Introduction

The clinical phenomenon under study is being described in many different ways:
- Hypersexual (Kafka, 2010; Kaplan & Krueger, 2010) or Hypersexual Disorder (Krueger & Kaplan, 2001)
- Sexual Impulsivity (Reid, Berlin & Kingston, 2015) or Out-of-Control Sexual Behavior (Bancroft & Vukadinovic, 2004; Bancroft, 2008)
- Sexual Compulsion (Quaidland, 1985; Barth & Kinder, 1987; Coleman, 1990; Holland, 1993; Kaplan, 1995)
- Sexual/Behavioral Addiction/Dependency (Carnes, 1983; Goodman, 1993, 2001; Mick & Hollander, 2006; Giugliano, 2008; Voon et al., 2014)

Choosing the most accurate term to describe this condition still remains a highly controversial problem.

Method

Review of articles published in PsyCinfo, PsycArticles, PsycCritiques and Medline databases with the following keywords: Hypersexuality, Hypersexual, Sexual dependence, Sexual impulsivity, Impulsive sex, Sexual compulsivity, Compulsive sex, Sexual addiction, and Sex addict.

Results

Currently it has been postulated that the Impulsivity and Compulsivity, rather than polar opposites, may represent orthogonal factors that contribute in varying degrees to the Obsessive-Compulsive Spectrum Disorders (OCSDs), including Sexual Compulsions, which are characterized by both qualities (Hollander, Poskar & Gerard, 2012).

Impulsive acts (as addiction, gambling or binge eating) can eventually become compulsive due to neuroplastic changes that engage the dorsal habit system and theoretically causes impulses in the ventral loop to migrate to the dorsal loop (Stahl, 2013). Probably, this could also apply to the characteristic impulsive-compulsive acts of the ‘Hypersexual Disorders’.

Voon et al., (2014) found that subjects who have Compulsive Sexual Behavior (in red color) had greater activity in three particular brain regions (the Ventral striatum, Dorsal Anterior cingulate and Amygdala) that healthy individuals (in black) in response to explicit sexual images, but a lesser sexual arousal. These findings supported that the brains of sexual compulsive people respond in exactly the same regions, and with a similar pattern, as the brains of drug addicts (e.g., cocaine).

The various terms used describe specific aspects, at different levels of analysis, of the same clinical phenomenon, which could be integrated according to the degree of inclusivity of each of them:
- Sexual Addiction: uncontrollable and recurrent sexual behavior maintained despite harmful consequences.
- Hypersexuality: “excessive” (statistical) sexual behavior that may be normal (e.g., promiscuity) or abnormal (due to a medical or psychiatric condition).
- Sexual Impulsivity: inability to stop initiating sexual responses (acting out).
- Sexual compulsivity: inability to terminate ongoing sex responses (acting in).

Discussion

Each proposed term puts forward a different theoretical approach (excessive sex drive, impulse-control deficit, obsessive-compulsive spectrum disorder or addiction model), although they are not clearly differentiated from each other and basically diverge with regard to what they consider to be the key aspect of the clinical syndrome under study.

However, there is a certain degree of overlap and/ or complementary relationships among some of the terms and models proposed, which increases the complexity and confusion. Moreover, each approach has a different level of theoretical and empirical foundation, which possibly favors one over the others (the addiction model) (Alonso-Fernandez, 2003; Duarte & Thibault, 2010; Echberia, 2012; Giugliano, 2013; Karla, Wey, Weinstein, et al., 2014; Kor, Fogel, Reid & Potenza, 2013; Ragan & Martin, 2009). The main argument is that the sexual behavior pattern considered satisfy the two basic necessary and sufficient criteria for the diagnosis of an addictive disorder: uncontrollable and recurrent behavior despite harmful consequences (Goodman, 1993, 2001). Furthermore, this pattern of sexual behavior reproduces the progression, characterizing the addiction process (Carnes, 1983/2001, 1991; Gold & Helfner, 1998; Goodman, 1993). Although there is little empirical evidence on the neurobiology of sexual addictive process as yet, a theoretical model has been proposed (Goodman, 2008).

Multiple additions have also been found in sexual addicts, who often show comorbidity with other types of addictive and psychiatric disorders (Carnes, 1991, 2001; Chichiana, 2013, 2014; Farel, Fernandez-Aranda, Granero, et al., 2015; Kaplan & Krueger, 2010; Rosenberg, Carnes & O’Connor, 2014).

Conclusion

Despite the diversity of terms and approaches examined the term “Sexual Addiction” and its study from the behavioral addiction approach (psychological dependency) has received more clinical and research attention than others. This would endorse its inclusion in the “Substance-related and Addictive Disorders” diagnostic category in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (like “Gambling Disorder”) and in the respective diagnostic group of the eleventh edition of the International Classification of Diseases (ICD-11), currently under review. However, more research and empirical evidence are needed to achieve the required consensus.
REFERENCES