Workplace mental health and substance use conditions in male-dominated industries: A systematic literature review

beyondblue commissioned the National Centre for Education and Training on Addiction (NCETA) to conduct a systematic review of anxiety, depression and substance use conditions in Australian male-dominated industries.

Scope

This project involved a systematic review of the literature concerning anxiety, depression and substance use conditions in male-dominated industries. The research questions addressed are shown below, and pertained specifically to the clinical significance of these conditions.

Q1.	What are the prevalence rates of depression, anxiety and substance use conditions in male-dominated industries?
Q2.	What are the awareness levels and attitudes toward depression, anxiety and substance use conditions in male-dominated industries?
Q3.	What are the risk-factors for depression, anxiety and substance use conditions in male-dominated industries?
Q4.	What are the help-seeking behaviours and barriers for depression, anxiety and substance use conditions in male-dominated industries?
Q5.	What industry-specific interventions have been effective in addressing depression, anxiety and substance use conditions in the workplace?
Q6.	What are the evidence gaps related to work and depression, anxiety and substance use conditions in male-dominated industries?

A 'male-dominated' industry was defined as one in which there was a substantial majority of male workers compared to female workers. The male-dominated industries of interest, as classified by the Australian and New Zealand Standard Industrial Classification (ANZSIC 2006), were:

- agriculture, forestry and fishing
- mining
- building and construction
- transport, postal and warehousing
- manufacturing
- utilities.

Method

The review was conducted in accordance with National Health and Medical Research Council guidelines on undertaking a systematic review. Studies were included in the review if they were:

- conducted in one of the nominated six male-dominated industries
- measured clinically significant depression, anxiety and substance use
- conducted in paid workplaces or with participants who were in paid work
- primary studies in the English language.

A total of 77,160 potential articles were located. After an initial screen using titles, abstracts, and where necessary the full article, 614 articles remained. They were then assessed for quality. Preference was given to higher quality studies and Australian studies wherever possible. This resulted in 135 articles being included in the analysis.

Key findings

There is a dearth of research conducted within male-dominated industries that sheds light on the extent and nature of anxiety, depression and substance use conditions. In addition, little research evidence is available that could inform workplace interventions. Australian research was particularly lacking.

Definitional and diagnostic issues surrounding mental health and substance misuse conditions also limit the capacity to make comparisons between studies and to extrapolate clear findings from the literature.

The lack of research in this area is at odds with:

- increasing community concerns about mental health and substance misuse conditions
- the growing understanding of the workplace as a potential source of ill health
- the potential of the workplace as a setting for health-related interventions.

Mental health conditions

Australian research on the prevalence of mental health conditions among male-dominated industries was scarce. This limited the conclusions that could be drawn.

Available Australian research indicated that workers employed in the construction and mining industries may have elevated prevalence rates of depression and anxiety.

Mental health condition prevalence rates varied between industry groups. Some male-dominated industries and occupations (e.g. construction and farming) had higher prevalence rates than other male-dominated industries (e.g. utilities) and non-male-dominated industries and occupations.

Within the same industry, there may be differences in prevalence rates according to location (i.e. city, rural).

The prevalence of mental health conditions also varied substantially between particular occupational groups (i.e. white and blue collar workers) within the same male-dominated industry.

Some non-male-dominated industries and occupations (e.g. office workers, sales, education/teaching) may have much higher mental health condition prevalence rates than male-dominated industries and occupations.

Women employed in some male-dominated industries may be more at risk of mental health conditions than males employed in male-dominated industries, or females employed in non-male-dominated industries.

Suicide

A detailed examination of differences in suicide rates between occupations was beyond the scope of the project. Nevertheless two studies showed a high incidence of suicide among male-dominated industries such as agriculture, transport and construction. One study demonstrated particularly high rates of suicide among young construction workers in Queensland.

Substance use conditions

Higher levels of problematic alcohol and drug use were found among workers in male-dominated industries; reflecting general population patterns of alcohol and drug use among men and young male adults in particular. There is likely to be a complex interplay between the characteristics of individuals attracted to work in these male-dominated industries and the characteristics of the workplaces and work roles which contribute to higher levels of problematic alcohol and other drug use.

Alcohol

Of the 45 substance use studies examined, a general pattern emerged of higher levels of drinking and alcohol-related problems, including dependence and alcohol abuse, among various male-dominated industries. The industries with higher prevalence levels of alcohol-related problems varied but problems appeared to be more concentrated in the construction industry and among manual workers. Workers in manufacturing, mining, transportation and farming/forestry/fishing also featured among higher prevalence groups.

Drugs other than alcohol

National Australian data on substance use in the last 12 months indicated workers in the construction industry appeared to have substantially higher levels of substance use than workers in other male-dominated industries or the Australian workforce overall.

Australian evidence concerning the high prevalence of abuse and dependence among construction workers was consistent with international evidence.

Awareness levels and attitudes

No evidence was located that specifically addressed awareness levels and attitudes towards mental health and substance use conditions in male-dominated industries. This is a clear gap in the research and it warrants attention and the development of a program of research specifically focussed on these issues.

Risk factors

The systematic review identified a broad range of risk factors for depression, anxiety and substance use conditions in male-dominated industries. The evidence for depression and anxiety and for substance use conditions was similar. The evidence has been combined below.

Individual:

- Demographic characteristics:
    - Being a younger worker
    - Being more junior in the work team, unit, company
    - Being male
- Life experiences
    - Negative life events (e.g. death of a close family member, divorce)
- Individual characteristics:
    - Job unsuitability
    - Attitudes towards work, associated with job security
    - Positive alcohol expectancies
    - Expectations of, or actual job changes
- Disparity in occupational status:
    - Manual workers were more at risk than non-manual workers
    - Unskilled workers were at significantly more risk than skilled workers
    - Lower status occupations were significantly more likely to be at risk than higher status occupations
    - Blue collar workers were at significantly more at risk than white collar workers

Team:
- Poor workplace relationships:
    - Lack of line manager support
    - Poor supervision combined with job stress
    - General lack of support and cooperation at work
- Permissive drinking norms

Work:
- Work demands: job demands and job overload
- Poor employment conditions and job insecurity
- Limited work role: inability to use one's skills/decision-making capacity
- Individual/workplace interface:
- Work/life imbalance (e.g. little time to unwind after or see family between shifts, unpredictable work hours, excessive overtime)
- Job demands/overtime/negative work-related life events

Help-seeking behaviours and barriers

Little information was available concerning help-seeking in relation to mental health and substance use conditions among workers in male-dominated industries. One study indicates a lack of help-seeking behaviour among miners and a reliance on trusted friends at the mine site, suggesting workplace relationships are crucial.

The available international evidence further suggests that, among male-dominated industries, those who are likely to seek help for anxiety and depression:

- had an awareness that others had noticed their ill-health and had suggested that they seek help
- had previously sought help for emotional problems
- had a reliance on trusted friends
- had noticed that their depression and anxiety had become more severe
- had had work difficulties, including work absenteeism and poor work performance evaluations
- were single, aged under 45 and living in a city.

No studies were located on help-seeking for substance use conditions in male-dominated industries.

Interventions

The studies identified were of variable quality. Most used a whole of workplace approach and implemented a menu of interventions. This made it difficult to determine whether individual components or the suite of intervention activities were required to achieve positive outcomes. Interventions that appeared to be effective are included in the box below.

Effective interventions - anxiety and depression	Effective interventions – alcohol and other substance use conditions
- Information - Social support - Access to treatment and advice - Managerial education - Team based approaches to improving work environments - Addressing absenteeism - Addressing excessive workloads and providing relief periods from heavy workloads	- Screening for risky alcohol use, which may reduce alcohol consumption - Peer-based workplace interventions aimed at changing attitudes to drinking by staff and management to reduce injury rates - Secondary prevention counselling for risky drinkers - Workplace policies on drug use, and Employee Assistance Program (EAP) services, which can reduce rates of injury

Evidence gaps

This review revealed the following gaps in the knowledge base available to inform responses to depression, anxiety and substance misuse conditions in male-dominated industries:

- Variations in prevalence by industry, gender, location (urban, regional, rural, remote), work-related risk factors (e.g. job demand, job overload, job security), and negative life events (e.g. death of a close relative or divorce)
- Levels of workplace awareness and attitudes towards mental health conditions
- Effective measures to promote help-seeking
- Characteristics of effective interventions

Next steps

Our current knowledge base is sufficient to support:

- addressing risk factors for mental health conditions by promoting supportive work environments, addressing workplace bullying, developing policies to prevent job demand and job overload
- raising awareness and offering support in the workplace for colleagues and their families with mental health problems/symptoms and substance use conditions
- promoting understanding of the impact of work conditions (e.g., poor work relations, high job demand and overload, low occupational status) on mental health and alcohol and other substance use conditions
- addressing the role of workplace culture on alcohol and substance use
- raising awareness of the impact of mental health and substance use conditions on individuals and the workplace (e.g. absenteeism).

Where to find more information

beyondblue

www.beyondblue.org.au
Learn more about anxiety, depression and suicide prevention, or talk through your concerns with our Support Service. Our trained mental health professionals will listen, provide information, advice and brief counselling, and point you in the right direction so you can seek further support.

📞 1300 22 4636

✉ Email or 💬 chat to us online at
www.beyondblue.org.au/getsupport

Head to Health

headtohealth.gov.au
Head to Health can help you find free and low-cost, trusted online and phone mental health resources.

f facebook.com/beyondblue

t twitter.com/beyondblue

Donate online www.beyondblue.org.au/donations