Raising awareness of men’s risk of premature death


Abstract

There is growing evidence to suggest that men are at increased risk of premature death from a broad range of health conditions. With the government’s mandate to reduce premature death, it is necessary to have an understanding of the health challenges faced by men. This article provides an overview of mortality data for men and women aged 15-64, with a focus on those aged 15-54, in England and Wales during 2011. Mortality data are viewed in relation to the main reasons for premature death in the male population. Initiatives aimed at addressing the health and social care needs of men are identified to raise awareness of the importance of targeting this population to reduce premature mortality.

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BEING ABLE TO assess the health risks of a population is essential to ensure that healthcare services meet the needs of users. The World Health Organization (WHO) (2013) defines epidemiology as ‘the study of the distribution and determinants of health-related states or events (including disease), and the application of this study to the control of diseases and other health problems’. Examination of particular populations can highlight the problems and challenges that individuals face, and identify potential interventions or solutions. Studies exploring the health and social needs of men from an epidemiological perspective, can help health and social care professionals to meet the needs of this population, ensuring that services are targeted and the advice provided has maximum effect (White et al 2011).

White and Cash (2003) analysed men’s health in Europe, and showed higher rates of premature death in men compared with women aged 15-64. A follow-up study looking at patterns of mortality in men and women aged 15-44 in 44 countries worldwide found that men were twice as likely, or more, to die prematurely than women (White and Holmes 2006). Reports by the European Commission (EC) (2011a, 2011b) found there were 630,000 deaths among men compared with 300,000 deaths among women aged 15-64 in the EU in 2007. The nature of these premature deaths among men is significant as they are mostly associated with conditions unrelated to anatomical or physiological sex-specific causes, and should therefore affect men and women equally.

A study by White et al (2013a) explored trends in life expectancy and found that although men were living longer, this was mostly because of better health outcomes in later life (reduction in mortality in those over 60 years). However, the high rate of
premature death in younger men remained relatively unchanged over a ten-year period. Therefore, although improvements in diagnosis, screening and treatment of conditions have a role in reducing the risk of premature death, a broader public health initiative is required to reduce significantly the burden of these deaths on men and the health service (EC 2011a, 2011b, White et al 2013a). Premature mortality in men aged 15-64 is significant because, apart from the loss of a young life, it has psychological, social and economic consequences for relatives, households, communities and the work environment (White et al 2011). This article provides an overview of mortality data for men and women aged 15-64, with a focus on those aged 15-54, in England and Wales during 2011 using Office for National Statistics (ONS) (2012) data to:
- Explore the rate of premature death in men.
- Identify differences between men and women in terms of the incidence of premature death.
- Ascertaining the main causes of premature death in men.
- Identify interventions that may increase awareness, and reduce the risk, of premature death in men.

**Analysis of mortality data**

Mortality data for men and women aged 15-64 in England and Wales during 2011 showed that there were 47,219 deaths in men and 30,819 deaths in women (ONS 2012) (Figure 1).

When exploring death rates relating to malignant neoplasms, diseases of the circulatory system, diseases of the liver, accidents, intentional self-harm and assault in those aged 15-54 (Figure 2), it can be seen that the main cause of death in women is malignant neoplasms, whereas a broader range of causes are responsible for mortality in men. The most common cause of death in men aged 15-35 is accidents. Death as a result of diseases of the circulatory system is increased fourfold in men between 25-34 years and 35-44 years, with a further threefold increase in men between 35-44 years and 45-54 years. Similar death rates are reported in women, with a threefold increase in those between 25-34 years and 35-44 years, and a further threefold increase in women between 35-44 years and 45-54 years. Deaths caused by malignant neoplasms follow a similar pattern in men and women of the same age ranges as above, with a three to fourfold increase in mortality between the different age ranges. Deaths caused by diseases of the liver rise fivefold in men between 25-34 years and 35-44 years. Intentional self-harm is the second highest cause of death in men and the third highest cause of death in women aged 15-34. Assault is responsible for a relatively small proportion of deaths, with the greatest number of deaths occurring in both men and women aged 25-34 (Figure 2).

**Malignant neoplasms**

The death rate from malignant neoplasms in men and women aged 15-64 is similar, as are the

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**FIGURE 1**

Mortality data for men and women aged 15-64 in England and Wales during 2011

**FIGURE 2**

Age-specific death rates per 100,000 people aged 15-54 in England and Wales for selected causes

(Office for National Statistics 2012)
number of deaths recorded (15,799 male deaths and 15,235 female deaths) (ONS 2012). However, when analysing all-cause mortality in this age group, malignant neoplasms are responsible for 33% and 50% of total deaths in men and women aged 15-64, respectively (ONS 2012). Detailed analysis shows that women aged 15-64 are more likely to die as a result of malignant neoplasms of the breast and genital organs, with 5,493 deaths compared with 772 deaths in men. This suggests that men in this age group are at increased risk of malignant neoplasms unrelated to anatomical or physiological sex-specific causes (White et al 2010, 2013b). Although deaths as a result of breast cancer or sex-specific cancers are less common in men than women aged 15-64, they still deserve consideration, with men receiving education and information about the risks of developing penile, testicular, prostate and breast cancer.

Diseases of the circulatory system
Men aged 15-64 are at increased risk of premature death as a result of diseases of the circulatory system, with around 12,000 deaths compared with approximately 4,400 deaths in women of the same age group (ONS 2012). Ischaemic heart disease accounts for 7,340 deaths in males and 1,761 deaths in women aged 15-64 years. Although cerebrovascular disease accounts for a greater proportion of total deaths in women (26,454 deaths in women compared with 16,909 deaths in men), men aged 15-64 have a higher rate of premature death as a result of the disease, with 1,575 deaths in men and 1,167 deaths in women (ONS 2012).

Diseases of the liver
Diseases of the liver account for 3,302 deaths in men and 1,828 deaths in women aged 15-64. The majority of these deaths are caused by alcoholic liver disease, with 2,500 deaths in men and 1,300 deaths in women (ONS 2012).

Accidents
Men are more likely to die from accidents than women, with 3,464 deaths in men and 1,167 deaths in females aged 15-64 (ONS 2012). Accidental transport-related deaths, including road traffic accidents involving pedestrians, cars and motorbikes, as well as public transport and planes, are more common in men. If the number of accidents, excluding transport accidents, is considered in those aged 15-64, there is a reported 2,371 deaths in men and 908 deaths in women (ONS 2012). These accidents are related to falls at work and home, DIY, fire, drowning, poisoning and sporting activities.

Intentional self-harm
One of the most significant causes of premature death is intentional self-harm, with 2,458 deaths in men and 638 deaths in women aged 15-64 (ONS 2012) (Figure 3). The number of such deaths is rising in men and women, but particularly so in men, coinciding with the onset of the recession (Barr et al 2012). In terms of total deaths, figures peak in men aged 40-49 and in women aged 45-54 (ONS 2012).

Assault
Assault is responsible for 186 deaths in men and 78 deaths in women aged 15-64 (ONS 2012). The primary cause of death for men is ‘assault by unspecified means’ and ‘assault by sharp object’; for women, it is predominately ‘assault by sharp object and ‘assault by hanging, strangulation and suffocation’.

Discussion
Analysis of the ONS (2012) data suggests that men are at increased risk of premature death. This is significant as these deaths are mostly unrelated to anatomical or physiological sex-specific causes, and should therefore affect men and women equally. Similar findings have been identified in other studies (White and Cash 2003, EC 2011b). The predominant causes of premature death in women include conditions that are well recognised, such as malignant neoplasms of the breast and genitals, for which appropriate screening and treatment are available. For men, there is a much greater range of life-limiting problems that need to be taken into consideration, especially as many of these problems are less well recognised, screening and treatments are limited, and men are therefore
not aware of the related risks. The death rate from non-communicable diseases, such as malignant neoplasms, diseases of the circulatory system and diseases of the liver, increases in men in their mid-thirties and forties. Health risks may not be observed in men during their early years, but can contribute significantly to developing ill health as they age. For example, men are more likely to have a diet high in red meat and low in fruit and fibre, which contributes to an increased risk of colorectal cancer in later life (Parkin 2011, Parkin and Boyd 2011a). There is a need to identify and target at-risk males from school age upwards to reduce the incidence of premature death.

Aside from those issues previously discussed in this article, there are several factors that may contribute to the increased risk of premature death in men:

- The male body, including anatomy, physiology, genetic make-up, effect of sex hormones and immune responses.
- Constructs of masculinity, including male socialisation, society’s expectations, media influences and social networks.
- Social determinants, including socio-economic factors, housing, education and employment.
- Intersectional factors, including age, class, ethnicity, disability and sexuality.
- Structural issues, including policies, an obesogenic society that increases the risk of being overweight and obese, availability of male-focused health promotion, and access to welfare and support systems.
- Lifestyle, including smoking, alcohol consumption, non-prescription drug taking, weight management, diet and sexual activity.

The biological differences between men and women extend beyond the reproductive system and can influence the risk of premature death. For example, the female sex hormones have a cardio-protective effect and the risk of cancer in women is thought to be reduced as women have increased innate and adaptive immune responses (Wizemann and Pardue 2001, Dorak and Karpuzoglu 2012). Another biological difference related to male physiology is fat distribution. Men tend to have central, visceral fat (Shi and Clegg 2009), which increases the risk of metabolic syndrome (Morrell et al 2012), which is associated with high cholesterol; hypertension; insulin resistance, leading to type 2 diabetes; erectile dysfunction; and the fat-related cancers such as those of the colon, oesophagus, prostate, kidney and pancreas (Eckel et al 2010, Parkin and Boyd 2011b).

While genetic and biological make up is essential in determining individuality, social constructs also influence how people choose to live their lives, and may therefore affect health outcomes (Krieger 2003). From an early age, social constructs of femininity and masculinity are present, for example toys and clothing labelled as ‘girls’ or ‘boys’, and books, games and television programmes aimed at the different sexes (Mac An Ghaill 1996). This contributes to how men think about themselves and how they form their identity or specifically, masculinity (Connell 1995).

Masculinity may be characterised by feelings of invulnerability and a need to be in control (Courtenay 2000). Suppression of emotion is also common and risk-taking behaviour, such as ‘heavy’ drinking is not only condoned, but actively encouraged (de Visser and Smith 2007, de Visser et al 2009). These factors influence how men view their physical and emotional health, and their willingness to adopt health-enhancing as opposed to health-damaging behaviour.

Social constructs of masculinity may also affect how men access health services. Contrary to popular belief, men may not delay any more than women in seeking help when experiencing symptoms of physical illness (Wenger 2011, Farrimond 2012). Nevertheless, it is possible that men negotiate help-seeking differently, with Robertson (2007) suggesting a ‘don’t-care, should-care’ model to explain an ambivalence between not wanting to be seen to care about their health as ‘real men’ and wanting to show that they care about their health as morally ‘good citizens’. There are, however, important differences between the genders, with men less likely than women to visit the general health practice for preventive health checks, screening, and advice about mental health issues and weight (EC 2011a, Wilkins 2011, Johnson et al 2012).

Premature death in men also appears to be related to the social determinants of health (Bates et al 2009). One of the key findings from The State of Men’s Health in Europe (EC 2011a) report was the difference in premature death and life expectancy observed in men living in developed countries such as Sweden and Italy, compared with less developed countries affected by major political and social upheaval, such as Lithuania and Latvia. Such differences also exist within countries at regional and local levels, whereby male mortality has been found to increase in areas of high socioeconomic deprivation caused by poverty, unemployment, social exclusion and lack of education (White et al 2011).

Intersectionality is a term used to reflect the multiple factors that can affect an individual’s life, such as ethnicity, class, income, education, ability, age, sexual orientation, immigration status and geography, all of which can affect the way in which men live their lives (Hankivsky 2012). For
example, the challenges men face with regard to their mental health differ significantly between rural settings and inner cities (Robertson et al 2010, Young 2010). In rural settings, men’s experience of poverty is compounded by isolation, limited access to services and specific crises such as outbreaks of foot and mouth disease, thereby creating traumatic social and economic change (Robertson et al 2010).

In urban settings, the demands of daily life are often intense and chaotic, for example witnessing violence and other crime, insecure or poor housing conditions and transient community arrangements, leading to increased levels of stress and mental health problems (Young 2010).

There are many aspects of society that may affect an individual’s health and wellbeing. For example, it is estimated that by 2030, between 41% and 48% of men in the UK will be obese (35–43% for women) (Wang et al 2011). With such a large proportion of men potentially being affected by obesity, it is important to identify external causes that may be contributing to this increase, such as sedentary lifestyles, and the way in which food is manufactured, marketed and sold (Jones et al 2007). The majority of weight-loss services are designed for, and targeted at, women, meaning that the needs of men may be under-recognised and, therefore, poorly met (White 2007).

Men’s lifestyles have also been implicated in the increased risk of premature death. Men have traditionally been seen to be high users of tobacco, alcohol and non-prescription drugs, with a diet high in red meat and low in fruit and fibre, all of which are linked to an increased risk of premature death (EC 2011a). The levels of smoking and drinking are declining in the younger generation, possibly because of the smoking ban in public places in the UK, legislation relating to the supply of cigarettes and alcohol, the increasing cost of cigarettes and alcohol and the effect of public health campaigns (Robinson and Harris 2011, OECD 2013).

Interventions
The government mandate emphasises the importance of preventing premature death (Department of Health 2012). Since more than 50% of deaths worldwide are avoidable (Danaei et al 2005, EC 2011a), it is important to target at-risk populations, such as men, and tackle the causes of health problems in a preventive as well as a reactive way. Society-wide initiatives, such as the ban on smoking in public places in the UK, as well as road and workplace safety legislation, appear to have a positive effect on the overall health of the UK population (Bauer and Steiner 2009, Baud 2011). However, it is essential to recognise the role of health and social care professionals in stimulating change at local, regional and national levels to help men live longer and healthier lives.

Health promotion advice needs to be targeted at young men to prevent problems in later life that might result in premature death. Since the Equality Act 2010 came into force, there has been a legal requirement for public authorities to consider how they are meeting the specific needs of men and women. This should form the basis of government policies, as well as the planning and provision of health and social care services. With the advent of GP-led clinical commissioning groups replacing primary care trusts, and the role of local councils in prioritising public health, health and social care professionals need to ensure that existing and emerging services are responsive in providing equitable provision for the entire population, including men.

Many younger men have limited access to health advice and guidance, with few services targeting this population (Tylee et al 2007). With there being less of a need for men to routinely access health services in the same way that women do, for example for prescribed contraception and cervical screening, many men may be unaware of the health risks they face. Therefore, men not only need to be targeted by health and social care services, but younger men may also benefit from advice from parents or schools, particularly about the need to prioritise their physical and mental health, and how to use health and social care services effectively.

More could be done as men enter middle age to encourage them to have regular health checks. Emphasising the importance of occupational health in the workplace, and encouraging men to make use of this service, may help to prevent many health problems (Harris et al 2011). For those who are not in employment, initiatives to promote health among men could be made available at drop-in centres and other community settings (Kierans et al 2007). Increased efforts also must be made to engage men in the national bowel cancer screening programme, as they have an increased risk of developing the disease in their early fifties and an increased possibility of premature death as a result of bowel cancer. Guidance from healthcare professionals has been shown to be effective in encouraging men to participate in bowel cancer screening (Wilkins 2011).

Nurses should be aware that the presence of erectile dysfunction can be an early indicator of impending cardiovascular problems – any vascular changes will be evident in the penile artery before the larger coronary arteries (Jackson and Padley 2008). Erectile dysfunction may also be a common complaint in men being treated for cardiovascular...
problems, both as a consequence of their condition and as a potential side effect of drug treatment (Scranton et al 2012). The sexual health of patients has long been recognised as an important aspect of nursing assessment (Serrant-Green 2008). The identification and successful management of erectile dysfunction can have major implications for the patient’s quality of life as well as preventing life-limiting conditions.

Men experiencing significant life changes, for example as a result of job loss or divorce, are at increased risk of premature death (Richardson 2004, Morrison 2009). Health and social care professionals would benefit from increased collaboration with the voluntary and third sector in terms of working with men who may not recognise how their circumstances may affect their health and the need for them to make health appointments.

The Campaign Against Living Miserably (Powell 2010) has been effective at targeting young men in an attempt to prevent suicide. The Men’s Health Forum (www.menshealthforum.org.uk) is focused on tackling the issues affecting the health and wellbeing of boys and men. There needs to be increased awareness of these initiatives among men.

Other initiatives being used successfully include Premier League Health, which involves the recruitment of health trainers to work with football clubs to reach out to young men to improve their health and wellbeing (White et al 2012, Pringle et al 2013). The Bradford Men and Boys’ Health Team is another example of a service using outreach to target boys and young men in the local community.

References


Analysis of mortality data shows that men are at increased risk of premature death. Health and social care services need to target men to promote health and encourage uptake of health advice and use of appropriate services. Recognising that men’s health is a complex issue, involving numerous social and biological factors, is essential to ensure that men’s health is promoted and premature death is prevented.

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