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Men, masculinity and pain

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***(In press, PAIN)***

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## 1. Introduction

Men's pain is not well understood, despite clear evidence that sex and gender play important roles in pain and disability [35]. Outside pain, men's health has emerged as an area of interest, and not only identified issues specific to men, but helped us better understand male-female differences as well. By taking a men's health approach to pain, we can view existing evidence in a different way, and identify potential gaps in our understanding of men (and women's) pain. The purpose of this selective review is therefore to identify key themes from the men's health literature and consider them within the context of men's pain. Whilst this review will mostly highlight psychosocial factors, it is acknowledged that biological factors contribute to men's pain. The review will focus on three core areas - morbidity/mortality, health behaviours, and masculinity – as well as the relationship between them (see Figure 1). The final section considers future directions, including implications for clinical research and practice.

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Figure 1  
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## 2. Gender differences in mortality and morbidity

One key theme that dominates men's health literature is the general, yet paradoxical, gender difference in mortality and morbidity rates. Typically, males have lower life expectancy [41; 75; 113] – males are more vulnerable to common life-limiting conditions [65; 75], and more likely to die from accidental and non-accident injury [11; 29; 82], including suicide [78]. Females, however, seemed to have worse overall health i.e., higher morbidity [22; 79; 92].

This health-survival difference is a good starting point for the current review. It forces us to step back, identify general themes, and ask question that might not have yet been asked within the context of pain. For example, chronic pain is viewed as long-term condition, although the life-limiting aspects of pain are starting to emerge [99; 105; 118]. However, few studies investigate the impact of gender on the relationship between pain and mortality beyond statistical control. In one of the few known studies, Docking et al. [30] found a greater mortality risk in older women with lower back pain, but not in men. It is not known whether this bias occurs in other age groups or painful conditions. Given the increased risk of suicide in both chronic pain and men [52; 100], it is possible that males might show greater pain-related suicide. One way to examine this could be to look at non-accidental opioid-related deaths. Whilst there is a general trend for women to use poisoning/overdose as a method of suicide [5; 78], opioid-related overdoses can be higher in men [84; 85]. Taking a men's health perspective highlights the need to consider outcomes such as mortality, suicide etc.

Despite ambiguities around pain-related mortality, gender results in a clear and well recognised pattern of pain morbidity. Prevalence of pain is generally higher in women than men [35; 58; 63]. However, these studies also show that pain still occurs to a high degree in men – and the rate is not far behind women. Men are not immune from pain and suffering. There are also common male-specific conditions where pain plays a significant role e.g., testicular/prostate cancer, prostatitis. Although fewer in number, there are shared pain conditions that show a male bias

e.g., cluster headache [37]. What this tells us is that men suffer from pain, and this should not be overlooked when considering gender-related issues.

### **3. Men's health behaviours**

#### *3.1 Health behaviour and utilization*

Explanations for these gender differences can also be found in the men's health literature. Males might have poorer survival rates because they engage in riskier behaviours [66; 87]. Men are more likely to smoke, use excessive alcohol, have poor diets etc [28; 96; 110]. Men are less likely to engage with healthcare services, and have fewer health checks or physician consultations [2; 34; 43; 68; 111]. Given the importance of catching life-threatening conditions early, delays negatively affect survival rates. When men do engage, health behaviours can be good e.g., some studies find medication adherence to be better in men [48; 71].

An important priority is to understand why men continue to engage in riskier behaviours, and seem resistant to health promotion messages. Barriers men face around help seeking include ineffective communication skills, embarrassment, and anxiety [116]. Lack of support has been related to poorer health [47]. Men tend to have a narrower range of support networks [7], engaging more with family members than those outside the family [10; 25; 97]. Levels of available support can get worse for men with increasing age [36]. Health campaigns help men overcome embarrassment, adopt better health behaviours, and improve social support networks. For example, the 'men's sheds' initiative provide male friendly environments that help reduce isolation and improve health awareness [114].

### *3.2 Pain care utilisation and pain coping behaviours*

These general explanations can be applied to pain. We know men have a lower take up of pain services [24; 33; 55] and are less likely to report using analgesics [9; 44; 83]. This could be because women suffer more pain [77]. Alternatively, health seeking behaviours may help explain lower pain service use by men. However, few studies consider gender [45], and results are mixed. Access to back pain services do not seem to show male-female differences in help-seeking [1; 51] - it is unknown whether men avoid seeking help across other painful conditions. It would also be interesting to know whether there are expectations around men's 'need' for analgesia, and if asking for pain relief is seen by some as a 'signal of weakness'.

Few studies take a men's health approach to pain behaviours, and so relatively little is known about men's self-management of pain [38]. Men seem to use a narrower range of pain coping strategies [32; 107]. They report using distraction-type approaches [61], even though they may benefit from focusing on pain [62]. Men are more likely to use alcohol to cope with pain [19; 94], and more males present at emergency rooms following combined alcohol and opioid use [54]. Males reported using 'adaptive' coping [32], but also avoidance [90; 91], and the usefulness of such approaches depend on context. Fear avoidance may contribute to pain chronicity [109], and the relationship between pain anxiety and pain can be stronger in men [31; 40] - although conflicting reports have been found [74; 102]. Men who perceive pain as more threatening have also been found to adopt passive coping responses [53]. Together, it seems that male coping patterns are worth further consideration, especially if related to pain avoidance.

## **4. Masculinity, health and pain**

### *4.1 Masculinity and health*

At the heart of men's health is masculinity, which refers to attitudes and beliefs about what it is to be 'male'. Masculinity is culturally defined, and so we need to be mindful that much of the research and measures used stems from North America and Europe [103]. Masculine behaviours are exemplified as being stoic and less emotional, independent and more dominant or aggressive. These views shape an individual's gender identity and influence behaviour, including health [2; 26; 69; 70; 98]. Identification with strength and independence explains why some men are less willing to express health concerns and seek help [101]. Gender beliefs are thought to be acquired in childhood (friends, family), then shaped and reinforced throughout life [20; 72]. Media representations of male health often reflect strength [8], and violation of male gender norms can result in negative responses [27; 50].

The relationship between masculinity and health is reciprocal - poor health can be perceived as a threat to masculinity and result in a loss of male identity [27; 42; 117]. This loss can lead to gender role strain [64], increased depression, and may even be linked to suicide [49; 73; 80]. Some interventions attempt to challenge traditional masculine beliefs in order to improve wellbeing and promote healthy behaviours [69].

### *4.2 Masculinity, gender identity and pain*

Although masculinity has not been extensively considered within the context of pain, but there are signs it is important [16; 38]. Greater male identification (high masculinity/low femininity) is associated with higher pain thresholds in laboratory studies [6; 39]. Gender identity is also embedded in how men describe clinical pain

[3; 4; 106]. Stereotypical beliefs exist around male pain - the typical male is viewed as less willing to report pain, and more likely to use distraction [60; 95]. Female pain is also perceived to be wider ranging and related to reproductive status [18]. Gender-role beliefs explain male-female variation in laboratory-induced pain, and affect how pain signals are interpreted [88; 115]. Unfortunately, the link between masculinity and pain behaviours has not been examined from a developmental perspective, and it is unclear whether they co-develop during childhood [58; 76; 108].

The expression of pain could challenge masculine identity, and so pain can have a demasculinising effect [17; 86]. Chronic pain can affect sexuality and sexual functioning [81; 89], which can also impact on gender identity. Interestingly, opioids can affect testosterone [12; 14], and reduced testosterone is implicated in some common health problems [56, 57]. It is unclear whether psychosocial pain interventions that seeks to improve pain and disability affect masculine identity in any way. It is unknown whether pain-related threats to masculine identity contribute to mortality, including suicide. Campaigns that raise awareness around effects of chronic pain on men and masculinity have yet to be developed and tested.

## **5. Next steps/future directions**

- There is an urgent need to determine whether a gender pain-survival paradox exists. We know there is an increased female vulnerability to pain, but not whether males have higher chronic pain-related deaths. There is a related need to consider gender differences in suicide amongst those in pain.
- The general absence of a men's health focus has led to calls for specific health policies and targeted campaigns that focus on men [13; 15; 34; 93;



112]. What are the healthcare needs and policy implications for the management of men's pain? There is a general need to improve interventions for chronic pain, with a move towards greater personalisation of treatment. Should there be specific interventions that recognise the impact of pain on men? Can a men's health approach be used to help improve treatments for both men and women in pain? For example, if women are more open to discussing issues and using social support, how should this be used to inform how to best deliver group-based interventions?

- Little is known about the structure, nature and impact of masculinity in pain, beyond simple conceptualisations [103]. To what extent are masculine gender roles specific to pain, or are they part of a more general health behaviour to consider? If they are general health behaviours, are they still relevant to pain? There are also multiple masculinities (e.g., identity, stereotypes, attributions [104]), and dispositional/situational aspects – how is this relevant to pain? Whilst masculinity is most often examined in men, it is relevant for women also. There is little pain research into the impact of masculine behaviours in women [46], and feminine behaviours in men.
- Greater understanding of the reciprocal relationship between masculinity and pain is required. What effect does masculine gender identity have on pain, pain reporting and pain behaviours. To what extent do masculine beliefs affect empathy, and the identification of pain in others [59]? Similarly, little is known about the consequences of pain-related changes to male gender identity e.g., social relationships, quality of life. We do not know whether this relationship changes across the lifespan, from childhood, through work, and into older life.

## **6. Conclusions**

Men experience a high level of pain, but are generally less likely to engage with health care services. We know little about how pain specifically affects men, and whether we should take a male focused approach to pain management for men. Advances in men's health, and our understanding of constructs such as masculinity, are emerging as important for pain as well. This review points to areas for immediate attention, such as morbidity/mortality differences, health behaviours, and health regulation/promotion. It also highlights the great potential in fully considering the gendered context in which pain operates.

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Figure 1: Possible relationship between the key areas covered within the review.

