.so-net.ne.jp

In some cases, parents were so fearful of provoking a violent physical reaction from their children that they felt unable to try persuading them to seek treatment for their condition. As detailed in a research report that we submitted to the Japanese government, our center examined 108 patients with IA between 2012 and 2013 (Higuchi, 2014). Among those patients, a day–night reversal was found in 41% of cases, verbal/physical violence in 32%, social withdrawal and shutdown in 36%, and money-related problems in 24% of cases.

The waiting period for treatment at our center is lengthy. In an effort to manage the situation, we take reservations for patients' initial medical examination every 4 months. However, the available reservation spaces are all usually taken within 1–2 days. This strongly suggests that there is a significant demand for IA treatment, which the Japanese medical system is currently unable to meet. So far, costs relating to IA patients have been set at a low level relative to those for patients with other psychiatric disorders, because the diagnostic guidelines for IA or GD are not included in 10th revision of the International Classification of Diseases (ICD-10). The Japanese medical system is aligned with the ICD and consequently the government has judged that IA is not an officially approved disorder so far. Moreover, examining patients with IA tends to take longer time than patients with other psychiatric disorders, because a substantial percentage of IA patients are adolescents with relatively high comorbid pathologies and we also often need to deal with complaints and psychological distress among family members, due to the patients' GD. These factors have acted as obstacles to increasing the number of doctors and treatment facilities that can provide specialist treatment for IA, notwithstanding the pressing need to meet this demand.

Establishing a definition of GD is also important to promote research. Diagnostic guidelines of GD will provide a clear basis on which research into a range of related areas can be developed. The *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DSM-5) already includes the diagnostic criteria of Internet gaming disorder (IGD) (American Psychiatric Association, 2013). Although these are located in Section III and their status preliminary, they have nevertheless attracted many critical comments on their content and the appropriate cut-off points (Griffiths et al., 2016), and their inclusion has undoubtedly stimulated research on IGD and related areas. The history of IA, GD, and IGD is still brief and therefore the accumulation of research evidence is in the early stages, compared with that of substance dependence and other major psychiatric disorders. However, research into the prevention and control of GD is pressing, due to the magnitude of problems associated with the disorder that has been shown to exist in many parts of the world (Mihara & Higuchi, 2017). In Japan, as mentioned above, the national medical system hews to ICD. With the GD criteria not being included in ICD-10, access to governmental research grants on topics related to IA and GD is limited. Were the definition and diagnostic guidelines of GD to be incorporated into ICD-11 it would improve access to research grants in Japan, which will undoubtedly increase both the quality and quantity of research into the condition.

Aarseth et al. (2016) stated in their commentary that “the healthy majority of gamers will be affected by stigma and perhaps even changes in policy” as one of the reasons for suggesting the removal of the GD definition from the draft version of ICD-11. However, in Japan, the term “IA or Internet dependence” has widely been used long before the discussion on IGD or GD began, but with a poor definition of the concept and symptomatology. This situation appears to be reflected in many other countries (based on personal communication with Dr. Poznyak of WHO), which means that any stigma will not be a new phenomenon arising from the inclusion of the GD definition in the draft of ICD-11. Furthermore, up to this point, we have had no other choice but to use IA and/or the catch-all diagnostic entity “other habit and impulse control disorder (F63.8)” in ICD-10 when making a diagnosis. The introduction of GD criteria, drawing a clear boundary between normality and the disorder, should actually avoid overdiagnosis and improve rather than worsen the situation related to the stigmatizing behavior.

Finally and most importantly, we ask readers to consider those adolescents and young people with GD who are in need of treatment, those being hidden in the shadow of healthy gamers. We need to address the current situation and simply cannot wait until GD criteria are included in 12th revision of the International Classification of Diseases (ICD-12), which may take 20 years or more. Inclusion of the definition and diagnostic guidelines of the disorder in ICD-11 will almost certainly increase the capacity and quality of treatment through advances in research and possible changes in national medical systems, both here in Japan and internationally.

Funding sources: This work was conducted without any financial support.

Authors' contribution: All authors contributed to collecting information to prepare this manuscript. SH wrote the first draft of the manuscript, and all authors contributed to and approved the final manuscript.

Conflict of interest: The authors do not have financial relationships with any organizations that might have an interest in the submitted work. They have no other relationships or activities that could influence or appear to have influenced the submitted work.

REFERENCES

- Aarseth, E., Bean, A. M., Boonen, H., Carras, M. C., Coulson, M., Das, D., Deleuze, J., Dunkels, E., Edman, J., Ferguson, C. J., Haagsma, M. C., Bergmark, K. H., Hussain, Z., Jansz, J., Kardefelt-Winther, D., Kutner, L., Markey, P., Nielsen, R. K. L., Prause, N., Przybylski, A., Quandt, T., Schimmenti, A., Starcevic, V., Stutman, G., Van Looy, J., & Van Rooij, A. J. (2016). Scholars' open debate paper on the World Health Organization ICD 11 Gaming Disorder proposal. *Journal of*

- Behavioral Addictions*. Advance online publication. doi:10.1556/2006.5.2016.008
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Association.
- Billieux, J., King, D., Higuchi, S., Achab, S., Bowden-Jones, H., Hao, W., Long, J., Lee, H.-K., Potenza, M. N., Saunders, J. B., & Poznyak, V. (in press). Functional impairment matters in the screening and diagnosis of gaming disorder. Commentary on: Scholars' open debate paper on the World Health Organization ICD-11 Gaming Disorder proposal (Aarseth et al.). *Journal of Behavioral Addictions*.
- Griffiths, M. D., van Rooij, A. D., Kardefelt-Winther, D., Starcevic, V., Király, O., Pallesen, S., Müller, K., Dreier, M., Carras, M., Prause, N., King, D. L., Aboujaoude, E., Kuss, D. J., Pontes, H. M., Lopez Fernandez, O., Nagygyorgy, K., Achab, S., Billieux, J., Quandt, T., Carbonell, X., Ferguson, C. J., Hoff, R. A., Derevensky, J., Haagsma, M. C., Delfabbro, P., Coulson, M., Hussain, Z., & Demetrovics, Z. (2016). Working towards an international consensus on criteria for assessing Internet gaming disorder: A critical commentary on Petry et al. (2014). *Addiction*, 111(1), 167–175. doi:10.1111/add.13057
- Higuchi, S. (2014). A study on the elucidation of current status and the development of treatment methods for Internet addiction. *Research Report for Fiscal 2013 on the Elucidation of Current Status of Various Dependence and the Development and Promotion of Treatment Programs* (in Japanese). Kitasato University, Sagamihara.
- Mihara, S., & Higuchi, S. (2017). Cross-sectional and longitudinal epidemiological studies of Internet gaming disorder: A systematic review of the literature. *Psychiatry and Clinical Neuroscience*, 71, 425–444. doi:10.1111/pcn.12532
- Saunders, J. B., Hao, W., Long, J., King, D., Mann, K., Fauth-Buhler, M., Rumpf, H.-J., Bowden-Jones, H., Movaghar, A., Chung, T., Chan, E., Bahar, N., Achab, S., Lee, H.-K., Potenza, M., Petry, N., Spritzer, D., Ambekar, A., Billieux, J., Derevensky, J., Griffiths, M., Pontes, H., Kuss, D., Higuchi, S., Mihara, S., Assangangkornchai, S., Sharma, M., El Kashef, A., Ip, P., Farrell, M., Scafato, E., Carragher, N., & Poznyak, V. (in press). Gaming disorder: Its delineation as an important condition for diagnosis, management and prevention. *Journal of Behavioral Addictions*.
- World Health Organization. (2016). *Print Versions for the ICD-11 Beta Draft (Mortality and Morbidity Statistics)*. Retrieved from <http://apps.who.int/classifications/icd11/browse/l-m/en/Printables> (May 23, 2017).