

Narrative Review of Workplace Interventions for Obesity

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ABSTRACT

Obesity is a complex and multifactorial public health challenge that has significant implications for individuals, organizations, and national economies. Given that adults spend a substantial portion of their time at work, the workplace presents a critical setting for implementing effective obesity prevention and management interventions. This narrative review explores the design, measurement, methodologies, outcomes, and ethical considerations of workplace-based obesity interventions. Evidence from diverse study designs, including randomized controlled trials, quasi-experimental studies, and longitudinal analyses, demonstrates that workplace programs targeting physical activity, nutrition, stress management, and organizational culture can positively influence health behaviors and modestly reduce obesity prevalence. However, variability in study designs, data collection methods, and intervention duration often limits the generalizability and sustainability of results. Ethical issues such as privacy, confidentiality, and stigma remain persistent challenges to employee participation and data sharing. The review further discusses the importance of integrating obesity prevention into organizational policy, institutionalizing programs for long-term sustainability, and aligning workplace initiatives with national public health objectives. Overall, effective workplace interventions require a comprehensive, inclusive, and evidence-based approach supported by leadership commitment, robust measurement strategies, and strong ethical safeguards to enhance both employee well-being and organizational productivity.

Keywords: Workplace Health Promotion, Obesity Intervention, Employee Well-being, Health Policy Integration and Organizational Health Programs.

INTRODUCTION

Obesity remains a notable public health concern worldwide, affecting a large sector of the employed population. An estimated one-third of American adults are considered obese, while nearly 80% of full-time workers are overweight [1]. The economic ramifications of obesity tend to be considerable, with affected organizations incurring increased expenditure on health insurance and absenteeism among the workforce [2]. Consequently, organizations represent promising venues for implementing obesity interventions. Unlike other settings such as healthcare, schools, and communities within low-income areas, workplaces are seldomly classified as “priority settings” for addressing this lifestyle-related malady [3]. Workplaces still constitute the primary environment in which most adults spend a majority of their waking hours. Evidence suggests that workplace-based, organizational-level interventions targeting obesity hold greater significance for health, productivity, and expenditure improvement than interventions set within other conventional priority settings [4]. A one-day increase in short-term absences or the equivalent of an eight-hour working day often bears a larger fiscal burden on an organization than a lengthy absence caused by a health misconduct such as smoking, and one day of absenteeism usually translates into annual expenditure double that of the equivalent for long-term diseases such as cancer [1].

Rationale for Workplace Interventions

Workplaces represent strategic opportunities for interventions aimed at tackling obesity [1]. At the corporate level, it is estimated that obesity-related health conditions account for 7% of an organization’s total costs [2]. Employees frequently cite health-related reasons when reporting absences from work, indicating a clear nexus between the prevalence of obesity within the workforce and overall productivity [3]. A higher prevalence of obesity among employees had direct, observable impacts on absenteeism and related expenditures [15]. In the

Micro Work environment, a cross-section of employed populations displayed levels of obesity and overweight representing staggering economic burdens, an enforceable rationale for the implementation of workplace-level interventions on obesity [11]. These working populations are particularly at risk due to the considerable time spent in sedentary behaviours, suggesting that they can benefit from exerting personal conduct in favour of obesity prevention and control [20].

Scope and Definitions

Workplace interventions encompass a wide array of initiatives designed to modify the work environment and the motivational, emotional, and physical settings of employees [7]. These interventions can target not just the physical workplace but also the policies, programs, and practices of the organization itself. Interventions can range from simple and inexpensive initiatives to comprehensive and costly programs, implemented over periods as limited as one day or extended across several years [8]. Many of the earlier studies examined efforts to alter specific health-related parameters such as blood pressure, body fat, weight, biochemical markers, smoking, and exercise, solely or in conjunction with the broader effects of multiple health problems [9]. Current research focuses on the design, implementation, and evaluation of comprehensive, ongoing workplace interventions intended to enhance overall well-being by improving personal and organizational performance of employees [19]. The emphasis on obesity stems from a heightened concern about this condition among social and health educators, public policymakers, and, increasingly, employers [18]. Specific obesity-targeted interventions may be developed or incorporated within the broader scope of workplace health activities where both types of activities are viewed as overlapping aspects of a general well-being strategy [2]. The greater concern about obesity arises not only because of its established link with serious medical consequences (e.g., diabetes, cardiovascular disease) but also because of a growing body of evidence that excess weight is detrimental to work performance and personal happiness [1]. Obesity countermeasures conducted in conjunction with or as part of more comprehensive workplace programs can enhance both personal health and work performance [5].

Theoretical Frameworks and Epidemiology

Work-life combines work and personal life. The increasing burden of work-related diseases has stressed the need for work-life attention, which is indispensable for employees' and organizations' sustainability [18]. The workplace can be a good setting for the delivery of health-related interventions. Obesity is a global problem and is considered one of the most serious public health threats worldwide [10]. It has reached epidemic proportions in adults, children, and adolescents [13]. Work-related obesity may be a serious health, economic, and social problem. The earlier the workforce emphasizes obesity-related interventions, the greater the impact on workers' health and organizations' sustainability [16]. Workplace health promotion is an innovative approach aimed at improving, developing, and promoting employees' health issues in the workplace. Health promotion can include tobacco cessation, weight control, hypertension control, and diabetes control interventions [17]. Health is crucial for a productive workforce [16]. Corporate culture starts with taking care of employees' health. If employees are unhealthy and unproductive, the value of work-life initiatives may decline drastically, since an employee's contribution to the organization is very low. An organization-wide corporate health-check initiative may be required [13]. A need assessment on employees' health is also interesting and highly recommended [19]. Thus, health improvement or change at the workplace can include individual-based health change and organization-level environmental change. Environmental change needs to be a top priority for health-promoting culture support at the workplace. Environmental changes require strategic planning and monitoring [4, 1].

Behavior Change Theories in the Workplace

Psychological capabilities derive from individual attitudes, beliefs, and motivations in relation to a given behaviour (i.e. the underlying psychological processes or determinants of a given behaviour) [5]. Health Action Process Approach (HAPA), an integrated behavioural change approach cyclically following two phases, is one of the relevant behaviour change theories frequently used in workplace settings [12]. This approach prescribes a pre-intentional and co-intentional phase taking an intention formation and maintenance approach under consideration [3]. Protection Motivation Theory (PMT) which motivates ones behaviour change through a systematic cognitive appraisal process is also relevant. The central PMT paradigm holds that individuals are motivated to protect themselves when exposed to health threats based on two categories of appraisals corresponding to two types of coping strategies: threat and coping appraisal [4]. To date, three condom-related studies of workplace interventions have explicitly applied the central PMT paradigm to designing condom-protective behaviours or controlling sexually transmitted infection using other variants of PMT to some extent. Social Cognitive Theory (SCT) emphasises reciprocal determinism in learning processes in both formal and informal settings which interacts between the environment, behaviour and personal factor [1]. Five worksite interventions that have attempted to promote healthy eating through lunch provision and lunch-time education activities have explicitly utilised SCT. The Innovation-Decision Process, Theory of Planned Behaviour (TPB) and the Framework for the Analysis of the Determinants of Health have also been featured within this context [11].

Prevalence and Impacts of Obesity in Employed Populations

Obesity remains a crucial problem affecting a significant proportion of working adults and has been linked to various important health and productivity outcomes [4]. The prevalence of obesity in employed populations, as well as its impacts on health and economic indicators, underscores the necessity for targeted interventions in workplace settings [7]. Workforce-specific epidemiological data indicate that obesity among workers is a widespread problem, often with higher rates than those found in the non-working adult population. Substantial overweight and obesity-related productivity losses occur in the employed population, resulting in billions of dollars in economic costs to employers [9]. Furthermore, conditions associated with obesity also give rise to absenteeism, presenteeism, increased healthcare expenses, and early retirement, all of which hinder workforce productivity. Other well-established links between high body weight and decreased workforce participation, increased disability incidence, and lowered job satisfaction strengthen the rationale for workplace-specific overweight and obesity interventions [8].

Types of Workplace Interventions

Workplace interventions for obesity can be broadly grouped into three interrelated categories. Environmental and policy changes create healthier physical, social, or organizational settings [6]. Programs that promote lifestyle and behavioral change typically involve specific strategies such as counseling and goal setting that complement and reinforce these environmental modifications [3]. Such programs are especially effective when driven by organizational culture and supported by leadership [7]. Environmental and policy changes have been widely adopted. Examples include improved access to nutritious food, designated periods for physical activity, scheduling flexibility, and architectural features that encourage movement [9]. These alterations can influence weight through mechanisms such as easier tracking or monitoring of consumption, enhanced availability of healthy options, and increased opportunities for activity [12]. Behavior change programs usually encompass at least two components: health-related assessments tailored to individual interests, conditions, and goals; and ongoing guidance, support, or tracking of physical activity, dietary habits, or other behaviors [15]. Digital delivery formats are often involved, reflecting the pervasiveness of mobile devices and other technology [18]. These initiatives are most beneficial when integrated into an overarching strategy that includes leadership commitment and a supportive workplace atmosphere [6].

Environmental and Policy Changes

Worksites are important settings for documenting, understanding, and responding to the obesity epidemic, given that a large portion of life is spent working and that many habits are formed during this period [2]. Three types of workplace interventions can be distinguished: environmental and policy changes to the worksite or work organization that promote healthier nutritional and physical activity options; lifestyle and behavioral programs that change nutrition-related or physical activity-related behaviors; and interventions to support or promote a workplace culture, climate, and leadership that encourages healthy choices or the utilization of health-related programs and activities [17]. Examples of environmental and policy changes include providing access to healthy and nutritious foods in the worksite cafeteria, designing the work environment to encourage or facilitate physical activity, and altering the work schedule to create opportunities for either physical activity or healthy food choices [13]. Changes of this nature should lead to reduced caloric intake, greater levels of physical activity, or both [10]. Nevertheless, attention to lifestyle and behavioral changes remains warranted, as contemporary workplace environments often present barriers to, rather than facilitators of, healthful nutrition and physical activity, and programs aimed at changing lifestyle behaviors have consistently demonstrated positive impacts on obesity-related health outcomes across numerous venues, including the workplace [8].

Lifestyle and Behavioral Programs

Behavioral and lifestyle programs typically comprise advice, counseling, or skill-building exercises, with or without digital tools [19]. Such programs can address all types of dietary and physical activity behaviors individually or in combination; programs following an organizational fit model may emphasize the subset of behaviors tied to organizational policies, practices, and structures [9]. Programs often incorporate counseling on weight loss and weight maintenance, goal-setting, and self-monitoring; digital resources such as videos, webinars, or websites complement in-person options [2]. These programs are classified separately from environmental and policy changes because their success relies on organizational attention to job design and work arrangements they may not be effective without changes that reduce job strain and promote good health [8]. Programs integrating workplace-paced physical activity into regular work duties are oriented toward the same goal. Lifestyle and behavioral programs can be delivered as standalone interventions or incorporated into broader health promotion efforts [7]. Cross-cutting activities include access to gym facilities, provision of on-site exercise classes, organized walking groups, and availability of standing desks or sit-stand workstations. Framing initiatives as workplace health promotion allows for the adoption of routinized components (e.g., screening, use of health apps) that maintain engagement without requiring scheduled events [8].

Organizational Culture and Leadership Support

Workplace culture has a strong influence on employee health and weight, affecting the effectiveness of obesity-related workplace interventions [3]. Organizational leadership must actively support such programs to foster a culture consistent with their goals [3]. They can do so through the equitable implementation of supportive policies, such as allocating adequate resources, integrating them into annual planning, increasing awareness, and explicitly encouraging participation throughout the organization [6]. In particular, leadership at all levels should unapologetically combat the stigma surrounding such programs to promote positive engagement across employees, as stigma can discourage or prevent participation altogether and leads to disengagement among individuals most in need of support [10].

Effectiveness and Outcomes

Obesity has serious implications for both individual well-being and the economy [1]. Weight-related issues can lead to physical and mental health problems; moreover, they can also affect the economy since obese employees can have reduced productivity and increased healthcare costs [3]. The workforce provides high potential for interventions, as many adults spend a considerable part of their waking hours at work [8]. Despite their economic significance, however, workplaces have received less attention than homes and schools for obesity prevention. Workplace interventions hold promise because they can reduce excessive weight gain, support weight loss, and encourage the adoption of healthy habits activity and nutrition that reduce the risk of obesity [2]. With growing interest in workplace wellness, disadvantaged groups need greater reach, inclusivity, and equity. The evidence shows that workplace interventions can lower weight compared with no action but generally have little or no impact on broader health and work-related outcomes [11]. Yet the focus on economic-level outcomes from these interventions may define the subject space too narrowly. Employer interest in workplace health because of absenteeism and presenteeism and its potential link to healthcare costs provides a strategic connection with interventions [5]. Though employers play the major role in workplace interventions, other actors public health agencies, various authorities, private providers, and employees also contribute [16]. Public health agencies advocate strategies to help reduce economic disparities across disadvantaged groups; workplace health is an example where such disparity reduction is pertinent since different groups spend varying amounts of time at work. Gender, education, and socio-economic differences among employees can influence start-up [14]. Additionally, employee engagement can correlate with wider organization's public health efforts and national health guidelines. Interventions that mitigate pivotal, resource-draining obesity-related burdens warrant interest [20].

Weight-related outcomes

Overweight and obesity are serious issues among employees worldwide [8]. Working adults are at risk of weight gain, often accumulating two pounds per year. Rates are rising across all industries and regions; in 2010, one-third of U.S. workers were classified as obese [11]. Obesity is linked to increased absenteeism, sick leave, workplace injuries, disability claims, and rising health care costs. Adults spend half their waking hours at work, making it logical to promote healthier behaviors in this setting [12]. Interventions have focused on modifying food environments, increasing physical activity, and fostering social support [16]. However, many studies are limited by short duration, lack of control groups, and failure to monitor weight changes; several showed improvements in nutrition or activity without recording outcomes [12]. Methodological shortcomings persist, as evidenced by numerous reviews that highlight a lack of long-term data on health and economic outcomes, an important gap given the public health implications and new methods for evaluating disease burden and cost-effectiveness [16]. Obesity stems from an energy imbalance; reducing intake, enhancing expenditure, or a combination can prevent weight gain. Individual behavior change is fundamental, but the workplace setting offers opportunities for environmental modifications [10]. Programs emphasize safe food access, easy exercise, supportive peers, and experiences that align with personal goals [20]. Effective interventions target these principles, providing tailored and streamlined approaches for organizations. Settings-based strategies can also reform policies, practices, and approaches to sustain behavior over time [14].

Secondary health and work-related outcomes

In addition to the interventions' direct impact on weight reduction, substantial evidence points to a range of consequential health-related outcomes in employed populations [12]. Measures of productivity, presenteeism, mental health, job satisfaction, and healthcare costs have all been reported [15]. Additionally, these outcomes frequently correlate with weight status, suggesting an indirect effect of weight-focused interventions on these broad health and work-related dimensions [1]. Consequently, consideration of secondary outcomes remains a priority for employers aiming to enhance the overall well-being of their workforce [13].

Implementation Considerations

Obesity in adult populations has grown into an alarming epidemic that poses significant risks to individual health and well-being, and a major burden in terms of productivity, absenteeism, and healthcare costs [2]. The rapid rise in obesity and chronic diseases not only jeopardizes the future of health systems but also threatens economic

development, social cohesion, and individual dignity [6]. Prior to the COVID-19 pandemic, many countries had adopted obesity prevention policies as part of their national health strategies. In parallel, the OECD, WHO, and several countries had developed regulations and guidelines for healthy workplaces [18]. Workplaces have that now clearly emerged as strategic settings for healthcare, and particularly, obesity these policies – these have been strengthened following the pandemic [17]. According to the World Health Organization, obesity has not only impeded the efficient functioning of labor markets but also eroded entire productive sectors due to high prevalence rates among employees [11]. Addressing risk factors directly in one of the environments where people spend most of their time has emerged since the pandemic as a global priority. A typology of workplace-driven, obesity-related policies encompasses three complementary interaction styles: environmental and policy change, lifestyle and behavioral programs, and supportive organizational culture and leadership [1]. Each type can operate alone, but their combined adoption is expected to amplify effectiveness and sustainability.

Feasibility and Cost-Effectiveness

Workplace obesity interventions are viable on economic and practical grounds [4]. In a recent overview of business-focused obesity programs, four evaluations reported cost–benefit ratios (four evaluations), return on investment (ROI) measures (four, 1 : 2 to 1 : 6), and cost-effectiveness ratios (two, €17 to €50 per kg weight loss) for workplace-based dietary interventions. Returns stemmed from reduced absenteeism, sick leave, and recruitment. Key features correlated positively with ROI: group-based programs, multiple health topics, access to food suppliers, free food choices, worksite sessions, on-site nutritionists, and additional health services [2]. Economic evaluation frameworks, addressing cost per kg or BMI lost, have emerged recently. Implementation burdens can inhibit uptake [11]. Obesity programs present severe challenges for both employees and employers. Despite acknowledged value, multi-faceted interventions tackling multiple health-related risk factors face high burdens due to diverse staff demands [14]. Degree of implementation concern varies with design: information campaigns encounter fewer challenges than enabling structural changes, while extensive behavioural training ranks as highly challenging. Interventions incorporating fewer, scalable, low-burden components offer better implementation prospects [13].

Engagement, Equity, and Inclusivity

Despite the significant health implications of workplace obesity on health and productivity, engagement remains a challenge across multiple settings [14]. A systematic review of behavioral weight management interventions found that many required a high degree of time, resources, and effort, factors that often restricted uptake and adherence among disadvantaged groups and exacerbated existing health inequalities [15]. Such equity concerns applied to the weight-management needs of populations identified within several workplace-based studies [1]. Evidence pointed to the significant roles of unhealthy nutritional and physical activity behaviors in driving weight among employed populations [9]. Applying similar lens across health behavior change, workplace-based obesity interventions aimed at disadvantaged individuals were likely to enhance reach and program participation [13]. Interventions needed to be designed for broad appeal, motivating and enabling individuals identified with a heightened need [12]. Strategies included those to foster social support, increase self-efficacy, and mitigate the stigma associated with weight gain imperatives repeated across population settings [17]. Employment-specific determinants influencing the engagement, equity, and inclusivity of workplace-based weight-management interventions needed consideration, given the significant costs of employee absenteeism, lowered productivity, and presenteeism due to obesity across settings [16].

Measurement and Methodology

Evidence on workplace interventions comes from diverse disciplines and is dispersed across academic fields. Thus, gathering credible and relevant evidence requires broad and systematic approaches [7]. The review of workplace-based interventions for obesity among nurses, covering internal and external evidence published by 2003 and 2018, exemplifies rigorous search strategies and study selection [17]. The broad question of “what works” directs attention to circumstances or subpopulations where interventions may be effective. Searches of CINAHL, SCOPUS, PsycInfo, MEDLINE, British Nursing Index, and grey literature included peer-reviewed and grey literature as well as case studies. The focus on the NHS confined the geographical scope [18]. Title and abstract screening, followed by data extraction in a dedicated Excel form, preceded quality appraisal using CASP checklists. Another example, addressing eating habits in office settings, illustrates systematic retrieval of evidence concerning the broader study topic [2]. Databases searched included Scopus, Elsevier, and Web of Science; “obesity,” “office,” and “workplace” were among the search terms. The search was limited to articles published in English in 2000 or later and ignored case reports [16]. Inclusion criteria established the relevance of the sample. The final dataset covered 46 articles across countries such as Australia, Canada, the Czech Republic, France, Japan, and the Netherlands [16]. The overview emphasises a broad selection of nutritional methods extended to a specific subspace. A search strategy encompassing these principles could enable the compilation of comprehensive evidence on workplace-based interventions aimed at obesity in employed populations [11].

Study Designs and Data Sources

Within the studies identified, a variety of research designs and data sources are represented [4]. Among the 25 included studies, six randomized controlled trials (RCTs), two cluster RCTs, four quasi-experimental studies, seven longitudinal cohort studies, three cross-sectional studies, two systematic reviews, and three informal assessments document fourteen unique workplace interventions [6]. Considering study design alone, the focus on RCTs and quasi-experimental designs overlaps somewhat with other systematic reviews examining workplace health interventions in general [3]. Common data sources for behavior-tracking studies are also apparent [8]. Of the measures assessed, weight, body mass index (BMI), and waist circumference emerge frequently, indicating a strong focus on weight and related metrics [16].

Measurement of Obesity and Related Behaviors

Obesity is recognized as a complex behavioral condition characterized by the accumulation of excess body fat. Obesity is typically measured either as body mass index (BMI) or waist circumference [9]. Given most workplace interventions target the elevation of health-related behavior, the measurement of these behaviors is also relevant. Behaviors targeted include nutrition, physical activity, sedentary behavior, sleep, stress management, and tobacco use [5]. The timing of measurement depends theoretically on when participants are exposed to the intervention that might generate behavior change [18]. The stay-at-home-order period during the COVID-19 pandemic, however, disrupted the typical pre-post intervention data collection frame. Many studies therefore adopted repeated measurement before and after disturbance events such as prior to the pandemic and during stay-at-home-order to assess program effectiveness [8]. For workplace health program, it may be common and valid to either take only pre-intervention data or take data at the initiation of the program to track both delivery and the later phase of an environmental or cultural intervention with little or no expected change under the current scope [10]. The long-term retention of weight change is also useful to understand the working of the program, and socio-cultural environments were different prior to and during stay-at-home-order [11]. Moreover, since workplace programs might not specifically target weight but a broader health-gain objective, the exploration of such generic or health-oriented condition might provide a more inclusive clue compared to an exclusively weight-centered one [19]. The consideration of other interventions having already focused on either health or workplace setting primarily suggests two focused conduits rhetoric of health beside weight status and workplace as principal target engagement [17].

Gaps, Challenges, and Ethical Considerations

Despite their potential benefits, several gaps and challenges surround workplace interventions for obesity [9]. Concerns about privacy and stigma limit the tracking and sharing of employee data; accordingly, organizations frequently struggle to monitor implementation, participation, and effectiveness [16]. Maintaining long-term engagement also proves difficult [14]. Although interventions may initially capture employees' attention, many participants eventually withdraw, hindering sustained impact [17]. Initial interest may reflect novelty and social desirability effects, whereas disengagement may stem from diminished visibility, absence of incentives, and diminished appeal [13]. Experts advocate designing programs to sustainably integrate health promotion into regular practice. Privacy issues and stigma frequently accompany weight-related health promotion initiatives [2]. Concerns about data confidentiality and discrimination against overweight or obese group members can inhibit leaders from tracking participation or conditions and monitoring effectiveness [6]. Consequently, many organizations forgo evaluating broad obesity prevention efforts [7]. Decision makers who pursue such evaluations should offer clear, transparent statements about data confidentiality, list specific tracking purposes, and secure participants' consent [9]. Non-stigmatizing approaches (e.g., using neutral language such as "weight-related changes" instead of "obesity") further minimize the risk of offending employees or inciting withdrawal or resistance [5].

Privacy and Stigma Concerns

Privacy, confidentiality, and stigma are important issues when collecting data from workers in workplace obesity interventions [17]. The collection of personal health information needs to be protected from unauthorized access, distribution, or sale in order to maintain confidentiality [16]. When designing interventions, organizations ought to consider the level of confidentiality they can realistically maintain and how easily data may become public [17]. Stigmatizing and discriminatory practices associated with weight are known to adversely affect health outcomes. High rates of weight-based discrimination among patients undergoing treatment for obesity suggest that these issues also exist outside of work [18].

Long-Term Maintenance and Scalability

External focus should gradually shift to institutionalizing workplace obesity management initiatives as an integral element of organizational health programs [11]. For sustained efficacy, these programs must be assimilated into ongoing operations and adopted as formal health policies or adapted to conform to existing ones [19]. Such measures enhance the credibility of the initiative and signal to employees its enduring significance [10]. Efforts

that engaged a small number of motivated businesses indicated that periodic, structured follow-ups to maintain focus on program goals and support continued involvement improved retention of health-promoting worksite initiatives [9].

Policy and Practice Implications

Due to the persistent rise of obesity, workplace health promotion programs to develop weight-friendly, positively focused, and universally accessible interventions provide an opportunity to address this challenge [15]. Despite the availability of workplace programs promoting physical activity and healthy nutrition, obesity levels remain high [15]. Organizations increasingly invest in workplace interventions aimed at promoting active lifestyles, improving nutrition, and helping employees achieve or maintain a healthy weight [16]. Such interventions are important because obesity impacts productivity, presenteeism, mental health, job satisfaction, and healthcare costs [15]. Workplaces represent strategic settings for health initiatives; employees are highly motivated to pursue lifestyle changes when they perceive health and work as interconnected, given that health affects attendance and productivity. Adjustments at work can also supplement activities outside the job, better accommodating hectic or abnormal schedules [14]. Implementation remains a challenge; flexible installations during inclement weather or at home could further alleviate barriers [13]. Workplace health promotion programs targeting nutrition and physical activity show a modest but consistent effect on weight reduction, with evidence from multiple randomized controlled trials. Nutrition education, counseling, dietary changes, and stress management benefit employees at risk of or with metabolic syndrome, preventing disease and improving health parameters [11]. Dietary interventions improve lipid indices, especially high-density lipoprotein and low-density lipoprotein cholesterol, but do not significantly affect other variables [18]. Most evaluated programs focus on nutrition or physical activity. Effective workplace obesity-related interventions generally incorporate components targeting both lifestyles in an integrated manner. A combined approach may better address intertwined influences on health and facilitate simultaneous monitoring of two major determinants of obesity [19].

Recommendations for Employers

Obesity remains a public health concern despite progressive improvements in population health. The burgeoned prevalence of overweight and obesity during the COVID-19 pandemic has emphasized the need for implementing comprehensive measures at workplaces [3]. Workplaces are conducive for implementing obesity control interventions because employees spend a considerable amount of time at the workplaces [12]. Therefore, they may be exposed to the surrounding obesogenic environment which adversely affects their health. A systematic review has highlighted the effectiveness of workplace interventions in reducing obesity related health risks [2]. Employers can bolster the health of their workforce by implementing obesity control programs [11]. Evidence indicates that implementing a workplace intervention program addressing obesity has favorable effects on the organization [15]. The organization witnesses reduction in health-related risks such as obesity, hypertension, diabetes, mental fatigue and musculo-skeletal disorder along with improvement in work-life balance, emotional intelligence, soft skills, job satisfaction, health consciousness, mental sharpness, pain, productivity, company loyalty, sleep quality, stress, and absenteeism [15]. Higher awareness of the health risks associated with obesity has motivated employers to organize various workplace interventions to curb the spread of obesity in workforces [17].

Policy Alignment and Public Health Impact

Interventions that tackle obesity in the workplace can support national public health goals, since they address major public health challenges and unhealthy behaviors [18]. Policies and programs that mitigate the workplace determinants of obesity can help to advance the aims of actions such as Healthy People 2030 by the United States Department of Health and Human Services [9]. They align with national workplace health strategies that advocate initiatives to support a healthy workplace and a safe and healthy workforce [20-26].

CONCLUSION

Workplace interventions for obesity offer a unique and practical avenue for promoting healthier lifestyles among employees and reducing the global burden of obesity-related diseases. Evidence from multidisciplinary studies underscores that comprehensive, well-structured workplace programs can improve dietary behaviors, increase physical activity, and foster long-term weight management. By integrating health promotion within the daily work environment, organizations can effectively reach large populations, influence lifestyle behaviors, and create supportive ecosystems that sustain health improvements. However, several methodological and ethical challenges must be addressed for these interventions to achieve lasting success. Many programs are hindered by inconsistent measurement frameworks, short implementation periods, and a lack of long-term follow-up. Ethical concerns particularly regarding privacy, data protection, and weight-based stigma further limit participation and monitoring. Employers must therefore establish transparent data management practices, adopt non-stigmatizing language, and ensure voluntary participation to build trust and encourage engagement. The institutionalization of workplace obesity management into formal health policies is essential for sustainability. Continuous follow-up,

leadership involvement, and integration of interventions into organizational culture strengthen program credibility and reinforce a long-term commitment to employee health. Moreover, aligning workplace interventions with broader national and global public health goals, such as the WHO's Sustainable Development Goal 3 (Good Health and Well-being) and initiatives like Healthy People 2030 can amplify their impact and contribute to national health advancement. Ultimately, the success of workplace obesity interventions lies in their adaptability, inclusivity, and integration into broader health and policy frameworks. Organizations that prioritize employee well-being through strategic, ethically grounded, and evidence-based health programs not only improve workforce health and productivity but also demonstrate social responsibility. Sustained leadership commitment, data-driven monitoring, and a supportive workplace environment remain vital to reducing obesity and fostering healthier, more resilient organizations.

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