

REVIEW

Workplace determinants of mental health disorders in men: a narrative review of risk and protective factors

Eguono Deborah Akpoveta¹, Kehinde Serah Offia², Favour Ejiro Enakirerhi³, Uchenna Esther Okpete⁴, Haewon Byeon^{5,*}

¹Department of Community Medicine, Federal Medical Centre, 322022 Asaba, DE, Nigeria

²Department of Family Medicine, Truecare Model Hospital, 106101 Epe, LA, Nigeria

³Department of Family Medicine, Federal Medical Centre, 322022 Asaba, DE, Nigeria

⁴Department of Digital Anti-Aging Healthcare, Inje University, 50834 Gimhae, Republic of Korea

⁵Worker's Care and Digital Health Lab, Department of Future Technology, Korea University of Technology and Education, 31253 Cheonan, Republic of Korea

*Correspondence

bhwpuma@naver.com
(Haewon Byeon)

Abstract

Men's mental health in the workplace is a significant public health and occupational concern shaped by the interaction of organizational conditions, psychosocial stressors, and gendered social norms. This review examines how workplace environments influence men's psychological well-being by identifying key risk and protective factors and exploring the role of masculine norms, such as stoicism and self-reliance, in shaping help-seeking behaviors and mental health disclosure. A comprehensive search of biomedical, psychological, and organizational literature was conducted and supplemented with policy reports from international bodies including the World Health Organization, the International Labour Organization, and the Organization for Economic Co-operation and Development. The findings indicate that men working in high-demand and male-dominated occupations experience elevated levels of depression, anxiety, burnout, and suicidal ideation. Major risk factors include job insecurity, excessive workload, long working hours, exposure to hazardous conditions, and workplace discrimination. In contrast, protective factors include strong social support, job flexibility, fair management practices, and supportive leadership. Masculine role norms were consistently found to hinder early help-seeking and contribute to the underreporting of psychological distress. Gender-sensitive workplace interventions, including peer support, leadership engagement, and psychosocial risk assessment, can improve mental health outcomes and reduce stigma. Improving men's mental health requires organizational and policy reforms that normalize help-seeking and embed psychological well-being within occupational health frameworks.

Keywords

Men's mental health; Mental health disorders; Workplace determinants; Occupational stress; Male workers; Occupational health; Depression; Anxiety; Protective factors; Risk factors

1. Introduction

Mental health disorders represent one of the most significant public health challenges worldwide, affecting individuals' productivity, social participation, and overall well-being. Among men, the burden of mental health problems is particularly concerning, as epidemiological evidence demonstrates persistently high rates of depression, anxiety, burnout, substance use, and suicide in male populations [1, 2]. The workplace constitutes a critical setting where many of these conditions develop or worsen, given that men often spend a substantial proportion of their lives engaged in paid employment. While occupational engagement can promote identity, purpose, and stability, work-related stressors frequently interact with masculine role expectations to exacerbate vulnerability to psychological distress [3, 4].

Epidemiological evidence indicates notable gender differences in the prevalence and manifestation of mental health

disorders. Globally, women are more likely to be diagnosed with depression and anxiety disorders, with prevalence estimates suggesting that women experience depression at nearly twice the rate of men. However, men exhibit significantly higher rates of suicide and substance use disorders, reflecting differences in both the expression and reporting of psychological distress. For instance, global estimates indicate that men account for approximately three-quarters of all suicide deaths, despite lower reported rates of diagnosed depression. These disparities highlight the complex interaction between biological, psychological, and sociocultural factors, and underscore the importance of examining men's mental health within specific contexts such as the workplace, where gendered expectations and occupational exposures may further shape risk and help-seeking behaviors [3–5].

Recent research has highlighted the strong influence of occupational determinants, such as excessive workload, long working hours, low autonomy, job insecurity, and psychoso-

cial strain, on the onset and progression of common mental disorders among working men [5–7]. Systematic reviews and meta-analyses have consistently identified associations between high job strain and depressive outcomes, particularly in industries dominated by men such as construction, mining, transportation, and manufacturing [8, 9]. In these settings, work pressure, economic instability, and exposure to physical hazards compound emotional stress, contributing to the disproportionate prevalence of psychological distress and suicide among male workers [10, 11]. Despite growing recognition of these patterns, workplace policies and interventions continue to underrepresent the gendered nature of occupational mental health.

Sociocultural constructions of masculinity further shape how men experience, express, and manage mental distress. Traditional masculine norms, emphasizing stoicism, independence, competitiveness, and emotional restraint, can discourage men from acknowledging vulnerability or seeking psychological support [12, 13]. Studies have shown that men are more likely to externalize distress through irritability, risk-taking, or substance use rather than emotional disclosure [14, 15]. Within organizational contexts that reward endurance and productivity, these behaviors may be normalized or even valorized, reinforcing a cycle of silence and self-reliance that limits early intervention [16]. Consequently, masculine role socialization interacts with occupational structures to sustain a hidden crisis of men's mental health within the workplace.

In response, global organizations have increasingly recognized the importance of integrating mental health within occupational health frameworks. The World Health Organization's (WHO) guidelines on mental health at work advocate for psychosocial risk management, supportive leadership, and stigma-reduction initiatives as essential components of healthy workplaces [17]. Similarly, the International Labour Organization (ILO) emphasizes the inclusion of mental health within occupational health and safety systems, while the Organization for Economic Co-operation and Development underscores the economic and societal burden of untreated workplace mental illness [18, 19]. These initiatives reflect an important shift toward institutional recognition of the workplace's role in shaping mental well-being. However, there remains a paucity of research specifically addressing how these policies translate into effective, gender-sensitive interventions for men.

The objective of this narrative review is to synthesize contemporary evidence on workplace determinants of mental health disorders among men, identifying both risk and protective factors across diverse occupational contexts. The review further explores how masculine norms influence help-seeking, coping, and resilience, and evaluates organizational and policy interventions aimed at promoting mental well-being in male-dominated workplaces. Through this synthesis, the study aims to provide a comprehensive understanding of how occupational, cultural, and structural dimensions converge to influence men's mental health and to inform the development of gender-responsive strategies for prevention and intervention.

2. Methodology of the narrative review

This narrative review was designed to provide an integrative and critical synthesis of current evidence concerning workplace determinants of men's mental health. The review was guided by principles of narrative synthesis and interpretive analysis, with the aim of examining empirical, theoretical, and policy-related contributions relevant to occupational mental health among men. Rather than applying a formal systematic review framework, the review adopted a structured and transparent approach to identify, organize, and interpret literature of conceptual relevance. The methodological framework used in this review is illustrated in Fig. 1.

Relevant literature published between January 2015 and December 2025 was identified through targeted searches of PubMed, Scopus, PsycINFO, and Google Scholar. These sources were selected because of their broad coverage of biomedical, psychological, public health, and occupational research. Search terms focused on key concepts including men's mental health, workplace stress, occupational determinants, masculinity, stigma, help-seeking, and organizational intervention strategies, as summarized in Table 1. Search terms were refined iteratively to ensure adequate coverage of both empirical and conceptual literature relevant to the review objectives.

Literature selection was guided primarily by conceptual relevance to the review aims. Priority was given to studies published in English that examined male workers, gender-specific occupational mental health outcomes, or sociocultural factors influencing men's psychological well-being in workplace contexts. Both quantitative and qualitative studies were considered, including cross-sectional studies, longitudinal investigations, intervention studies, reviews, and theoretical papers. Studies involving mixed-gender populations were considered when findings relating to men were explicitly reported or clearly interpretable. In addition to peer-reviewed articles, organizational and policy documents were included to provide a broader understanding of institutional and structural frameworks shaping workplace mental health, particularly those published by the WHO, the ILO, and the Organization for Economic Co-operation and Development (OECD) [17–19]. Publications lacking direct relevance to workplace mental health, gender-specific analysis, or substantive conceptual contribution were not considered further.

Relevant references were organized using Zotero to facilitate literature management and thematic organization. Selected studies were examined with attention to study design, population characteristics, occupational context, geographic setting, and principal findings. The evidence was subsequently synthesized thematically, drawing on the narrative synthesis approach described by Popay and colleagues [20].

Through iterative reading and synthesis, four dominant themes emerged: workplace risk factors for men's mental health, protective and resilience factors, the role of masculinity and stigma in shaping help-seeking behaviors, and the nature and impact of workplace interventions and policy frameworks [5, 9, 13, 21, 22]. Findings were interpreted across disciplinary perspectives including occupational medicine, psychology, sociology, and public health, with attention to methodological

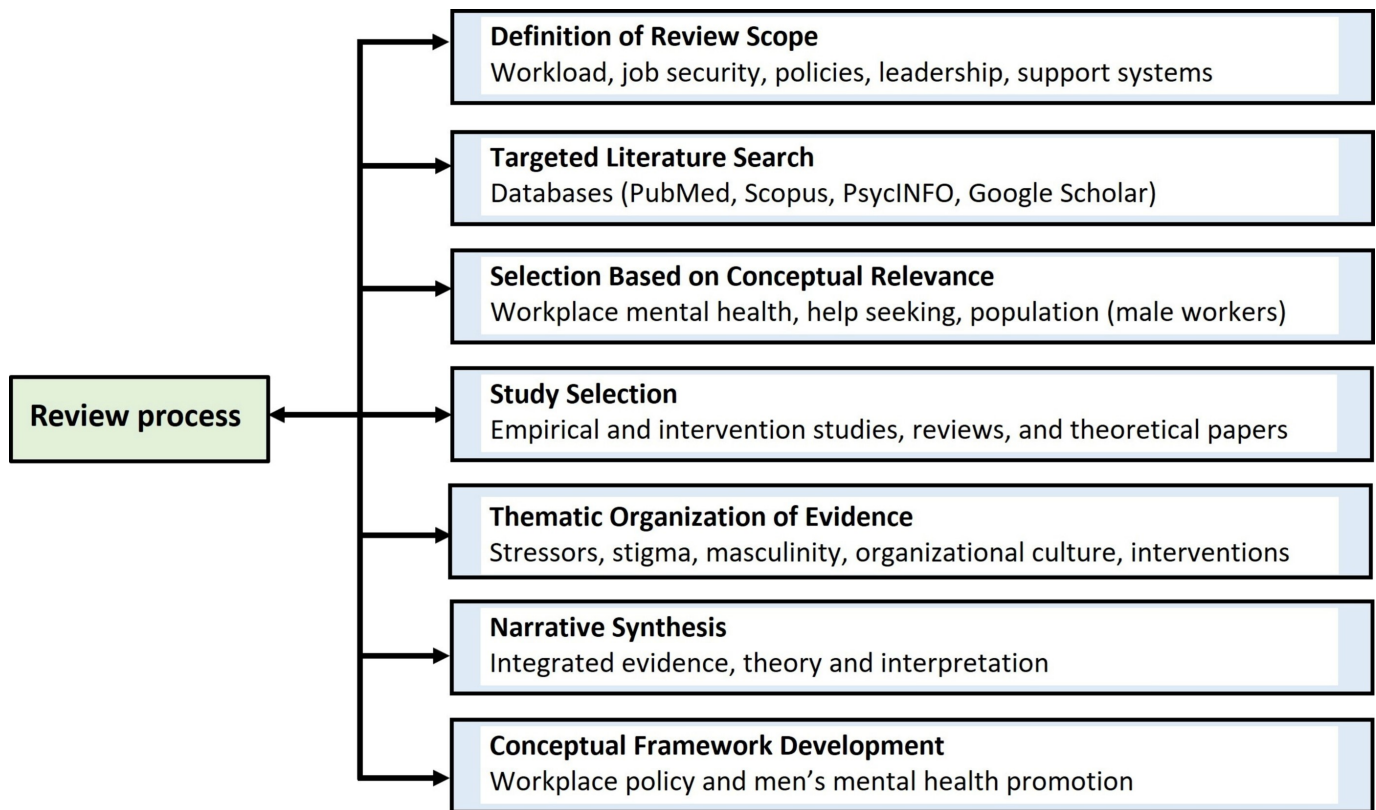


FIGURE 1. Methodological overview of the narrative review.

TABLE 1. Sources and scope of literature informing the narrative review.

Source	Focus of Literature Search	Time Frame	Scope
PubMed	Men's mental health, depression, occupational stress, masculinity	2015–2025	English language; peer-reviewed; adults (≥ 18 years)
Scopus	Men's mental health, occupational determinants, help-seeking, gender norms	2015–2025	Journal articles, reviews, reports
PsycINFO	Masculinity, stigma, workplace stress, help-seeking	2015–2025	Psychology and behavioral science focus studies
Google Scholar	Men's mental health, organizational mental health interventions, workplace mental health	2015–2025	Relevant and highly cited literature

diversity, cultural context, and variations in measurement approaches. Policy documents were examined qualitatively to assess their alignment with current research evidence and their consideration of gender-specific workplace mental health needs [17–19].

Methodological rigor was supported through critical appraisal of conceptual relevance, clarity of study design, transparency of reported methods, and contribution to thematic development. This inclusive yet critical interpretive approach enabled a comprehensive understanding of how occupational stressors, gender norms, and organizational practices intersect to shape mental health outcomes among men, providing the conceptual foundation for the framework presented in Fig. 2.

3. Results/thematic review

The reviewed literature reveals a multifaceted relationship between men's work environments and their mental health

outcomes, reflecting the interplay between occupational stressors, sociocultural constructions of masculinity, organizational structures, and available support systems. Through a thematic synthesis of the included studies, five overarching themes were identified: (1) workplace risk factors and psychosocial stressors, (2) protective factors and resilience mechanisms, (3) masculinity, stigma, and help-seeking behaviors, (4) assessment and measurement of workplace mental health, and (5) intervention strategies and organizational responses. Together, these themes illustrate how workplace conditions influence both the development and mitigation of psychological distress among men while also highlighting how these outcomes are conceptualized, measured, and addressed across diverse occupational and cultural contexts (Table 2, Ref. [1, 3, 8, 10, 12, 13, 16, 21–29]).

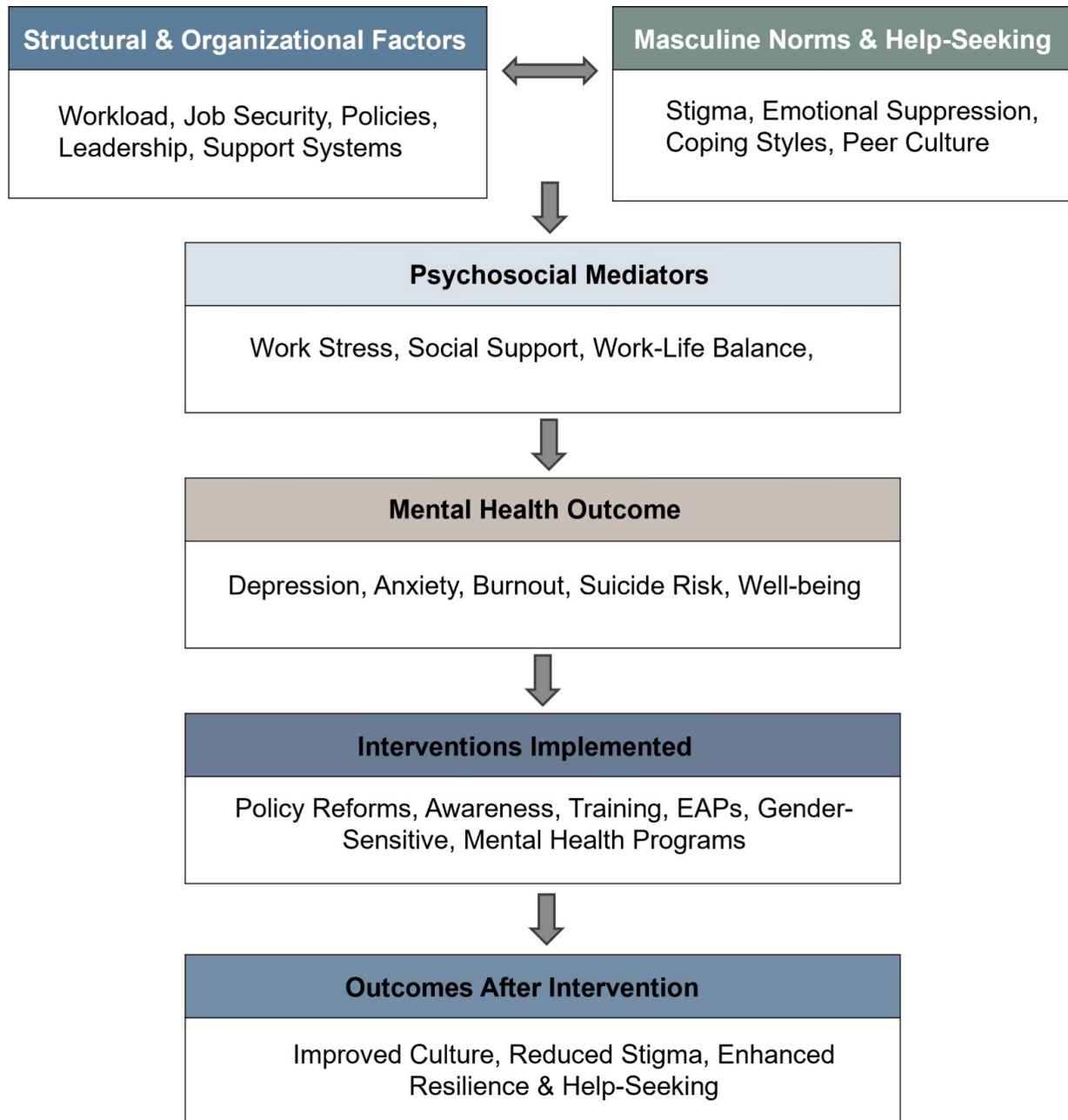


FIGURE 2. Conceptual framework illustrating the workplace determinants of men's mental health. The framework depicts how structural and organizational factors (workload, job security, leadership, support systems) influence psychosocial mediators (stress, social support, work-life balance) and masculine norms (stigma, emotional suppression, coping styles). These interactions shape mental health outcomes such as depression, anxiety, burnout, and suicide risk. Interventions (policy reforms, awareness training, gender-sensitive programs, and Employee Assistance Programs) aim to improve organizational culture, reduce stigma, and enhance resilience and help-seeking. Arrows indicate directional relationships and feedback across stages. Abbreviations: EAPs: Employee Assistance Programs.

3.1 Workplace risk factors and psychosocial stressors

The first major theme concerns workplace risk factors and psychosocial stressors that disproportionately affect men. Evidence consistently demonstrates that employment in high-demand, low-control environments increases vulnerability to depression, anxiety, burnout, and psychological distress. Research across male-dominated workplaces such as construction, mining, healthcare, and manufacturing indicates that excessive workload, extended working hours, role ambiguity,

and lack of autonomy constitute major occupational hazards. For instance, studies among construction workers in China, South Africa, and Ireland report elevated rates of depressive and anxiety symptoms linked to job insecurity, financial stress, workplace hazards, and exposure to bullying and violence [1, 9, 15, 23, 30]. Similar findings were noted among nurses, miners, and call-center employees, where prolonged shifts, poor organizational communication, and emotional exhaustion contribute to heightened stress levels [31–34]. Meta-analytic evidence further supports these associations, showing that job

TABLE 2. Thematic summary of key studies and findings.

Theme	Representative Studies	Key Findings	Implications
Workplace Risk Factors	Blair Winkler <i>et al.</i> [1] (2024); Ling <i>et al.</i> [23] (2024); Madsen <i>et al.</i> [8] (2017); Milner <i>et al.</i> [10] (2017)	High workload, long working hours, low job control, job insecurity, and workplace bullying significantly increase the risk of depression, anxiety, and burnout among male workers, especially in construction, mining, and manufacturing.	Implement organizational redesign, enforce work-life balance, promote workload management, and strengthen occupational health and safety culture.
Protective Factors	Matthews <i>et al.</i> [24] (2021); Sampaio <i>et al.</i> [25] (2022); Affleck <i>et al.</i> [3] (2018); Seaton <i>et al.</i> [26] (2019)	Social support, fair supervision, flexible work schedules, and participatory management are protective against psychological distress and improve morale.	Strengthen peer networks, create inclusive leadership programs, and embed employee assistance programs (EAPs) in workplace policy.
Masculinity and Stigma	Seidler <i>et al.</i> [12] (2016); Boettcher <i>et al.</i> [13] (2019); Kilian <i>et al.</i> [27] (2020)	Traditional masculine norms promote stoicism, self-reliance, and emotional suppression, reducing the likelihood of help-seeking and disclosure. Stigma remains a key barrier to accessing mental health services.	Promote gender-sensitive training, reframe help-seeking as strength, and address stigma through workplace campaigns and role modeling.
Intervention Strategies	Stratton <i>et al.</i> [28] (2023); Hanisch <i>et al.</i> [16] (2016); Roche <i>et al.</i> [21] (2024); Hulls <i>et al.</i> [22] (2022); Hallett <i>et al.</i> [29] (2024)	Workplace interventions such as mental health literacy programs, online cognitive behavioral tools, and peer-led support initiatives improve awareness and early help-seeking. WHO/ILO guidelines reinforce preventive approaches.	Integrate psychosocial risk assessment into occupational health frameworks, sustain evaluation of interventions, and ensure gender-responsive policy implementation.

EAPs: Employee Assistance Programs; WHO: World Health Organization; ILO: International Labour Organization.

strain, effort-reward imbalance, and long working hours are significant predictors of major depressive episodes and suicidal ideation in men [8, 35–37]. The prevalence of distress is particularly pronounced in blue-collar and manual labor occupations, reflecting structural inequities in occupational hierarchies and the masculine expectation of endurance under adverse conditions [10, 38, 39].

3.2 Protective factors and resilience mechanisms

A second recurring theme involves protective factors and resilience mechanisms that mitigate the negative impact of work stressors. Social support, both formal and informal, emerged as one of the most consistent buffers against psychological distress. Studies demonstrate that co-worker support, peer networks, and employee assistance programs (EAPs) enhance coping and promote help-seeking behaviors among men, particularly in workplaces where stigma remains high [13, 24, 40]. Organizational factors such as job flexibility, participatory decision-making, and perceived fairness in management practices are also associated with reduced stress and improved well-being [7, 25, 41]. At the individual level, emotional regulation, self-efficacy, and mental health literacy appear to enhance adaptive coping and resilience [3, 28]. Qualitative research among municipal, construction, and healthcare workers further highlights that male employees often benefit from leadership that models openness and empathy, fostering environments where discussions of mental health are normalized rather than stigmatized [26, 42]. Such findings underscore the importance

of developing workplace cultures that recognize mental health as integral to productivity and safety, rather than as a personal weakness or liability.

3.3 Masculinity, stigma, and help-seeking behaviors

The third thematic area centers on masculinity, stigma, and help-seeking behaviors, which together constitute critical sociocultural determinants of men's mental health at work. Across diverse contexts, hegemonic masculine norms, emphasizing stoicism, emotional suppression, and self-reliance, continue to hinder men from acknowledging psychological distress or seeking professional help [12, 13, 15, 27]. Studies have documented that male employees often externalize distress through irritability, risk-taking, or substance use rather than expressing vulnerability, leading to delayed intervention and exacerbated mental health outcomes [9, 38]. Interviews with working-class men indicate that help-seeking is often perceived as incompatible with masculine identity, reinforcing a cycle of silence and self-stigma [13, 43]. Workplace culture plays a decisive role in either perpetuating or mitigating these patterns. Environments that valorize toughness and endurance, common in military, construction, and emergency service settings, tend to exacerbate stigma [44]. In contrast, those that encourage peer dialogue and psychological openness improve mental health literacy and early intervention [16, 17, 26]. The relationship between masculinity and occupational mental health is therefore both cultural and structural, shaped by gendered

expectations embedded within professional hierarchies and broader societal discourses about male strength and resilience [45].

3.4 Assessment and measurement of workplace mental health

A fourth theme emerging from the literature concerns the assessment and measurement of workplace mental health outcomes. Standardized assessment tools play a central role in translating theoretical constructs of workplace mental health into measurable and actionable outcomes. Across the reviewed literature, several validated instruments have been widely employed to assess work-related stress and psychological well-being among men. The Job Content Questionnaire and the Demand-Control model are frequently used to assess the interaction between job demands and decision latitude, providing insight into the impact of work structure on mental health [46, 47]. Similarly, the Effort–Reward Imbalance model has been widely applied to examine perceived disparities between occupational effort and rewards [48]. In addition to these work environment models, general mental health screening instruments such as the General Health Questionnaire and the Patient Health Questionnaire are commonly utilized to identify symptoms of depression, anxiety, and psychological distress within occupational settings [49, 50]. Together, these tools provide a structured approach for organizations to quantify risk factors, monitor employee well-being, and evaluate the effectiveness of workplace interventions. Importantly, the integration of such standardized measures enhances methodological consistency and comparability across studies, thereby strengthening the evidence base for policy and organizational decision-making [51]. However, despite their demonstrated utility, the application of standardized measures remains uneven across industries and regions. These inconsistencies highlight the need for broader and more systematic adoption of validated assessment frameworks in occupational mental health research and practice, as well as greater attention to contextual and gender-specific factors in measurement approaches.

3.5 Intervention strategies and organizational responses

The fifth theme concerns intervention strategies and organizational approaches to improving men's mental health. Several systematic and scoping reviews report a growing range of workplace-based interventions targeting literacy, stigma reduction, and early help-seeking [16, 21, 22, 29, 52]. Programs emphasizing education and peer engagement have demonstrated effectiveness in enhancing awareness and reducing negative attitudes toward mental illness among male workers [21]. E-mental health tools and digital training programs, including web-based cognitive behavioral modules and resilience-building applications, have also gained prominence due to their accessibility and anonymity, which appeal to men reluctant to seek face-to-face therapy [17, 53, 54]. However, evidence on long-term sustainability remains limited, and most interventions have continued to be evaluated in high-income Western contexts. Cross-cultural adaptation and contextual sensitivity remain critical gaps, especially in developing countries

where occupational mental health resources are scarce [30, 42, 55]. Policy-level initiatives, including WHO and ILO frameworks, increasingly emphasize organizational accountability, psychosocial risk assessment, and integrated health management systems [17–19, 50]. Yet, despite these advances, persistent barriers such as underfunding, lack of gender-specific programming, and limited managerial training continue to undermine implementation.

A comparative synthesis of workplace mental health interventions across the reviewed studies is presented in Table 3 (Ref. [3, 10, 12, 13, 16–19, 21, 22, 24, 26, 28, 29, 42, 53]). This summary highlights the diversity of strategies employed, ranging from literacy and stigma reduction initiatives to organizational policy reforms and digital interventions. It also identifies the most common limitations in the current evidence base, including the lack of longitudinal evaluation, contextual adaptation, and gender-responsive frameworks that adequately address men's unique psychosocial stressors.

Collectively, the findings reveal that workplace determinants of men's mental health cannot be reduced to individual pathology alone but are deeply embedded within organizational, cultural, and policy contexts. The literature suggests that promoting men's psychological well-being at work requires a dual focus: addressing structural stressors while reshaping cultural norms surrounding masculinity and emotional expression. This review highlights an emerging consensus that effective interventions must move beyond individual resilience training toward systemic reform that integrates gender-responsive mental health strategies into occupational policy and practice.

4. Discussion and implications

The findings of this review demonstrate that men's mental health in occupational settings is shaped by a dynamic interaction between structural working conditions, gendered social expectations, and organizational cultures. Rather than reflecting individual vulnerability alone, psychological distress among male workers emerges from broader occupational systems in which job design, economic insecurity, workplace relationships, and cultural norms collectively influence both exposure to stress and responses to it. These findings reinforce the need to conceptualize workplace mental health as an organizational and public health issue rather than solely an individual clinical concern.

A central insight emerging from the reviewed literature is that occupational stress among men is deeply embedded within structural features of contemporary labor markets. Across industries, particularly in manual labor, industrial, and service-oriented sectors, persistent exposure to high demands, limited autonomy, insecure employment, and organizational inequities appears to generate cumulative psychological burden, including depression and anxiety [5, 8, 34, 35]. These patterns suggest that workplace mental health disparities are not simply the consequence of stressful jobs, but of organizational structures that prioritize productivity and endurance while insufficiently addressing psychosocial safety. This appears especially pronounced in male-dominated occupations such as construction, mining, and industrial work, where hazardous environments

TABLE 3. Comparative analysis of intervention strategies and limitations.

Intervention Type	Representative Studies	Effectiveness/Outcomes	Limitations/Research Gaps
Mental Health and Anti-Stigma Programs	Hanisch <i>et al.</i> [16] (2016); Roche <i>et al.</i> [21] (2024); Hallett <i>et al.</i> [29] (2024)	Increased awareness and reduced stigma in male-dominated workplaces; improved peer support and help-seeking behaviors.	Limited longitudinal evidence; most studies conducted in high-income countries; few evaluate long-term behavioral change.
Digital and E-Mental Health Tools	Stratton <i>et al.</i> [28] (2023); Wang <i>et al.</i> [53] (2016); Seidler <i>et al.</i> [12] (2016)	Web-based cognitive behavioral therapy (CBT) and mental health apps enhance accessibility, engagement, and early symptom recognition.	Variable adherence rates; data privacy concerns; underrepresentation of blue-collar male populations.
Peer Support and Leadership Training Programs	Matthews <i>et al.</i> [24] (2021); Seaton <i>et al.</i> [26] (2019); Nwaogu & Chan [42] (2020)	Peer-led interventions and mental health champion models foster trust, reduce stigma, and promote supportive workplace cultures.	Lack of standardized training protocols; inconsistent measurement of impact across industries.
Organizational and Policy-Level Interventions	Hulls <i>et al.</i> [22] (2022); WHO [17] (2022); ILO [18] (2022); OECD [19] (2018)	Policies emphasizing psychosocial risk assessment and mental health promotion improve employee well-being and strengthen organizational accountability.	Implementation challenges in low-resource settings; limited integration of gender-responsive frameworks.
Comprehensive Multi-Level Approaches	Boettcher <i>et al.</i> [13] (2019); Milner <i>et al.</i> [10] (2017); Affleck <i>et al.</i> [3] (2018)	Combining individual, organizational, and societal strategies yields the greatest improvement in psychological outcomes.	Insufficient cross-sector collaboration and limited evaluation of sustainability and scalability.

CBT: Cognitive Behavioral Therapy; WHO: World Health Organization; ILO: International Labour Organization; OECD: Organisation for Economic Co-operation and Development.

and performance-driven cultures may normalize chronic stress as an expected component of professional identity [1, 10, 30, 45].

The review also highlights the influence of masculine role norms in both exposure to and responses toward occupational stress. Traditional ideals of masculinity, which emphasize stoicism, endurance, and self-reliance, often discourage men from expressing emotional vulnerability or seeking psychological support [12, 13, 15, 47]. This gendered socialization has profound implications for how men interpret workplace stress and their willingness to access mental health care. For example, qualitative studies indicate that many male employees perceive stress as a personal weakness, leading to suppression of emotional distress and reduced engagement with therapeutic services [3, 48]. This internalization of stigma reinforces a cycle in which distress escalates unnoticed, and help-seeking occurs only during crisis. Within this context, men often adopt self-administered coping strategies in response to workplace strain, which follow a recognizable pattern, with initial responses frequently involving problem-focused coping strategies, such as increasing work effort or attempting to regain control over job demands.

Conversely, adaptive coping pathways, including engagement in physical activity, peer discussion, and gradual acknowledgment of emotional strain, have been associated with improved mental health outcomes. This progression highlights the importance of guiding men toward healthier coping mech-

anisms within workplace interventions. For instance, gender-sensitive interventions that emphasize values such as teamwork, responsibility, and problem-solving have demonstrated success in increasing help-seeking among male employees [21, 46, 56]. Digital mental health programs tailored to men's communication preferences, such as anonymous, solution-focused formats, also show promise in engaging those reluctant to access traditional therapy [44, 54, 56]. However, the challenge remains in scaling these interventions and embedding them within workplace systems, especially in industries with high stigma and low mental health literacy [57].

In addition, physical activity and structured training interventions have been increasingly recognized as effective strategies for reducing workplace stress and improving mental well-being among men. Evidence suggests that regular physical exercise can alleviate symptoms of depression, anxiety, and burnout while enhancing resilience and cognitive functioning. Workplace-based initiatives such as fitness programs, active breaks, and performance-oriented training may be particularly appealing to men, as they align with achievement-oriented and action-based coping styles. Integrating physical activity into occupational health strategies therefore offers a practical and complementary approach to mitigating workplace strain [46].

From a policy perspective, there is growing recognition that mental health at work must be treated as a core component of occupational safety. The WHO and the ILO increasingly advocate for psychosocial risk assessments, preventive in-

interventions, and continuous evaluation of workplace mental health initiatives [17–19, 50]. The present synthesis supports these recommendations and further suggests that gender-responsive occupational policies should move beyond reactive treatment models toward preventive strategies that normalize help-seeking, strengthen managerial accountability, and integrate mental health promotion into routine workplace practice [58, 59].

It is also important to recognize confounding factors and other non-occupational determinants. Family responsibilities, marital discord, financial strain, and broader socioeconomic pressures may independently contribute to psychological distress while simultaneously interacting with workplace stressors. For example, financial insecurity may amplify the impact of job instability, while relationship conflicts may reduce an individual's capacity to cope with occupational demands. These overlapping stress domains create a cumulative burden that complicates the attribution of mental health outcomes solely to workplace conditions. Empirical studies have demonstrated that work-family conflict and economic hardship are significant predictors of depression, anxiety, and burnout among working populations. Therefore, a more comprehensive understanding of men's mental health requires an integrated perspective that considers both occupational and non-occupational determinants. Future research should adopt multidimensional models that account for these confounding influences to better isolate the specific contribution of workplace factors [3, 11, 36, 60, 61].

In addition to external and occupational determinants, individual-level factors such as personality traits and emotional regulation also play a significant role in shaping mental health outcomes. Variations in traits such as resilience, neuroticism, and coping style may influence how men perceive and respond to workplace stressors. For instance, individuals with lower emotional regulation capacity may be more vulnerable to anxiety and depressive symptoms under similar working conditions. These personal characteristics interact with both workplace and sociocultural factors, further reinforcing the need for multidimensional approaches to understanding and addressing mental health in occupational settings. Moreover, there is a need for intersectional analyses that account for the diversity of male experiences based on age, socioeconomic status, ethnicity, and sexual orientation. Current research remains heavily concentrated in high-income Western contexts, limiting the generalizability of findings. Collaborative cross-sector research that integrates epidemiological data with qualitative insights could provide a richer understanding of how contextual factors shape mental health trajectories among men in varied occupational settings [3, 34, 52, 62].

An important limitation that should be considered when interpreting the findings of this narrative review relates to the nature of the review design. Because study selection was guided by conceptual relevance and interpretive synthesis rather than formal systematic review procedures, the approach allowed for the inclusion of a broader range of empirical, theoretical, and policy-oriented evidence. However, this methodological flexibility may also have introduced selection bias and limited the reproducibility of the review when compared with sys-

tematic reviews or meta-analytic approaches [20]. Although international policy frameworks from the WHO, the ILO, and the OECD were included to provide institutional context, empirical evidence evaluating the real-world implementation and effectiveness of these policies across occupational settings remains limited. As a result, the extent to which policy recommendations translate into measurable improvements in men's workplace mental health is not yet fully established [17–19].

A further limitation relates to the heterogeneity of occupational contexts represented in the reviewed literature. Although studies from blue-collar, white-collar, industrial, and healthcare settings were included, no quantitative or synthetic evidence was available to permit direct comparison of psychosocial stress levels, mental health outcomes, or coping behaviors across occupational categories, including newer work models such as remote or hybrid employment. This limits the ability to determine whether specific workplace stressors or protective factors disproportionately affect particular groups of male workers and highlights an important direction for future comparative research.

An important consideration for future implementation is the sustainability of workplace mental health interventions in low-resource settings. Economic constraints, limited access to mental health professionals, and underdeveloped occupational health systems often limit the feasibility of comprehensive intervention programs. In this context, peer-support models represent a cost-effective and scalable approach to promoting mental well-being among male workers. Peer-support programs typically involve trained employees who provide informal psychological support, facilitate open discussions, and encourage early help-seeking within the workplace. Evidence suggests that such interventions can reduce stigma, enhance social connectedness, and improve mental health literacy without requiring substantial financial investment or specialized infrastructure [26, 46]. These models are particularly effective in male-dominated workplaces, where trust and shared experiences among peers can mitigate resistance to formal mental health services. Integrating peer-support initiatives into existing workplace structures, such as safety meetings and team briefings, may further enhance accessibility and sustainability. Therefore, low-cost, peer-led interventions should be prioritized as a pragmatic strategy for addressing mental health disparities in resource-constrained occupational settings.

Overall, improving men's mental health in the workplace requires more than strengthening individual coping capacity. It demands organizational cultures that prioritize psychosocial safety and policies that recognize mental health as fundamental to a sustainable workforce. Such efforts should reframe help-seeking as an act of strength rather than weakness, prioritize psychosocial safety alongside productivity and promote leadership accountability at all organizational levels.

5. Conclusion and recommendations

This review underscores that men's mental health in the workplace is shaped by the interaction of occupational stressors, organizational conditions, and gendered

sociocultural expectations. The evidence suggests that traditional masculine norms, combined with high job demands, limited autonomy, and workplace stigma, may delay help-seeking and worsen mental health outcomes. Conversely, psychologically safe workplaces, supportive leadership, peer engagement, and gender-sensitive interventions may promote resilience, reduce stigma, and encourage earlier access to care.

Improving men's mental health therefore requires moving beyond individual-level interventions toward organizational and policy-level commitment. Integrating psychosocial risk assessment, confidential support services, leadership accountability, and gender-responsive occupational health strategies into routine workplace practice should be prioritized to promote sustainable workforce well-being.

AVAILABILITY OF DATA AND MATERIALS

The data presented in this study are provided upon request from the corresponding author.

AUTHOR CONTRIBUTIONS

EDA, UEO and HB—conceived this study. EDA, KSO and FEE—developed the manuscript. All authors critically revised the manuscript and approved the final manuscript for publication. All authors contributed to editorial changes in the manuscript. All authors read and approved the final manuscript.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Not applicable.

ACKNOWLEDGMENT

Not applicable.

FUNDING

This research was supported by the Professor Research Program of KOREATECH, No. 202602270001.

CONFLICT OF INTEREST

The authors declare no conflict of interest. Haewon Byeon is serving as one of the Guest editors of this journal. We declare that Haewon Byeon had no involvement in the peer review of this article and has no access to information regarding its peer review. Full responsibility for the editorial process for this article was delegated to SYY.

REFERENCES

- [1] Blair Winkler R, Middleton C, Remes O. A review on the prevalence of poor mental health in the construction industry. *Healthcare*. 2024; 12: 570.
- [2] Sharp P, Oliffe JL, Kealy D, Rice SM, Seidler ZE, Ogrodniczuk JS. A survey of Canadian men's mental health in the workplace. *Cogent Mental Health*. 2024; 3: 2313870.
- [3] Affleck W, Carmichael V, Whitley R. Men's mental health: social determinants and implications for services. *The Canadian Journal of Psychiatry*. 2018; 63: 581–589.
- [4] American Psychological Association (APA). Guidelines for psychological practice with boys and men. American Psychological Association: Washington (DC). 2018.
- [5] Harvey SB, Modini M, Joyce S, Milligan-Saville JS, Tan L, Mykletun A, *et al*. Can work make you mentally ill? A systematic meta-review of work-related risk factors for common mental health problems. *Occupational & Environmental Medicine*. 2017; 74: 301–310.
- [6] Van Der Molen HF, Nieuwenhuijsen K, Frings-Dresen MHW, De Groene G. Work-related psychosocial risk factors for stress-related mental disorders: an updated systematic review and meta-analysis. *BMJ Open*. 2020; 10: e034849.
- [7] Wang ML, Narcisse MR, Togher K, McElfish PA. Job flexibility, job security, and mental health among US working adults. *JAMA Network Open*. 2024; 7: e243439.
- [8] Madsen IEH, Nyberg ST, Hanson LLM, Ferrie JE, Ahola K, Alfredsson L, *et al*. Job strain as a risk factor for clinical depression: systematic review and meta-analysis with additional individual participant data. *Psychological Medicine*. 2017; 47: 1342–1356.
- [9] Roche AM, Pidd K, Fischer JA, Lee N, Scarfe A, Kostadinov V. Men, work, and mental health: a systematic review of depression in male-dominated industries and occupations. *Safety and Health at Work*. 2016; 7: 268–283.
- [10] Milner A, Maheen H, Currier D, LaMontagne AD. Male suicide among construction workers in Australia: a qualitative analysis of the major stressors precipitating death. *BMC Public Health*. 2017; 17: 584.
- [11] O'Donnell S, Egan T, Clarke N, Richardson N. Prevalence and associated risk factors for suicidal ideation, non-suicidal self-injury and suicide attempt among male construction workers in Ireland. *BMC Public Health*. 2024; 24: 1263.
- [12] Seidler ZE, Dawes AJ, Rice SM, Oliffe JL, Dhillon HM. The role of masculinity in men's help-seeking for depression: a systematic review. *Clinical Psychology Review*. 2016; 49: 106–118.
- [13] Boettcher N, Mitchell J, Lashewicz B, Jones E, Wang J, Gundu S, *et al*. Men's work-related stress and mental health: illustrating the workings of masculine role norms. *American Journal of Men's Health*. 2019; 13: 1557988319838416.
- [14] Lok RHT, Law YW. Men's mental health service engagement amidst the masculinity crisis: towards a reconstruction of traditional masculinity. *SSM—Qualitative Research in Health*. 2025; 8: 100596.
- [15] Zhang RP, Bowen P, Edwards P. Depressive symptoms among South African construction workers: associations with demographic, social and work-related factors, and substance use. *International Journal of Environmental Research and Public Health*. 2025; 22: 694.
- [16] Hanisch SE, Twomey CD, Szeto ACH, Birner UW, Nowak D, Sabariego C. The effectiveness of interventions targeting the stigma of mental illness at the workplace: a systematic review. *BMC Psychiatry*. 2016; 16: 1.
- [17] World Health Organization. WHO guidelines on mental health at work. 2022. Available at: <https://www.who.int/publications/i/item/9789240053052> (Accessed: 24 April 2026).
- [18] International Labour Organization. Ensuring mental health in the workplace: guidance note. 2022. Available at: <https://www.ilo.org/publications/mental-health-work> (Accessed: 24 April 2026).
- [19] Organisation for Economic Co-operation and Development (OECD). Mental health and work: New Zealand. 2018. Available at: https://www.oecd.org/en/publications/mental-health-and-work-new-zealand_9789264307315-en.html (Accessed: 23 December 2025).
- [20] Popay J, Roberts H, Sowden A, Petticrew M, Arai L, Rodgers M, *et al*. Guidance on the conduct of narrative synthesis in systematic reviews: a product from the ESRC Methods Programme. 2006. Available at: <https://doi.org/10.13140/2.1.1018.4643> (Accessed: 26 January 2026).
- [21] Roche E, Richardson N, Sweeney J, O'Donnell S. Workplace interventions targeting mental health literacy, stigma, help-seeking, and help-offering in male-dominated industries: a systematic review. *American Journal of Men's Health*. 2024; 18: 15579883241236223.

- [22] Hulls PM, Richmond RC, Martin RM, Chavez-Ugalde Y, De Vocht F. Workplace interventions that aim to improve employee health and well-being in male-dominated industries: a systematic review. *Occupational & Environmental Medicine*. 2022; 79: 77–87.
- [23] Ling Z, Xu Y, Tao M, Zhang B, Zhang M, Zhang Z, *et al.* Construction workers' depression, anxiety, stress, and risk factors in China: a cross-sectional study. *Journal of Global Health*. 2024; 15: 04167.
- [24] Matthews LR, Gerald J, Jessup GM. Exploring men's use of mental health support offered by an Australian Employee Assistance Program (EAP): perspectives from a focus-group study with males working in blue- and white-collar industries. *International Journal of Mental Health Systems*. 2021; 15: 68.
- [25] Sampaio F, Coelho J, Gonçalves P, Sequeira C. Protective and vulnerability factors of municipal workers' mental health: a cross-sectional study. *International Journal of Environmental Research and Public Health*. 2022; 19: 14256.
- [26] Seaton CL, Bottorff JL, Oliffe JL, Medhurst K, DeLeenheer D. Mental health promotion in male-dominated workplaces: perspectives of male employees and workplace representatives. *Psychology of Men & Masculinities*. 2019; 20: 541–552.
- [27] Kilian R, Müller-Stierlin A, Söhner F, Beschoner P, Gündel H, Staiger T, *et al.* Masculinity norms and occupational role orientations in men treated for depression. *PLOS ONE*. 2020; 15: e0233764.
- [28] Stratton E, Player MJ, Glozier N. Online mental health training program for male-dominated organisations: a pre-post pilot study assessing feasibility, usability, and preliminary effectiveness. *International Archives of Occupational and Environmental Health*. 2023; 96: 641–649.
- [29] Hallett N, Rees H, Hannah F, Hollowood L, Bradbury-Jones C. Workplace interventions to prevent suicide: a scoping review. *PLOS ONE*. 2024; 19: e0301453.
- [30] Roche E, O'Donnell S, Richardson N. Factors influencing the mental health help-seeking behaviours of construction workers in Ireland: perspectives from managers. *Health Promotion International*. 2025; 40: daaf210.
- [31] Cheung T, Yip PSF. Depression, anxiety and symptoms of stress among Hong Kong nurses: a cross-sectional study. *International Journal of Environmental Research and Public Health*. 2015; 12: 11072–11100.
- [32] Ashipala DO, Nghole TM. Factors contributing to burnout among nurses at a district hospital in Namibia: a qualitative perspective of nurses. *Journal of Nursing Management*. 2022; 30: 2982–2991.
- [33] Goel S, Bhagawati R, Zhou D, Mullins J, Hirshleifer S, Batheja D. Incidence of depression and anxiety among working men and women: evidence from a cross-sectional survey in Indian call centers. *PLOS Mental Health*. 2025; 2: e0000460.
- [34] Havenga Y, Bester M. Psychological distress among workers at a mine. *South African Journal of Psychiatry*. 2025; 31: 2422.
- [35] Rugulies R, Sørensen K, Di Tecco C, Bonafede M, Rondinone BM, Ahn S, *et al.* The effect of exposure to long working hours on depression: a systematic review and meta-analysis from the WHO/ILO Joint Estimates of the Work-related Burden of Disease and Injury. *Environment International*. 2021; 155: 106629.
- [36] Niedhammer I, Pineau E, Rosankis E. The associations of psychosocial work exposures with suicidal ideation in the national French SUMER study. *Journal of Affective Disorders*. 2024; 356: 699–706.
- [37] Moon JY, Choi TY, Won ES, Won GH, Kim SY, Lee HJ, *et al.* The relationship between workplace burnout and male depression symptom assessed by the Korean version of the Gotland male depression scale. *American Journal of Men's Health*. 2022; 16: 15579883221123930.
- [38] Brownhill S, Wilhelm K, Barclay L, Schmied V. Depression in men: issues for practice and research. *Issues in Mental Health Nursing*. 2014; 35: 633–639.
- [39] Wang YP, Gorenstein C. Gender differences and disabilities of perceived depression in the workplace. *Journal of Affective Disorders*. 2015; 176: 48–55.
- [40] Geldart S, Langlois L, Shannon HS, Cortina LM, Griffith L, Haines T. Workplace incivility, psychological distress, and the protective effect of co-worker support. *International Journal of Workplace Health Management*. 2018; 11: 96–110.
- [41] Riley R, Buszewicz M, Kokab F, Teoh K, Gopfert A, Taylor AK, *et al.* Sources of work-related psychological distress experienced by UK-wide foundation and junior doctors: a qualitative study. *BMJ Open*. 2021; 11: e043521.
- [42] Nwaogu JM, Chan APC. Evaluation of multi-level intervention strategies for a psychologically healthy construction workplace in Nigeria. *Journal of Engineering, Design and Technology*. 2020; 19: 509–536.
- [43] Oliffe JL, Han CS, Drummond M, Bottorff JL, Mahalik JR. Working-class men's constructions of help-seeking when feeling depressed or sad. *American Journal of Men's Health*. 2019; 13: 1557988319850052.
- [44] Xie L, Zheng Y. Masculinity contest culture and turnover intentions: the roles of work stress and coping styles. *Personality and Individual Differences*. 2022; 195: 111688.
- [45] Milner A, Kavanagh A, King T, Currier D. The influence of masculine norms and occupational factors on mental health: evidence from the baseline of the Australian longitudinal study on male health. *American Journal of Men's Health*. 2018; 12: 696–705.
- [46] Karasek R, Brisson C, Kawakami N, Houtman I, Bongers P, Amick B. The Job Content Questionnaire (JCQ): an instrument for internationally comparative assessments of psychosocial job characteristics. *Journal of Occupational Health Psychology*. 1998; 3: 322–355.
- [47] Karasek RA. Job demands, job decision latitude, and mental strain: implications for job redesign. *Administrative Science Quarterly*. 1979; 24: 285–308.
- [48] Siegrist J. Effort-reward imbalance at work and health: review and critical appraisal of three decades of research. *Scandinavian Journal of Work, Environment & Health*. 2026; 52: 179–188.
- [49] Mapi Research Trust. General health questionnaire (GHQ). 2026. Available at: <https://eprovide.mapi-trust.org/instruments/general-health-questionnaire> (Accessed: 24 April 2026).
- [50] Hlynsson JJ, Skúlason S, Andersson G, Carlbring P. Why are we still using the PHQ-9? A historical review and psychometric evaluation of measurement invariance. *Psychiatric Quarterly*. 2025. PMID: 40900414.
- [51] LaMontagne AD, Keegel T, Louie AM, Ostry A, Landsbergis PA. A systematic review of the job-stress intervention evaluation literature. *International Journal of Occupational and Environmental Health*. 2007; 13: 268–280.
- [52] Hulls PM, Richmond RC, Martin RM, de Vocht F. A systematic review protocol examining workplace interventions that aim to improve employee health and wellbeing in male-dominated industries. *Systematic Reviews*. 2020; 9: 10.
- [53] Wang J, Patten SB, Lam RW, Attridge M, Ho K, Schmitz N, *et al.* The effects of an e-mental health program and job coaching on the risk of major depression and productivity in Canadian male workers: protocol for a randomized controlled trial. *JMIR Research Protocols*. 2016; 5: e218.
- [54] Watkins DC, Goodwill JR, Johnson NC, Casanova A, Wei T, Allen J, *et al.* An online behavioral health intervention promoting mental health, manhood, and social support for young Black men: the YBMen project. *American Journal of Men's Health*. 2020; 14: 1557988320938640.
- [55] Faisal-Cury A, Matijasevich A, Rodrigues D, Tabb K, Peres M. Workplace violence and its strong association with depression among Brazilian workers: insights from a national survey. *Frontiers in Psychiatry*. 2025; 16: 1534511.
- [56] Roy P, Tremblay G, Robertson S, Houle J. "Do it all by myself": a salutogenic approach of masculine health practice among farming men coping with stress. *American Journal of Men's Health*. 2017; 11: 1536–1546.
- [57] Sagar-Ouriaghli I, Godfrey E, Bridge L, Meade L, Brown JSL. Improving mental health service utilization among men: a systematic review and synthesis of behavior change techniques within interventions targeting help-seeking. *American Journal of Men's Health*. 2019; 13: 1557988319857009.
- [58] Battams S, Roche AM, Fischer JA, Lee NK, Cameron J, Kostadinov V. Workplace risk factors for anxiety and depression in male-dominated industries: a systematic review. *Health Psychology and Behavioral Medicine*. 2014; 2: 983–1008.
- [59] Stergiou-Kita M, Mansfield E, Bezo R, Colantonio A, Garritano E, Lafrance M, *et al.* Danger zone: men, masculinity and occupational health and safety in high-risk occupations. *Safety Science*. 2015; 80: 213–220.
- [60] Harris W, Trueblood AB, Yohannes T, Rodman CP, Rinehart R. Suicides among construction workers in the United States, 2021. *American Journal*

of Industrial Medicine. 2025; 68: S144–S151.

- [61] Dong XS, Brooks RD, Brown S, Harris W. Psychological distress and suicidal ideation among male construction workers in the United States. *American Journal of Industrial Medicine*. 2022; 65: 396–408.
- [62] Mukhti MIH, Ibrahim MI. The determinants of men's health behaviors: a cross-sectional study among public safety personnel in Kelantan, Malaysia. *Healthcare*. 2025; 13: 291.

How to cite this article: Eguono Deborah Akpoveta, Kehinde Serah Offia, Favour Ejoro Enakirerhi, Uchenna Esther Okpete, Haewon Byeon. Workplace determinants of mental health disorders in men: a narrative review of risk and protective factors. *Journal of Men's Health*. 2026; 22(8): 1-11. doi: 10.22514/jomh.2026.064.