

INAPPROPRIATE SEXUAL BEHAVIOR IN THE CONTEXT OF DEMENTIA AND NEUROGENERATIVE DISORDERS: A REVIEW OF THE LITERATURE

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SUMMARY

Background: The increasing prevalence of neurodegenerative disorders in the context of global population aging, has led to a growing incidence of Behavioral and Psychological Symptoms in Dementia (BPSD). Among these, Inappropriate Sexual Behavior (ISB) constitutes a particularly challenging and underrecognized issue for healthcare providers, patient and their family. Despite its clinical, ethical, and institutional implications, ISB remains insufficiently studied and poorly understood in the field of geriatric psychiatry.

Subjects and methods: A literature review was conducted using publications from 2004 to 2024, identified across multiple databases (PubMed, Cochrane, Scopus, Cairn, Psychinfo). Search terms included: "sexuality in older adults," "dementia and sexuality," "sexual behavior disorders," and "affective, cognitive needs in geriatric psychiatry."

Results: Sexual expression persists as a fundamental human need in older adults, including those with dementia, yet it is frequently misinterpreted or pathologised. ISB in dementia may stem from multifactorial etiologies, including neuroanatomical changes, unmet emotional, relational needs, medication side effects, comorbid conditions, or pre-existing personality traits. Distinguishing ISB from paraphilic or deviant sexual behaviours necessitates a nuanced, individualised, and contextually informed assessment. Structured tools can aid in the systematic evaluation and monitoring of ISB. Management strategies should prioritise non-pharmacological interventions as first-line approaches. Pharmacological treatments are considered only in refractory cases.

Conclusion: ISB in dementia demands a comprehensive, interdisciplinary, and person-centered approach. Greater clinical awareness, standardized diagnostic frameworks, and robust empirical research are urgently needed to inform effective and ethically sound interventions, ultimately improving patient and caregiver outcomes.

Key words: sexuality in older people - dementia and sexuality - sexual behaviour disorders - affective and cognitive needs in geronto-psychiatry

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INTRODUCTION

From a demographic standpoint, the World Health Organization (WHO) emphasizes the global aging of the population. As life expectancy increases, there is a marked rise in the number of older adults worldwide. This demographic shift is closely associated with a growing prevalence of dementia and neurodegenerative disorders, notably Alzheimer's disease. It is important to note that, among these patients, over 75% will develop Behavioural and Psychological Symptoms of Dementia (BPSD), which include apathy, anxiety, emotional lability, agitation, aggression, delusions, and hallucinations. These symptoms carry substantial health, social, and economic consequences. They are a leading cause of hospital admissions in geriatric and psychogeriatric settings. Such admissions are often prompted by overwhelmed outpatient care systems and/or patient's entourage, exhausted by these behaviours, feeling a real sense of powerlessness and massive exhaustion. It should be noted that BPSD are the primary drivers of long-term institutionalization of older adults with dementia in residential care facilities, such as nursing homes. Among these symptoms, Inappropriate Sexual Behavior (ISB) frequently presents a particular challenge for caregivers and healthcare

professionals, but also for patients' relatives. The appropriate management of ISB constitutes a critical clinical, institutional, and ethical issue within outpatient, inpatient, and long-term care settings. Despite its significant prevalence, ISB in dementia remains relatively understudied and poorly understood. This literature review aims to synthesize current evidence regarding the management of ISB in patients with dementia, drawing on clinical practice guidelines and specific research studies to inform and enhance the quality of care for this vulnerable population.

METHODS

We carried out a literature review based on articles dated from 2004 to 2024 and selected from the following databases: Pubmed, Cochrane, Scopus, Cairn and Psychinfo. The articles selected dealt with sexuality in the elderly, sexual behaviour disorders in dementia, and associated therapeutic and ethical approaches. Data extracted included specific recommendations for the different BPSD, the quality of the associated evidence and the strength of the recommendations. Keywords used included "sexuality in older people", "dementia and sexuality", "sexual Behaviour Disorders" and "Affective and Cognitive needs in Geronto-Psychiatry".

RESULTS

The lack of high-quality randomized controlled trials limits the development of strong evidence-based recommendations, most of the current knowledge coming from case studies. Existing data show that sexuality in older adults remains a fundamental need, even in the context of dementia. However, it is often misunderstood or misinterpreted by the patient's relatives or caregivers. It is important to recall that several factors influence the expression of sexuality in older individuals in general. First, biological and neurological factors - such as physical aging, mobility, autonomy, and hormonal changes - are important elements to consider. Then, psychological and relational factors, including loneliness, the need for affection, and the desire to maintain tactile, emotional, or intimate connections, play a central role in the expression of sexuality. Finally, sociocultural factors, including cultural, familial and religious values, as well as societal perceptions of sexuality in older adults, significantly influence how sexuality is experienced and understood in later life. Thus, when sexuality is expressed in the context of a neurocognitive or dementing disorder, its interpretation becomes even more complex. Although neurocognitive disorders are often associated with apathy and a decrease in sexual interest, disinhibition resulting from frontal lobe involvement may lead to the emergence of inappropriate sexual behavior (ISB). These may manifest in various forms, including obscene or suggestive language, sexually explicit insults, stereotyped sexual activities, provocative or seductive behaviors, delusional jealousy, implicit sexual acts (such as requesting unnecessary genital care, watching pornography in public), and explicit sexual acts (such as touching, groping, undressing others or oneself, or masturbating in public). It is therefore necessary to carefully analyze the behavior in order to understand the medical, psychological, and social context in which it occurs. For example, it is common to observe ISB when relational needs are unmet (lack of physical contact, tenderness, or intimacy). They may also result from side effects of medications, underlying conditions (such as delirium), or pre-existing personality traits. These behaviors must be distinguished from classical sexual deviance (such as exhibitionism, pedophilia, or voyeurism), as they are generally linked to cognitive impairment rather than to a structured perversion. The exact prevalence of ISB is difficult to determine, but it is recognized as a frequent challenge in long-term care facilities.

Assessment of Inappropriate Sexual Behaviors: Faced with a potentially inappropriate sexual behavior, rigorous and systematic assessment is essential. It is crucial to distinguish between appropriate and inappropriate behaviors, taking into account the variability of individual perceptions influenced by factors such as sex education, cultural and religious beliefs, and

prevailing social norms and codes. The assessment should include a comprehensive medical history, along with a mental status examination, in order to identify any pre-existing conditions and/or associated disorders such as mood disorders, substance use disorders, rigid personality traits, or a long-standing pattern of hypersexuality, as each of these elements may necessitate a tailored management strategy. A precise analysis of the behavioral context is required, encompassing the exact nature of the behavior, the circumstances under which it occurs, its frequency and intensity, any identified triggers or exacerbating factors, the perception of the behavior as problematic (by whom and for what reasons), and the potential risks it may pose to the patient or to others in their environment. It is also crucial to assess whether the individuals involved possess the necessary capacity to give informed consent. Environmental or emotional triggers, misinterpretation of non-sexual care activities, or certain medications (e.g., benzodiazepines, dopamine agonists, androgen supplements) may contribute to the emergence of ISB. Therefore, obtaining collateral history from family members, caregivers, and possibly other residents is essential. A physical examination and targeted laboratory tests, guided by the clinical context, are necessary. For instance, the sudden onset of ISB may represent a prodromal sign of delirium. A thorough neurological and cognitive evaluation, in conjunction with a genital examination, may help identify contributing factors such as urinary tract infections or fecal impaction. The use of standardized tools, such as the St Andrew's Sexual Behaviour Assessment (SASBA), validated and reliable instrument (level II evidence), can assist in documenting ISB, monitoring its evolution, and supporting the rationale for therapeutic interventions. Finally, the assessment should also explore the extent to which the behavior aligns with the patient's prior values and beliefs, their capacity to refuse unwanted sexual contact, their awareness of potential risks, and their understanding of interpersonal and relational boundaries.

Principles and management strategies for ISB: The management of ISB in patients with dementia requires a multidimensional approach integrating adapted nursing, psychological, medical, and environmental care. It's crucial to ensure that the observed behaviors are not misinterpreted expressions of non-sexual needs (need for physical contact, confusion, physical discomfort). Thus, the objective is first to understand the behavior rather than systematically suppress it. Open communication with families is essential to mitigate misunderstandings and promote an approach respectful of the patient's needs. Caregiver training plays a central role in demystifying sexuality in older adults and identifying appropriate interventions. Non-pharmacological interventions constitute the first line of treatment. These include calm and reassuring responses to inappropriate expressions of desire, without excessive, judgmental, or punitive reactions. Redirecting the

person to other activities or private places can be effective, particularly to distract them or to address a form of boredom. It is important to integrate different forms of touch into the daily routine to meet the needs for physical contact (holding a resident's hand, washing their hair, hugging them, etc.). Creating environments that respect privacy and offer private spaces within residential infrastructures is also essential. Openly discussing sexuality outside periods of urges can also be helpful (e.g., facilities for conjugal visits, individual bathrooms, privacy-friendly bedrooms...). Identifying and managing environmental or emotional triggers is also important (e.g., avoiding over-stimulating TV or radio programs). In addition to these environmental and behavioral approaches, it will be essential to psychoeducate families, caregivers, and staff members about sexuality related to aging and ISB, with a view to better differentiating behaviors and fostering more open views with more permissive and beneficial attitudes for people with BPSD. Psychotherapeutic support for the patient's partner is also important to implement. Pharmacological interventions may be considered in some cases of persistent ISB, depending on the underlying etiology. However, they should only be used as a last resort. Decisions must be individualized, weighing the potential benefits against the risks. It is crucial to communicate with patients and their families regarding these aspects and to document these discussions, as most pharmacological treatments for ISB are prescribed off-label. Above all, it is essential to evaluate the medications already taken by patients and any associated drug interactions. Stopping or adjusting medications likely to exacerbate sexual disinhibition, such as benzodiazepines or dopamine agonists, should be considered. A wide range of drug classes has been used for SBD, but the results mainly come from isolated cases or short case series, without any randomized controlled trials due to the lack of a well-defined method of observation and measurement of SBD and significant ethical considerations (De Giorgi et al. 2016). Pharmacological treatments therefore present low-level evidence of efficacy in the literature. Different studies have been carried out with antidepressants: selective serotonin reuptake inhibitors (SSRIs) are often recommended as first-line treatment due to their presumed safety profile. Cases of success have been reported with paroxetine and citalopram, with benefits sometimes observed within the first week for some. The tricyclic antidepressant clomipramine has reduced ISB in some cases, but its use is discouraged in older adults due to adverse effects. Trazodone has improved ISB in a few patients with dementia. Antipsychotics, although they can be used to treat agitation and aggression associated with ISB, have not shown conclusive results. Their use for sexual disinhibition is poorly supported by solid evidence and is associated with risks of significant adverse effects. Anticonvulsants have been associated with an

attenuation of sexual behaviors in cases of dementia: carbamazepine has shown some effectiveness in a few cases of sexual disinhibition, but its side effects limit its use. Other anticonvulsants such as gabapentin and valproate have also been studied with variable results. Studies evaluating the effect of cholinesterase inhibitors are contradictory, with cases reporting a reduction in SBD under rivastigmine, while others describe the appearance of SBD under donepezil. Finally, hormonal agents such as medroxyprogesterone acetate and cyproterone acetate (anti-androgens) have been tried to reduce inappropriate sexual behaviors in men. Scientific data on their effectiveness are limited, and the potential side effects are significant. Other drugs such as beta-blockers (propranolol, pindolol) and cimetidine have also been suggested, but little evidence is available. Thus, it is important to note that none of these drugs are specifically approved for the treatment of SBD in dementia and that caution is recommended due to the high risk of adverse effects in older adults with dementia.

DISCUSSION

The evidence for the management of ISB in dementia is limited and mainly based on general recommendations regarding NPS, and on low-level evidence studies such as isolated cases and case series. The review by Watt et al. in 2024, highlights the variability of recommendations across different clinical practice guidelines for all NPSD, which is also reflected in the management of SBD. Several factors contribute to the lack of robust data. First, the absence of a standardized definition and objective measurement methods for SBD. This lack of uniformity regarding the terms used to define a behavior leads to significant subjective variability. Indeed, the perception, feeling, and experience of an individual facing a symptom of a sexual nature can vary considerably, particularly due to personal, socio-cultural, religious... factors. In collective care settings such as nursing homes, where many different attitudes towards sexuality coexist and where privacy is limited, this diversity of perceptions can lead to tensions and management difficulties. The label of "demented" attached to a person can also lead to stigmatization by loved ones or caregivers, thus projecting their own representations of sexuality. Second, ethical difficulties are associated with research on sexual behaviors in vulnerable individuals, particularly regarding their capacity for discernment and to consent both at the level of the consent required for inclusion in studies, but also regarding the capacities of discernment regarding their behaviors and the impact on others. Finally, another problem is related to the heterogeneity of the clinical presentations of SBD depending on the type and stage of dementia (which are not always clearly known or

documented in the patient's medical record) as well as individual and contextual factors. Despite these difficulties related to conducting studies, it seems fundamental to be able to broaden our knowledge in the future. Indeed, many caregivers sometimes feel helpless in the face of these situations, lacking training and clear protocols to respond appropriately. This represents a considerable obstacle to respectful and adapted management of the sexuality of older adults. Their own representations and stereotypes can negatively influence their approach. Deepening our studies would thus improve evidence-based medicine knowledge, change attitudes, and create tools.

CONCLUSION

In conclusion, the management of ISB in older adults with dementia constitutes a multidimensional challenge, combining clinical, ethical, and social issue. It is fundamental to recognize sexuality as a persistent human need, even in situations of cognitive decline, while ensuring the safety and well-being of all individuals involved in institutions. An individualized assessment, attentive to contributing factors such as pain, boredom, or the search for affection, helps to guide adapted management. This should primarily rely on non-pharmacological interventions, integrating environmental adjustments, behavioral strategies, and psychoeducation of caregivers and families. The use of medication can only be considered as a last resort, with caution and in a rigorously evaluated framework. Continuing education for health professionals, awareness-raising among loved ones, as well as a better understanding of the mechanisms involved are essential to combat stereotypes, promote benevolent attitudes, and ensure respect for the dignity of residents. Finally, quality research, including randomized controlled trials, is essential to build recommendations based on solid evidence and promote an ethical, informed, and humane approach to sexuality in the context of dementia.

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