The social construction of gender and its influence on suicide: a review of the literature

Sarah Payne, Viren Swami and Debbi L. Stanistreet

Keywords

Gender
Suicide
Deliberate self-harm
Parasuicide
Social constructionism

Abstract

In developed Western societies, it is well known that more men than women commit suicide each year, whereas women are more likely to be involved in suicide attempts. Despite these differences, public policies in the West have tended to treat gender as a descriptive, rather than causal, factor in suicidal behaviours. However, differences between socially constructed masculinities and femininities may impact on suicide-related behaviours and help explain gender differences in both behaviours and outcome. This literature review considers suicide through the lens of gender, drawing on a social constructionist perspective to explain differences between women and men in suicidal behaviour. In particular it focuses on individual and life history factors, social and community variables and living and working conditions. It will be argued that suicide-related behaviours, like health-behaviours more generally, are influenced by (and influence) demonstrations of masculinities and femininities. Finally, it will explore how a gendered view of suicidal behaviour will be of potential benefit to public health policies aimed at reducing gender differences in suicidal behaviour.

Differences between women and men in rates for both completed suicide and suicide attempts are well-documented. In 2002, of the 800,000 suicide deaths worldwide, 63% were male [1]. While the ratio of male-to-female suicides varies between countries [2,3], globally more men die through suicide each year [4]. The female-to-male ratio of completed suicide in Western societies is at least 1:2, with the highest ratio (1:6) being found in the United States [5]. Female suicide rates are in excess of male rates only in China [6].

Nor is this higher incidence of suicide among men a recent phenomenon: Durkheim's [7] work on suicide trends in Europe during the 19th century found a similar gap in suicide mortality among men and women, although this gap became more marked during the last decades of the 20th century [8–12], partly due to a substantial global increase in suicide among younger men combined with a falling female rate worldwide [13]. In contrast, more women worldwide are involved in acts of deliberate self-harm (DSH) each year, with a female-to-male ratio of between 0.71:1 and 2.15: 1 (median 1.5:1) [14]. In recent years, however, the gap in DSH between women and men has narrowed in some parts of the world. In a recent European study, for instance, while DSH rates were higher for women in virtually all sites, male rates were greater than those for women in Helsinki [15].

Despite the attention paid to such gender differences in suicidal behaviour, explanations for men's higher suicidal mortality and women's greater risk of DSH remain unsatisfactory. To some extent, this is due to the complexity of factors involved, including questions of definition (see below) combined with the relative rarity of suicide compared with other causes of death. But it is also a reflection of the way gender differences have been con-

Q1 **Sarah Payne, BSc, PhD**
University of Bristol, Bristol, UK

Viren Swami, BSc, PhD
University of Liverpool, Liverpool, UK

Debbi L. Stanistreet, RGN, DPSN, BA, MPH
University of Liverpool, Liverpool, UK

E-mail:
sarah.payne@bristol.ac.uk

Online xxxxxxxxxxxxxxxxxx

sidered in the literature until recently. While differences between women and men in suicidal behaviour have often been noted, gender is commonly treated as one of an array of individual, social and demographic characteristics (e.g. education, employment status, sexual orientation), rather than as an inter-dependent variable that connects with, and impacts on, other influences.

Some more recent work has considered gender as a socially constructed variable that plays a part in explanations of suicidal behaviour (e.g. Smalley et al. [16] on youth suicide). In addition, gender roles have been explored in empirical research [17]. For example, Hunt et al.'s [18] community study with three age groups of men and women suggested that associations between suicidal thoughts and gender roles are complex and are affected by both age and cohort differences. However, it is suggested here that the large existing literature on suicide may also offer valuable insights into the role of socially constructed gender, once examined through a new lens. Hence this paper, which offers a gendered perspective on the suicidal behaviour of men and women.

The present review

This literature review adopts a social constructionist framework to explore different factors identified in suicide research as relevant to suicidal behaviour. In particular, we were it is interested in the ways in which a gendered perspective might throw light on men and women's suicide mortality and DSH and, in turn, how this might suggest particular gender-sensitive suicide prevention strategies. While many of the factors used to explain suicide are similar for women and men (e.g. mental illness and employment status), our argument is that these factors might be experienced differently as a result of gender constructions and might operate in different ways in terms of their effect.

As should be clear, the focus of this article is on the social determinants of gender and suicidal behaviour. It should be pointed out, however, that both gender and suicidal behaviour have multifactorial origins – including biological and cultural factors – which we have not considered here. For instance, the health of men and women is known to be affected by reproductive differences and genetic variations, and some research has found increased suicidal behaviour among people with low serotonin-levels, associated with greater aggression and impulsive behaviour [e.g. 19]. Although most of this research has not explored sex differences in such influences, studies on male depression have concluded that stress-induced low serotonin may be important in this illness and, thus, might help explain male suicide [20]. In short, then, suicide is clearly the result of a complex interaction of a number of precipitating factors and, in this review, we have focus on the social determinants of suicide.

It is important to begin with a clarification of the meaning of terms used, particularly in relation to non-fatal suicidal behaviour. Although a number of terms have been proposed in the literature, confusion remains over meaning [21]. The term parasuicide is commonly defined as 'an act with non-fatal outcome, in which an individual deliberately initiates a non-habitual behaviour that, without intervention from others, will cause self-harm, or deliberately ingests a substance in excess of the prescribed therapeutic dosage' [22]. However, some authors have argued that this term is problematic because it includes all forms of self-harming behaviour without explicit reference to suicidal intent [21].

'Deliberate self-harm' (DSH) is used to include both acts with suicidal intent as well as other forms of self-harm without suicidal intent, and writers often use the same definition as for parasuicide [21]. This includes those administering 'more than the prescribed dose of any drug, whether or not there is evidence that the act was intended to result in death' and any act of injury which is intentionally self-inflicted [23]. The term attempted suicide is often used to mean only those acts where suicidal intent is known but again some writers have used definitions that are identical to DSH [24].

Gender is important here: the attribution of intent can utilise gendered discourse including the stereotype that women's suicidal behaviour is a plea for help or attention, while men's behaviour has higher fatal intent [25]. The inclusion or exclusion of different behaviours has gendered dimensions and this may affect the findings and conclusions drawn. However, this debate – although important –

is beyond the scope of this paper. While studies included in this review have used a range of definitions in their methodology, the term used herein is that of deliberate self-harm, which includes all acts which are self-inflicted, deliberate and which cause harm without consideration of intent.

Retrieval of studies

Although this is not a systematic review, studies were retrieved in an organised way through a search of Pubmed, Web of Knowledge, ASSIA, CSA, Embase, PsycLIT, PsycINFO MEDLINE, Zetoc and Google Scholar, using the following keywords: *suicid** or *parasuicid** or *deliberate self harm* or *self poisoning* or *self-injury* and *sex* or *gender* or *masculin** or *feminin**. A search was also carried out for UK and European suicide prevention strategies using the databases above in addition to main search engines on the World Wide Web including Google Scholar. Given the size of this literature the search was limited to 1997–2006 and to papers in the English language.

Initial retrieval revealed over 2,500 papers, which were then reduced by the application of inclusion/exclusion criteria (no case studies, exclusion of papers providing normative data on trends, where focus was area-specific and national data exists, and where sole focus was suicidal ideation). Retrieved papers were divided between the three researchers for the decision on inclusion and inter-researcher agreement was checked using a sample of 100 papers.

Limitations

This review was restricted in two important dimensions. Firstly, due to limitations of space, we did not review evidence from developing and/or non-Western countries, including China where female rates are higher than those of men [6]. However, given the relationship between cultural factors, constructions of gender and suicide it would be interesting to extend the arguments here to parts of the world with a narrower gender gap in suicide and DSH. In addition, systematic surveys of suicides and suicide attempts are significantly lacking in the developing world, which makes conclusive reporting difficult. For these reasons, we restricted our review to developed Western societies sharing a similar cultural, political and economic background. Secondly, we have not explicitly focused on variations in ethnicity within a single country, although gender differences in suicide hold in relation to ethnicity. Social constructions of gender and their association with suicidal behaviour are likely to be influenced by cultural factors, but this does not fall within the scope of the present study.

The discussion in this paper is based on the areas of research and the papers that are most important in terms of differences between women and men in suicidal behaviour. Given limitations of space, and the fact that this paper aims to contribute to the debate on the understanding of suicidal behaviour rather than presenting a systematic review, we do not comment here on the strengths and weaknesses of the studies used nor provide a critical appraisal of the literature as a whole.

In summary, then, we assess the current state of research findings on suicide in developed, Western societies through a gendered lens. We review the way in which gender, as a social construct, impacts upon suicidal behaviour among women and men. We first address the issue of defining gender, before assessing the evidence on gender differences in suicide and DSH. Finally, we discuss the implications of such a focus for public policy, particularly in relation to suicide prevention strategies.

The social construction of gender

Defining gender

Social constructionist ideas focus on gender as something that is done, as opposed to biological sex that is ascribed at birth according to external genitalia. In this view, men and women's identity, behaviour and the expectations placed on them reflect socially constructed ideas about femininity and masculinity [26]. As West & Zimmerman [27] put it, 'Doing gender involves a complex set of socially guided perceptual, interactional, and micropolitical activities that cast particular pursuits as expressions of masculine and feminine ''nature''.' While early social constructionist theories saw gender as relatively fixed and static, in more recent conceptualisations, gender is something that exists only in its enactment, that is, gender is 'something that one does, and *does* concurrently, in interaction with others' [27].

A key aspect of social constructionism is that gender is something that is performed in a range of settings and activities and in relation to other people [28,29]. Through such performance, gender becomes accountable, something that takes place in the context of assessment by others, so that certain aspects of gendered identity are normalised or legitimated [27]. As men and women do gender in various ways, this defines them as gendered beings, while contributing to social conventions of gender. In addition, the accountability of 'doing gender' encourages conformity to dominant norms of masculinity and femininity [29].

More recently, post-structural ideas have suggested that gender is discursively constructed through language [30], including not only conversation, but also written text, institutional practice, media and the law [31]. In many ways, post-structuralism overlaps with social constructionist ideas: both paradigms see gender as something that is performed, and both argue that biological difference is not the same as gender, allowing for gender performances that are at odds with biological categorisation. However, post-structuralist accounts of gender permit greater recognition of the ways in which there are competing and contradictory ways of 'doing gender' within normative boundaries, using the notion of hegemonic gender to allow for the greater acceptability and higher status of certain gender practices.

Hegemonic masculinity has been used increasingly in recent years to refer to 'the most honoured or desired' form of masculinity in a society [32], while also drawing attention to the existence of many masculinities, just as there are differences between groups of men and groups of women. As Connell [32] points out, however, while some forms of masculinity may be constructed as more desirable to other subordinate forms, it would be wrong to see different masculinities as existing in isolation from each other. Thus, while hegemonic masculinity might reflect the experience of only a minority of men, the relational nature of different masculinities means that other men locate themselves in the context of the hegemonic ideal [33].

The pursuit of this ideal includes what Connell & Messerschmidt [33] refer to as 'toxic practices' such as aggression, violence and competitiveness. Thus, men's relational positions to hegemonic masculinity, the tensions these create and the overtly self-destructive practices that at times result may help explain men's increased risk of suicide. It is significant that hegemonic masculinity is also defined in terms of male subordination over women. Less has been written about hegemonic femininities or 'emphasized femininity' [33] and how these might help us understand women's lives, women's enactment of gender relations, women's health and so on. However, it is also the case that both 'aspirational' femininity and subordinated or marginalised femininities may be associated with suicidal behaviour.

The health effects of gender

The traditional male gender-role is characterised by a set of definitions and attributes that stress robustness and strength. In Western societies, masculinity is associated with the desire for power and dominance, and men are expected to display courage, independence, rationality and competitiveness, while concealing vulnerability and weakness. Although some forms of emotional expression are less valued or denied, male emotion in the form of aggression and anger is accepted. Traditional masculinity does not deny men a family role, but locates men as breadwinners rather than as primary carers. The traditional female role typically includes characteristics such as fragility, emotionality and expressiveness, and family-orientation. Although the boundaries of both male and female gender roles have shifted in recent years, male gender roles remain more toxic and more limiting in terms of health potential.

These different gender roles influence the health of men and women in various ways [34]. For men, doing gender may require that they behave 'excessively', through risk-taking behaviour, or excessive drinking for example. Moreover, hegemonic masculinity prioritises independence and resistance, and restricts help-seeking behaviour, which implies a loss of status and autonomy [35,36]. Thus, a gender analysis offers a powerful means of understanding differences in suicidal behaviour among men and women.

'Doing masculinity' may be associated with an increased risk of suicide compared with

'doing femininity.' For instance, research indicates that men experience comparatively greater social pressure than women to endorse gendered stereotypes [37]. It is likely, therefore, that their behaviour and beliefs about gender will be more stereotypic than those of women. If male gender roles are more prescriptive, the social construction of masculine identities may be more closely related to suicide rates than the construction of feminine gendered identities, and the social practices required for demonstrating femininity and masculinity may be associated with different outcomes in terms of suicide [38]. In addition, masculine ways of doing gender may in themselves be more dangerous, leading to greater success when suicide is attempted.

Gender, while socially constructed, also interacts with various intermediary variables to shape suicide risk. In order to understand these different variables and their interaction with gender we draw on the organising principles developed by Dahlgren & Whitehead [39] in their model of key determinants of health. Dalhgren & Whitehead suggest layers of determinants surrounding populations, beginning with the individual and fanning out to social and community networks and general, socioeconomic cultural and environmental conditions. Thus, in our exploration of the interaction between gender and intermediary variables, we have grouped these into *individual and life history variables* (e.g. sexuality, history of DSH, mental illness), *social and community variables* (e.g. marital status, parental status) and *living and working conditions* (e.g. employment), each of which we will consider in turn.

Individual and life history variables

At a fundamental level, gender shapes the microlevel practices and lifestyle choices that individuals make in everyday life [40]. More specifically, since male and female role identities are expressed in different ways, it might be expected that there will be different suicidal behaviours associated with masculinity, the socially dominant gender construction, and femininity, the socially subordinated gender construction. In this section, we consider a number of individual factors that mediate the relationship between gender and suicide.

Methods used in suicidal behaviour

One of the most commonly reported differences between women and men is the method of suicide, which is related to a number of factors including access to, and acceptability of, a method; intent; and the message attached to particular methods [41–43]. Clearly, the social practices required for demonstrating femininity and masculinity are associated with these different factors and such gender differences may have a profound impact on the choice of method used in suicide and DSH [44].

For instance, men are more likely than women to use violent methods for both suicide and DSH [13,43,45,46]. Overall, men are more likely to attempt suicide through hanging, vehicle exhaust gas, asphyxiation and firearms. Women also use hanging and exhaust gas asphyxiation as methods, but a greater number use self-poisoning [47]. The male–female gap in suicide mortality may partly be due to women surviving suicide attempts because of the less lethal nature of the methods used [5,38].

A gendered view of such differences highlights the fact that suicide methods are intricately connected with demonstrations of hegemonic gender roles. For men, surviving a suicidal act is perceived as inappropriate, and death by suicide among men is seen as less wrong than death by suicide in women [44]. Canetto & Sakinofsky [25] suggest that gender stereotypes in which men are expected to be tough and strong play a large part in constructing suicide 'scripts,' shaping both suicide ideation and methods selected. Lethal suicidal behaviour among men may be seen as an act of mastery or masculine expression [38] or as an attempt to escape the negative associations of surviving a suicide attempt [5,25]. This also helps to explain men's greater risk of mortality following a previous suicide attempt [48].

Gender also influences familiarity with different methods. For example, men are more likely than women to store and use firearms, which is likely to influence their choice for firearms in suicidal behaviour [43]. Even where the gender distribution of suicide methods has changed over time, differences between women and men may be explained by their relative access to certain methods. The increase in male suicides in England and Wales, for example, is associated with an

increase in the proportion of suicides by exhaust asphyxiation, more typically used by men [8]. Similarly in Canada the introduction of gun restriction appears to have had a gender differential impact on suicide rates, leaving women's overall rates unchanged but associated with displacement to other methods of suicide for men [49]. Thus, policies aimed at reducing the availability of certain methods may have important, if unconsidered, consequences for gender differences in suicide mortality.

Gender differences in the method selected for suicidal behaviour also relate to the message that is intended [25]. In choosing less violent methods, women may be seeking to protect others, while women also choose methods that are seen as having less of an effect on their attractiveness [50], consistent with gender differences in image and beauty.

Mental illness

A history of mental illness is the greatest risk factor for suicide for both men and women [51,52]. However, there appear to be gender differences in the strength of this relationship and in the specific forms of mental illness involved. Research supports the idea that women completing suicide suffer more often than men from diagnosed mental illness [51,53–55]. One explanation for this gender difference is that women are at greater risk for some mental illnesses and this increases their likelihood of attempting suicide. For example, depressive disorders are more frequent in women of all ages [56], and depression increases the probability of suicidal ideation and DSH [56].

Alternatively, these gender differences may be an artefact of men's lower likelihood of seeking help for mental health and emotional problems [25,38] or because men's depression presents differently. Thus, individual and social factors may form a barrier to help-seeking behaviour in men, especially as they relate to mental health. If mental illness symptoms are perceived as inconsistent with masculinity, men may seek to hide such symptoms from others and be treated less often [25]. In addition, men may rely on norm-congruent behaviour including alcohol and substance abuse (see below) to combat depression, rather than seek medical help [25].

Some writers have proposed the idea of a 'male depressive syndrome' that highlights 'stress-precipitated, cortisol-induced, serotonin-related' depression [20: p. 21] together with gendered behaviour such as substance abuse, low impulse control and acting-out. Clearly such a concept, which draws together biological influences as well as socially constructed gender factors might be of use in understanding male suicide in the context of mental health problems.

Using gender as a lens may also help explain differences between women and men in the risk of suicide following discharge from inpatient psychiatric treatment. Suicide risk is higher among discharged psychiatric patients compared with the general population, particularly in the period immediately following discharge [57,58]. Again research suggests a complex interaction between gender, engagement with psychiatric services and suicide. Overall, women appear to be more at risk after leaving psychiatric care, although this varies by diagnosis and with length of time following discharge, with men more at risk as time passes [58–60].

Alcohol and substance misuse

Alcohol and substance misuse is associated with increased risk of suicide at all ages [61,62]. Cross-national data also supports the idea that the greater the alcohol consumption, the greater the suicide rate [4]. Again, however, differences between women and men in the part played by alcohol and substance misuse suggest social constructions of gender affect risk factors, consumption behaviour and help-seeking [63,64].

A number of studies have shown that the association between alcohol and substance misuse and suicide is more marked for men [63,65] and more men use alcohol or substances immediately prior to their suicide attempt [66]. In most societies, alcohol consumption is associated with masculinity, and this may explain the strong link between alcohol use and suicide in men. However, alcohol consumption may also be used by men to alleviate depression and as an alternative to seeking professional help for mental health difficulties [25]. For both women and men substance use may reflect other factors, but these may have different associations with

suicide. Pirkola et al. [64], for example, found that female suicides with alcohol and substance misuse were more likely to have been abused or suffered childhood trauma.

Although a number of studies have highlighted questions of co-morbidity, this is a complex issue. Overall a large proportion of alcohol and substance misuse patients also have symptoms of depression although it should be noted that alcohol is itself a depressant and the relationship is complex [67]. Depression is more common among those who die through suicide where substance misuse is a factor [5]. In addition, although a number of studies have suggested that co-morbidity of substance misuse and depression or anxiety is more frequent among women than men [62–64], this may reflect gender differences in help-seeking behaviour rather than differences in prevalence.

That is, women with mental health difficulties alongside problems with alcohol or substance use may be more likely to seek help for their mental health problems from general practitioners or the psychiatric services rather than specialist substance misuse services, and to be diagnosed as depressed with a co-morbid condition of substance misuse. If men, on the other hand, use alcohol or other substances in response to symptoms of depression, it is more likely they will receive a diagnosis of substance misuse.

Use of health care

Contact with health care services has also been closely studied in suicide research and again there are complex gender differences in the findings. Luoma et al.'s [68] review of evidence of contact with mental health and primary care providers reported that male suicides were significantly less likely than women to ever have had contact with mental health services, and were less likely to have had contact within 1 month and 1 year of suicide. Similarly, a retrospective study of elderly suicides in Britain found that men were significantly less likely to have been known to psychiatric services than women [69].

This lack of consultation among men reflects more generalised gender differences in the use of health care. Women consult more than men for most conditions, although whether this reflects greater awareness of symptoms and willingness to seek help, or that women have higher levels of morbidity, has been questioned by a number of studies [29]. In addition to the complexity of gender differences in consulting behaviour, studies on the use of health care services prior to suicidal acts often do not establish what the individual was consulting for, and it is possible that some consultations were for other conditions. It is also important to consider how well services meet men and women's needs, once they do consult. One study found that reduced suicide mortality among older men and women was associated with the prescription of antidepressants [70]. However, while antidepressant prescriptions among men have increased, younger men remain less likely than other men to be prescribed antidepressants, which suggests a potential gap in treatment.

Sexuality

Suicide ideation and DSH are higher among sexual minorities than among those primarily identifying as heterosexual. DSH is more frequent among lesbian, gay and bisexual men and women, for example, compared with heterosexual populations [71,72]. However, the risk appears to be higher for men than women [71,72], which may reflect a wider gap in mental health between sexual minority men and heterosexual men, compared with the gap for women. This, in itself, will reflect other influences, such as differences between women and men in the stigma attached to being gay, which can produce feelings of shame, reduced self-esteem, isolation and depression [73].

Similarly, while sexual minorities can be seen as contravening gender roles, the transgression is more marked for men than for women, and the distance between hegemonic masculinity and gay or bisexual masculinities is greater and may constitute more of a threat to mental health [74]. Research on DSH among transgender people may add to these insights. Although research on transgender people and suicide is limited, one study found that transgender people experienced an increased risk of suicide compared with heterosexual men and women and gay men [75]. The authors suggested that this may be because the victimisation experienced by transgender persons is more damaging because they challenge the norms of both sexuality and gender. More

research on further differences in suicide in relation to sexuality is needed, however.

Taken together, evidence on individual and life history factors suggests that traditional male and female gender roles define and reinforce suicide-related behaviours, and help to explain gender differences in such behaviours. For men, hegemonic masculinity is characterised by dominance, aggressiveness and invulnerability, which helps explain men's choice of more lethal suicide methods, their relative unwillingness to seek help for mental illness symptoms, and their misuse of alcohol and other substances. In contrast, femininity is often associated with fragility, weakness and emotionality. This may explain women's reduced risk overall, their help-seeking behaviour and their choice of method.

Social and community variables

The effect of social and community factors on suicide should likewise be examined through a gendered lens. Durkheim's [9] sociological analysis of suicide posited that, in times of rapid societal change, suicide levels will increase as a result of new-found poverty or prosperity, both of which can produce feelings of helplessness or meaninglessness. In such periods of anomie, the health benefits accrued from social institutions such as marriage, the family, religion and the community may be negated as individuals adapt to new circumstances by loosening family and community ties. In this way, levels of social integration play an important role in facilitating or preventing suicide. But as we will see in relation to marital and parental status, there may be important differences in such integration between men and women.

Marital and parental status

A relatively robust finding in the suicide literature is the greater risk of suicide among the widowed, separated and divorced, and those living alone, compared with married adults [68,76]. However, there are important differences between women and men in this association, with higher risks experienced by non-married men compared with non-married women [55,68]. Divorce is a significant risk factor for suicide for men, but not women [54,77,78]. Widowhood is also a greater risk factor for suicide for men, especially among the young and the very old [68,79].

Why might marital status be more protective for men compared with women? It is worth noting that marriage is known to reduce risk behaviours such as heavy drinking [80], and a range of factors associated with socially constructed gender roles play a part in the way marriage protects men from harm. Constructions of gender mean that marriage, which offers emotional and social integration, is particularly important for men who have fewer alternative close relationships [38,78]. Men are more vulnerable to suicide following the break-up of a marriage or death of a spouse because they are less likely to be socially connected, while negative emotions such as pessimism, anxiety, uncertainty and sadness following a personal setback such as a relationship break-up have a more marked effect [38]. In the United States and other developed Western countries, divorce may be particularly devastating for men because they are mainly the ones who lose their home, children and family, leading to feelings of resentfulness and anger while reducing their self-esteem [78].

Being a parent also has an association with suicide risk but again this association is gendered. A number of studies have reported that having a young child protects women against suicide, but that the effect is less marked for men [2,3,81]. This may be because family roles within hegemonic masculinity focus on economic success and the status of a good breadwinner rather than caring responsibilities. For women social constructions of femininity include family roles and a caring orientation and this may offer women benefits when they fulfil such stereotypes. Conversely, rates of suicide among women may increase if childlessness is viewed as a transgression of perceived gender roles or if pregnancy outside marriage is stigmatised [2].

Other social and community factors

Another key concern in relation to social and community variables has to do with the effect of changing gender roles. In most Western societies, there has been some change in paradigms related to the perception and social role of men [82], with more men now occupying roles in the private sphere once traditionally reserved for women. Some evidence suggests

that this may be having an effect on rates of suicide: one study of suicide in England and Wales, for example, found that marriage appeared to exert a similar protective effect for men and women, in contrast to earlier research suggesting marriage was more protective for men [83].

In summary, the existing literature suggests that gender interacts with social and community factors in affecting suicide rates among women and men. Because women are more likely to have extended and rooted social networks, they are likely to suffer less following the break-up of a marriage or death of a spouse. By contrast, gender role stereotypes lead to the perception of men as being independent and, in turn, men tend to develop social networks that are much more restricted. In the absence of social support accruing from such networks, they are likely to experience marital setbacks negatively, leading to increased rates of suicide.

Living and working conditions

The social construction of gender also associates masculinities and femininities with living and working conditions. For men, an important aspect of their gender role concerns their status as bread-winners. Women's increasing participation in the labour market and the public sphere may have improved their mental health and reduced suicide risks, while threatening men's gender roles and increasing rates of suicide among men. This section considers a gender view of living and working conditions, including occupational status and unemployment.

Employment and unemployment

Women have increasingly entered labour markets and may be viewed by men as rivals or threats to job security. Moreover, the entry of women into the public sphere may be associated with a loss of control or self-esteem, and feelings of anomie among men [84]. This will be especially true if men's ideas of masculinity still relate strongly to their occupational role, despite the increased time they spend in non-working roles. Indeed, one recent ecological study has suggested that men may react to greater women's empowerment with violence, which may contribute to rates of suicide. For women, in contrast, increasing engagement in paid work can produce benefits, including independent access to income, social support and opportunities for self-esteem not found in domestic labour [85], although there may also be costs in terms of the 'double burden' of combining paid and unpaid work, and in role conflict [84,86].

Ecological research shows that increased female labour force participation is associated with reduced suicide rates for women, but not men, widening the gender gap [87,88]. Some studies suggest that women without paid employment outside the home have higher suicide rates and that domestic status may constitute a particular risk for women [46]. This may reflect risks of depression: a number of studies, including the seminal work of Brown & Harris [89], have suggested that, for women with young children, paid work may protect against depression.

However, although studies in the past have suggested that women's paid work had a detrimental effect on men's suicide rates, this may be changing, to the point that now 'men actually appear to receive some protection from suicide when women are in the paid work force' [90]. Moreover, while the evidence suggests a beneficial effect of women's employment on their female suicide rates, this is complex and reflects the ways in which men and women 'do' gender in the context of paid work differently. For example, women who work in traditionally male sectors experience an elevated risk of suicide in comparison with other women, and similar suicide risks as those of men [4,91].

Given the occupational content of male gender role stereotypes, it seems likely that unemployment, uncertainty about future employment or insecure employment would have a stronger impact on men's health than women's. Indeed, the evidence shows a clear association between unemployment and suicide, with a stronger relationship for men than for women [52]. The stronger association between unemployment and male suicide may be explained by gender differences in the impact of job loss, especially in terms of status, routine and social support. While women retain another status through their domestic and caring responsibilities, men may experience significant gender role confusion as a result of unemployment.

Socio-economic status

There is a further association between low socio-economic status and an increased risk of suicide [52,92]. However, the relationship is more marked for men than women [93]. In an ecological study of 34 European countries, for example, Sher [94] showed that per capita income was related to suicide rates in men but not in women. Similarly, Taylor et al. [95] found that the risk of suicide in New South Wales increased significantly with decreasing socio-economic status among men but not women. This may reflect differences in traditional male and female gender roles. Because male status is more often dependent on relative socio-economic success and control over their work and environment, men may be more sensitive to deprivation, and more vulnerable to gender role distress as a result of not meeting expectations. For women, however, socio-economic position may influence rates of suicide less because their status is derived from other sources as well [94].

Other living and working conditions

The available evidence suggests that gender plays an important role in understanding the effects of working and living conditions on suicide. There are other areas of interest that are relatively under-researched, including education. For example, some studies have suggested that educational achievement has an inverse relationship with suicide, but is more closely associated with male suicide mortality [62,93]. However, changes in female educational opportunity may affect the gender gap in suicide. Increasing equality of education for women has been linked with widening suicide sex ratios, either through increasing male suicide mortality [96] or decreasing female suicide mortality [88]. More research is needed to examine this in greater detail.

Gender may also be important in understanding higher suicide rates in rural areas. Ni Laoire [97], for example, suggests that, in Ireland, economic restructuring has had particular implications for male suicide in rural areas, due to higher male unemployment and the risk that family farms may be lost. In short, the evidence in relation to living and working conditions suggests that gender plays an important role in the higher mortality among men. Because work is much more closely tied with masculine gender roles, being employed offers particular benefits for men while unemployment is detrimental. For women, employment and socio-economic status are less significant in dominant gender roles, which may help to explain the smaller association of such variables with suicide rates.

Implications for suicide prevention

Social constructions of gender impact on health-related behaviours, and the toxic practices associated with some masculinities help us to understand differences between women and men. However, public health policies in the West have generally treated gender as an invisible concept [98] and, in particular, suicide prevention strategies have largely failed to take account of the ways in which gender affects various risk factors for suicide and DSH. Gender-sensitive policies, which specifically address masculine practices in relation to various kinds of risk, may offer more success than those which are gender-blind.

In the United States, for example, the Department of Health and Human Service's National Strategy (http://mentalhealth.samhsa.gov) does not outline gender sensitive approaches, and while the American Foundation for Suicide Prevention (www.afsp.org) also details a number of different projects and resources to help reduce suicide mortality, these do not address the needs of men and women separately.

In England, the Department of Health (DoH) has had targets to reduce suicide mortality for some time, but these have mainly not identified differences between women and men in either suicide or DSH. The 2004 target, for example, outlined in the Public Spending Review, was for a 20% reduction in total suicide mortality [99].

However, the DoH's Suicide Prevention Strategy, launched in 2002, addressed the needs of specific sub-groups in the population with higher than average suicide risk including young men, together with prisoners and people in contact with mental health services [100]. The strategy included a number of pilot projects aimed at improving mental health among young men, and the evaluation of these pilots highlighted the ways in which men's mental health was associated with such 'toxic

gender practices' [33] as lack of emotional literacy and a reluctance to use statutory services due to perceptions of stigma, lack of confidentiality and the feeling that general practitioners lack empathy [101].

Other prevention policies are aimed at improving the identification and treatment of alcohol and substance abuse, but again these services need to be gender sensitive in their understanding of the factors underlying such abuse and the willingness to seek help, as well as providing both male and female staff. Similarly, strategies which seek to reduce suicide by limiting access to particular methods – for example by removing attachment points in institutions such as prisons and psychiatric facilities, to reduce hanging – also need to take gender differences in choice of method into account.

Conclusion

A large body of evidence highlights differences in the suicidal behaviour of women and men, with more men dying through suicide and more women engaging in DSH. From a social constructionist perspective, these differences can be understood as a result of the gender roles that men and women are expected to demonstrate in their daily lives. For men, this means dismissing symptoms of ill-health, taking risks and adopting traditional notions of being the 'stronger' sex, which in turn can increase their likelihood of engaging in lethal suicidal behaviour. For women, rates of lethal suicide may be attenuated by their greater use of medical and other sources of help and their choice of less lethal methods.

In order to respond to these differences we need public health policies that acknowledge the myriad of ways in which gender can influence health-related behaviour, including both positive and negative effects. Frameworks of analysis that include gender as a core component, rather than an incidental factor, will not be easy to construct, although there are a number of valuable recent contributions [18,38]. In the long term, changing the health behaviours of men and women will not be enough, particularly if the sources of societal constructions of such behaviours are left intact. Rather, this strategy must involve a deconstruction of the power structures that give rise to inequalities between men and women. Doing so will benefit both women and men when it comes to reducing suicidal behaviours.

References

[1] World Health Organisation. The World Health Report 2004: Changing History. Geneva: WHO; 2004.

[2] Brockington L. Suicide in women. Int Clin Psychopharmacol 2001;16(Suppl 2):S7–S19.

[3] Chaudron LH, Caine ED. Suicide among women: a critical review. J Am Med Womens Assoc 2004;59(2):125–34.

[4] Stack S. Suicide: a 15-year review of the sociological literature. Part I: cultural and economic factors. Suicide Life Threat Behav 2000;30(2):145–62.

[5] Murphy GE. Why women are less likely than men to commit suicide. Compr Psychiatry 1998;39(4):165–75.

[6] Phillips MR, Xianyn L, Zhang Y. Suicide rates in China, 1995–99. Lancet 2002;359:835–40.

[7] Durkheim E. Suicide. New York: Free Press; 1897/1951.

[8] Amos T, Appleby L, Kiernan K. Changes in rates of suicide by car exhaust asphyxiation in England and Wales. Psychol Med 2001;31(5):935–9.

[9] Appleby L. Suicide in women. Lancet 2000;355(9211):1203–4.

[10] Crawford MJ, Prince M. Increasing rates of suicide in young men in England during the 1980s: the importance of social context. Soc Sci Med 1999;49:1419–23.

[11] Hawton K. Why has suicide increased in young males? Crisis 1998;19(3):119–24.

[12] McClure GM. Changes in suicide in England and Wales, 1960–1997. Br J Psychiatry 2000;176:64–7.

[13] World Health Organisation. Evolution of global suicide rates 1950-2000 (per 100,000). WHO Suicide Prevention Strategy. Geneva: WHO; 2002. Available at: http://www.who.int/mental_health/prevention/suicide/evolution/en/index.html. [Accessed 01/10/07].

[14] Platt S, Bille-Brahe U, Kerkhof A, Schmidke A, Bjerke T, Crepet P, et al. Parasuicide in Europe: The WHO/EURO multicentre study on parasuicide. I: Introduction and preliminary analysis for 1989. Acta Psychiatr Scand 1992;85:97–104.

[15] Schmidtke A, Bille-Brahe U, DeLeo D, Kerkhof A, Bjerke T, Crepet P, et al. Attempted suicide in Europe: rates, trends and sociodeomographic characteristics of suicide attempted during the period 1989–1992. Results of the WHO/EURO Multicentre Study on Parasuicide. Acta Psychiatr Scand 1996;93:327–38.

[16] Smalley N, Scourfield J, Greenland K. Young people, gender and suicide: a review of research on the social context. J Soc Work 2005;5:133–54.

[17] Swami V, Stanistreet D, Payne S. Masculinities and suicide. The Psychologist 2008: in press. Q4

[18] Hunt K, Sweeting H, Keoghan M, Platt S. Sex, gender role orientation, gender role attitudes and suicidal thoughts in three generations - a general population study. Soc Psychiatry Psychiatr Epidemiol 2006;41(8):641–7.

[19] Purselle DC, Nemeroff CB. Serotonin transporter: a potential substrate in the biology of suicide. Neuropsychopharmacology 2003;28(4):613–9.

569 [20] Wallinder J, Rutz W. Male depression and suicide. Int Clin Psychopharmacol 2007; 16(Suppl 2):21–4.
[21] Linehan MM. Behavioural treatments of suicidal behaviours: definitional obfuscation and treatment outcomes. Ann NY Acad Sci 1997;836:302–28.
[22] Guo B, Harstall C. For which strategies of suicide prevention is there evidence of effectiveness?. Geneva: WHO; 2004.
[23] Hawton K, Harriss L, Hall S, Simkin S, Bale E, Bond A. Deliberate self-harm in Oxford, 1990–2000: a time of change in patient characteristics. Psychol Med 2003;33(6): 987–95.
[24] De Leo D, Padoani W, Scocco P, Lie D, Bille-Brahe U, Arensman E, et al. Attempted and completed suicide in older subjects: results from the WHO/EURO Multicentre Study of Suicidal Behaviour. Int J Geriatr Psychiatry 2001;16(3):300–10.
[25] Canetto SS, Sakinofsky I. The gender paradox in suicide. Suicide Life Threat Behav 1998;28(1):1–23.
[26] Pleck JH, Sonenstein FL, Ku LC. Problem behaviours and masculinity ideology in adolescent males. In: Ketterlinus RD, Lamb ME, editors. Adolescent problem behaviours: issues and research. Hillsdale: Lawrence Erlbaum; 1994.
[27] West C, Zimmerman DH. Doing gender. Gender Soc 1987;1:125–51.
[28] Connell RW. Masculinities. Berkeley: University of California Press; 1995.
[29] Courtenay WH. Constructions of masculinity and their influence on men's well-being: a theory of gender and health. Soc Sci Med 2000;50:1385–401.
[30] Perry LA, Turner LH, Sterk HM. Constructing and reconstructing gender: the links among communication, language and gender. Albany: State University of New York Press; 1992.
[31] Butler J. Gender trouble: feminism and the subversion of identity. London: Routledge; 1990.
[32] Connell RW. The men and the boys. Cambridge: Polity Press; 2000.
[33] Connell RW, Messershmidt JW. Hegemonic masculinity: rethinking the concept. Gender Soc 2005;19:829–59.
[34] Annandale E, Hunk K. Masculinity, femininity and sex: an exploration of their relative contribution to explaining gender differences in health. Sociol Health Illn 1990;12:24–46.
[35] Grossman M, Wood W. Sex differences in intensity of emotional experience: a social role interpretation. J Pers Soc Psychol 1993;65:1010–22.
[36] Maris RW, Berman AL, Silverman MM. The comprehensive textbook of suicidology. New York: Guilford Press; 2000.
[37] Golombok S, Fivush R. Gender development. Cambridge: Cambridge University Press; 1994.
[38] Möller-Leimkühler AM. The gender gap in suicide and premature death or: why are men so vulnerable? Eur Arch Psychiatry Clin Neurosci 2003;253(1):1–8.
[39] Dahlgren G, Whitehead M. Reducing inequalities in health. Wellington: Ministry of Health; 1991.
[40] Pyke KD. Class-based masculinities: the interdependence of gender, class and interpersonal power. Gender Soc 1996; 10:527–49.
[41] Cantor CH, Baume PJM. Access to methods of suicide: what impact? Aust N Z J Psychiatry 1998;32:8–14.
[42] Cantor CH, Baume PJM. Changing methods of suicide by young Australians, 1974–1994. Arch Suicide Res 1998;4:41–50.
[43] Denning DG, Conwell Y, King D, Cox C. Method choice, intent, and gender in completed suicide. Suicide Life Threat Behav 2000;30(3):282–8.
[44] Canetto SS. Meanings of gender and suicidal behavior during adolescence. Suicide Life Threat Behav 1997;27(4):339–51.
[45] Beautrais AL. Gender issues in youth suicidal behaviour. Emerg Med (Fremantle) 2002;14(1):35–42.
[46] Fekete S, Voros V, Osvath P. Gender differences in suicide attempters in Hungary: retrospective epidemiological study. Croat Med J 2005;46(2):288–93.
[47] Hawton K, Houston K, Shepperd R. Suicide in young people. Study of 174 cases, aged under 25 years, based on coroners' and medical records. Br J Psychiatry 1999; 175:271–6.
[48] Gibb SJ, Beautrais AL, Fergusson DM. Mortality and further suicidal behaviour after an index suicide attempt: a 10-year study. Aust N Z J Psychiatry 2005;39(1–2):95–100.
[49] Leenaars AA, Moksony F, Lester D, Wenckstem S. The impact of gun control (Bill C-51) on suicide in Canada. Death Stud 2003;27(2):103–24.
[50] Chuang HL, Huang WC. A multinomial logit analysis of methods used by persons who completed suicide. Suicide Life Threat Behav 2004;34(3):298–310.
[51] Arsenault-Lapierre G, Kim C, Turecki G. Psychiatric diagnoses in 3275 suicides: a meta-analysis. BMC Psychiatry 2004;4:37.
[52] Qin P, Agerbo E, Westergård-Nielsen N, Eriksson T, Mortensen PB. Gender differences in risk factors for suicide in Denmark. Br J Psychiatry 2000;177:546–50.
[53] Pritchard C, King E. A comparison of child-sex-abuse-related and mental-disorder-related suicide in a six-year cohort of regional suicides: the important of the child protection-psychiatric interface. Br J Soc Work 2004;34:181–98.
[54] Qin P, Agerbo E, Mortensen PB. Suicide risk in relation to socioeconomic, demographic, psychiatric, and familial factors: a national register-based study of all suicides in Denmark, 1981–1997. Am J Psychiatry 2003;160(4):765–72. 570
[55] Quan H, Arboleda-Florez J. Elderly suicide in Alberta: difference by gender. Can J Psychiatry 1999;44(8):762–8.
[56] Bar Joseph H, Reznik I, Mester R. Suicidal behavior of adolescent girls: profile and meaning. Isr J Psychiatry Relat Sci 2003;40:209–19.
[57] Ho TP. The suicide risk of discharged psychiatric patients. J Clin Psychiatry 2003; 64(6):702–7.
[58] Lester D. Sex differences in completed suicide by schizophrenic patients: a meta-analysis. Suicide Life Threat Behav 2006; 36(1):50–6.
[59] Geddes JR, Juszczak E, O'Brien F, Kendrick S. Suicide in the 12 months after discharge from psychiatric inpatient care, Scotland 1968–92. J Epidemiol Community Health 1997;51(4):430–4.
[60] Qin P, Nordentoft M. Suicide risk in relation to psychiatric hospitalization: evidence based on longitudinal registers. Arch Gen Psychiatry 2005;62(4):427–32.
[61] Borowsky IW, Ireland M, Resnick MD. Adolescent suicide attempts: risks and protectors. Pediatrics 2001;107(3):485–93.
[62] Oyefeso A, Ghodse H, Clancy C, Corkery JM. Suicide among drug addicts in the UK. Br J Psychiatry 1999;175:277–82.
[63] Groves SA, Sher L. Gender differences in suicidal behavior and alcohol abuse in adolescents. Int J Adolesc Med Health 2005;17(3):307–9.
[64] Pirkola SP, Isometsä ET, Heikkinen ME, Henriksson MM, Marttunen MJ, Lönnqvist JK. Female psychoactive substance-dependent suicide victims differ from male – results from a nationwide psychological autopsy study. Compr Psychiatry 1999;40(2):101–7.
[65] Baxter D, Appleby L. Case register study of suicide risk in mental disorders. Br J Psychiatry 1999;175:322–6.
[66] Bilban M, Skibin L. Presence of alcohol in suicide victims. Forensic Sci Int 2005; 147(Suppl):S9–S12.
[67] Zierau F, Bille A, Rutz W, Bech P. The Gotland Male Depression Scale: a validity study in patients with alcohol use disorder. Nord J Psychiatry 2002;56:265–72.
[68] Luoma JB, Pearson JL. Suicide and marital status in the United States, 1991–1996: is widowhood a risk factor? Am J Public Health 2002;92(9):1518–22.
[69] Salib E, Green L. Gender in elderly suicide: analysis of coroners inquests of 200 cases of elderly suicide in Cheshire 1989–2001. Int J Geriatr Psychiatry 2003;18(12):1082–7.

[70] Gunnell D, Middleton N, Whitley E, Dorling D, Frankel S. Why are suicide rates rising in young men but falling in the elderly? – a time-series analysis of trends in England and Wales 1950–1998 Soc Sci Med 2003;57(4):595–611.
[71] Paul JP, Catania J, Pollack L, Moskowitz J, Canchola J, Mills T, et al. Suicide attempts among gay and bisexual men: lifetime prevalence and antecedents. Am J Public Health 2002;92(8):1338–45.
[72] Skegg K, Nada-Raja S, Dickson N, Paul C, Williams S. Sexual orientation and self-harm in men and women. Am J Psychiatry 2003;160(3):541–6.
[73] Fergusson DM, Horwood LJ, Ridder EM, Beautrais AL. Sexual orientation and mental health in a birth cohort of young adults. Psychol Med 2005;35(7):971–81.
[74] Russell ST. Sexual minority youth and suicide risk. Am Behav Sci 2003;46:1241–57.
[75] Clements-Nolle K, Marx R, Katz M. Attempted suicide among transgender persons: the influence of gender-based discrimination and victimization. J Homosexuality 2006;51(3):53–69.
[76] Kposowa AJ. Marital status and suicide in the National Longitudinal Mortality Study. J Epidemiol Community Health 2000;54(4):254–61.
[77] Cantor C, Neulinger K. The epidemiology of suicide and attempted suicide among young Australians. Aust N Z J Psychiatry 2000;34(3):370–87.
[78] Kposowa AJ. Divorce and suicide risk. J Epidemiol Community Health 2003; 57(12):993.
[79] Agerbo E, Qin P, Mortensen PB. Psychiatric illness, socioeconomic status, and marital status in people committing suicide: a matched case-sibling-control study. J Epidemiol Community Health 2006;60:776–81.
[80] Powers C, Rodgers B, Hope S. Heavy alcohol consumption and marital status: disentangling the relationship in a national study of young adults. Addiction 1999;94:1477–87.
[81] Agerbo E. Midlife suicide risk, partner's psychiatric illness, spouse and child bereavement by suicide or other modes of death: a gender specific study. J Epidemiol Community Health 2005;59(5):407–12.
[82] Hosoda M, Stone DL. Current gender stereotypes and their evaluative content. Percept Motor Skills 2000;90:1283–94.
[83] Yip PS, Thorburn J. Marital status and the risk of suicide: experience from England and Wales, 1982–1996. Psychol Rep 2004;94(2):401–7.
[84] Blane D, Berney L, Montgomery SM. Domestic labour, paid employment and women's health: analysis of life course data. Soc Sci Med 2004;52: 959–65.
[85] Härenstam A, Aronsson G, Hammarström A. The future of gender inequalities in health. In: Östlin O, Danielsson M, Diderichsen F, editors. Gender inequalities in health: a Swedish perspective. Boston, MA: Harvard University Press; 2001.
[86] Stanistreet D, Swami V, Pope D, Bambra C, Scott-Samuel A. Women's empowerment and violent death among men and women: an ecological study. jmhg 2007;4(3):257–65.
[87] Cutright P, Fernquist RM. The relative gender gap in suicide: societal integration, the culture of suicide, and period effects in 20 developed countries, 1955–1995. Soc Sci Med 2001;30:76–99.
[88] Fernquist RM, Cutright P. Societal integration and age-standardized suicide rates in 21 developed countries, 1955–1989. Soc Sci Res 1998;27(2):109–27.
[89] Brown GW, Harris T. The social origins of depression: a study of psychiatric disorder in women. London: Tavistock Publications; 1978.
[90] Burr JA, McCall PL, Powell-Griner E. Female labor force participation and suicide. Soc Sci Med 1997;44(12):1847–59.
[91] Pampel FC. National context, social change, and sex differences in suicide rates. Am Sociol Rev 1998;63:744–58.
[92] Hawton K. Sex and suicide. Gender differences in suicidal behaviour. Br J Psychiatry 2000;177:484–5.
[93] Lorant V, Kunst AE, Huisman M, Costa G, Mackenbach J. EU Working Group on Socio-Economic Inequalities in Health. Socio-economic inequalities in suicide: a European comparative study. Br J Psychiatry 2005;187:49–54.
[94] Sher L. Per capita income is related to suicide rates in men but not in women. jmhg 2006;3(1):39–42.
[95] Taylor R, Morrell S, Slaytor E, Ford P. Suicide in urban New South Wales, Australia 1985–1994: socio-economic and migrant interactions. Soc Sci Med 1998;47(11): 1677–86.
[96] Mayer P. Development, gender equality, and suicide rates. Psychol Rep 2000;87(2): 367–72.
[97] Ni Laoire C. A matter of life and death? Men, masculinities and staying 'behind' in rural Ireland Sociol Ruralis 2001;41:220–36.
[98] Annandale E, Clark J. What is gender? Feminist theory and the sociology of human reproduction Sociol Health Illn 1996;18:17–44.
[99] Department of Health. Technical Note for the Spending Review 2004 Public Service Agreement 2005–2008. London: Department of Health; 2006.
[100] Department of Health. National Suicide Prevention Strategy for England. London: Department of Health; 2002.
[101] Oliver C, Storey P. Evaluation of mental health promotion pilots to reduce suicide amongst young men: Final Report. London: Thomas Coram Research Unit, University of London; 2006.