



HYPERSEXUALITY IN SEVERE MENTAL RETARDATION : A CASE REPORT

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ABSTRACT

Hypersexuality is a condition characterised by excessive sexual thoughts, urges and behaviours that may cause distress and impairment of personal, social and occupational functioning. We report the case of a woman, Ms. P, aged 23 years, diagnosed with excessive sexual drive accompanied by severe mental retardation. She was reported to be a victim of sexual abuse, having been subjected to sexual intercourse by her neighbour on several occasions. Following these events, the patient developed an addiction-like pattern of behaviour. Every day she would recount the sexual intercourse she had experienced and demonstrate the movements in detail without being asked. Intelligence quotient (IQ) testing placed the patient within the 20–34 range. On the basis of the IQ test result and the presenting signs and symptoms, the patient was classified according to PPDGJ-III (the Indonesian

Diagnostic Guidelines for Mental Disorders, third edition) as having severe mental retardation. Most persons with intellectual disability have difficulty identifying inappropriate touch, which renders them more vulnerable to sexual abuse⁽⁸⁾. According to Tomsa et al. (2021), the prevalence of sexual abuse is estimated to range from 7% to 34% among adults with intellectual disability. The therapeutic options for this patient consisted of antidopaminergic pharmacotherapy, psychoeducation for the family, and the use of contraception to prevent pregnancy.

Keywords: Hypersexuality, Mental Retardation, Intellectual Disability, *Sexual Abuse*.

INTRODUCTION

Hypersexuality is a condition characterised by excessive sexual thoughts, urges and behaviours that may cause distress and impairment of personal, social and occupational functioning⁽²⁾. The behaviours may take the form of compulsive masturbation, excessive use of pornography, frequent sexual intercourse with multiple partners, and involvement in risky or inappropriate sexual activity. Alterations in sexual desire and behaviour may arise from dysregulation of specific networks related to the dopaminergic circuits, including the mesolimbic and mesocortical pathways⁽³⁾. The mesocortical pathway plays a crucial role in executive function, as the prefrontal cortex projects to the ventral striatum. Impulse-control disorder behaviours emerge after exposure to a particular reward, which subsequently becomes compulsive. Upon receipt of the reward, "unexpected" activation of the ventral striatum triggers a strong emotional response and an increase in ventral striatal dopamine. Once the action is repeated, the behaviour becomes "habitual" and may become associated with craving. Initially the behaviour may be localised to the ventral striatum, after which it is reinforced by the dorsal striatum. For this reason, injury to the frontal and temporal lobes gives rise to sexual problems, including hypersexuality, more frequently than lesions involving the posterior regions of the brain.

The term mental retardation has historically been used to denote a condition of limited intellectual functioning; however, because the term is regarded as stigmatising and sensitive, the World Health Organization agreed to replace it in the international classification (ICD-11) with "Intellectual Developmental Disorder" (IDD). Conceptually, mental retardation and intellectual disability refer to the same condition, namely a disorder of intellectual development with onset in childhood⁽⁵⁾. According to the American Association on Intellectual and Developmental Disabilities (AAIDD, 2010), intellectual disability is characterised by limitations in intellectual functioning and in adaptive behaviour, as expressed in conceptual, social and practical adaptive skills, with onset before the age of 18 years. According to DSM-5 (APA, 2013), intellectual disability is defined by the presence of the following three criteria: deficits in intellectual functioning, deficits in adaptive

functioning, and onset of the intellectual and adaptive deficits during the developmental period.

A person is considered to have intellectual disability when the intelligence quotient (IQ) is below 70, with onset before the age of 18 years, together with poor adaptive functioning. According to severity, mental retardation in PPDGJ-III (2013) is divided into mild, moderate, severe and profound. Similarly, The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) divides intellectual disability into four categories according to the intelligence quotient (IQ): (1) mild intellectual disability, with an IQ score of 55–70; (2) moderate intellectual disability, with an IQ score of 40–55; (3) severe intellectual disability, with an IQ score of 25–40; and (4) profound intellectual disability, with an IQ score below 25 (APA, 2013). Most persons with severe mental retardation suffer from marked motor impairment or other accompanying deficits, indicating clinically significant damage to, or aberrant development of, the central nervous system.

According to Sadock (2015), severe intellectual disability is usually apparent during the preschool years. Affected children have minimal speech capability and impaired motor development. Language development may occur during the school-age years. In adolescence, if language ability has not developed adequately, communication may take a nonverbal form. Such conditions render the intellectual development of patients with intellectual disability unequal to that of their age-matched peers.

CASE ILLUSTRATION

1) History of Present Illness

Ms. P, a 23-year-old woman, was reported by local residents as being a source of unease because she frequently visited the house of a man with the initials Mr. M. Mr. M is a 30-year-old man with no permanent employment. According to those living in the vicinity, Ms. P had on several occasions been invited by Mr. M to engage in sexual intercourse at his house. To date, the patient frequently comes to Mr. M's house, and when there is no response from within the house she throws gravel onto the roof. Whenever she is asked what her purpose is in coming to Mr. M's house, the patient answers with the word "inserted" while holding her vaginal area. She then begins to act out

the scene of sexual intercourse, starting by lying down, opening her clothing and touching her vaginal area.

According to the family, the patient diligently performed congregational prayers at the musalla (small prayer house) near her home; recently, however, she has chosen a musalla that is farther from her house but close to Mr. M's house. After returning from congregational prayer, the patient always visits Mr. M's house. The patient's father has forbidden her to go to Mr. M's house, but the patient disregards this and still goes, slipping away while her family is at work. These complaints have been present for the past two months. The family expressed concern that, if the patient were allowed to continue, she would become pregnant, whereas she is not married and is not in a fit condition to raise a child.

Ms. P is the third child; she has two elder brothers, both of whom are married. The patient lives with her father, her eldest brother, his wife and their two children. Her mother died eleven months ago. According to the patient's father, her physical growth and behaviour were comparable to those of children of the same age. Before primary school age the patient played with neighbours of similar age, and no incidents ever occurred. However, in the fourth grade of primary school the patient frequently cried on returning home from school. According to her father, the patient's classmates often teased her by taking her school equipment and damaging her books. The teachers reported that the patient was unable to follow the lessons in class. At school the patient was continually bullied by her classmates, so that her mother felt sorry for her and chose to withdraw her from school. Thereafter the patient began to smile to herself frequently, became quiet and no longer played with her friends. The complaints worsened when her mother died. The patient became more sensitive and irritable, and used coarse language. Her speech became markedly slow. The patient's elder brother often behaved harshly, spoke loudly to her and even struck her. When confronted by her brother, the patient's emotions erupted and she could speak at great length using various forms of profanity. At times the patient throws objects, but she does not injure those around her. If she is not spoken to, the patient remains largely silent.

During the home visit, the patient appeared to welcome the health-care workers warmly. She sat on the floor of the front terrace of the house and from time to time smiled to herself. On

examination, the patient denied ever hearing any voices but stated that she missed the voice of her late mother. Although this statement was sorrowful, the patient uttered it with a smiling face and a joking tone. Initially the patient refused to have her blood pressure measured but eventually consented, and indeed became eager for it and asked to be examined again. Throughout the interview session, the patient repeatedly brought up Mr. M and expressed a strong wish to meet him, with her hand positioned over her vaginal area. When asked why she wished to meet him, the patient would once again act out the scene of sexual intercourse.

2) Past Medical History

a. Previous Psychiatric History

The patient first appeared different from children of her own age when she entered the fourth grade of primary school, being unable to follow the lessons at her school.

b. History of General Medical Conditions

As an infant, the patient underwent surgery on her head, because at that time part of her skull was not firm and, whenever she cried, a swelling would appear on her head. After the operation the patient received treatment for approximately six months and was declared to have improved. During her mother's pregnancy there was no particular illness that would have required the mother to take any medication.

c. Psychoactive Substance Use

The patient has never consumed psychoactive substances or alcohol.

3) Personal History

a. Premorbid History

- **Infancy:** According to the family, the patient was delivered normally by a midwife.
- **Childhood:** According to the family, the patient appeared comparable to children of her own age up to the fourth grade of primary school; thereafter her development appeared slower than that of her peers.
- **Adolescence:** According to the family, the patient was active only within the home with her family, occasionally helping with ironing clothes. She would usually leave the house while her parents and elder brother were at work, walking around the village.

- **Adulthood:** The patient occasionally attends the women's religious study group (Fatayat) when invited by a female community health cadre in the village.

b. Family History

A family history of the same symptoms or illness was denied.

c. Educational History

The patient discontinued schooling in the fourth grade of primary school.

d. Occupational History

The patient has never been employed.

e. Marital History

The patient has never been married.

f. Socioeconomic History

The patient's father is the head of the household, remains actively employed and is able to meet the patient's needs.

g. History of Legal Violations

The patient has never committed any legal offence.

4) Mental Status Examination

a. General Description

- **Appearance:** self-care is good
- **Behaviour and psychomotor activity:** normoactive, spasticity of the right side of the body, oculogyric crisis
- **Attitude towards the examiner:** cooperative, inadequate eye contact

b. Level of consciousness: compos mentis, GCS 15.

c. Vital signs:

- Blood pressure: 110/70 mmHg
- Pulse rate: 80 beats/minute
- Respiratory rate: 20 breaths/minute
- Temperature: 36.5 °C

d. Mood and Affect

- **Mood:** euphoric (cheerful)
- **Affect:** labile
- **Congruence:** incongruent

e. Speech

- **Quantity:** the patient is able to answer questions spontaneously, but continually repeats her talk about Mr. M.
- **Quality:** slow speech, low volume

f. Perceptual Disturbances

- **Hallucinations:** none found
- **Illusions, depersonalisation, derealisation:** none found

g. Thought Process

- **Form of thought:** non-realistic
- **Content of thought:** preoccupation (with engaging in sexual intercourse)
- **Stream of thought:** remming (retarded stream of thought), circumstantial

h. Orientation to person/place/time/situation: intact

i. Memory: impaired

j. Concentration and attention: easily drawn, difficult to sustain

k. Language, reading and writing ability: impaired

l. Visuospatial ability: difficult to assess

m. Abstract thinking: impaired

n. Impulse control: impaired

o. Judgement: impaired

p. Insight: grade 1, unaware that she is ill.

5) Multiaxial Diagnosis

- a. **Axis I:** F52.7 Excessive Sexual Drive
- b. **Axis II:** Severe mental retardation
- c. **Axis III:** History of cranial surgery in infancy
- d. **Axis IV:** Subjected to sexual intercourse by an unfamiliar man

- e. **Axis V:** GAF 50–41 (serious symptoms, serious impairment in social or occupational functioning)

6) Ancillary Examination

The IQ examination result fell within the range [as stated in the source manuscript; the abstract specifies an IQ range of 20–34].

7) Management Plan

Haloperidol ¼ tablet twice daily

Insertion of a contraceptive implant

DISCUSSION

The clinical aetiology of mental retardation, according to Sularyo & Kadim (2000), is divided into three categories: (1) prenatal causes, such as chromosomal abnormalities, genetic/hereditary disorders, metabolic disorders, dysmorphic syndromes, intrauterine infection and intoxication; (2) perinatal causes, such as prematurity, asphyxia, kernicterus, hypoglycaemia, meningitis, hydrocephalus and intraventricular haemorrhage; and (3) postnatal causes, such as infection (meningitis, encephalitis), trauma, prolonged seizures and intoxication (lead, mercury). On the basis of the existing theory, the patient had a history of cranial surgery at the age of six months. This may have been one of the causes of mental retardation in this patient. We had difficulty in exploring the cause and establishing a definitive diagnosis because the patient's mother, who had accompanied her during treatment, had already died.

In the course of development, a person with intellectual disability generally experiences limitations in several domains, such as: (1) Academic development (cognitive domain): their capacity for learning is limited and is further hampered by abstract material. They more often learn by rote learning than by comprehension. They frequently repeat the same errors and avoid activities that require thinking. There is impairment of attentional focus, a tendency to forget easily, difficulty in generating new creations and a short attention span; (2) Social/emotional development (affective domain): the ability to care for, maintain and direct oneself is impaired, so that assistance is

required to prevent them from readily falling into undesirable behaviour. They tend to socialise and play with individuals younger than themselves. Their capacity for appreciation is limited; they are unable to express pride or admiration, their personality is less dynamic, easily destabilised, less engaging and lacking in breadth of outlook. They are also readily suggestible or easily influenced, so that not infrequently they are led into negative acts such as stealing, vandalism and sexual transgression. Nevertheless, with appropriate handling and a conducive environment they are able to demonstrate perseverance and good empathy; (3) Physical/health and motor development (psychomotor domain): development is generally slower than that of typically developing children. They frequently experience movement disorders, speech defects, and hearing or visual impairment arising from abnormalities of the brain as the centre of information processing. Consequently, they may see but not comprehend what they see, and hear but not comprehend what they hear. Among those with severe and profound mental retardation, there is often reduced perception of pain, unpleasant body odour, an unfresh bodily appearance, weak immunity and susceptibility to illness. These factors render them vulnerable to disease and to death at a young age⁽¹²⁾. With regard to memory (cognitive domain), most individuals with mental retardation have difficulty recalling information. With regard to language development (psychomotor domain), development emerges late, progresses slowly and ends at a lower developmental level than would be expected for their biological age.

Persons with intellectual disability have the same experience of sexual thoughts, feelings, desires and activities as people in general⁽⁴⁾. Most persons with intellectual disability have difficulty identifying inappropriate touch, which renders them more vulnerable to sexual abuse⁽⁸⁾. According to Tomsa et al. (2021), the prevalence of sexual abuse is estimated to range from 7% to 34% among adults with intellectual disability. The overall prevalence of sexual abuse in institutions was 27.5% for women and 50.8% for men. This is related to the fact that men with intellectual disability are less closely supervised and are consequently at higher risk of experiencing sexual abuse. Although the prevalence of sexual abuse among women with intellectual disability is lower, the figures nevertheless remain high.

Hypersexuality in patients with intellectual disability may be related to dysregulation of the

brain reward system mediated by dopamine. Dopaminergic activity in the mesolimbic pathway, particularly the projection from the ventral tegmental area to the nucleus accumbens, plays an important role in regulating motivation and reward-oriented behaviour, including sexual behaviour. Increased dopaminergic activity in this pathway may reinforce the perception of sexual stimuli as pleasurable experiences and encourage repetition of the behaviour, thereby giving rise to preoccupation with sexual thoughts and excessive sexual drive. In addition, increased dopamine is associated with reduced inhibitory control from the prefrontal cortex, which is responsible for the regulation of impulses and socially appropriate behaviour, thus aggravating maladaptive sexual behaviour.

The administration of haloperidol, a typical antipsychotic, acts by blocking dopamine D2 receptors in the mesolimbic pathway. Blockade of these receptors results in reduced dopaminergic activity, so that the sexual reward system is suppressed and excessive sexual drive may be diminished. The reduction in dopaminergic activity also helps to enhance prefrontal cortical control over impulses, which ultimately reduces preoccupation with sexual thoughts and hypersexual behaviour. Furthermore, dopamine antagonism by haloperidol may increase prolactin levels, which in turn contributes to a reduction in libido and helps to control excessive sexual behaviour. Thus, the pharmacological mechanism of haloperidol contributes to the reduction of hypersexuality through suppression of the dopaminergic reward system and enhancement of inhibitory behavioural control^(13,14,15).

The use of contraception in mental retardation serves to prevent unintended pregnancy and to provide protection against the risk of *sexual abuse*. Women with intellectual disability more frequently use long-acting contraceptive methods such as implants and intrauterine devices (IUDs), because of their high effectiveness and the fact that they do not require daily adherence¹⁶.

CONCLUSION AND RECOMMENDATIONS

The intellectual and behavioural impairment in mental retardation results in difficulty in identifying touch from another person; consequently, the experience of sexual abuse in such a

patient may give rise to deviant behaviour such as excessive sexual drive. In adult patients, psychotherapy is less effective, so that psychoeducation for the family and pharmacological therapy are required as the therapeutic options of choice. Contraception is used to prevent pregnancy. It is recommended that primary health centre (Puskesmas) staff monitor the patient's adherence to medication and provide ongoing support and periodic education for the patient's family.

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