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Integrative Review of Workplace Health Promotion in the Business Process Outsourcing Industry: Focus on the Philippines

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ABSTRACT

Objective: The Business Process Outsourcing (BPO) industry in the Philippines has experienced substantial growth, making a significant contribution to the country's economy. However, concerns about work-related health and safety issues have emerged, necessitating effective workplace health promotion strategies for BPO employees.

Study design: An integrative review of relevant literature was conducted to explore workplace health promotion in the BPO sector.

Methods: The search included quantitative, qualitative, and mixed-method studies, pertinent laws, policies, news articles, and reports published between 2000 and 2022. The scope was intentionally broad to encompass a diverse range of relevant evidence related to workplace health in this field. Articles published both in the English and Filipino languages were considered.

Results: Findings revealed that BPO workers face risks related to physical and psychological stress, sleep disturbances, and occupational diseases owing to the unique challenges inherent to the nature of their jobs. While there are existing occupational health and labor laws, compliance among BPO companies remains a problem, and only a few organizations offer comprehensive wellness programs. Building upon the available evidence, a conceptual framework was developed to provide guidance for enhancing workplace health promotion initiatives specifically designed for BPOs in the country.

Conclusion: Workplace health promotion is vital to warrant the health and safety of BPO workers. This study offers evidence-based recommendations for implementing effective well-being strategies, highlighting the importance of collaboration among employers, employees, and society to prioritize employee health in the workplace.

1. Introduction

The Business Process Outsourcing (BPO) industry in the Philippines involves the contracting of crucial business functions or tasks to external service providers. Presently, this sector is experiencing remarkable expansion, resulting in a significant upswing in employment opportunities. In 2019, an estimated 1.3 million Filipinos were employed by more than 1000 BPO companies, demonstrating an annual growth rate of 8–10% [1]. The country also commands a growing market share of 16–18% in the global BPO trade [2]. According to the Contact Center

Association of the Philippines (CCAP), the industry's total revenue amounted to approximately USD 23 billion in 2018 [3]. Forecasts indicate that this figure is poised to escalate to USD 40 billion by 2022, potentially positioning the BPO service as a significant contributor to the overall economic growth of the nation.

Accenture's Global Resource Center in Manila is credited with starting the Philippine BPO industry [2]. This event led to the passage of Republic Act 7916 or the Special Economic Zone Act of 1995, which provided tax incentives and was instrumental in the growth of the BPO sector in the country [4]. In 2000, the "Make It Philippines" campaign

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drew global industry investments, creating many IT service jobs [5]. By the year 2020, the Philippines was ranked fifth in the Global Innovation Index's Top 50 Digital Nations ranking [6]. However, existing literature raises concerns regarding work-related health and safety issues associated with the unique working conditions in this sector. For instance, the Philippine Statistics Authority (PSA) reported that only a few establishments offered certain requisite training programs: drug-free workplace (38.1%), stress management (29.3%), HIV/AIDS prevention (28.6%), smoke-free workplace (28.5%), and TB prevention (24.9%) [7]. The high prevalence of occupational health problems among call center workers further accentuates the need for improvement in health and safety practices [8].

In the Philippines, employees often view their organizations as familial, expecting both physical and economic protection. This cultural backdrop —marked by traditional expectations and often informal decision-making— poses challenges for health promotion in the BPO industry as well [8]. While there have been endeavors to promote and enforce occupational safety and health in different organizations, the degree of implementation has varied, primarily due to constraints in financial and human resources [9]. Some employers exhibit a strong dedication to ensuring the safety and well-being of their employees, while others require room for improvement. Given the evolving experience of BPOs in a developing country like the Philippines — encompassing contextual nuances, working conditions, and regulatory landscapes — there is a need to identify effective and culturally-sensitive strategies to promote workplace health among BPO employees.

Thus, the purpose of this review is to explore workplace health promotion in the Philippine BPO sector. Specifically, it aims to critically assess the specific occupational health challenges encountered by workers in the country and evaluate their effects on employee well-being and job performance. In addition, existing literature concerning workplace health promotion laws, policies, programs, and strategies applicable to the Philippines will be analyzed to determine best practices.

Finally, this review aims to construct a conceptual framework or model, serving as a roadmap for future approaches tailored to the unique cultural perspectives of the Philippine BPO environment. A region-specific framework would facilitate the identification of relevant and customized solutions that resonate with the realities and requirements of the Philippine BPO sector, promoting ownership and engagement among stakeholders, including employers, employees, policymakers, and public health practitioners.

2. Methods

An integrative review was conducted to comprehensively synthesize and gather relevant literature on workplace health promotion among BPOs in the Philippines. The selection of this review type stemmed from its recognized effectiveness in collating, critiquing, and integrating diverse findings to offer a wholistic understanding of specific topics, allowing for the identification of key patterns, gaps, and implications for research, practice, and policy [10,11]. The inclusion criteria were intentionally broad to encompass a diverse range of suitable studies. Empirical original research articles that investigated workplace health promotion among BPOs in the Philippines using qualitative, quantitative, mixed methodologies, and grey literature were considered eligible for inclusion. The studies were in the English or Filipino languages, and published between the years 2000 and 2022. Exclusion criteria were applied to ensure the relevance and appropriateness of the selected literature. Studies that did not specifically focus on workplace health promotion in the BPO sector, were not related to the Philippines, or were published outside the defined time range were excluded from the review.

An extensive search strategy was devised to identify apt literature in PubMed, CINAHL, and Google Scholar. The following search terms were employed: "workplace health promotion," "workplace health program,"

"workplace health policy", "business process outsourcing," "call center," "occupational health and safety," and "Philippines." These terms were used in various combinations, and Boolean operators (AND, OR) were applied to optimize the search and ensure the retrieval of relevant articles. The initial search yielded 233 records (Fig. 1). After first excluding 27 articles, mainly due to duplicates and those not written in English or Filipino, 206 articles met the eligibility criteria. Upon closer examination of the full texts, 169 more were excluded due to irrelevant population or inappropriate topics, resulting in a final count of 37 studies included in the review. Pertinent research details were extracted and a systematic data analysis approach was employed to derive meaningful conclusions aligning with the review's objectives [10].

Data extraction was carried out by three researchers to enhance rigor and minimize bias. Any differences in analysis or discrepancies during data extraction were resolved through discussions among the researchers. Consensus was reached through careful deliberation and revisiting the original sources when necessary. This review sought to answer the following research questions:

- 1. What are the specific occupational health challenges encountered by BPO workers in the Philippines, and how do these impact their wellbeing and job performance?
- 2. What are the existing laws and policies on occupational health and safety relevant to BPOs in the Philippines?
- 3. What are some current workplace health promotion programs and practices conducted among BPOs in the Philippines?

3. Results

3.1. Workplace health and safety challenges in the Philippine BPO industry

Table 1 summarizes the included articles concerning current work-place health and safety challenges and their effects on Philippine BPO workers. Of the 22 articles assessed, 13 were peer-reviewed studies, 4 were reports from the public and private sectors, 3 were news articles, and 2 were conference papers.

The BPO industry has seen success but has also experienced occupational health and safety issues, such as computer-related health disorders, call-related vocal and auditory issues, and stress and burnout. The PSA reported 32,221 occupational diseases in the BPO industry in 2015 alone [12]. During the year, occupational lung disease (16.3%), occupational asthma (13.5%), other musculoskeletal ailments (11.7%), and neck-shoulder pain (11.1%) accounted for the top occupational diseases experienced [8]. Other job-related factors, such as sitting for long periods and repetitive tasks, have been reported to cause physical and psychological stress [13].

In the metropolitan areas of Cebu and Manila, Amit and colleagues [14] identified significant occupational health issues among call center workers, with high rates of back pain (96%), headache (96.5%), neck pain (93%), and insomnia (93%), and that smoking and drinking predicted neck pain, headache, and insomnia. These findings were echoed in the 2017/2018 Integrated Survey on Labor and Employment, which also showed that back pain (31.3%) was the most common occupational disease among administrative and support service workers, including call center agents [15]. In 2020, Haw et al. [16] observed that females were more prone to migraine disability, noting that stress and prolonged exposure to computer screens were identified as primary migraine triggers. A number of BPO agents also face throat irritations and hearing damage from handling numerous calls in a day's work [17]. In a tropical country like the Philippines, the hot outdoor climate exacerbates issues such as itchy throat, colds, and coughs, especially after spending prolonged periods of time in very cold call center conditions [18].

Moreover, the challenges faced by BPO employees in adapting to work environment demands and shifting schedules has been shown to contribute to occupational stress, which affects overall well-being and

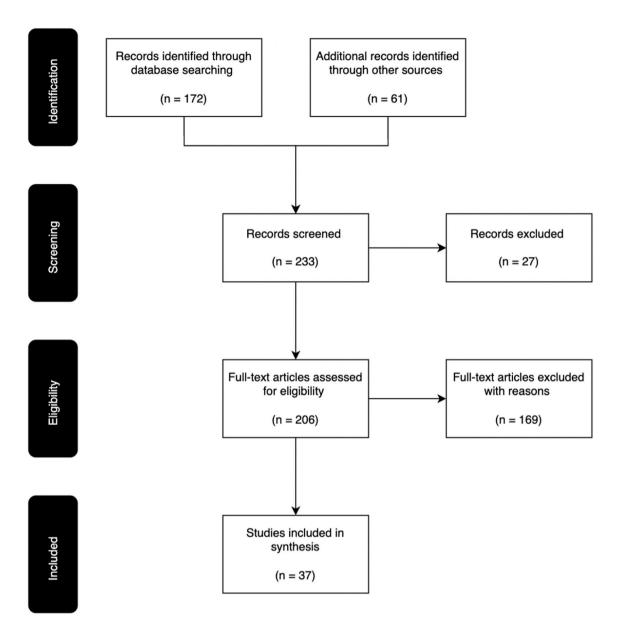


Fig. 1. PRISMA flowchart of the study.

job performance [19]. Filipino BPO workers often work night shifts to serve international customers, but this setup has inherent health consequences. Sleep disturbances, skin disorders, and fatigue are common [20], and those who experience stressful work environments and sleep deprivation, are more likely to have poor health [21]. A 2016 International Labor Organization (ILO) study also noted an increase in HIV and AIDS among BPO workers [22], reaffirming findings from a 2013 study that linked HIV to BPO employment, principally among men who have sex with men (MSM) [23].

Another major issue is safety, chiefly among women in call centers who are more vulnerable to robbery due to leaving work in the early hours of the morning [24]. Of concern among female BPO workers is also the risk of breast cancer linked to chronic night shifts [25]. In 2016, a study on call center agents in Metro Manila revealed notable exhaustion among female respondents aged 18 to 29 [26]. Over half of the participants exhibited high cynicism and low professional efficacy, leading to burnout in new female employees. Similar findings were also demonstrated in a 2022 study showing that emotional exhaustion was more pronounced, especially among younger workers [27].

In terms of maternal support for working mothers, the Philippines' breastfeeding policies align with international standards for lactating working women, but the implementation and effectiveness of these in the workplace are hindered by structural and individual barriers [28]. In 2009, Keitel and Ledesma [29] found that none of the call centers in their study had breastfeeding areas, and only one had a daycare facility. The combination of a highly stressful job and the demands of domestic/family responsibilities has consistently placed women in call centers at a disadvantage [30]. In facing these challenges, BPO workers employ personalized coping strategies, such as prioritizing adequate sleep and incorporating massages into their routines [16]. However, insufficient coping skills may lead to stress-related adverse effects on both physical and psychological well-being [31].

Likewise, the presence of urban green spaces has emerged as a significant predictor of BPO worker stress levels, underscoring the importance of the built environment in fostering resilience and positive mental health [32]. Collectively, burnout and other forms of occupational stressors were found to be key factors that contribute to the high turnover rate of workers in Philippine call centers [33]. The attrition rate of

Table 1
Current workplace health promotion and safety challenges among Philippine BPOs.

Author(s)	Year	Sample/Setting	Purpose/Objective	Article Type	Summary/Conclusion
Agoncillo	2017	1 call center agent in Metro Manila	To report about slain call center agent	News article	A call center agent, was robbed and murdered while crossing the Guadalupe Bridge between Makati City and Mandaluyong City in Metro Manila. The family is struggling emotionally and financially, as the agent was the main breadwinner.
Amit et al.	2020	227 call center workers from five companies in the Philippines	To measure the prevalence of occupational health outcomes among call center workers in the BPO industry in the Philippines	Peer- reviewed article	There are high prevalence rates of occupational health problems, with back pain, headache, neck pain, and insomnia being the most common. The study also identifies smoking and drinking as predictors of these symptoms.
Carillo	2010	2 BPO workers in Davao City, Philippines	To report on the healthcare and safety challenges of call center agents from the so-called "sunrise industry"	News article	One call center agent mentioned experiencing skin rashes and allergies due to lack of sleep and irregular working hours. Another agent complained of heart palpitations, which her doctor attributed to work pressure.
Charoensukmongkol & Puyod	2022	412 call center agents from 5 call center companies in the Philippines	To investigate the role of call center agents' work and personal characteristics as moderating factors that might influence the effect of mindfulness on emotional exhaustion	Peer- reviewed article	There is an inverse relationship between mindfulness and emotional exhaustion. The examination of moderating effects revealed that the adverse impact of mindfulness on emotional exhaustion was notably pronounced for call center agents who: (1) faced high job demands; (2) occupied a supervisory position; (3) were single, and (4) were younger.
Ceblano et al.	2019	212 inbound call center agents in Metro Manila, Philippines	To identify factors predicting turnover intention among call center agents in the Philippines	Peer- reviewed article	Job control, salary, and burnout were found to significantly predict turnover intention, accounting for 65% of the variance. Social support and job demands were not significant predictors.
Cruzat	2014	210 survey respondents from a BPO company	To determine the effects of shift work in a BPO company in terms of shift workers health, psychological well- being, and their coping mechanisms	Peer- reviewed article	There is a significant difference in coping mechanisms—such as social interactions, domestic activities, sleep routines, and work performance—among the three groups of shift workers. Shift workers employ coping strategies that, when successful, restore physical and psychological well-being. Insufficient coping skills may lead to stress-related adverse effects on both physical and psychological well-being.
Domingo-Cabarrubias	2012	Women in Philippine BPOs	To examine whether the gender- differentiated impact of call center work has been adequately explored	Peer- reviewed article	The challenges encompass health issues faced by pregnant and lactating mothers, safety considerations for women working during nighttime hours, and conflicts arising from the juxtaposition of work hours with the demands of task performance and domestic/family responsibilities. The combination of a highly stressful job, overnight shifts, and unpredictable schedules can significantly impact women's traditional caregiving roles within their homes.
Errighi et al.	2016	Philippine BPOs	To examine the challenges related to decent work in the BPO sector	Report	There is a danger of skills shortages, high- stress work environments, the prevalence of HIV/AIDS among BPO workers, the concentration of women in low-paid jobs, and the limited presence of trade union activities. Workplace health promotion programs are usually conducted in partnership between health management organizations and international partners.
Gangcuangco et al.	2013	Men having sex with men (MSM) from call centers	To understand the factors catalyzing the HIV epidemic among MSM in Metro Manila	Peer- reviewed article	All 40 Western blot-confirmed cases were positive, including 24 identified as BPO employees. Multivariate analysis revealed associations between HIV and BPO employment (aoR: 3.37; p = 0.001), preference for receptive anal sex (aoR: 5.26; p = 0.04), and engaging in sex under excessive alcohol influence (aoR: 2.71; p = 0.04). Significantly fewer BPO workers consistently used condoms during insertive (continued on next page)

Table 1 (continued)

Author(s)	Year	Sample/Setting	Purpose/Objective	Article Type	Summary/Conclusion
					anal sex with strangers compared to non-BPOEs (24.5% vs. 38.2%; $p=0.02$), emphasizing the need for urgent interventions to curb the HIV epidemic in the Philippines.
Gumasing & Ilagan	2019	180 inbound call center agents working in three shifts (opening, middle, and closing)	To identify significant risk factors affecting the overall performance of call center agents in terms of health condition, psychological condition, and job performance	Peer- reviewed article	Findings indicate that for opening and closing shifts, factors such as irregular meal times, noise level, workplace temperature, workplace setup, and disruptions to social life contribute to the stress levels of agents. Conversely, for middle shifts, risk factors include workplace relationships, number of rest days, irregular meal times, social life
Gutierrez et al.	2017	Philippine BPOs	To investigate the link between ergonomics and talent retention in the Philippine BPO industry	Conference paper	disruptions, and disruptions to domestic life. Ergonomic issues in call center management play a crucial role in talent retention, ultimately contributing to the competitiveness, growth, and profitability of call centers in the Philippines. The study suggests a shift from diagnostic talent management to a more preventive approach by considering workplace conditions and ergonomic factors.
Haw et al.	2020	12 companies in the Philippines across various industries, including BPOs	To evaluate the burden and impact of migraine on work productivity in selected workplaces in the Philippines	Peer- reviewed article	Females constituted two-thirds of individuals with positive migraine screens and had a higher likelihood of experiencing high migraine disability compared to males (odds ratio: 1.60, 95% CI: 1.03–2.49). Stress and prolonged exposure to computer screens emerged as primary migraine triggers, while adequate sleep and receiving a massage were identified as key coping mechanisms.
Keitel & Ledesma	2009	9 BPO stakeholders in the Philippines	To illuminate the mismatch between existing labor statutes and the evolving needs of the industry, with a focus on call center women working night shifts in the Philippines	Conference paper	The study elucidates the health, safety, and working conditions of women in the call center industry. Pregnant women, attracted by the premium salary, often opt for night shifts, exposing themselves to potential risks. Interviewees disclosed the lack of breastfeeding areas in all the call centers they worked in, with only one facility offering a daycare service.
Lu	2022	Occupational health and safety data in the Philippines	To develop a comprehensive review of occupational safety and health data, including hazard exposures and occupational diseases for various Filipino occupational groups	Peer- reviewed article	Unsafe and unhealthy conditions are prevalent in various Philippine workplaces, particularly in informal sectors lacking sufficient social protection. Specific vulnerable groups, including call center agents, face heightened risks. Gender disparities in protection, with women having less safeguarding than men, were observed. Industries such as administrative and support services, such as the BPO industry, exhibit a high prevalence of occupational diseases.
Lu	2019	630 call center agents in Manila, Philippines	To determine whether a significant difference exists in the prevalence and severity of self-reported skin disease between "regular" day shift workers compared to "graveyard" night shift workers.	Peer- reviewed article	No significant difference in the prevalence of skin disease was observed across shifts. Nevertheless, night shift workers exhibited poorer sleep quality. Poor sleepers, when compared to good sleepers, showed a higher prevalence of skin disease with increased severity, suggesting that graveyard shift workers experiencing poor sleep may have heightened skin disease severity.
Magellan Solutions	2020	Philippine BPOs	To report on the 2020 statistics of the BPO industry in the Philippines	Report	The BPO industry significantly contributes to the Philippines' economy, providing jobs and boosting the gross domestic product. The industry is undergoing a shift from low-skill to mid- and high-level skills in response to global demands. Employee attrition is one of the biggest challenges in BPO companies, citing physical and psychological strain as some of the reasons.
Malazarte	2011	Cebu, Philippines	To report on the health issues faced by call centers	News article	Call center workers often struggle with unpredictable schedules and associated health risks, including a potential link to breast cancer for women on graveyard shifts and concerns about "acoustic shock" in call (continued on next page)

Table 1 (continued)

Author(s)	Year	Sample/Setting	Purpose/Objective	Article Type	Summary/Conclusion
					centers. The high attrition rate in the Philippine call center industry is linked to job stress, prompting a call for a tailored healthcare program. Specialized BPO Medicine is recommended to address psycho-emotional and physical health issues.
Montalbo	2016	747 BPO employees from various call centers in Metro Manila	To measure the exhaustion, cynicism, and professional efficacy that would determine an individual's level of burnout	Peer- reviewed article	High exhaustion levels in the 18–29 age group and among female respondents were observed. More than half of the participants exhibited high cynicism, with females predominantly reporting low professional efficacy. Age correlated significantly with exhaustion and cynicism, while job tenure showed a significant association with professional efficacy. The findings suggest that working in a call center may contribute to employee burnout, particularly for females and those new to their jobs.
Philippine Statistics Authority	2018	Nationwide sample survey covering 12,926 establishments with 20 or more workers	To report on the BPO industry profile in 2015 and 2016	Report	The BPO industry recorded 32,221 cases of occupational diseases, with the majority (97.0% or 31,269) occurring in call centers. Back pains were the most prevalent, constituting 23.9% of total cases, followed by occupational lung disease (16.3%), occupational asthma (13.5%), other musculoskeletal ailments (11.7%), neck shoulder pain (11.1%), and essential hypertension (1.3%).
Philippine Statistics Authority	2019	Nationwide sample survey covering 16,506 establishments, including BPOs	To report on the labor and employment statistics of Philippine establishments in 2017 and 2018	Report	The most prevalent occupational disease among workers was back pain (31.3%), particularly affecting those in administrative and support service activities, including call centers. Additionally, workers commonly experienced essential hypertension (15.5%) and neck-shoulder pains (11.4%).
Samaniego et al.	2022	Desk review of policies and documents and in-depth interviews with 100 caregivers, employees, employers, health workers, and policymakers in the Greater Manila Area	To assess the adequacy and potential impact of breastfeeding policies, as well as the perceptions of stakeholders of their effectiveness and how to address implementation barriers	Peer- reviewed article	The effectiveness of the Philippines' breastfeeding policy framework is limited by both structural and individual barriers. Structural issues include inconsistent promotion, limited access to counseling, inadequate workplace support, gaps in legal provisions, weak monitoring of the Philippine Milk Code, and short maternity leave. Individual barriers involve knowledge gaps, misconceptions, and low self-confidence among mothers due to insufficient support.
Villanueva et al.	2020	186 contact centers in the Philippines	To examine the relationship of stress with individual resilience and the presence of urban green spaces (UGS) in the environment	Peer- reviewed article	High average stress levels were found among participants in Philippine contact centers. Resilience, household income, and awareness of nearby UGS were identified as significant predictors of stress levels. The findings suggest health promotion strategies in these centers should focus on resilience-building, income security, and promoting UGS awareness within the workplace vicinity.

the BPO industry has consistently been steady at around 50% per year, with some instances reaching as high as 80%, attributed to factors such as physical and psychological strain [34].

3.2. Relevant laws and policies on occupational health and safety

Table 2 displays the Philippine legislation concerning occupational health and safety specifically applicable to the BPO industry. Among the 7 relevant articles identified, 3 were laws enacted by the Congress of the Philippines, another 3 were supporting policies published by the Department of Labor and Employment (DOLE), and 1 is a house bill currently proposed.

The 1987 Philippine Constitution promotes a fair and dynamic social order, requiring the State to provide social services, full employment,

better living standards, and improved quality of life for all citizens [35]. It also mandates the State to protect and promote the right to health and health awareness. In a bid to improve the workplace domain and protect the welfare of workers, the Philippines enacted the Occupational Safety and Health Standards (OSHS) Act, also known as RA 11058 [36]. This significant legislation aims to curb the growing prevalence of diseases and injuries within the working population. A particular focus of this law is the development and reinforcement of workplace health promotion strategies to address inadequate implementation of health programs by employers across various industries, including the BPO sector.

The Philippine Labor Code also outlines regulations on work hours, benefits, and entitlements to Health, Safety, and Social Welfare Benefits with a dedicated chapter on Occupational Health and Safety (Articles 162 to 165) [37]. It covers safety and health standards, research,

Table 2Legislation on occupational health and safety relevant to the Philippine BPO industry.

Institution	Legislation/Policy Name	Year Enacted/ Published	Scope/ Coverage	Key Provisions/Regulations
Congress of the Philippines	Presidential Decree No. 442 (also known as The Philippine Labor Code)	1974	National	 Establish standard working hours for a healthy work-life balance Enforce fair and region-specific minimum wage standards Provision of comprehensive benefits for a supportive work environment Guarantee safe workplaces with stringent safety standards Mandate robust safety measures to prevent accidents and hazards Foster continuous improvement through ongoing research initiatives
Congress of the Philippines	Constitution of the Republic of the Philippines	1986	National	Promote a just and dynamic social order Require provision of social services Ensure full employment and elevated living standards Enhance the overall quality of life for every citizen
Congress of the Philippines	Republic Act No. 11058 "Act Strengthening Compliance with Occupational Safety and Health Standards and Providing Penalties for Violations Thereof"	2017	National	Encourage development and strengthening of workplace health promotion strategies Require safety and health committees in workplaces to be established Provision of protection for whistleblowers reporting OSH violations in BPO companies Authorized the Department of Labor and Employment (DOLE) to conduct safety inspections
Department of Labor and Employment	Occupational Safety and Health Standards (As Amended, 1989)	February 2005–May 2016	National	 Included additional provisions on OSH personnel and training requirements Defined the roles of stakeholders in OSH, affirming workers' right to refuse unsafe work Mandated employers to establish on-site clinic facilities and inform workers of potential hazards
Department of Labor and Employment	Department Circular 1–08 "Policy Guidelines Governing the Occupational Safety and Health (OSH) of Workers in the Call Center Industry"	2008	National	 Offered guidance to BPO firms in crafting effective OSH programs Mandated BPO companies to furnish in-house medical professionals and resting quarters for pregnant women
Department of Labor and Employment	Voluntary Code of Good Practices in the Business Process Outsourcing- Industry Tripartite Council (BPO-ITC Industry)	2016	National	 Advocated for improved workplace safety and health among BPO companies, promoting quality employment and adherence to safety standards Defined industry-specific principles and parameters, acknowledging the shared responsibilities of both the government and BPO sector in ensuring workplace safety and health
House of Representatives	Magna Carter for IT-BPO workers (House Bill 1674)	2022 (filed); in progress	National	 Ensure the rights, welfare, and safety of the IT-BPO sector through fair labor practices Safeguard employees against job insecurity Provision of standard national entry-level wage Provision of medical benefits upon commencement of employment Creation of OHS representatives in the workplace to monitor health conditions

training programs, and the administration of safety and health laws. In spite the existence of this code, the number of workplace accidents and occupational diseases has been on the rise. An amendment to the 1978 OSHS was then issued in response to this concerning trend with the objective of enhancing its implementation and compelling employers to adhere more strictly to Occupational Safety and Health (OSH) Standards [38]. The amended policy added several provisions, such as OSH personnel complement, and safety and health training requirements. Employers were required to provide on-site clinic facilities and inform workers of all hazards. The policy also outlines the roles of stakeholders in OSH, while workers were given the right to refuse unsafe work.

Furthermore, the DOLE and the Business Process Outsourcing – Industry Tripartite Council (BPO-ITC) created a Voluntary Code of Good Practices to improve workplace safety and health while promoting decent employment and safety standards [39]. The code outlines industry-specific principles and parameters, recognizing government and BPO roles in workplace safety and health. In 2008, the agency also introduced Department Circular No. 01–08, guiding BPO firms in formulating effective OSH programs [40]. Similarly, the mandate requires BPO companies to provide an in-house doctor as well as resting quarters for pregnant women. As championed in the proposed Magna

Carter for IT-BPO workers recently filed in 2022, employees are entitled to fair labor practices, safeguarded against job insecurity, and provided a standard national entry-level wage (aligned with the family living wage) and medical benefits upon commencement of employment [41].

3.3. Current workplace health promotion for BPOs in the Philippines

Table 3 shows the summary of workplace health promotion programs and strategies in the BPO sector, together with their processes, strengths, and weaknesses. The majority of the articles reviewed (6) chronicled strategies from national and international organizations, while the rest (2) detailed activities employed by individual BPO companies during their setup and implementation, making a total of 8 articles.

The DOLE acknowledges health and safety concerns in BPO work in the Philippines. In 2011, the agency partnered with ILO on a project entitled "Promoting Company Values and Healthy Lifestyle in the BPO Industry" that aimed to foster healthy habits among young BPO professionals with strategies that targeted stress, poor diet, physical inactivity, substance use, HIV, tuberculosis, and violence [42]. Initiatives to enhance BPO employees' well-being also included a partnership

Table 3Workplace health promotion programs and practices in the Philippine BPO sector.

Actors	Year Implemented	Programs/Strategies	Aims/Processes	Strengths/Weaknesses
BPO company in Metro Manila	Undisclosed	Company-wide occupational health policies and programs	Conducts yearly health examinations for BPO employees, along with the implementation of the following policies and programs: (1) Hepatitis B Workplace Policy, (2) Workplace Policy and Program on Tuberculosis Prevention and Control, (3) Breastfeeding / Lactation Policy and Promotion Program, (4) Smoke-free Workplace Policy and Program, (5) HIV and AIDS Policy in the workplace, and (6) Drug-free Workplace Program	Strengths: - The company operates a health and safety committee - Emergency services include an on-site treatment clinic and first aid kits, with basic medicines distributed on every floor - The clinic is equipped with oxygen tanks and a nebulizer - The company has established partnerships with a private ambulance provider and a nearby private tertiary hospital, both within 5 km Weaknesses: - No published data regarding effects of these policies and programs - Occupational health services personnel only work part-time - The company lacks some DOLE-mandated policies, specifically in the areas of stress management and anti-
Contact Center Association of the Philippines	2012	BPO Olympics (formerly Call Center Olympics)	A recurring annual event dedicated to advocating health and wellness among BPO employees, with a focus on sports and fitness, featuring up to 20 different activities that expand each year	sexual harassment programs Strengths: - Cultivates sportsmanship and camaraderie among BPO employees nationwide - Highlights fitness and talent events, including cheer dance competitions - Utilizes street parade and social media blasts to publicly promote the event Weaknesses:
Department of Health and Johnson and Johnson	2017	BPO Healthcare Program	The program sought to provide comprehensive healthcare information to empower BPO agents in making healthier choices, together with various activities to ensure that every BPO agent has access to quality healthcare information	 Concentration of most events in the National Capital Region, creating travel challenges for participants from other regions Lack of studies on the effects and outcomes of the program Strengths: Aimed to tackle issues affecting over 1.3 million BPO workers in the country Envisioned providing specialized training for healthcare professionals to enhance their ability to address common health risks associated with the BPO call center environment
Department of Health and Johnson and Johnson	2018	Voice Your Care Advocacy Campaign	To foster health and wellness in the BPO sector of the Philippines, transitioning from a curative approach to a preventive one	Weaknesses: - Lack of published data regarding the evaluation and monitoring of the effects of these activities Strengths: - Conducted on-ground activities and workshops involving healthcare practitioners to educate doctors and nurses assigned to BPOs on best practices for addressing industry-specific ailments - Development of a website intended to serve as a valuable resource of information for BPO agents to consult
Department of Labor and Employment in partnership with the IT-Business Process Association of the Philippines (DOLE-IBPAP)	2014	Orientations on General Labor Standards and OSH policies among 152 BPO IBPAP member companies	Implemented awareness-raising initiatives aimed at enhancing compliance with OSH regulations, including orientations and seminars, spanning from April 2014 to December 2015	when facing health concerns Weaknesses: Lack of published documentation or reports related to this campaign Absence of published information regarding the success and usability of the created website Strengths: Formed a technical working group responsible to oversee implementation of planned activities Conducted refresher courses on general labor and occupational safety and health laws modules for IT-BPMs, targeting business leads, human resource (continued on next page)

Table 3 (continued)

Actors	Year Implemented	Programs/Strategies	Aims/Processes	Strengths/Weaknesses
				personnel, and safety officers of IBPAP member-companies - Demonstrated increased compliance rates Weaknesses: - The campaign focused on a stand-alone HIV intervention rather than a comprehensive workplace health promotion
Department of Labor and Employment with the International Labour Organization	2011	"Promoting Company Values and Healthy Lifestyle in the BPO Industry" Project	Aimed to promote healthy lifestyles among the young professionals working in BPOs	program Strengths: - Surveyed management and workers in this industry to arrive at a holistic and integrated workplace-based approach to address the issues of stress, poor diet, physical inactivity, tobacco and alcohol use, HIV and IDS, tuberculosis and violence - BPO companies have introduced better workplace design as part of their good ergonomics program - Launched awareness-raising programs on eating healthy - Organized physical fitness activities to address work stress Weaknesses: - No published data available measuring the outcomes and impacts of the
International Labour Organization	2012	Project CHANGE (Cigarette smoking; HIV/AIDS; Alcohol and Drug Abuse; Nasal, Lung Ailments and Tuberculosis; Good Nutrition and Breastfeeding; and Exercise)	A multi-organization collaboration aimed to support the safety and health promotion component of the National OSH Plan Involved human resource personnel and occupational health and safety officers	programs to worker health and wellbeing Strengths: - Effective international and local collaboration with key organizations like UNAIDS, WHO, UNDP, DOLE, and DOH - Utilization of informative educational materials, including posters, brochures, and manuals - Implementation of information dissemination strategies through seminars, lectures, and fora - Published a report of the effects of the program, emphasizing training of occupational safety particularly HIV/AIDS policymaking Weaknesses: - Lack of awareness among some employees regarding drug-free workplace programs
Open Access BPO	Undisclosed	Health and Wellness Programs under Employee Engagement and Development Campaigns	To proactively prioritize employee wellbeing, by not only providing health insurance but also organizing health and wellness events, offering employees access to health services and the chance of purchasing lifestyle products	- Limited use of social media platforms to promote health and wellness programs Strengths: - Health and wellness initiatives encompass physical examinations, blood donation drives, vaccinations, and seminars on HIV/AIDS prevention and screening - The company's Health Services team extends support for mental health concerns, offering counseling by healthcare staff to employees in need of assistance or someone to talk to Weaknesses: - Lack of published data regarding the evaluation and monitoring of the effects of these activities - No information available about the commencement date of the programs, the number of participants, and their current status

between DOLE and the IT & Business Process Association (DOLE-IBPAP) through wellness programs with health management organizations [21]. Between 2014 and 2015, the DOLE-IBPAP collaboration conducted General Labor Standards awareness sessions and OSH policy orientations for 152 BPO companies [43]. These efforts aimed to create a safer

and healthier working environment for BPO employees and increase compliance with OSH regulations.

Moreover, the DOLE and other agencies partnered with ILO in 2011–2012 to spearhead Project CHANGE, a multi-organization collaboration which aimed to strengthen workplace promotion

programs on occupational health priorities in the BPO sector [44]. This was done through dissemination of informative educational materials and utilization of seminars, lectures, and fora. The CCAP further reinforced health and wellness promotion by organizing the BPO Olympics—formerly Call Center Olympics—an annual event dedicated to BPO employees' fitness and well-being since 2012 [45].

In 2017, the DOH partnered with the international agency Johnson and Johnson to tackle health challenges faced by Filipino BPO agents, leading to the BPO Healthcare Program [46]. It aimed to improve BPO workers' well-being by providing access to essential health services through doctors, nurses, and digital platforms. By 2018, the collaborative partnership conducted the "Voice Your Care" advocacy campaigns to enhance health literacy and promote best practices — working together to develop a website designed to serve as a valuable information resource for agents, addressing industry-specific ailments [47]. One of their strategies was to train healthcare professionals with BPO-specific health modules for better diagnoses and outcomes.

On the other hand, individual BPO companies strive to comply with OSHS regulations and guidelines. In 2017, Campo et al. [48] described various strategies of a BPO company in Metro Manila, including annual health examinations, on-site treatment facilities, and prevention programs for common health issues. While the company also enforces a breastfeeding/lactation policy and maintains a drug-free workplace program, stress-management and anti-sexual harassment programs have not been implemented. In contrast, another BPO company asserts the prioritization of employee development and wellness programs to foster a happier, higher-performing workforce [49]. The company uses weekly health alerts to educate employees and offer free counseling with health experts. Programs include physical exams, blood donations, vaccinations, HIV/AIDS prevention seminars, and screenings. Sleeping quarters are reported to be available within the office or a designated rest area.

Notwithstanding, there is a scarcity of published data on the effects, outcomes, and impacts of all these strategies on employee wellbeing. Some companies still lack DOLE-mandated policies, occupational health services personnel only work part-time, and there is limited awareness of these programs and policies among employees. The absence of documentation in certain institutions and the diverse compliance levels among BPO companies have been previously delineated by the PSA in 2015 [12].

4. Discussion

This integrative review provides insights into workplace health and safety in the BPO sector in the Philippines. Despite significant growth and success, workers face various health challenges, including computer-related disorders, vocal issues, night shifts, and stress. High rates of occupational health problems like back pain, headaches, and insomnia were reported. Safety concerns, especially for women in call centers, were evident. While relevant laws and policies exist, implementation needs strengthening and stronger collaboration between BPO companies, government agencies, and stakeholders is essential for a more effective approach. The high turnover rate of BPO workers is a cause for concern and underscores the need for comprehensive workplace programs and strategies integrated with principles of health promotion.

Workplace health promotion, rooted in the 1986 Ottawa Charter for Health Promotion, aims to improve health and well-being by involving employers, employees, and society [50,51]. This approach seeks to empower individuals, groups, and organizations to take control of their health. It also aligns with the vision of the 2030 Agenda for Sustainable Development, which strives to guarantee well-being for all and leave no one behind in attaining good health and sustainable development [52].

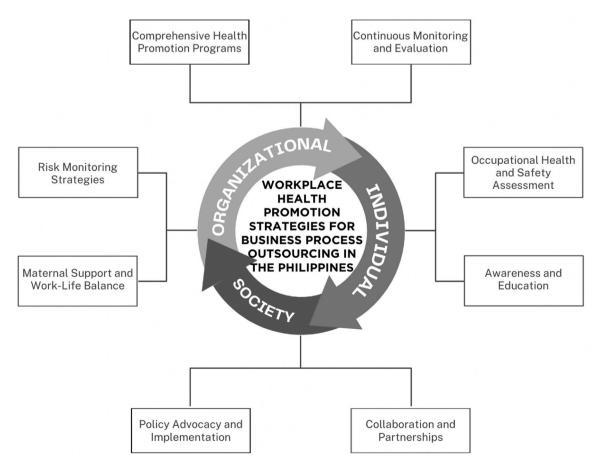


Fig. 2. Workplace health promotion conceptual framework for Philippine BPOs.

In light of this, Fig. 2 presents the conceptual framework to guide the approach to promoting workplace health and overall well-being among BPOs in the Philippines. It illustrates eight integral strategies categorized into three major factors influencing workplace health: organizational, individual, and societal factors.

4.1. Organizational factors

Based on the results, a substantial organizational factor that affects workplace health is compliance with developing and implementing comprehensive health promotion programs [48,53]. While some BPOs seem to have HIV/AIDS, TB, and smoking policies in place, there are others that require full commitment to their workplace health efforts. Employers should prioritize the execution of all DOLE-mandated policies and shift their emphasis towards integrated campaigns rather than individual interventions [38,43]. Several studies argue that workplace health promotion programs are more likely to be sustainable when employers actively support, participate, and get involved [49,54]. Employers can enhance sustainability by collecting data on employee satisfaction, health outcomes, and productivity to assess the overall impact of the initiatives. Previous work also suggests that mindfulness training should be required for those in supervisory positions to reduce emotional exhaustion as well [27]. These programs need to be regularly monitored and evaluated to ensure their effectiveness and acceptability. Unfortunately, there is limited evidence on the effectiveness of workplace programs employed in the BPO sector.

Another important strategy that BPO companies can do is to continuously monitor risks in the workplace. This entails identifying hazards and implementing methods to address common health concerns, including improper workstation setup that may lead to issues such as back pain, neck pain, and headaches, vocal and auditory issues related to calls, and physical strain resulting from repetitive tasks [12, 14,16]. This can be done by crafting protocols and guidelines that minimize the impact of job-induced stress. Knowing the impact of ergonomic factors on talent retention [13] and the connection between stress levels and the built environment [32], it is imperative to implement risk monitoring activities to safeguard employee well-being and enhance job satisfaction. Employee well-being monitoring initiatives require timely and comprehensive evaluation to identify and improve activities that have the desired impact as well.

Maternal support and work-life balance are further vital for BPO companies to address, particularly considering the challenges faced by working women due to societal expectations and responsibilities [30]. Employers should uphold adherence to breastfeeding policies and provide supportive measures like designated lactation rooms and flexible work arrangements [25,28,30]. The Filipino workplace culture, typically viewed as familial, may turn toxic if unhealthy attitudes prevail, leading to harm or conflict [8,55]. Consequently, adopting culturally appropriate strategies for the avoidance of burnout and stress, such as offering programs like wellness retreats, team-building events, and recreational activities, is crucial to encourage employee well-being [21].

Furthermore, introducing family-friendly policies that recognize BPO workers' family obligations can contribute to a healthier workplace environment. A positive employer-employee relationship, characterized by mutual respect, faith, and trust, is also necessary for reducing stress levels and increasing morale in the workplace [56]. BPO workers with higher job satisfaction and good relations with their superiors tend to perform better [49], leading to improved working conditions and efficient organizational processes that positively impact workplace health promotion programs [50]. The BPO Olympics, for example, is a great way to promote physical activity and camaraderie in the workplace [45]. However, smaller organizations may require additional support to strengthen such initiatives, given that barriers to their participation are often driven by managers' concerns about costs [57].

4.2. Individual factors

As for individual factors, evidence points to the workplace as a social determinant of health [58]. Routine occupational health and safety assessments, including annual health exams, are essential to monitor and address individual health concerns [36]. In accordance with OSH standards, each BPO should designate an occupational health and safety officer to lead workplace health promotion activites [38,40]. Thorough and more stringent oversight from DOLE regarding the implementation of these measures can also ensure that workplace health promotion strategies in the BPO sector abide with labor laws and regulations.

Besides, raising awareness among BPO employees about workplace health and safety, along with the available health programs within the company, can promote health-seeking behaviors that empower the prioritization of well-being using the knowledge and resources at their Encouraging active disposal [53]. participation culturally-appropriate health information is essential, considering that knowledge gaps, misconceptions, and low self-confidence have been identified as individual barriers to engaging in health promotion activities [28]. BPO companies can support this by implementing education and training programs to enhance employees' health literacy and understanding of preventive measures [47]. Utilizing social media platforms may also be leveraged to provide regular updates and information on health and wellness topics to employees.

4.3. Societal factors

Lastly, it is indispensable to consider the upstream factors that influence workplace health, such as government policies and regulations and industry standards. Notably, continued collaboration with international and local partners is key to engage experts in the field, share best practices, and tailor global workplace health promotion strategies to the specific needs and challenges of the country [21,39,59]. In addition, the advocacy for policies that safeguard and implement the rights of IT-BPO workers must be maintained for the success of workplace health promotion initiatives. For example, engagement with unions and labor organizations can help ensure that the needs and concerns of the workers are taken into account when designing and implementing workplace health promotion strategies [59,60]. However, BPO unions in the country are still scarce, possibly owing to the initial hesitation towards government intervention, labeled as "forced unionization," a prevailing belief that such intervention might hinder sector growth and competitiveness, potentially deterring foreign investors [21]. However, the constitutional commitment to the right to decent work persists and BPO union advocacy continues to be a focal point of debate among political figures in the country [35,41].

Some scholars argue that a culture's power distance may also contribute to this deficiency, whereby societies in high power distance countries like the Philippines have less inclination to challenge or question authority [8]. Employees may try to adapt forcefully and submit to work circumstances due to the perception that complaining is seen as unprofessional [61]. This presents problems in implementing and maintaining structured health promotion policies and programs, particularly when issues remain unspoken, informally addressed, and decisions are emotion-driven. Workers' rights struggles have since faced obstacles, with strikes used to declare the inequitable treatment of BPO workers [62,63].

Hence, it becomes imperative to advocate for the effective implementation of labor unions to negotiate fair labor and health policies related to occupational health and safety within the BPO industry. For instance, encouraging collaboration between BPO companies, government regulatory agencies, and healthcare providers is necessary in developing and promoting effective workplace well-being initiatives that better address the unique challenges faced by BPO employees. Partnering with health management organizations and relevant stakeholders has been shown to enhance the reach and impact of health

promotion programs [60].

4.4. Moving forward

The results of this study provides significant lessons that may be applicable to other countries as well, especially those with a growing BPO industry like the Philippines. According to Sugumar et al. [64] the challenges of physical and psychological stress, sleep disturbances, and occupational diseases are not exclusive to the country alone. Many others hosting BPO operations share these commonalities, making this research applicable on a broader scale. However, the transferability of the findings still depends on the similarities in the organizational structures, cultural contexts, and regulatory domains of the target countries [65]. Localized studies and collaboration between stakeholders in each specific country are therefore required to tailor the recommendations to the specific challenges and dynamics of the BPO industry in that region.

It is crucial to acknowledge the temporal context of this integrative review, which includes papers published between 2020 and 2022. This period coincides with the height of the COVID-19 pandemic, a global crisis that undoubtedly influenced workplace dynamics, and health and safety protocols worldwide. In the Philippines, the pandemic has since changed work structures, normalized remote work set-up, increased reliance on digital technologies with the advancements of artificial intelligence and automation, and heightened awareness of mental health challenges [66,67]. The initial strict quarantines and lockdowns brought a temporary halt to BPO-IT operations [68]. However, the industry quickly transitioned to work-from-home strategies, even capitalizing on the crisis, when other major BPO nations like India struggled to control their COVID-19 cases [68]. Countries like the United States then heavily relied on Filipino overseas customer support workers, realizing the interdependence of the global community. For example, Americans faced longer wait times for calls as BPO agents juggled pandemic-related disruptions, such as managing household responsibilities while working at home [69].

These changes have direct impacts for the well-being of BPO workers, who often operate in dynamic and high-pressure environments [70]. The intersection of pre-existing stressors with the new challenges posed by the pandemic necessitates a nuanced examination of how workplace health promotion strategies may need to adapt as the need arises. While the present review primarily focuses on pre-pandemic conditions, the principles and models of health promotion presented remain fundamental and flexible. The evolving nature of health and safety guidance during the pandemic underscores the need for more research. Employers in the BPO industry may consider future-proofing their operations by incorporating pandemic-specific perspectives into their workplace health programs.

As the BPO industry navigates the post-pandemic era, this research will continue to provide a foundational framework. The core principles of employee health prioritization, collaboration among stakeholders, and development of laws and policies as well as comprehensive health programs are timeless. However, continual adaptation and refinement of workplace health promotion strategies are essential to address emerging challenges and ensure the well-being of BPO workers in the emerging global landscape.

Subsequently, this review draws attention to the remaining gaps in the evidence. From the articles synthesized, multiple organizations lack published data on the effects and outcomes of their health and wellness initiatives. The part-time occupational health services personnel in some organizations may also result in coverage gaps during work shifts with the highest number of employees. There is incomplete compliance with DOLE-mandated policies, specifically in the areas of stress management and anti-sexual harassment programs. Several initiatives lack published data regarding the evaluation and monitoring of program effects. Some campaigns primarily focus on stand-alone interventions rather than comprehensive workplace health promotion programs. Addressing these

gaps can result in more informed decision-making, improved health service accessibility, robust evaluation practices, holistic health promotion programs, and increased awareness and transparency. This, in turn, contributes to a healthier, more engaged, and productive workforce.

According to the World Health Organization's Healthy Workplaces Model, a healthy workforce translates to increased productivity, leading to fewer occupational diseases, reduced expenses, lower stress levels, higher job satisfaction, and an improved quality of life [71]. Instilling healthy lifestyles and health-promoting habits is necessary for sustained behavior change, inspiring BPO workers to approach their work with enthusiasm daily. The contextualized framework discussed in this paper espouses the DOH's Health Promotion Framework Strategy 2030, which advocates for a settings-based approach in planning, implementing, and evaluating health programs for local work aspects in the country [72]. Rightfully, the strategies described also align with the 2030 SDG targets of inclusive and sustainable economic growth, fostering full, productive, and decent employment opportunities for all [52,59].

4.5. Limitations

This review has several limitations. First, there could be a bias in compliance reporting, where certain companies might either underreport or overstate their compliance levels due to various factors. Therefore, results of this review should still be interpreted with caution. Second, the conceptual framework developed serves as a valuable starting point, but its effectiveness and applicability require testing through rigorous research. There is a need to conduct empirical studies to validate the proposed conceptual framework, aiming to refine and enhance its relevance over time.

5. Conclusion

The BPO industry's undeniable contributions to the Philippine economy are conspicuous. This review has explored workplace health promotion in this sector and has examined evidence concerning the current workplace health challenges, relevant laws and policies, and existing wellness programs in the BPO industry that significantly influence workplace health outcomes. Although some progress has been made over the years, several gaps still persist. The resulting conceptual framework developed contextualizes workplace health principles within the Filipino BPO setting, grounded on the principles of health promotion. Findings can inform future research in designing targeted workplace health promotion programs for improved employee and organizational performance. Achieving worker well-being necessitates comprehensive and adaptable health programs and partnerships spanning work and nonwork domains, requiring collaborative efforts from employers, employees, and the Filipino society. Recognizing the workplace as a social determinant of health emphasizes the significance of prioritizing employee well-being, ultimately shaping effective programs that address upstream factors impacting overall organizational effectiveness. Establishing a strong culture of employee well-being represents a decisive occupational health and safety initiative worthy of urgent public health action.

Statement of authorship

All authors participated in the conceptualization, literature review, and drafting of the manuscript. All authors reviewed and approved the final version submitted.

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Declaration of competing interest

The authors declare no conflicts of interest.

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