Recent studies suggest that most older adults maintain sexual interest well into late life; many, however, experience sexual dysfunction. This article provides psychiatric practitioners with current information regarding sexuality and aging, as well as psychiatric and systemic medical comorbidities and sexual side effects of medications. Practice guidelines for assessing and managing sexual dysfunction have been developed for use in many medical specialties, and such guidance would be welcome in psychiatric practice.

This article addresses the myth of “geriatric asexuality” and its potential impact on clinical practice, the effects of age-related physiological changes on sexual activity, the importance of sexuality in the lives of older adults, and sensitive questions clinicians can pose about geriatric sexuality. We also will discuss:

- the importance of including a sexual assessment in the comprehensive psychiatric evaluation
- recognizing sexual dysfunction
- providing appropriate management within a multidisciplinary, collaborative approach.

Sexuality after 65

Regardless of age, sexual activity can provide a sense of comfort and elicit a positive emotional and physical response. Hillman defined human sexuality as any combination of sexual behavior, emotional intimacy, and sense of sexual identity.

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Sexuality in the aging population generally is an understudied area, obscured by the myth of “geriatric asexuality” and subject to numerous psychosocial variables. Previous research, focused on a biological perspective of sexuality, has largely overlooked psychological and social influences. It has been assumed that, with age, physical and hormonal changes or chronic illness ordinarily reduce or eliminate sexual desire and sexual behavior. However, the majority of older adults (defined as age ≥65) report a moderate-to-high level of sexual interest well into late life.

Sexual function remains a subject often neglected in psychiatry. Sexual dysfunctions, as described in the DSM-5, do not include age-related changes in sexual function. In addition to physiological changes, sexual difficulties can result from relationship strain, systemic medical or psychiatric disorders, and sexual side effects of medications.

CASE REPORT

Mr. C, age 71 and married, is being treated for a major depressive episode that followed a course of shingles and persistent postherpetic neuralgia. Medications are: escitalopram, 20 mg/d; pregabalin, 150 mg/d; and ramipril, 5 mg/d. Mr. C is physically active and involved in social activities; he has no substance use history. He attends clinic visits with his wife.

Mr. C reports that despite significant improvement of his depressive and pain symptoms, he now experiences sexual difficulties, which he seems hesitant to discuss in detail. According to his wife, Mr. C appears to lack sexual desire and has difficulty initiating and maintaining an erection. She asks Mr. C’s psychiatrist whether she should stop her estrogen treatment, intended to enhance her sexual function, given that the couple is no longer engaging in sexual intercourse.

Mr. C admits to missing physical intimacy; however, he states, “If I have to make a choice between having sex with my wife and getting this depression out of my head, I’m going to pick getting rid of the depression.” Mrs. C says she is becoming dissatisfied with their marriage and the limited time she and her husband now spend together. Mr. C’s psychiatrist suggests that Mr. C and his wife undergo couples counseling.

Physiological changes with aging

In both women and men, the reproductive system undergoes age-related physiological changes.

Women. In women, the phase of decline in ovarian function and resulting decline in sex steroid production (estradiol and progesterone) is referred to as the climacteric, with menopause being determined retrospectively by the cessation of a menstrual period for 1 year.

Menopausal symptoms typically occur between age 40 and 58; the average age of menopause is 51. Both estradiol and progesterone levels decline with menopause, and anovulation and ovarian failure ensue. A more gradual decline of female testosterone levels also occurs with aging, starting in the fourth decade of life.

Clinical manifestations of menopause include vasomotor symptoms (ie, “hot flushes”), sleep disturbances, anxiety and depressive symptoms, decreased bone mineral density, and increased risk of cardiovascular disease. Loss of estrogen as well as continued loss of testosterone can result in dyspareunia because of atrophy and decreased vulvar and vaginal lubrication, with sexual excitement achieved less quickly, and a decreased intensity of orgasm.

Men. Research has shown that testosterone levels are highest in men in the second and third decades, with a subsequent gradual decline. Older men with a low testosterone level are described as experiencing “late-onset hypogonadism,” also known by the popularized term “andropause.” This is attributed to decreased activity at the testicular and hypothalamic levels.

Nonetheless, only a small fraction of older men with confirmed androgen deficiency are clinically symptomatic. Low testosterone is associated with decreased libido; it can hinder morning erections, contribute to erectile dysfunction, and result in erections that require physical stimulation.
Erectile dysfunction involves several other etiologic factors: psychiatric (e.g., relationship difficulties, depression), neurogenic (e.g., spinal cord injury), endocrine (e.g., hyperprolactinemia), arteriogenic (e.g., hypertension, type 2 diabetes mellitus), and drug-induced (e.g., antidepressants, antihypertensives). A low testosterone level also has been associated with potential cognitive changes, decreased bone mineral density, metabolic syndrome (e.g., increased risk of type 2 diabetes mellitus), and cardiovascular mortality.

Effects on sexual activity. How much age-related physiological changes impact sexual practices in the geriatric population is uncertain. A study following 3,302 women through menopause over 6 years found some decline in sexual activity; however, this decline was not associated with increased sexual pain, decreased desire, or lack of arousal. Men continue to find ways to remain sexually active despite physiological changes (e.g., erectile difficulties), but the etiology of sexual dysfunction in later life remains multi-modal, involving physical, psychological, and relational factors.

Sexual practices in older adults
Researchers for the National Social Life, Health, and Aging Project (NSHAP) have examined sexual activities, behaviors, and problems in >3,000 older community-dwelling men and women across the United States, using information collected from in-home interviews. This study found that sexual activity, defined as any mutually voluntary sexual contact with another person, declines with age; however, even in the oldest age group (age 75 to 85), 39% of men and 17% of women reported being sexually active in the last 12 months. Among these persons, 54% reported sexual activity at least 2 times per month; 23% reported having sex at least once a week; and 32% reported engaging in oral sex. Partner availability predicted sexual activity.

Respondents with self-reported poor physical health were more likely to experience sexual problems (e.g., difficulty with arousal, erection, dyspareunia, ejaculation, orgasm). A longitudinal study, part of the Women’s Healthy Ageing Project, examined changes in sexual function at late menopause compared with early menopause. Although the researchers also found an age-related decrease in sexual activity, 50% of their late-menopause respondents (mean age, 70; range, 64 to 77) still reported sexual activity in the previous month, with 35% of this subgroup reporting sexual activity at least once a week.

Clinical Point
In a survey of older men and women, those who reported poor physical health were more likely to say they experience sexual problems.
once a week; 83% reported sexual thoughts or fantasies. Availability of a partner, absence of a history of depression, moderate (compared with no) alcohol consumption, and better cognitive function were significantly associated with a higher level of sexual activity.19

In the Successful Aging Evaluation study, conducted in San Diego County, California, community-dwelling older partnered adults age 50 to 99 (mean age, 75) were surveyed about their sexual health after a cognitive screen by telephone5; rating scales for depression, anxiety, and physical function also were included. Results included 41% of men and 35% of women reporting sexual activity at least once a week, and only 21% of men and 24% of women reporting no sexual activity in the previous year. Depressive symptoms were most highly correlated with lack of sexual activity.20

Overall, these studies reveal that positive physical and mental health, access to a healthy partner, and a positive attitude toward sex are correlated with sexual activity in later life, whereas barriers to sexual activity include lack of a healthy sexual partner, depression, and chronic systemic medical illnesses, such as coronary artery disease or type 2 diabetes mellitus.13,17,21-24 Sexual activity and satisfaction have been positively associated with perceived general well-being and self-esteem.25,26 Conversely, sexual difficulties secondary to disease can be a source of distress for couples.27

Possibly overlooked? It is important to note that sexuality itself is a subjective area. Psychological intimacy is a universal phenomenon, and its physical expression may evolve as couples accommodate to age-related bodily changes. Means of achieving physical closeness, other than intercourse (eg, intimate touching, hand holding, kissing, or even acts of caretaking), may not be adequately captured in studies that look specifically at sexual activity.

Taking a sexual history in a geriatric patient

Because sexuality can be an uncomfortable topic for geriatric patients to discuss, sexual problems in this population often go unrecognized. It has been suggested that psychiatrists are more likely to inquire about sexual activity in middle-aged patients than geriatric patients with the same psychiatric presentation—perhaps illustrating a bias against taking a sexual history from a geriatric patient.28 However, because many older patients can experience depression or anxiety disorders in relation to normal sexual changes or sexual dysfunction within the context of their intimate relationships, it is essential to bring these issues to light.

Although a sexual history may not be the focus of a first clinical encounter, consider making such an assessment at a relatively early stage of your care.

### Table 2

Examples of interviewing questions to assess sexuality in geriatric patients

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your current experience with intimacy?</td>
<td></td>
</tr>
<tr>
<td>Please describe your gender identity.</td>
<td></td>
</tr>
<tr>
<td>Please describe your sexual orientation.</td>
<td></td>
</tr>
<tr>
<td>How do you find your level of sexual interest?</td>
<td></td>
</tr>
<tr>
<td>How about your sexual function?</td>
<td></td>
</tr>
<tr>
<td>• How is your sexual desire?</td>
<td></td>
</tr>
<tr>
<td>• Are you able to experience arousal?</td>
<td></td>
</tr>
<tr>
<td>• Do you have any difficulty achieving or maintaining an erection?</td>
<td></td>
</tr>
<tr>
<td>• Do you usually achieve ejaculation/orgasm?</td>
<td></td>
</tr>
<tr>
<td>• Do you have pain during intercourse?</td>
<td></td>
</tr>
<tr>
<td>How do you express sexual activity?</td>
<td></td>
</tr>
<tr>
<td>How about sexual and physical intimacy?</td>
<td></td>
</tr>
<tr>
<td>Do you wish this took place more often?</td>
<td>Less often?</td>
</tr>
<tr>
<td>What factors do you think are affecting your approach to sex?</td>
<td></td>
</tr>
<tr>
<td>Do you engage in self-stimulation, such as masturbation?</td>
<td></td>
</tr>
<tr>
<td>Are you currently in an intimate relationship?</td>
<td></td>
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<tr>
<td>How satisfied are you with companionship in your current relationship?</td>
<td></td>
</tr>
<tr>
<td>Has there been any relationship strain?</td>
<td></td>
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<tr>
<td>If so, why do you think this is?</td>
<td></td>
</tr>
<tr>
<td>If you could, what would you change about your current relationship?</td>
<td></td>
</tr>
<tr>
<td>If you are currently not in an intimate relationship, are you interested in pursuing one?</td>
<td>Do you have any concerns about this?</td>
</tr>
</tbody>
</table>

Clinical Point

A sexual history might not be the focus of a first clinical encounter, but consider making such an assessment at a relatively early stage of your care.
Geriatric sexuality

Geriatric sexuality

Clinical Point
As a starting point, an open-ended invitation might be best from you: ‘What would you like to tell me about your sexual life?’

Table 3
Factors that can affect geriatric sexuality

Systemic medical conditions
Type 2 diabetes mellitus, obesity, hyperthyroidism, other endocrine disorders; cardiac disease, including history of myocardial infarction, hypertension, peripheral vascular disease; renal disorders and dialysis; lower urinary tract symptoms; prostate cancer and its treatment; pelvic surgery, hysterectomy; ovarian cancer; Parkinson’s disease, epilepsy, stroke, multiple sclerosis; lung disease; lumbar disc disease; and arthritis

Psychiatric factors
Depressive disorders, anxiety disorders, neurocognitive disorders, substance abuse, chronic stress, history of sexual abuse

Medications
Antidepressants: SSRIs and SNRIs due to serotonin effects; TCAs due to serotonin and anticholinergic effects and lower urinary tract symptoms; trazodone, which can cause priapism; fewer sexual side effects with bupropion and mirtazapine.

Antipsychotics: Elevation of prolactin levels through dopamine antagonism, metabolic effects resulting in conditions that affect sexual function (eg, type 2 diabetes mellitus)

Anticonvulsants and other mood stabilizers: Carbamazepine, phenytoin and phenobarbital due to possible reduction of free testosterone; valproic acid, with polycystic ovarian syndrome and reports of decreased libido and anorgasmia in women and reduced testicular volume in men; conflicting data for oxcarbazepine; gabapentin with cases of anorgasmia; no sexual side effects known for lamotrigine and lithium.

Benzodiazepines: Weak evidence only, mainly via case reports and retrospective studies; potential for decreased sexual desire, delay in reaching orgasm, and erectile dysfunction; other case reports indicate possible increased desire and sexual disinhibition.

Cognitive enhancers: Case reports of both successful treatment (rivastigmine) and emergence of sexually inappropriate behaviors (donepezil) in patients with neurocognitive disorders; no data on memantine.

Antihypertensives: Clonidine, beta blockers, and angiotensin-converting enzyme inhibitors.

Lipid-lowering agents: Niacin and fibrates

SNRIs: serotonin norepinephrine reuptake inhibitors; SSRIs: selective serotonin reuptake inhibitors; TCAs: tricyclic antidepressants

relatively early stage of patient care. The importance of such dialogue is 2-fold:
• It demonstrates to the patient that talking about sexuality in a respectful and empathic manner is appropriate and can encourage patients to communicate more effectively about sexuality with clinicians and with sexual partners.
• It helps elicit medical information needed to make an accurate diagnosis and provide adequate management.

How to begin. As a starting point to taking a sexual history, an open-ended invitation for the geriatric patient to share information may be best, such as “What would you like to tell me about your sexual life?” See further suggestions (Table 1, page 16) and examples of more detailed questions to ask once a dialogue has been initiated (Table 2, page 17). Additional factors that may contribute to sexual dysfunction are presented in Table 3.1,27,29,30

CASE CONTINUED
In Mr. C’s case, an assessment of his sexual history, including risk factors for sexual dysfunction, is completed. Results from laboratory investigations, including a total testosterone level, are within normal limits.

Mr. C asks about using medications with fewer sexual side effects (he has been taking 3 medications that can contribute to sexual dysfunction). A gradual cross-taper of escitalopram, 20 mg/d, to mirtazapine, 45 mg/d, is implemented, along with tapering pregabalin to 50 mg/d.

Mr. C’s psychiatric and pain symptom improvement is maintained. He notices a boost in his sexual desire but has minimal improvement in erectile dysfunction. He is
encouraged to speak with his primary care physician about an antihypertensive agent with less impact on sexual function, as well as therapeutic agents for erectile dysfunction; these, he declines.

At a subsequent visit, Mr. C reports feeling less apprehension about sexual performance. He is now willing to consider further medical options with his primary care physician, and agrees to a recommendation for couples psychotherapy.

As illustrated in Mr. C’s case, the recommended sexual assessment and management strategies to consider at a minimum in psychiatric practice are listed in Table 4.

### STI risk in geriatric patients

The risk of sexually transmitted infections (STIs), including human immunodeficiency virus (HIV), often is overlooked in sexually active older adults. Although STIs are more common among younger adults, there is recent evidence of increased incidence in the geriatric population (with the highest risk of incident HIV and some STIs in older men who have sex with men). These increased rates can be explained, at least in part, by:

- older men being less likely to use a condom during sexual activity
- promotion of viral entry in older women through a drier, thinner vaginal wall
- increased longevity of HIV-positive persons

Routine STI screening is not warranted in all older adults, but education and prevention strategies are recommended for those at increased risk.

### Additional considerations in geriatric sexuality

Because psychiatric and systemic medical conditions can hinder sexual function, it is essential to identify and manage these conditions. Several neuropsychiatric disorders, including mood and neurocognitive disorders, can not only cause sexual dysfunction, but also can raise ethical dilemmas for clinicians, such as reduced...
decisional capacity in cognitively impaired patients to consent to sexual activity.\textsuperscript{1,34}

In some patients, psychological, environmental, and pharmacological treatment options may help. A phosphodiesterase type 5 inhibitor for erectile dysfunction can be prescribed by the primary care physician, a psychiatrist, or another specialist, depending on the physician’s expertise and comfort level.

**Sequencing of sexual dysfunction.**

Notably, there is a common paradox in mood disorders. Decreased sexual interest or performance may represent an aspect of anhedonia associated with depression, whereas sexual dysfunction could also result from medication use (particularly that of serotonergic antidepressants, such as selective serotonin reuptake inhibitors and serotonin-norepinephrine inhibitors), even as other depressive symptoms improve. Therefore, it is critical to analyze sequencing of sexual dysfunction—as part of the presenting mood symptoms or dysfunction induced by antidepressant treatment.

**Geriatric sexuality in the digital age.**

Because older adults represent a rapidly growing segment of digital device users, Internet use is likely to play a role in the future of sexuality and “digital intimacy,” in that older adults can engage in online sexual activities. The Internet also can be a tool to access medical education.

**References**


**Related Resources**


**Drug Brand Names**

- Bupropion • Wellbutrin, Zyban
- Carbamazepine • Tegretol
- Clonidine • Catapres
- Donepezil • Aricept
- Escitalopram • Lexapro
- Gabapentin • Neurontin
- Lamotrigine • Lamictal
- Lithium • Eskalith, Lithobid
- Memantine • Namenda
- Mirtazapine • Remeron
- Oxcarbazepine • Trileptal
- Phenoobarbital • Luminal
- Phenytoin • Dilantin
- Pregabalin • Lyrica
- Ramipril • Altace
- Rivastigmine • Elexon
- Trazodone • Desyrel
- Valproic acid • Depakote

**Clinical Point**

Depending on your expertise and comfort level, consider prescribing a PDE5 inhibitor for a man who reports erectile dysfunction.

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continued from page 19

continued
Ms. A, age 17, and her parents are seen by you after an episode at school in which Ms. A screamed for other students to “be quiet” during a test. Ms. A complains to you that her classmates won’t stop talking about her, although she never catches them doing so, and that one of her teachers laughs at her and calls her “fat and worthless.” That teacher noted in the school record that Ms. A often “spaces out” and has been failing tests—uncharacteristic of a once straight-A student. Your diagnosis is first-episode psychosis; you prescribe risperidone, 3 mg/d. After 2 months of remission of symptoms, however, Ms. A relapses. Which course of treatment would you next choose for her?

- Prescribe a higher dosage of risperidone (6 mg/d)
- Stop risperidone and start quetiapine, 25 mg/d, titrated to 600 mg/d
- Stop risperidone and begin haloperidol, 5 mg
- Stop risperidone and start clozapine, 12.5 mg/d, titrated to 300 mg/d

See ‘Managing first-episode psychosis: An early stage of schizophrenia with distinct treatment needs,’ page 32-40,42

Visit CurrentPsychiatry.com to answer the Instant Poll and see how your colleagues responded. Click on “Have more to say?” to comment.

MARCH POLL RESULTS

Mr. G, age 73, visits your office reporting poor sleep, fatigue, and loss of appetite. His son says that Mr. G has been forgetful lately and has called to ask how to perform routine tasks or how to get to stores he often visits. Mr. G takes citalopram, 40 mg/d, for depression and atenolol, 50 mg/d, for high blood pressure. How would you begin to assess Mr. G’s symptoms?

- 43% Perform laboratory testing for drug toxicity, low vitamin levels, and an underlying medical condition
- 4% Refer Mr. G to a clinical neuropsychologist for neuropsychological testing
- 3% Perform a CT scan
- 50% Use the Six-Item Screener to assess cognitive impairment

SUGGESTED READING:

Data obtained via CurrentPsychiatry.com, March 2015