

Emphasizing the Importance of Sexual Healthcare among Middle and Old Age Groups: A High Time to Re-Think?

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Abstract

Our sexuality and sexual health is affected by physiological-, pharmacological-, psychosocial-, and illness-related changes as we age. Physiological changes in men can cause less firm erections due to narrowing of the arteries that supply blood to the penis, and in women, the vagina can become shorter, narrower, and less lubricated. Pharmacological and medical interventions may affect libido in both men and women by decreasing overall sexual desire resulting in a diminished interest in sex over time. Illnesses more prevalent among middle-aged and older adults including diabetes can also influence sexual function, such as increased erectile dysfunction among men and lack of sexual arousal in women. Societal changes, including increased rates of divorce, use of the internet to find sexual partners, suggest that older populations are also at risk of sexually transmitted infections (STIs). Even though the World Health Organization's definition of sexual health contains no age limits, most sexual health policies, services, and interventions target people from adolescence to early childbearing years. Many people continue to be sexually active in later years, yet health promotion and services target the young (under 25 years), with little opportunity for prevention, treatment, or positive sexual health promotion in over 45 s. Sexual dysfunction, STIs are an increasing public health issue among middle-aged and older adults but are not considered a priority for surveillance in sexual healthcare. This review aims to examine how sexual health is affected by aging and why sexual health among people aged 45 years and above is of public health importance.

Keywords: Aging, middle-aged, old aged, sexual dysfunction, sexual health, sexuality

INTRODUCTION

On average, the population is getting older because of successful public health interventions increasing life expectancy. An estimated 29.3% of the world's population is middle-aged (45–64 years) and older (above 65 years).^[1] In the developed countries like Japan, life expectancy at birth now exceeds 83 years and is at least 81 years in several other countries, including the UK and 79 years in the US.^[2] In less developed regions, such as East Asia and the Caribbean also increased to at least 74 years (with the notable exception of parts of Africa where deaths caused by the HIV/acquired immunodeficiency syndrome (AIDS) epidemic is responsible for the fall in life expectancy rates).^[2] Thus, much attention has focused on the implications of an aging population. Individual and societal benefits of increased life expectancy include the value of longer periods of life, a sustained sense of well-being and productivity (increased retirement age), and extended periods of social engagement, however, these are coupled with

problems associated with an aging population. These problems include chronic illness and noncommunicable diseases, higher probability of developing dementia, disability, and dependency. Notably, minimal attention has been paid to this group with respect to their sexual health and how it affects their quality of life (QOL). Policy makers and media seem to equate sexual health with youth (both positively and negatively) while the sexual health-care needs of the middle-aged and older is ignored.^[3]

The World Health Organization defines sexual health as “a state of physical, emotional, mental, and social well-being related to sexuality; not merely the absence of disease, dysfunction,

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or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination, and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be protected, respected, and fulfilled.^{7[4]} While this definition contains no age limits, most sexual health policies, services, and interventions target people from adolescence to early child-bearing years. In many high-income countries, including the UK, public health strategies aiming to combat poor sexual health, such as their Teenage Pregnancy Strategy, the National Chlamydia Screening Programme, and the Sexual Health and HIV Strategy have focused primarily on the young,⁵⁻⁷ possibility due to the assumption that sexual health among older people is not of public health importance or even that older people are not sexually active, and therefore not at risk of poor sexual health outcomes.

This review aims to examine how our sexual health is affected by aging and why sexual health among people aged 45 years and above is of public health importance.

The impact of normal aging on sexual function

For most men and women, changes in sexual function occur around midlife and into subsequent decades as a normal consequence of aging.⁸ These changes include physiological (biological and physical) and psychosocial (emotional, mental, and social) changes, some of which can be illness related or brought on by pharmacological intervention, but all of which further influence our sexuality.

Physiological aspects of aging on sexuality

As we age, physiological changes (including hormonal levels) in our bodies may affect our sexual competence and can lead to problems, including diminished or absent interest in sex, difficulty becoming sexually aroused or lack of enjoyment during sex.⁹

Men

The physical changes coupled with aging are associated with an increased risk of impotence. Erections can be less firm or smaller than they used to be due to narrowing of the arteries that supply blood to the penis, and they produce less ejaculate during an orgasm or lose an erection faster after orgasm.^{9,10} Testosterone levels begin to decline in the fifth decade, often resulting in a diminishment of sexual desire.⁹ Loss of desire is associated with, and often a consequence of, diminished sexual responsiveness.

Women

Hormonal changes after menopause or a hysterectomy can cause the vagina to become shorter, narrower, and less lubricated.^{9,10} Estrogen depletion following menopause may affect the psychology and the physiology of sexual response. Blood flow to vaginal and genital tissues and sensory stimulation are directly affected by declining estrogen levels.¹⁰ These changes can produce vaginal dryness and recurrent genital pain with intercourse (dyspareunia), contributing to loss in desire and diminished sexual responsiveness.^{9,10}

Medical and illness-related factors

Physical illness can affect sexual function directly by interfering with endocrine, neural, and vascular processes that mediate the sexual response, indirectly by causing weakness or pain and psychologically by provoking changes in body image and self-esteem.¹⁰ In men and women, the age-related chronic or systemic conditions that instigate these changes and affect overall sexual satisfaction and performance include endocrine or metabolic disorders such as diabetes; cardiovascular diseases; cancers; neurologic disorders; and generally any injuries related to the reproductive organs, chronic pain, and incontinence.¹¹ The burden of chronic disease is growing due to increased life expectancy and lifestyle changes. For example, the estimated global prevalence for diabetes in 2010 was 347 million and was expected to affect 438 million people by 2030;¹² however, we are set to exceed this estimate as the prevalence was 422 million in 2014.^{13,14} Age has been shown to be a significant risk factor for all types of sexual dysfunction (SD). The age-related probability of complete erectile dysfunction (ED) is three times greater in patients with diabetes than in those without.¹⁵ ED prevalence and severity increase with age from 39% in men in their 40 s to 67% for men in their 70 s.¹⁶ Surgical therapy in men can affect erectile function by interfering with the neurologic innervation of the penis. Gynecologic and mastectomy surgeries in women affect the decline in orgasmic pleasure, such as following a hysterectomy because of the absence of uterine contractions.^{10,11} For men and women who view hysterectomy as a further loss of femininity, the women's self-esteem and body image may be negatively affected. Conversely, for women who experience relief from pain, abnormal bleeding, or cramping, hysterectomy may result in an improved sexual function.¹¹

Pharmacological factors

While pharmacological interventions have been developed to combat age-related illnesses and conditions; medications can cause or exacerbate changes in sexual function. These effects on sexual function can be more apparent among older persons as the aging process influences physiologic drug distribution, metabolism, and excretion. In men, medications such as the antihypertensive agents, beta blockers, and diuretics appear to be the primary causes of impaired erection.¹² In addition, cardiovascular drugs, cancer chemotherapy agents, anxiolytics, antipsychotics, a wide range of antidepressants, lithium, and numerous drugs of abuse (including cocaine, alcohol, narcotics, and amphetamines) have all been linked to impaired erectile function.¹⁰ In women, reported side effects are associated with antidepressant, antipsychotic, and neuroleptic medications and include decreased sexual desire, impaired arousal and lubrication, vaginal anesthesia, delayed orgasm, and anorgasmia.^{11,12} Antihypertensive drugs have been shown to impair physiologic sexual response in women by decreasing vaginal blood volume and pressure and pulse responses.¹¹ With regard to diabetes, male SD is a common, under-appreciated complication of this disease that can include

disorders of libido, ejaculatory problems, and ED.^[17] All three forms of male dysfunction can be a significant burden to diabetic patients and can affect their QoL.^[17] There is a paucity of research on the effects of diabetes on women; at this point, it does not appear to be correlated with sexual function as there is no evidence that peripheral or autonomic neuropathies directly affect the female sexual response.^[9]

Psychosocial aspects of aging on sexuality

Sexual function in middle-aged and older adults also has psychological influences like those that impact on the sexuality of younger persons. Common sources of sexual dissatisfaction noted among couples of all ages include commitment issues, marital conflict, sexual intimacy, communication problems, lack of trust, and incompatibilities in sexual desire and performance.^[18] However, what makes these factors different for older adults is that these may be amplified by anger and resentment that may have built over the years, as well as by feelings of entrapment and resignation and the option to leave if the relationship no longer seems viable.^[10] Psychosocial stresses such as depression or anxiety may fuel increased sexual difficulties, for example, stress attributable to the death of a spouse, divorce or separation, loss of a job or social status, and deterioration of support networks.^[10]

Adapting to changes in sexuality

Regardless of the physical and psychological barriers coupled with aging, many middle-aged and older adults adapt to improve their sexual lives. However, there are greater societal pressures to maintain a youthful appearance, perhaps influenced by an ageist media. Thus, widely accessible anti-aging products and treatments, as well as the growing popularity of plastic surgery and cosmetic treatments, occur in this age group. According to the American Society for Aesthetic Plastic Surgery 2016 report, ages 40–54 contributed to make up the majority of cosmetic procedures – 49% (7.6 million) cosmetic procedures performed and ages 55 and over second highest with 4.1 million.^[19] Reported factors that drive older patients toward anti-aging treatments and procedures include: improving general self-esteem; to be competitive in the workplace; to feel more attractive and connected/accepted in their social circles; to get a new start on life and attract new partners; and to look as young as they feel, as people become more “fitness” and attractive-conscious.^[20]

The internet offers forums for sex education and entertainment and the opportunity to meet sexual partners. The sexuality of older adults, like younger adults, has been greatly enhanced (or grossly distorted) through the varied avenues of the internet through which many have found new opportunities for sexual expression.^[21] The popularity of internet use for cyber dating and meeting the newly single middle-aged and older people is growing as several sites such as “Friends over 50”^[22] and “50+ Dating”^[23] and many others are well established. Remarriage and cohabitation in middle and old age is a progressively growing socio-demographic trend. In the US, about 50% of the “Baby boomers” (the post-Second

World War generation born between 1946 and 1964) have divorced and remarried and the proportions ever divorced, currently divorced, and married at least twice, are highest among individuals ages 50 and over.^[24,25] For those who are lonely in middle and old age, forming new relationships could be a necessary socioemotional goal which may serve to improve their psychological and sexual wellbeing. In fact, relationships formed in later life tend to be more positive, deeper, and more meaningful than those relationships in young adulthood.^[26] Interestingly, the dynamic of relationships in later life include choosing partners that are vastly younger in age (for reasons that may include making them feel youthful again). In the Caribbean, U.S., and Latin America the terms “Sugar daddy” and “Cougar syndrome” have been coined for these types of sexual relations which are becoming more acceptable possibly due to TV and Music celebrities of both sexes who flaunt their new relationships globally in the media with much younger partners.

Sexual behavior and health in middle-aged and older adults

Sexual dysfunction

Our knowledge is limited regarding sexual behavior in middle-aged and older adults as many surveys on sexual behavior or routine data collection exclude older people. Surveys which did include this demographic suggest that older adults are sexually active and consider sexual function,^[27] performance and ability to have sex as very important.^[28,29] A cross-sectional study in the UK and US showed that more than 80% of 50–90-year-old are sexually active.^[30,31] However, this age group has a higher probability of SD due to aging and development of chronic illnesses. Commonly reported SD problems among middle-aged and older adults include: (i) lack of interest in sex; (ii) arousal problems; (iii) climaxing too early; (iv) inability to achieve an orgasm; (v) experiencing pain during sex; (vi) not finding sex pleasurable; and (vii) anxiety about performance.^[32,33]

The prevalence of these issues varies according to the country. The National Social Life Health and Ageing Project in the US indicates that more than half of the people between 57 and 65 years and about a third of those 75–86 years are sexually active, about half (of both age groups) self-reported at least one bothersome sexual problem; one-third report at least two.^[34] In a global European study (Sweden, the UK, Belgium, Germany, Austria, France, Spain and Italy) on sexual activity, dysfunction, health-seeking attitudes and behavior, 83% of the men and 66% of the women aged 40–80 years are sexually active.^[35] SDs frequently reported were early ejaculation (11%) and ED (8%) in men and a lack of sexual interest (18%), an inability to reach orgasm (13%), and lubrication difficulties (11%) in women.^[35] Higher frequencies for these were seen in Spain, with early ejaculation (31%) and lack of sexual interest (17%) the most commonly reported male sexual problems and a lack of sexual interest (36%) and an inability to reach orgasm (28%) the most commonly

reported female sexual problems.^[36] Recent pharmaceutical developments have provided options such as “wonder drugs” for sexual performance enhancement, for example, Viagra or Cialis, which aim to improve sexual experiences for those with ED. In addition, several widely available varieties of lubricants and mood enhancers aim to address dryness, stimulation, and interest for both sexes.

Sexually transmitted infections

In addition to SD, sexually transmitted infections (STIs) are an increasing public health issue among middle-aged^[37] and older adults.^[38] One in four people living with a diagnosed HIV infection is now aged 50+ years, likely due to improved survival and continued transmission.^[39] In the UK, adults aged 50+ years accounted for 9.0% of all new HIV diagnoses in 2006 and 17% in 2015, which almost doubled over the period.^[40,41] The median age at diagnosis was 55 years; 73% were diagnosed between the age of 50 and 59 years, with the rest diagnosed aged 60+ years.^[40] Although this is a perceivably low proportion to the entire 50+ population, this is not a group traditionally considered at risk and signals the need to develop services accommodating the older population. In addition, people diagnosed 50+ years were more likely to be diagnosed late compared to those diagnosed under 50-year-old (58% compared to 39%).^[38,39] Late diagnoses can be attributed to low levels of awareness of later life sexual health issues among GPs which contributes significantly as a barrier to discussions relating to sexuality in consultations with older patients.^[42] In addition, STIs in middle and old age are not considered a priority for national surveillance in sexual healthcare mainly because countries are mandated to report on global indicators for the prevalence of STIs such as HIV between the age group of 15 and 49 years.^[43] The burden of disease among those aged 50+ years is frequently ignored, and this represents a significant blind spot in the global response to the epidemic of HIV infection and AIDS.^[44] Regardless, part of the combination prevention strategies for HIV infection, diagnosis, and treatment of STIs is one of the biomedical interventions overlooked to patients in middle and old age.^[45] While many older adults remain sexually active and may have concerns about sexual function or STIs, their problems are infrequently addressed by the health sector.^[46]

Sexual healthcare

Middle-aged and older adults are frequent attendees of general practice^[41] and report that this is the favored setting for advice or treatment; however, both patients and physicians find it difficult to discuss sexual health issues.^[27,28] Primary care physicians do not address sexual health proactively with older people, and unless, it is raised by the patient it may not be discussed,^[27] as few will be willing to initiate this discussion with their physician.^[47] This could be a result of the societal emphasis that has linked sexuality almost exclusively to young people and may consequently have discouraged these patients from seeking sexual advice within the primary care setting.^[48] Sexual health promotion materials target young people,^[49] with few exceptions. The “Middle-age Spread,” for example, was

the first sexual health campaign in the UK that targeted people over 45, alerting them of the risk of STIs.^[50] In general, these missed opportunities for prevention or intervention of sexual health issues for over 45 s are exacerbated by the striking absence and underuse of or poor quality sexual healthcare services available to this age group in many countries.^[51] Information from health-care professionals regarding normal age-related changes in sexuality, together with advice on how to continue meaningful sexual relations, may play a key role in altering such negative attitudes.^[8] Sexual lifestyle advice should be a component of holistic healthcare for middle-aged and older patients with chronic ill health.^[45]

CONCLUSIONS AND RECOMMENDATIONS

Globally, those aged 45 years and older represent the second largest population group to whom, positive sexual health promotion is lacking. Although over 45 s present with treatable sexual health conditions, these are often overlooked or dismissed as being a “normal part of ageing.” Commercially available products exist to alleviate some of the issues that can arise due to SD and there are ways of rejuvenating sexuality as one gets older, such as internet dating and sexual performance enhancers. However, the right to the best possible health does not diminish as we age and for this to improve, much research is needed to better understand sexual health as we age and how to develop appropriate services and training for health-care staff. Regarding sexual healthcare in later life, health-care professionals need to proactive in: Relevant continuing medical education in care and effective sexual health communication, establishing appropriate sexual health-care age-appropriate services. Health-care professionals and policymakers must consider and encourage the promotion of good sexual health-related QOL to create more sustainable and happier relationships, less sexual health burden, and a healthier middle-aged and older population.

Contribution

This paper is part of the doctoral thesis at LSHTM. The first author PR has done the majority of the work including the conception, review, and manuscript preparation. VK reviewed and offered minor suggestions.

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Conflicts of interest

There are no conflicts of interest.

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