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Pornography Addiction in a University Undergraduate: a Case Report

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Abstract: Controversies exist as to the existence of pornographic addiction and how it should be defined. Currently, the proposed ICD-11 classification classifies pornographic addiction under the impulse control disorder section as there is not enough evidence of its similarity with chemical addictions and behavioral addiction. In Nigeria, there is scant literature on pornographic addiction. However, with the steady rise in internet penetration in the nation, pornographic use is increasing and the country ranks high among those that search for pornography on the internet. Therefore, problematic pornographic use and pornography addiction may represent a hidden disorder with an unknown burden and magnitude. This paper presents a case report of a young male with pornography addiction with comorbid psychiatric disorder presenting to a tertiary hospital in Nigeria.

Key words: Pornography · Addiction · Nigeria · Psychiatric Comorbidity · University Undergraduate

INTRODUCTION

Pornography use has exploded since the advent of the internet [1, 2]. About 12% of the content on the internet is comprised of pornographic materials and about a quarter of all internet searches is related to pornography [3, 4]. In the United States, about 70% males and 40% females reported viewing pornographic content; similar proportion reported pornographic use in Australia [5, 6]. The increasing use of pornography has raised concerns about the possibility of problematic pornographic use [1, 2, 7, 8]. The ease of access of internet pornography combined with anonymitiy and availability that the internet provides increase the chances of developing problematic use of internet pornography [7].

Traditionally, the term 'Addiction' has been restricted to maladaptive behaviors that involve psychoactive substances use, but recent advances in neuroscience in the past decade have led to an expansion of the terminology to include 'behavioral addiction' such as pathologic gambling and internet use disorder [9]. These behaviors have similar mechanism: activating neuronal circuits involved in reward, motivation and memory [10]. The American Society of Addiction Medicine defines addiction as a "primary, chronic disease of brain reward, motivation, memory and related circuitry. Dysfunctionality of these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors" [11].

Controversies exist in the scientific community about the existence and definition of pornography addiction [12]. Current classification systems, DSM-V and ICD-10 do not recognize it as a distinct disorder. However, the proposed ICD-11 contains a category, Compulsive Sexual Behavioral Disorder (CSBD), under the Impulse Control Disorder section [13]. Excessive pornography use is a prominent feature of CSBD and it has been suggested that pornography addiction can be created as a subtype of CSBD [14, 15].

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Currently, there are no uniform operationalized criteria for pornography addiction and several studies have utilized several operationalized criteria [12]. Majority of this criteria follows the criteria for substance use disorders: compulsive use, with a loss of control, neglecting other pleasurable activity and social and functional detriment.

In Nigeria, there is little to no data on the prevalence of pornography use. Web analytic data show that pornography and pornographic sites are among the top yearly searches [16, 17]. There are very few studies on pornography use or problematic pornographic use. The few studies available have focused on the effect of pornography on risky sexual behaviors. To the best of the authors' knowledge, no study have reported on pornography addiction or the psychological sequelae of pornography use in Nigeria.

It is against this background that we present a case report of a young male undergraduate presenting to an outpatient psychiatry clinic in Nigeria with self-perceived pornography addiction.

Case Presentation: Mr A is a 25-year old single, male, student who presented to the outpatient psychiatric clinic of the University of Calabar Teaching Hospital accompanied by his mother with chief complaints of excessive viewing of internet pornographic contents and poor sleep. About a year prior to presentation, his older cousin introduced him to internet pornography, mostly short video clips lasting between two and five minutes. Within a month of watching, Mr A had increased the number of hours spent watching pornographic videos from less than an hour a day to four to six hours daily. He also took up watching longer clips. These sessions were accompanied by masturbation. The frequency of his masturbation increased from one or two times daily to six to nine time daily. Mr A reported watching mostly videos of heterosexual sex. Over the next few months, Mr A reported an uncontrollable urge to watch pornographic videos and he reported staying up all night to watch them. He also began to watch them to the detriment of other activities, including watching them during lectures and neglecting studying or socializing. As a result of his habit, his social relationships began to deteriorate as he preferred watching pornography to socializing with friends and family; his academic performance also declined considerably. Watching pornography was associated with feelings of shame and guilt afterwards. He is a Christian and considers watching pornography to be immoral.

About eight months prior to presentation, he began to experience unusual sadness with weepy spells that occurred for most parts of the day and most days of the week. This was accompanied by feelings of excessive guilt, reduction in energy level, loss of interest in pleasurable activity, poor concentration and weight loss. This was unrelated to his pornography use and described as different and more severe. He also reported recurrent suicidal thoughts but with no active suicidal intent or planning. He believes suicide to be a sure way to damnation and this coupled with thoughts of what his untimely death would do to his family served as deterrent from acting on his suicidal thoughts. Four days prior to presentation, he began to experience poor sleep, described as inability to fall asleep even though he felt tired, with multiple awakenings over the course of the night. His sleep before was an average of six to eight hours a night, this had reduced to about four hours with a marked reduction in the refreshing nature of his sleep. He wakes up feeling unrested and more tired than when he went to bed.

He has not had any prior mental illness and past medical and surgical history was not contributory; he has no known drug allegies. He denied alcohol use nor other psychoactive substances. He attained puberty at twelve years and stated his sexual orientation as heterosexual. He has not had any long lasting relationship but reported several casual relationships which were strictly physical in nature. He did not report any history of sexual abuse; his first sexual encounter was at sixteen years and was consensual.

His mental state examination at presentation was significant for psychomotor retardation with hesitant, low tone and low volume speech, depressed mood and affect, impaired attention and concentration (tested with serial sevens) and full insight. There were no demonstrable thought and perceptual abnormalities. Physical examination and comprehensive metabolic work up were normal.

A diagnosis of pornography addiction with comorbid major depressive disorder was made. He was started on fluoxetine 20 mg daily and diazepam 10mg at bedtime prescribed as a short course- discontinued after a week. In addition to medications, he was also referred for cognitive behavioral therapy and had weekly sessions for three months. Within two weeks of commencement of medications, he reported a marked improvement in his mood and a reduction in the frequency of watching pornography. He was followed up for six months and his improvement was sustained. He was able to return to

premorbid level of functioning with improvement in social interactions and academic performance. He was able to stop watching pornography and his episodes of masturbation decreased to once or twice a day. He was lost to follow up after six months.

DISCUSSION

While the majority of pornography users do not have problems, about 1–3% report being addicted to pornography [6, 7, 18]. Self-reported pornography addiction is becoming an increasing reason for seeking treatment at outpatient clinics in many parts of the world [19-21]. Though pornography use is prevalent in Nigeria, sex is not an openly discussed topic even in clinical encounters, therefore, it is highly unlikely that people with pornography addiction will seek orthodox treatment. They are more likely to seek spiritual therapy in the form of prayers and deliverance. To the best of the authors' knowledge, this is the first report of pornography addiction in Nigeria.

Youths, especially undergraduates, are the largest consumers of pornography in Nigeria, with about a third of Nigerian undergraduates reporting pornography use [1, 2]. This is lower than the prevalence reported in other parts of the world [22, 23]. However, these figuresare most likely a gross underestimate as these studies are not nationally representative and are limited in sample size. The patient in this case report belongs to the at-risk population for pornography use and problematic pornographic use.

Pornography use has been associated with negative consequences, including emotional and behavioral problems and decline in social and occupational functioning [3, 24, 25]. Individuals who develop problematic pornographic use and pornography addiction may have comorbid psychiatric disorders such as mood disorders, anxiety disorders, paraphilias and personality disorders [26, 27]. Also, certain personality traits and attributes may be common among them such as novelty seeking, alexithymia and stress vulnerability [28, 29]. In addition, those with poor social skills, trauma and history of sexual abuse may turn to the internet and pornography as an escape from reality especially as more of these pornographic websites are becoming more interactive and permits interaction between users while maintaining anonymity [30]. This patient had comorbid major depressive disorder with recurrent suicidal thoughts which developed following the initiation of pornography use. He did not have any history of trauma, abuse, or any personality trait that predisposed him to developing pornography addiction.

Pornography addiction, like other behavioral addictions such as gambling disorder, is thought to share similar neural circuits with chemical addictions [9, 10]. Studies have shown that people with pornographic addictions have increased activation in the amygdala, nucleus accumbens and ventral striatum in response to sexually explicit materials, the same areas that are activated in relation to craving states and drug-cue reactivity in patients with chemical addictions [31, 32]. These neurobiological findings have led to arguing for pornography addictions to be categorized as an addictive disorder [9, 32-34]. However, there are others who argue for classification within the group of Impulse Control Disorders [35-37]. The patient in this case report has symptoms that fit the criteria of an addiction as proposed by Stark *et al*. [34] with craving, loss of control, neglect of other pleasurable interests and social and occupational decline.

Because of lack of consensus on definition and classification, research in this area has been limited [12, 29]. In a review of the literature, Duffy *et al*. [12] noted a wide range of terms and definitions utilized in the extant literature and noted that these different terms may refer to different disorders with different pathogenic mechanisms. Nevertheless, there seems to be a consensus that problematic pornographic use consists of compulsive pornographic use with attendant negative consequences [38].

There are no guidelines on treatment for pornographic addiction. Studies have reported use of naltrexone [39] and paroxetine [40]. This patient responded well to use of low dose fluoxetine (20mg) similar to the study by Gola *et al*. [40]. It is unclear whether the improvement in pornography was related to the effect of SSRIs in improving depression symptoms. However, given that the patient's pornography use preceded the onset of depressive symptoms, it is unlikely that the beneficial effect of fluoxetine on pornography use is due to improvement in depression symptoms alone. Pornography addiction may result from increased reactivity in the ventral striatum that mediates rewards leading to increased impulsivity and/or increased threat reactivity in theamygdala leading to increased anxiety [40]. Paroxetine has been shown to reduce amygdala volume and consequently anxiety and this may be how it works in reducing pornographic use in patients with

pornography addiction [40, 41]. It is possible that all SSRIs have the same effects on the amygdala and this may explain the patient's response to fluoxetine. However, a previous case report did not report sustained improvement with sertraline [42].

Moral incongruence has been suggested as the mediator of distress for those who self-report pornography addiction [18, 38]. Those who have moral disapproval of pornography whilst consuming pornographic material may develop cognitive dissonance in relation to their continued pornography use which causes considerable distress that leads to a self-perceived pornography addiction and seeking treament [38]. It has been suggested that the emotional distress to pornography use may be mediated by moral incongruence and not by the pornography use itself [38, 43, 44]. The resulting depression that occurred following initiation of pornography use in this patient may be accounted for in part by moral incongruence giving his strong religious background and his belief that pornography is immoral. It is possible to engage in pornography while still maintaining a strong moral disapproval of pornography use, as seen in this patient [45].

There is no data on the long term prognosis of patients with pornographic addiction. The available studies [40, 42, 46, 47] report short term improvement with combination of medication and cognitive behavioral therapy. If indeed pornography addiction is similar in neurobiology to chemical and other behavioral addictions, then, it is likely that the course will be chronic and relapsing [42].

This study highights the need for cliniciansto be aware of the possibility of compulsive pornography use and pornography addiction especially when dealing with young patients with psychological, emotional, or behavioral problems. There is a need for more studies to identify the pattern and prevalence of problematic pornography use and pornographic addiction in Nigeria. Future studies will require the development of a valid instrument that operationalizes the diagnostic criteria set out in the ICD-11 and that is culturally sensitive. Potential challenges to accurate measurement of true prevalence of pornography addsiction in Nigeria will be reporting bias due to the sensitive nature of the topic and a desire to conform to societal ideals (social desirability bias). There is also a need for established guidelines on the management of patients with pornographic addiction with or without a comorbid psychiatric disorder.

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