



Review Article

Paraphilia: Concepts, Classifications, Epidemiology, Attributes and Management

Surobhi Chatterjee

MBBS Student, King George's Medical University, Lucknow, UP, India

Abstract

Paraphilia have always been a debatable and under-researched topic in psychiatric domain, with lots of cultural myths associated with its origin. The aetiology is unclear, with several theories forwarded but none having universal acceptance. Psychotherapy was the mainstay of treatment until antidepressants were found to be effective. With the milieu gradually incorporating several anti-androgens, Gonadotrophin Releasing Hormone (GnRH) and Luteinizing Hormone (LH) analogues; pharmacotherapy was introduced after better understanding developed through extensive research.

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Correspondence should be directed to:

Miss. Surobhi Chatterjee

MBBS Student,

King George's Medical University, Lucknow, U.P, India

Email-surochat98@gmail.com

Introduction

Paraphilia (Greek: para-beside, philos-love) literally translates to loving, besides ordinary/apart from, what is normally acceptable. The word was coined by Friedrich Solomon Krauss in 1903. First used by William Stekel, the word has transcended its meaning and usage throughout the 20th century. In his book 'Sexual Aberrations' (1930), Stekel

highlighted the difference between 'paraphilia' (neurosis), paralogia (psychosis) and paraphilia (perversion), thus separating paraphilia from the other categories of mental disorders (Giami, 2015).

Stekel had described paraphilia as "*paranormal or dangerous instincts where sexual gratification was not obtained from normal heterosexual intercourse*" (Malin, 2007). However, the credit for popularizing

the term goes to Benjamin Karpman. Sexual deviance was considered a medical phenomenon after *Psychopathia Sexualis* written by the German psychiatrist Krafft-Ebing, describing sexual murders, was published (Ebbing, 1886).

Society had played a pivotal role in adjudging what is normal and what is abnormal and has shaped the mind of psychologists/ psychiatrists and is doing so even today. Paraphilia have always been a matter of deep intrigue, amazement and moreover hatred which has paved its way for the greater focus on punitive aspects rather than reformative/treatable approach required for them. With the course of changing mentality and acceptability of the different shades of sexuality, the widespread boundaries of paraphilia have gradually shrunken, however debates have ensued, and no single definition, till date, has been enough to encompass everything.

History

The folklore involving paraphilia have always been mentioned in different cultures with a demonic incarnation getting great pleasure using such techniques. Though there is no valid exact documentation pinpointing of its origin and existence, some disorders have been depicted like in 490 B. C, 'The

Tomb of Whipping' at Etruscan Tomb near Tarquinia, Italy represented two men beating a woman in an erotic situation. Whipping ceremonies were practiced by ancient Spartans too in around 9th century B.C. (Steingraber & Steingraber, 2006). India too had its own set of Paraphilic admonitions like Sadomasochistic and Fetishist approaches described in length in Vatsyayana's Kama sutra. It describes different hitting practices being executed during love-making to enhance pleasure, after getting acceptance from the partner. There is also mention of objects shaped specifically to stimulate one's genitals for getting sexual gratification. So, Kama sutra may be the first documented proof explaining paraphilia, their limitations and safety regulations. (Steingraber & Steingraber, 2006).

Conceptual evolution and phenomenology

Perception and evidence are the opposing stalwarts, which have gradually shaped the modern understanding of paraphilia. The understanding has changed over the years, as reflected by the difference in stands by DSM and ICD over the years. The first DSM, printed back in 1952 didn't even include paraphilia as a sexual disorder. Back then, Sexual

deviations was the term used for them which was classified under the subclass of Sociopathic personality disturbance. It included all the disorders earlier thought of as psychopathic personality traits and considered to be pathological sexuality. Thus, it included behaviours which were considered pathological back then like masturbation, homosexuality, paedophilia, transvestism, fetishism, and sexual sadism which includes rape, mutilation and assault (Sorrentino, 2016).

DSM II however, continued with the thought of paraphilia being a personality disorder. The major change came with DSM III when it was designated as a psychosexual disorder including psychosexual dysfunctions, gender identity disorders, and ego-dystonic homosexuality with it.

In DSM III R, Paraphilia term was used to describe unusual acts or dreams necessary for sexual excitement and in addition were 'persistent' and 'involuntarily repetitive'. DSM IV and DSM IV-TR have maintained the basic ideology of DSM III along with the definitions, with DSM IV-TR moving transvestism from gender identity disorder to a paraphilia termed transvestic fetishism (Sorrentino, 2016). The major benchmark change again came, when DSM V introduced changes in the

definition, and included Paraphilic disorders, thus now Paraphilia, and Paraphilic disorder had separate meanings. There was clarification regarding the difference between thoughts and disorders. Over the years the research into Psychosexual development and societal understanding has been significant, leading to the inclusion of homosexuality, masturbation, and oral sex in mainstream sexual practices, and not a deviation or perversion, as earlier thought of. Several grey areas have remained unclassified, like Incest, which is not legally punitive, nor is acceptable in the mainstream and neither is classified under paraphilia. Similarly, is the state for classifying people who practice BDSM (B/D: Bondage and Discipline; D/S: Dominance and Submission and S/M: Sadism and Masochism). It is believed to be a method of experimentation and enjoyment rather than a perversion. India, has always faced criticism for being a pro-conservative when it comes to sexual issues, but the milestone Judgement in 2018, the scrapping of parts of Article 377 of Indian Penal Code (IPC), changed the perception. Still, the cultural acceptability and the leverage given is too less, to be of any significance for the inclusion of such communities. Unlike many other disorders, the legal stand of Incest is debatable with no law criminalizing it. Thus, the

morals, and principles affecting the conservationist approach are highly questioned in this regard.

Prevalence

There is very limited data available

regarding the epidemiology of Paraphilia. Different studies have reported the prevalence as few as 1.7% and as many as 62.4% subjects showing at least some paraphilia related patterns (Mc Manus et al., 2013).

Paraphilic Disorder	Prevalence
Voyeuristic Disorder	Males: 12% Females: 4%, clinically uncommon
Exhibitionistic Disorder	Males: 2% to 4% Females: uncertain but lesser
Frotteuristic Disorder	Males: 30%, clinically 10%-14% Females: lesser
Sexual Masochism Disorder	Males: 2% Females: 1.3%
Sexual Sadism Disorder	2% to 30% 37 to 75% in cases of sexually motivated homicide
Pedophilic Disorder	Males: 3% to 5% Females: uncertain but lesser
Fetishistic Disorder	Not reported in females
Transvestic Disorder	Males: less than 3% Females: extremely rare

Table 1: Prevalence of Paraphilic disorders among males and females

Definition and classification

DSM-5 defines paraphilia as *"any intense and persistent sexual interest other than the sexual interest in genital stimulation or preparatory fondling with phenotypically normal, physiologically mature, consenting human partners"*(American Psychiatric Association, 2013).

Paraphilic disorder is a *"paraphilia that is causing distress or*

impairment to the individual or whereby satisfaction entails personal harm or risk of harm, to others" (American Psychiatric Association, 2013). Thus boundaries of clinical relevance are defined. The behaviours may not be ‘normophilic’ but have no or minimal clinical importance (Bradford & Ahmed, 2014). Next, important change is the inclusion of specifiers to the classification scheme. The first group of disorder

is, 'anomalous activity preferences' subdivided into courtship (voyeuristic, exhibitionistic, frotteuristic disorder) and algolagnic disorders (sexual masochism disorder, sexual sadism disorder).

The second group describes 'anomalous target preferences' (paedophilic disorder, fetishistic disorder and transvestic disorder) (American Psychiatric Association, 2013). The third group earlier under 'not otherwise specified' is changed to 'specified' and 'unspecified Paraphilic disorder' (American Psychiatric Association, 2013). As per the DSM- 5, Criterion A, means that recurrent and persistent sexual arousal must be present for at least six months. Criterion B, requires that individual should have acted on the sexual urges with a non-consenting person or the urges/fantasies caused significant distress in a social, occupational, or other important areas of functioning.

Both must be met for classifying the person as having 'Paraphilic disorder'. Terms like 'in a controlled environment' is used for individuals 'staying in institutionalized settings in which the object used for sexual gratification is restricted'; 'in full remission' refers to 'absence of distress and impairment in social, occupational, or other areas of function for 5 years at least' (American Psychiatric Association, 2013).

ICD-10 includes paraphilia under Section V (Mental and Behavioural disorders) as F65, 'Disorders of sexual preference' describing Paraphilia (WHO, ICD-10 Version: 2015). ICD-11 however, describes it under Section 17- 'Conditions related to sexual health'; 'Paraphilic disorders' (6D30-6D3Z) (ICD-11, Mortality and Morbidity Statistics, 2019), wherein paraphilic disorders are referred to as, "*persistent and intense patterns of atypical sexual arousal, manifested by sexual thoughts, fantasies, urges, or behaviors, the focus of which involves others whose age or status renders them unwilling or unable to consent on which the person has acted or by which he or she is markedly distressed*" (ICD-11- Mortality and Morbidity Statistics, 2019).

Etiology

How and why did paraphilia originate have been a matter of confusion and debate. The association of Paraphilia with genetic and environmental factors, in the past has been dismantled by certain new research papers which are even questioning the validity of their predecessors' work. The most important point is the affection of male gender, in almost all the types of Paraphilic disorders, except the sexual masochism disorder. It can be pointed out that it is a learned behavior associated with variation in the hormonal stimulation and the

androgenic psychology. Three most popular theories regarding the aetiology are-

1) Neurobiological model, where the possibility of linking paraphilia with defective cognitive development abilities suggested that they play a direct role in the pathogenesis of such a disorder/trait (Garcia & Thibaut, 2011).

2) Psychodynamic model, which believes that paraphilia develops as a shield to averse the perpetrators from the anxiety and depression of any painful event. It helped them to cope up with the aggressive thoughts, lack of control and the potential loss of one's physical integrity. For example, diaper fetish is thought of as a wish to return to an infantile state to be cared for, which may be an attempt to make up for the lack of parental care required in early childhood (Garcia & Thibaut, 2011).

3) Cognitive-Behavioural model, which hypothesized that the development of arousal to non-sexual object/behaviors occurs through repetitive and recurrent associations between the thought and pleasurable activity. For example, a child found sudden sexual arousal while accidentally visualizing his/her parents or any two consenting adults being intimate, and later on recollects the memory for masturbation and then the repetitive intrusion of this

thought leads to his Paraphilic behavior (Garcia & Thibaut, 2011).

Diagnosis

Since Paraphilia is associated with lots of taboo and punitive outcomes, the self-reporting of such disorders are extremely rare, even when they are distressing for the individual. Such individuals usually live 'hidden' and in complete or partial isolation of the society making contact only when the arousal is triggered. So, in most of the situations, they arrive as a suspect for a possible sexual crime. The evaluation of such an individual requires both clinical and testing components. The clinical component involves sexual history, past history (especially childhood exposure to sexual acts), history regarding the number of partners and practices like masturbation.

A proper psychiatric and medical history is taken to identify any psychiatric or medical comorbidities leading to the perverted sexual preference (Sorrentino, 2016).

Objective assessments include poly-graphs, penile plethysmograph (penile tumescence to sexual stimuli), and the Abel screen test (visual reaction time to sexual interests) which is helpful in delineating problematic sexual behavior and even in seeing prognosis during treatment (Sorrentino, 2016).

Management

The initial management was mainly restricted to surgical castration, done as a punishment for sexual perversions till 1900. The need for a different treatment arose when several psychotherapists argued that treatment reduces the chances of sexual recidivism and proved that if not complete recovery, can change or reduce the sexual proclivity of such individuals. Thus, initially the mainstay of treatment was psychotherapy wherein pharmacotherapy was later added. Different research papers have shown different protocols for the effective management of the disorder. Though an ideal treatment is currently unavailable which would include, reducing distress of the patient, abolishing repeated thoughts and fantasies would have no/minimal side effects, and prevent them from acting out and victimizing others. Individual paraphilic disorder may receive different therapies based upon personal goals of therapy and individuals wish and response to them due to unavailability of a gold standard or a protocol that suits all needs. Most widely used is the Bradford algorithm published in 2001 for the treatment of

paraphilia. This was based upon DSM-III-R. The algorithm graded paraphilia from Level 1 to Level 6, based on the severity (mild, moderate, severe, and catastrophic). Level 1 was treated with Cognitive Behavioral Therapy (CBT) for mild cases. Level 2 requires using Selective Serotonin Reuptake Inhibitors (SSRI). Level 3 is proposed to be used when symptoms don't improve with SSRI within 4-6 weeks, thus one needs to add low dose of Cyproterone (CPA) or Medroxyprogesterone acetate (MPA). Subsequently, Level 4 involves giving full doses of oral Anti-androgen therapy. Level 5 requires long acting intramuscular hormonal therapy (GnRH agonists) for effective results. Level 6 is for those catastrophic paraphilia wherein, a patient fails to respond to any of the afore mentioned treatment and needs complete androgen suppression with the highest doses of IM therapy combined with LHRH agonists (Bradford, 2001). A nearly identical algorithm was published by Thibaut et al. in 2010 wherein, he recommended treatment with Gonadotropin releasing hormone (GnRH) agonists for Level 5 and Level 6 patients (Garcia & Thibaut, 2011).

Table 2, below is another such algorithm given by Janell L. Carroll (Carroll, 2018).

Individual	It's a one on one therapy with the counsellor directed on improving social skills and controlling the distorted emotions.
Group Therapy	Multiple patients with paraphilic disorders and their interaction is analysed.
Family intervention	Family relations are explored for their role in the disorder.
Cognitive-behavioral intervention	Works on cognition and behaviour. It helps to weaken the relationship between situations and one's reactions to them. The thoughts and behaviours are interpreted.
Systemic desensitization	Done to relieve anxiety. Patients are exposed to threatening situations under relaxed conditions until anxiety is relieved.
Aversion therapy	Using unpleasant stimuli in a controlled way to change the emotions. Eg- a paedophile given an emetic drug while seeing naked pictures of children.
Orgasmic Reconditioning	It involves reprogramming one's fantasies to a more socially acceptable one.
Pharmacotherapy	Medications are used to improve symptoms and decrease the fantasies and sexual drive associated with them.
Surgical intervention	Rarely used these days to ultimately stop one's sexual drive by castration.

Table 2- Treatment algorithm for treating Paraphilia

Psychotherapy

The psychotherapy given is tailor-made and customized based upon the needs and understanding of the disorder in the patient. The common components include: 1) Educating the patient, and their family members addressing the nature, perceptions, proposed etiology and treatment modality. 2) Supporting the patient, reassuring them and giving them empathy. 3) Addressing the problem points-anger, past trauma or low self-esteem. 4) Problem solving to evaluate the possible advantages and disadvantages of possible

solutions and evaluating it (Baez-Sierra et al. , 2016).

Psychodynamic therapy

It is based upon creating a rift between the idea that led to the evolution of the behavior in the patient and the behavior showed by the patient there after. The patient is explained the ways to distract his mind from the continuous intrusion of the ideas and thoughts, thereby facilitating the process by which his addiction to the behavior/object can be reduced, done mostly by letting the patient acknowledge and accept these ideas as harmful /invalid.

Cognitive Behavioural therapy

It focuses on changing the distorted cognition and maladaptive behaviors. The person is first carefully analyzed and then his thoughts are allowed to be changed by letting them understand the vicious cycle they are associated with, which is broken by increasing one's calmness and peace of mind.

Behavioural interventions

They include behavioural re-patterning where the therapist gradually implements changes in the patient's behavior to address specific problems leading to patient's distress. The role is to gradually shift the role of the object/behavior to a less prominent aspect, so that it doesn't play a role in sexual activities and sexual gratification. Assertiveness technique is used to teach patient's an alternative to express emotions and constructive approaches to deal with negative emotions.

Couples' therapy- It also plays a significant role in the understanding of the disorder by both the patient, and their partner, so that there is proper understanding of the disorder (Baez-Sierra et al., 2016).

Pharmacotherapy

Following three classes of drugs are helpful in the management of paraphilic disorders.

Antidepressants- SSRIs have potential utility in reducing the sexual preoccupation associated with paraphilia, which is based upon-

- 1) Monoamine hypothesis
- 2) Comorbidities associated with paraphilia
- 3) Their effectiveness in reducing OCDs.

Serotonin is considered an inhibitor of male sexual behavior (proven in rats) (Yells et al., 1992). Clinically, it was seen that SSRIs impair orgasmic functions and erectile ability, even the sexual interest in a dose-dependent fashion. Fluoxetine and Sertraline have been found to have the maximum acceptability and effectiveness (Verma et al. 1989). Tricyclic antidepressants have also been used in the management of paraphilia, and are still being used; (example, clomipramine for exhibitionism) although, the adverse effects have limited its usage.

Hormonal therapy

Oestrogens- Despite its efficacy, several severe adverse effects like nausea, thromboembolism, weight gain, cerebrovascular ischemic disease, and feminization have been reported, reducing its usage in subjects with paraphilia.

Steroidal antiandrogens- (Medroxy progesterone acetate)

It has an off-label use in the treatment of paraphilia. It is a progesterone derivative that gives negative feedback to the hypothalmo-pituitary axis, leading to controlled release of GnRH and LH. The mechanisms proposed for its action are -

- 1) Inducing testosterone α - reductase enzyme, increasing testosterone's metabolism.
- 2) Binding of testosterone to testosterone binding globulin, which decreases free testosterone levels.

The long list of side effects limit its usage, with pulmonary embolism, thromboembolic phenomenon and adrenal suppression being the severe ones (Southren et al., 1977).

Cyproterone

It is a synthetic steroid which acts by binding to all the androgen receptors and blocks testosterone's uptake and metabolism. Acting as competitive inhibitor of both testosterone and dihydrotestosterone, it also leads to decreased GnRH and LH release. Various side effects (like sleep disorders, leg cramps, impotence, osteoporosis, depressive symptoms); availability in only oral dosage form and erratic absorption have however limited its usage (Neumann, 1977).

Gonadotrophin-releasing hormone analogues

GnRH agonists act at GnRH receptors present in the pituitary. Initially, there is release of testosterone caused by LH release, thus a phenomenon called as flare-up is associated with them.

However, with their continued usage, there is desensitization of the receptors reducing LH, FSH and testosterone release to levels equaling castration, referred to as chemical castration within 2-4 weeks. Three analogues are- Triptorelin which is a synthetic decapeptide (long-acting 11.25 mg, 3 month formulation or 3 mg, one month formulation). Leuprorelin which is developed as an IM depot with 3.5 or 7.5 mg one month dosage, and 11.25 mg, 3 month dosage. Goserelin (3.6 or 10.8 mg subcutaneous) is given as an IM injection daily or monthly depot preparation. The high efficacy, fewer side effects reported (like bone demineralization, nausea, weight gain, hirsutism, decreased glucose tolerance, mild gynecomastia, blood pressure changes), shorter dosage regime and increased compliance creates GnRH agonists as the choice for treatment of severe cases (Thibaut et al., 1993).

Luteinizing hormone agonists

LH agonists like long acting preparations of Leuprolide acetate has been used to treat severe paraphilia. It shows promising response in suppression of deviant sexual behavior and is well-tolerated. Limited research and RCT done in this field has reduced its effective usage (Peer Briken, 2001).

Combined psychotherapy and pharmacotherapy

Some psychiatrists believe that a combined therapy serves the best possible outcome in this regard. The general strategy involves education, relapse prevention, cognitive behavioral therapy, sexual impulse control training, empathy training, and biofeedback sessions combined with pharmacotherapy based upon the requirement (Hanson & Morton-Bourgon, 2005).

Conclusion

Whatever may be the mode of treatment, it is accepted that the treatment of paraphilia should be continued for a longer duration since most of the patients have a chronic history. A treatment ranging from 1-5 years is recommended for patients depending upon the severity of patient's condition. The available data has pointed to the usage of psychotherapy and/or SSRI, anti-androgens and GnRH

analogues in the treatment. The research data is limited and a gold standard treatment is currently unavailable. However, the efficacy of the current treatment is strongly highlighted through the meta-analysis, systemic reviews and various research papers published (Hall GCN, 1995; Hill A. et al, 2003). This under-researched area still requires a lot of focus so that the social, legal, and mental adversities are reduced.

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