Background
Sexuality has become a medical issue in association with aging. This is due to a number of factors, including increasing age of survival, a positive societal construct that promotes sexuality as important for quality of life as we age, and the medicalisation of sexuality with the advent of prescription medications to treat sexual dysfunction.

Objective
This article reviews the factors surrounding aging and sexuality and also considers special situations with age, such as institutionalised care and the possibility of elder abuse.

Discussion
Normal physiological changes with aging affect both genders in terms of sexual desire and performance. Other medical conditions increase with age, and these and their treatments will impact on sexuality and the way it can be expressed. Medical practitioners require an understanding of these changes in order to find ways to optimise sexual function in older patients.

Keywords: sexuality, aging

In Australia, ‘older people’ are defined as those being over 65 years of age, and the proportion of the population in this age group is steadily increasing. In the 12 months to 30 June 2009, the number of people aged 65 years and over in Australia increased by 85 800, representing a 3.0% increase. This increase is due to a significant reduction in mortality. The average Australian male has a life expectancy of 78.1 years and the average Australian female has a life expectancy of 83.0 years.

With this increase in life expectancy has come an expectation that we are entitled to enjoy a good quality of life. The aging of the ‘baby boomer’ generation, and the openness around sexual mores that accompanied this generation in the 1960s and 1970s, has resulted in an aging population that has always regarded sexuality as being important.

Gender differences in sexuality
There is undoubted evidence that sexuality, and its expression, remains important to both men and women as they age. However, there are significant gender differences in the incidence of remaining sexually active into our older years. Studies have indicated that while overall for both genders there is a decline in sexual activity with age, sexual activity, sexual interest and the quality of sexual life appear to be consistently higher in men compared to women. These gender differences increase with age. In one American study it was noted that in the 75–85 years age bracket, 38.9% of men compared to 16.8% of women were sexually active. These men also reported a higher level of interest in sex (41.2% compared to 11.4%) and a higher quality of sex life (70.8% compared to 50.9%) than women.

It is becoming increasingly recognised that the complexity of female sexual dysfunction remains distinct from that of men. As women age, they experience a more marked decrease in sexual activity and interest in sex than men, but they also experience less distress than men or younger women with the same symptoms. This may well reflect various psychosocial factors. These include the presence or absence of a partner, health status, and relationship and life satisfaction. While both genders show a decline in sexual frequency when a partner loses interest in sex, women lose interest more than men. For women, life stressors,
contextual factors, past sexuality and mental health problems are more significant predictors of older women maintaining their sexual interest than physiological status alone.9

The role of the general practitioner is to evaluate all these psychosocial factors as well as the physical status of older patients.

**Discussing sexual health**

Unfortunately, there are a number of ageist stereotypes in our community, which make it difficult for both doctors and patients to discuss sexuality openly as they become older. Many doctors may see sexual dysfunction in the elderly as a biological part of the aging process and therefore not a medical issue.10

Asking about sexual health remains difficult or embarrassing for many primary care physicians, particularly with older patients.11 However, studies indicate that patients find it difficult to raise sexual issues with their doctor, and would prefer their doctor to introduce this for them.12 This situation often results in sexual issues not being adequately addressed. In particular, men more than women do not always report sexual problems to their doctor, ignoring the problem, taking measures such as stopping medication they believe to be responsible for sexual dysfunction or buying medication over the internet. This can result in depression, social withdrawal and delayed diagnosis of underlying medical conditions.13 Examples of questions a GP might ask are listed in Table 1.

**Physiological changes associated with aging**

Aging produces changes that effect the endocrine, vascular and neurological systems, all of which produce direct and indirect effects on sexual arousal and sexual performance.

**Men**

In the aging male, the most common sexual dysfunction is erectile dysfunction. This can be due to hormonal changes as part of normal aging or due to underlying conditions such as late onset hypogonadism or neurological and vascular disease processes.14 The treatment of erectile dysfunction should involve assessment of cardiovascular risk factors, advice on lifestyle modifications and a trial of PDE-5 inhibitors, unless contraindicated.15 The connection between erectile dysfunction and features of the metabolic syndrome is well established and should be further explored when dealing with erectile dysfunction in older men.

Hormonal monitoring in older men have demonstrated decline in free testosterone, by 1–2% each year from the age of 45–50 years, decreased dehydroepiandrosterone (DHEA), and increased follicle stimulating hormone/luteinising hormone (FSH/LH) and sex hormone binding globulin (SHBG).16 Even when serum testosterone levels are normal or high, its availability to tissues as free testosterone decreases between the ages of 40–70 years regardless of health status. There is also a decrease by 2–3% per year of DHEA and dehydroepiandrosterone sulphate (DHEAS), precursor metabolites of testosterone. Marked falls can lead to symptoms such as mood changes, low energy, decreased strength, increased sweating, decreased sex drive and erectile dysfunction.17 These older men with symptoms of androgen deficiency could benefit from hormone therapy, although there is controversy as to how much this decline is normal aging and when replacement is indicated (Table 2).

**Women**

In the aging woman, the most common sexual dysfunctions are lack of desire and lack of arousal. Local urogenital effects from a decrease in hormones, which commence with menopause and continue as women age, may produce atrophy of the vaginal and vulval membranes, urinary incontinence and urinary frequency, and urogenital prolapse.

A full physical examination of the urogenital system will help assess whether these changes are present. This decrease in hormones may also produce reduced muscle bulk, loss of bone mass, loss of a sense of wellbeing and declining energy (Table 3). Sexually, this may result in vaginal dryness and dyspareunia, decreased libido, and decreased ability to achieve orgasm.18 Medical treatment of these conditions may include local or systemic hormone therapy where relevant and safe.

### Table 1. Examples of questions regarding sexuality

- Often things change as you get older/have this illness. Have you noticed any change in your sexual enjoyment/sex life?
- Does this change concern you?
- Do you want to do anything about this? What would you like to do about this?
- What difference has this change made to how you feel about yourself? About your body? About your sexuality?
- Have these changes made a difference to your relationship?
- How has your partner reacted?
- Many people explore intimacy in their relationships in other ways if they experience any sexual changes. Is this something you have considered?

### Table 2. Normal changes in sexual function in older men

- Erections may require more intense or prolonged physical stimulation
- There is a longer time for erectile response
- There may be a less rigid erection with some softening during sexual activity
- Decreased intensity of ejaculation
- Decreased ejaculatory volume
- Delay in ejaculation
- Increased refractory period
Other medical conditions

Common to all studies on sexuality and aging is the fact that continued good health is associated with a higher rate of sexual activity and sexual satisfaction. However, there is increased morbidity with aging and many common medical conditions have an effect on sexuality and have been linked to sexual dysfunction. The normal sexual response can be altered by a change in central or peripheral physiology due to diseases. Problems with desire, arousal and orgasm can all be caused or worsened by medical conditions and the drugs or other treatment options used. It is important to investigate those presenting with sexual difficulties for serious underlying conditions.

Unfortunately, disability increases with age. Physical disabilities are most common, being experienced by 69% of persons aged 65 years and over in Australia. In 2007–2008, 83% of people aged 65 years and over had three or more of the following long term health conditions:

- cardiovascular disease
- diabetes
- arthritis
- stroke
- respiratory disease.

These diseases will necessitate routine visits to a GP. It is therefore important to provide a comfortable environment to address the impact of these conditions on the patient’s sex life, and the GP will need to open dialogue to facilitate these discussions. Assessment of sexual activity in the elderly tends to focus on coitus, whereas many older people engage in other forms of sexual activity, such as touching and caressing.

Typically sexual difficulties become an issue for patients some time after an initial diagnosis, once acute care has been initiated and active treatment commenced. The longer term issues regarding quality of life will then become more relevant. For example, in 2003, cancer was the leading contributor to the overall burden of disease among Australians (19%). Patients with the commonest cancers, ie. lung, colorectal, breast and prostate cancer, often notice a large impact on their ability to engage in their usual sexual practices following treatment. Many patients will have an expectation that their doctor will be the appropriate person to help with this as they see this as relating to their illness and its treatment. Some general suggestions to help in these situations are listed in Table 4.

### Table 3. Normal changes in sexual function in older women

- Decreased clitoral engorgement
- Decreased vaginal lubrication
- Decreased breast swelling
- Decreased vasovaginal congestion
- Diminished pre-orgasmic sweating
- Diminished orgasm intensity

### Table 4. Examples of general suggestions

- Plan sexual activity
- Ensure rested and relaxed state
- Take pain medication 2 hours before
- Encourage alternate sexual activities
- Encourage intimacy in other forms including touching and hugging
- Encourage communication
- Use specific aids when needed
- Encourage an emphasis on comfort, warmth and joy
- Be positive and affirming

### Table 5. Barriers to sexual activity in places of institutionalised care

- Lack of privacy
- Attitude of staff
- Attitude of family
- Lack of an able sexual partner
- Physical limitations and poor health
- Cognitive impairment and dementia
- Lack of finances for education of staff or to institute changes

Institutionalised care

In Australia it is estimated that over 10% of people over 65 years of age will require hostel or nursing home care. Studies reveal that residents believe they should be able to be sexually active. The level of female sexual activity is around 10% in most studies and the level of genital sex between residents is approximately 5%. This reflects the predominance of females to males living in hostels. There are a number of barriers preventing patients engaging in sexual activity in institutionalised care facilities (Table 5).

The Australian Disabilities Discrimination Act of 1992 promotes recognition and acceptance within the community of the principle that people with disabilities have the same fundamental rights as the rest of the community. It is therefore important to maintain an awareness of this. It may be all too easy to overlook the legal and human rights of older patients in this arena.

Elder abuse

Elder abuse is defined as the willful or unintentional harm caused to older adults by other persons with whom they have a relationship implying trust. This may include family members or caregivers. It is important to have an index of suspicion for sexual abuse of an older person as this can be overlooked and is believed to be under reported. It may be that the older person may hide the abuse due to shame or stigma. The older person may desire to protect the abuser or fear retaliation, particularly if they are dependent on the abuser. It is often difficult for the practitioner to balance the need for beneficence
(making a choice for the good of another person) against the right of autonomy (the patient can make a choice for themselves without interference). An awareness of elder abuse should be maintained when dealing with sexual issues in older patients with cognitive impairments.

Summary of important points

- Many older men and women remain sexually active through their later years, although men generally rate this as more important than women.
- The presence of a partner, good health for both, good relationships and life stressors will all impact on continued sexual activity with age.
- Physiological changes with aging and disease, and the treatments of disease, will impact on sexual function. Doctors can offer appropriate medical management for many of these conditions.
- Generally patients feel sexual problems are appropriate to discuss with their GP but they may be embarrassed to raise the topic.
- Doctors should be willing to discuss sexuality with patients in a nonjudgmental way. They must be comfortable in addressing the complexity of medical, psychological and social issues that may impact on older patients’ ability to remain sexually active.

Author
Lesley Yee MBBS(Hons), MM(Psychthpy), FACHSHM, FACPsychMed, is a sexual health physician, Australian Centre for Sexual Health, Sydney, New South Wales. lesleyy@acsh.com.au.

Conflict of interest: none declared.

References
   abs@.nsf/mf/3201.0.
2. Lindau ST, Schumm LP, Laumann EO, Levinson W, O’Muircheartaigh CA,
   Waite Lj. A study of sexuality and health among older adults in the United
3. Waite LJ, Laumann EO, Das A. Schumm LP. Sexuality: measures of partners-
   ships, practices, attitudes, and problems in the National Social Life, Health
4. Lindau ST, Gavrilova N. Sex, health, and years of sexually active life gained
   due to good health: evidence from two US population based cross sectional
5. Walsh KE, Berman JR. Sexual Dysfunction in the older woman: an overview
   Australian women: sexual interest, sexual arousal, relationships and sexual
7. Woloski–Wruble AC, Oriel Y, Leefsema M, Hochner-Geinkiker D. Sexual activi-
   ties, sexual and life satisfaction, and successful aging in women. J Sex Med
   2010 Apr 1 [Epub ahead of print].
8. DeLamater J, Hyde JS, Fong MC. Sexual satisfaction in the seventh decade
9. Hartmann U, Phillipsohn S, Heiser K, Ruffer-Hesse C. Low sexual desire in
   midlife and older women: personality factors, psychosocial development,
11. Andrews CN, Piterman L. Sex and the older man – GP perceptions and man-
12. Barton D, Joubert L. Psychosocial aspects of sexual disorders. Aust Fam