

Sex and Sexual Addiction in the United States of America: An Overview of Its Epidemiology, Management and Prevention Strategies

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Abstract

Sexual Addiction (SA) is a global public health challenge. This review was done on sex and sexual addiction in the United States of America (USA) looking at the overview of its epidemiology, management and prevention strategies. The term SA first emerged in the USA. Sex or sexual intercourse is principally the insertion and thrusting of the penis, usually when erect, into the vagina for sexual pleasure, reproduction or both. An addiction to sex is an uncontrollable and continuous sexual behaviour irrespective of its consequences and negative impacts. There are several types of sexual addiction which include; fantasy sex, seductive role sex, voyeuristic sex, exhibitionistic sex, sadomasochism and exploitative sex. The prevalence of SA among the general population in the United States is 3-6% and high prevalence rates have been reported among population of hypersexual disorders and sex offenders. SA has contributed to the spread of sexually transmitted diseases such as HIV/AIDS, gonorrhoea, and syphilis etc. The aetiology of SA include; biochemical imbalances, over secretion of sex hormones, family lifestyles, abuse, and impaired neurochemistry and sexual development. Treatment of a sexual addict starts with the actual identification/diagnosis of the problem before self-help organizations, Cognitive Behavioural Therapy (CBT), pharmacological treatment, couple therapy and dialectical behavioural therapy follows. Since SA is a global health menace in our society, more surveys on the epidemiology of the problem should be done by global public health experts.

Keywords: Sex; Sexual addiction; Epidemiology; Management; Prevention; USA

Introduction

Sex (sexual intercourse) is principally any form of sexual activity. It is more or less, the insertion and thrusting of the penis, usually when erect, into the vagina for sexual pleasure and satisfaction, reproduction or both [1,2]. Sexual intercourse is of different forms which include; vaginal intercourse or vaginal sex, anal sex (penetration of the anus by the penis), oral sex (penetration of the mouth by the penis or oral penetration of the female genitalia), fingering (sexual penetration by the fingers) and penetration by use of dildo (especially a strap-on dildo) [3,4]. Literature suggests that the definition of a sexual act varies considerably across culture and even among individuals belonging to the same culture.

Sexual Addiction (SA) is defined as a compulsive, uncontrollable and continuous sexual behaviour irrespective of its adverse effects or consequences [5]. Nordqvist, [6] stated that SA is characterized by an abnormal, intense and obsessive drive for sex and sexual activities. Sex addiction is also known as Compulsive Sexual Behaviour Disorder (CSBD) [7,8]. In addition, sex addicts have uncontrollable urges for sex; sexual activity dominates their minds and thoughts, thereby, affecting and distorting other usual activities [6]. However, having a long-term affair, non-compulsive sexual experimentation after divorce, or having multiple sex partners does not indicate sex addiction [9]. Carnes [10] and Schneider [11] opined that sex addicts only have brief or minimal control of their behaviours, and encounter difficulties in

regaining balance of their life prior to treatment. Sex addiction also exists as nymphomania (excessive sexual desire by a female) and satyriasis (abnormal sexual desire in a male) in women and men respectively [12,13].

Types of sex addiction

Several forms of SA exists, Carnes [10] enumerated the following as types of sex addiction:

Fantasy sex (FS): This involves an obsessive preoccupation with sexual fantasies, rather than the reality of genuine sexual feeling, sexual behaviours, and sexual relationship.

Seductive role sex (SRS): It is an act of persuasion, charming and manipulation of others into sexual acts. SRS addicts treat their proposed partners as conquests rather than equals, thereby making them feel powerful.

Voyeuristic sex (VS): VS includes watching others engage in sexual activity or having sex. The addict is aroused by pornography, sexting (internet sex) on the computer, peep shows, going to sex clubs to watch live sexual activities or secretly peeping at people having sex. Sex voyeurs are synonymous and associated with excessive masturbation [14].

Exhibitionistic Sex (ES): Sex exhibitionists derive pleasure and excitement from the reaction and not from the actual sexual activity with partners. ES involves engaging in sexual activities in places where others can see, incessant posing and participation in porn and exposing private parts in public.

Sadomasochism: It is a form of sex addiction whereby the addict gives or receives pain. This can also be seen as paraphilic disorders. It is usually characterized by the association of pain with sexual satisfaction and pleasure by participants who give their informed consent.

Exploitative sex: This type of sex addiction involves the violation of the human rights of the victim, as well as the absence of genuine intimacy or love. The main types of exploitative sex addiction are paedophilia and rape. This might not be that all exploitative sex offenders suffer from sex addiction; there might be other reasons for engagement in such act.

Other forms of sex addiction include paying for sex, anonymous sex, trading for sex and intrusive sex [15].

The addiction cycle

Sexual addiction occurs in four main stages known as the addiction cycle that go on repeatedly [10]. The first stage termed “*preoccupation*” occurs when the addict’s mind is taken over by thoughts of sex and sexual activities. The Sex addict become obsessed with yearns for sexual stimulation. The next stage is called the “*ritualization stage*”. Carnes [10] described ritualization as customary and routine actions of the addict that results in the sexual behaviour. Also, the addict’s preoccupation is enhanced in this stage, this leads to incessant arousal and excitement. The third stage termed “*compulsive sexual behaviour*” is the end goal of preoccupation and ritualization [16]. In this stage, the addict uncontrollably carries out the actual, intended and exact sexual activity. The last stage of the addiction cycle according to Carnes [10] is called “*despair*”. The addict feels hopeless because of the behaviour, and is powerless to curb or stop it.

History of sexual addiction

The term Sexual Addiction (SA) firstly emerged in the United States of America (USA) when vast members of alcohol anonymous attempted to, and applied the principles of the twelve- steps towards recovery from compulsive sexual behaviours, similar to symptoms observed for alcohol addiction in the 1970s [12]. Irvine [17] reported that SA became a concept when it appeared independently and simultaneously in different cities in the early 1970s. Furthermore, strides were made on SA when animal research examination of rats with Chemical Stimulation of the Brain (CSB) led to the discovery that similar molecular mechanisms in the brain that mediates alcohol addiction enhanced this behaviour [16]. This has led to the 12 steps recovery groups for alcohol dependence to minimise and curtailed sexual uncontrollability by individuals who viewed SA as a treatable, dangerous and manageable condition similar to alcohol and drug abuse [10]. Irvine [17] reported that a musician, in Boston, established the first 12 step group on SA called “*Sex and love addicts anonymous*” in 1977.

In 1983, Patrick Carnes, a psychologist, published an article titled “*The Sexual Addiction*”, this led to widespread professional interest in the concept of Sex addiction [18]. He also founded the first in-patient programme geared towards treating sex addicts at Golden Valley Health Centre’s Sexual Compulsivity Unit in Minneapolis [19]. SA as a concept gained further legitimization after it was included as a form of psychosexual disorder in the Diagnostic and Statistical Manual adopted and used by mental health professionals [17]. In addition, theoretical development in the field of addiction further supported the growing professional interest in SA. Posits of the addiction theory developed in the late 1970s suggested that “*behaviours or anything*

through the right or wrong combination of pleasure and pain” can induce an addiction; this led to the expansion of aetiology of addiction beyond substances [20]. By the late 1980s, SA claims gained extensive media coverage and support, television shows such as Maria Shriver’s featured programs on sex addiction [19].

Epidemiology of Sexual Addiction

The prevalence of sexual addiction in the general adult population of the United States of American has been reported to be between 3-6% [21]. The estimated male to female ratio of sex addiction is between 3-5% males for every one female [22]. In addition, evidence has suggested higher prevalence rates among individuals suffering from hypersexual disorder, and sexual offenders [19].

Further statistics showed that majority of sex addicts were abused sexually (81%), emotionally (97%) or physically (72%) [23]. A pattern of dual addiction has been reported among sex addicts [19]. Findings have shown that 38% of sex addicts had eating disorders, 26% had compulsive spending, 43% suffered from chemical dependency, 5% had uncontrollable gambling and 28% spend compulsively [22]. Reports have also shown that 87% of sex addicts were reported to come from dysfunctional families, where at least one family member had a history of, or presented with addiction [19]. However, a variation in sexual activities between male and female sex addicts have been reported [24]; while male sex addicts tend to engage in voyeur and anonymous sex, most female sex addicts prefers exhibitionist sex, trading for sex, pain exchange sex and fantasy sex [24]. Sex addiction also contributes to the spread of HIV and other sexually transmitted diseases in the States [6,25].

Aetiology of sexual addiction

The causes of sexual addiction according to Herkov [9] include:

Biochemical imbalances: Sexual stimulation and response is a function of both the brain and the genitals [26]. High levels and alteration of chemicals in the brain is associated with sexual addictive behaviours. This leads to a euphoric feeling during the sexual activity. Weiss [27] stated that, the alteration of the brains chemistry results in the demand for more. Therefore, the addict continues to engage in the sexual behaviour to meet the chemical needs of the brain [26].

Hormones: The over secretion of sex hormones such as androgen, may also lead to addiction [9]. Androgen affects libido, and can enhance addiction when secreted excessively [9].

Family: A number of sex addicts come from unhealthy and dysfunctional families [6]. Rigid parenting styles, emotional unavailability of parents and loved ones, and a family history of addiction also contributes to sex addiction [13].

Abuse: Studies has shown that majority of sex addiction originates from an abuse [23]. According to Ferree [23], reports showed that 72%, 81% and 97% of sex addicts suffered physical, sexual and emotional abuse respectively.

Impaired neurochemistry and sexual development

Sexual addiction has been reported to be influenced by neurochemical changes found in the reward centre of the brain, similar to those of cocaine abusers [28]. Dopamine and Oxytocin which are associated with behavioural disorders such as SA, influence socio-sexual behaviours and erotic presentation [29]. Buhler et al. [30] revealed that, erotic stimulus presentation triggers a unique response

from the brain. Early exposure to pornography in the pre-adolescent years, prior to natural onset of sexual development has been reported to have significant functional and structural consequences for neuro-development, and may become a central organising feature in early brain development, depending on chronicity [31]. This plays a role in orienting vulnerable youths towards sexually addictive behaviours [11]. The prevalence and availability of sexual images allow for this early exposure to be easily repeated and thus habitually reinforced [31].

Risk factors of sexual addiction

The advent of the internet has played a key role in sexual development and practices in the United States. Most American adults engage in cybersex and patronise pornography. Also, peer pressure, and the general norm of sex education, without emphasis on the addictive aspect of sex might be a contributory factor [27]. In addition, the availability of sadomasochism in movies and electronic media (for example, the movie “*Fifty Shades of Grey*”) is another propellant of sexual activity. Furthermore, sex is socially acceptable, and is viewed by liberals, conservatives and religionists in America as the means for procreation [23]. Environmental triggers such as the prevalence and availability of strip clubs, sex toys and prostitutes is also associated with compulsive sexual behaviours in the United States. Also, the psychological perspective of feeling wanted, and the belief of only getting to self-actualisation through the acts of others play key roles in sex addiction. Most sex addiction in the states especially trading for sex have been found to be more common in low and middle-income population, where most members are poor and of low socioeconomic status [27]. Finally, sex addiction is also influenced by bonding and isolation. Most individuals who feel disconnected and isolated from the society tend to seek sex as a way out; this tend to trigger levels of pleasure, lead to more cravings for sex and invariably results to addiction if not treated [31].

- More risk factors/comorbidities according to Carnes [12], associated with sex addiction include.
- A history of abuse which might have occurred sexually or physically (Rape and paedophilia).
- Presence of a co-addiction such as drug, gambling, and alcoholism.
- Existence of other psychiatric disorders such as bipolar disorder, depression, narcissistic or borderline personality disorder, and impulse control difficulties.
- Dysfunctional attachment at childhood.
- Attention Déficit Hyperactive Disorder (ADHD).
- Anxiety disorder.

Levels of sexual addictive behaviours

Sexual addictive behaviours are classified into three levels. The first level comprises of homosexuality, heterosexuality, pornography and masturbation which are culturally acceptable. The second level is characterised by nuisance behaviour such as bestiality, transvestitism, incessant, indecent phone calls and text, as well as voyeuristic behaviours. The third level consists of behaviours which include incest, child molestation, rape, and sexual abuse of vulnerable persons [10].

Symptoms of sexual addictions

Gold and Heffner [24] stated that the symptoms of sex addiction include: compulsive and incessant masturbation resulting to physical injuries, having persistent sexual thoughts, urges and fantasies,

engaging in and seeking new sexual encounters due to boredom with old ones and being indifferent towards sexual partner(s). In addition, Seegers [32] reported symptoms of sex addiction to include; inability to stop sexual behaviour despite severe and negative consequences, neglect or suspension of essential activities (social, recreation and occupational) because of the sexual behaviour, severity in mood changes in the midst of sexual acts, an out of control pattern of sexual behaviour and being unsuccessful or incapable of stopping or significantly reducing sexual behaviour. Studies have shown that, it is difficult to find proof of sex addiction using one symptom; however, a concurrent existence of these symptoms shows that sex addiction exists in an individual [12].

Management and Treatment of Sexual Addiction

The first step in managing and treating sex addiction is the actual identification/diagnosis of the problem. However, the following management and treatment options for SA are available:

Self-help organizations: Such as Sex Addicts Anonymous, Sexaholics Anonymous, Sexual Compulsives Anonymous, and Sex and Love Addicts Anonymous, offer 12-step programs to help the individual in self-managing the condition. This helps the addict to learn and develop authentic and genuine relationships, interpersonal skills and accountability. Self-help organisations also offer in patient treatments for sex addicts, during which they live on site at the facility and receive care and psychotherapy [27].

Cognitive behavioural therapy (CBT): As with many behavioural management strategies, CBT provides a variety of techniques that help the individual change their behaviour. CBT can equip a person to avoid relapses and reprogram harmful sexual behaviours. The features of CBT include; the adoption of a rational approach and law of entropy, acceptance of unpleasant and painful emotions, questioning and expression, as well as the use of specific coping techniques [33].

Pharmacological treatment: Medication and drugs such as Prozac, may be prescribed to reduce sexual urge. Also, other pharmacological medications such as anti-anxiety medications, mood stabilizers or anti-psychotics can be used for treatment [31].

Couple therapy: This method of treatment is aimed towards bonding and restoration between the addict and partner or spouse. Issues addressed by the therapy sessions include betrayal, self- denial and trauma bonding [27].

Motivational and dialectical behavioural therapy: This involves motivational interviewing to capitalise on the addicts’ willingness to change their behaviour. In addition, dialectical behavioural therapy enables the addict to manage cravings by learning appropriate coping skills to apply for cognitive and emotional regulation [34].

Currently, drug therapy for sex addiction is a point of debate among professionals and sex addiction specialists in the States. Although, there is no drug or medication approved for the treatment of SA by the United States Food and Drug Control Agency, certain drugs (such as Prozac) have been reported to be effective in reducing sexual urges [31]. However, critics always point to the absence of a large clinical trial in the States and globally that validates this success. In contrast, Kouimtsidis et al. [33] reported that treatment with drugs can be used in tandem with psychotherapy. A survey among German sex therapists showed that Selective Serotonin Reuptake Inhibitors (SSRIs) and lithium reduced the frequency and intensity of addictive sexual behaviours urges among patients [35]. Also, Gonadotropin-Releasing

Hormone (GTRH) may be administered to reduce sexual drive among addicts suffering from sexual predation [36]. In addition, the use of antidepressants and other drugs for treatment among sex addicts that presented co-addiction have been effective [11,27,37]. This form of treatment can enable reduction in compulsions that initiate the behaviour, thus enabling the patient concentrate on psychotherapy. CBT has been reported to be successful in the treatment of sex addiction. CBT programmes improve self-esteem and confidence, thereby reducing anxiety and other possible co-addictions. Also, the coping skills acquired and learnt during CBT reduces and lowers the risk of future relapse. Although CBT sessions might be time consuming, it offers clients and sex addicts the ability to manage their own reactions and responses to situations more skilfully. Furthermore, Briken et al. [35] reported that one of the biggest advantages and benefits of CBT compared to other prevention strategies is the provision for continuation by sex addicts after formal therapy sessions.

Prevention Strategies for Sexual Addiction

Potent prevention strategies have been developed over time for assessment, management and prevention of sex addiction, these include:

- Screening (Sex addiction screening test [SAST]).
- Twelve steps (12-steps) recovery programme.
- Psychotherapy/Cognitive Behavioural Therapy.

Sexual addiction screening test

This intervention is aimed at assessing and identifying the presence or absence of compulsive sexual behaviours among patients. The most potent tool; the Sexual Addiction Screening Test (SAST) was developed in 1989 by Dr Patrick Carnes and revised in 2010 [6]. SAST was designed in liaison with treatment centres and programmes, hospitals, therapists and community groups [34]. In addition, a study in 2012 reported that SAST contain a twenty-five item measures and 45 questions in total, which are scored dichotomously (YES/NO), these are used for the assessment and evaluation of sex addiction symptoms [34].

Also, Carnes [12] states that, scoring for SAST is done as follows:

- Questions 1-20 are designed to determine the presence or absence of SA.
- A Yes answer (7 or more times) to questions one to twenty makes the patient a sex addict.
- Questions 21-45 determine the manner in which the sexual disorder is manifested.

Twelve (12) steps recovery programme

The twelve (12) steps recovery programme was developed by Sex Self-Help Organisations (SSHO), which offer participants a safe environment to explore, determine root causes and begin to work towards recovery from compulsive sexual behaviour [27]. Furthermore, SSHO meetings are judgement free and involve occasional invitation of speakers to give insight and share personal stories on recovery and experiences [12].

The twelve steps recovery programme was adapted as an intervention on a series of steps from Alcohol Anonymous in the late 1970s for sex addicts, and has been applied in different psychosexual counselling and therapy in the States. Carnes [10] opined that few

changes were made to the 12 steps to suit sex addiction, but the path included milestones employed in many other addiction groups. Posits of the 12-steps recovery programme which involves cognitive and behavioural changes include:

- Recognition of inability to overcome or Control Addictive CSB.
- There believe that normal sexual behaviour can be restored by a higher power.
- Making a decision of inviting into the life of the sex addict a higher power.
- An evaluation of the nature, depth and extent of the SA.
- Admission of the existence of the SA to all.
- Becoming and being ready for the intervention by a higher power.
- Asking for help with the recovery process from a higher power.
- Making a list of victims of the CSB.
- Making amends to the victims.
- Continuous self -assessment throughout recovery period.
- Developing an improved relationship with a higher power and carrying life accordingly.
- The experience of spiritual awakening and subsequently, assisting others with the recovery process.

Psychotherapy/Cognitive behavioural therapy for sex addicts (CBT-SA)

Psychotherapy or Cognitive Behavioural Therapy for Sex Addicts (CBT-SA) is a prevention strategy designed to curb irrational thought and core dysfunctional beliefs that enhance the addiction cycle in sex addicts [35]. CBT-SA is the bedrock of treatment for sex addiction, and can be carried out among individual sessions or in group therapies [35]. It involves attempts to inhibit the addictive behaviour in the short term, before concentrating on other long-term issues [33]. This preventive measure focuses on addressing and finding ways to mitigate issues that initiate emotional discomfort, and subsequent desires to escape through compulsive sexual activity in patients. It can practically be done via role playing, journaling, communication with a supportive friend in recovery or engaging in domestic activities for example [33].

Furthermore, CBT-SA is aimed at assisting the patient in adopting a healthy mind-set that make them understand their urges, prevent relapse, disengage from fantasy and other addictive behaviours by doing or practicing something else [35,33]. This strategy equips the patient to avoid relapses and reprogram harmful sexual behaviours.

The prevention strategy adopts the posits of the Trans-Theoretical Model (TTM). The therapy sessions focus on initiating the pre-contemplation stage by making the addict aware of consequences of addictive behaviour, triggering thoughts about healthy actions and the contemplation stage. Suggestions and emphasis on engaging in other activities and healthy behaviour such as journaling is geared towards preparing the addict to be ready to take action or change behaviour (preparation stage). In addition, the addict is made to implement change (Action stage) by practicing or carrying out the suggested healthy behaviour(s). The maintenance stage is also included through regular follow up sessions and encouragement to continue the new health behaviour at home to ensure sustained behaviour change.

Policies and public health priorities for sexual addiction

In the absence of documented policies for sex addiction in the United States and world at large, the following suggestions are made:

All-inclusiveness and vulnerable populations: Different section and members of the society should be considered and involved in design of policies. This includes medical practitioners, counsellors, therapist, religious leaders, recovered addicts, psychologists, etc. Furthermore, treatment and intervention programmes should cover Federal, State, and local and individual levels, including schools, disadvantaged and high-risk and vulnerable populations.

Stigma, dependence and social recovery: Policies and behavioural interventions should make provision for enabling recovering addicts cope with the associated stigma and shame- based systems. Sex addicts should be made to understand that sex is not the benchmark for emotional survival. Emphasis should be made on dependence on family, friends, work and societal values. Prevention and Interventions should also focus on social recovery and re-establishment of lost connections between addicts and the society.

Taxation, Regulation and stiffer punishment: Strip clubs, and sex toys/dolls vendors should be made to pay high taxes. Also, there should be regulation on the excessive pornography sites, as well as stiffer punishment for sexual offenders, rape and paedophilia.

Rehabilitation and sex education: Sex addiction should be taught as part of sex education with emphasise on the consequences in all arms of schools. In addition, there should be rehabilitation programmes which must include behavioural change for rape and paedophilia victims, as well as sex offenders.

Conclusion

The prevalence of sex addiction among the general population in the United States is 3-6% and high prevalence rates have been reported among population of hypersexual disorders and sex offenders. SA has brought about spread of sexually transmitted diseases such as HIV/AIDS, gonorrhoea, and syphilis which has been regarded as a public health problem worldwide. The aetiology of SA include; biochemical imbalances, over secretion of sex hormones, family lifestyles, abuse, and impaired neurochemistry and sexual development. Treatment of a sexual addict starts with the actual identification/diagnosis of the problem before self-help organizations, psychotherapy, pharmacological treatment, couple therapy before dialectical behavioural therapy follows. Since SA is a global health menace in our society, more surveys on the epidemiology and probable risk factors of sex addiction should be carried out by public health sex experts.

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