

Research Article

Dimensions of Achieving Security and Occupational Safety for Social Workers in the Health Sector at Cairo University, Egypt

Fawzia Abdeldayem Abdelfattah Youssef

Assistant Professor, Department of Social Sciences, College of Arts, University of Ha'il, Ha'il, Kingdom of Saudi Arabia & Assistant Professor, Department of Working with communities and organizations Department, Faculty of Social Work, Helwan University, Egypt
Email: f.youssif@uoh.edu.sa

Submitted: 1 July 2022 | In revised form: 7 September 2023 | Accepted: 12 November 2023 |
Published: 27 December 2023

Abstract: This research investigated the requisite dimensions for ensuring the professional security and safety of social workers within health sector organizations. Through a sample comprising 41 participants, the study collected data pertaining to demographic characteristics and solicited perspectives on personal, professional, physiological, and organizational factors influencing security and safety. The primary findings underscore the significance of readiness to work, alignment with organizational needs, and physical health and safety as crucial personal dimensions. Professionally, ongoing training and the cultivation of professional relationships emerge as critical factors. The foremost physiological considerations encompass proper workplace illumination, technology utilization, and equipment maintenance. On an organizational level, administrative awareness of social work roles and the organizational culture regarding safety are deemed paramount. In sum, the results accentuate disparities in alignment between administration and social workers with regard to safety priorities. Despite positive indications in leadership intentions and preparedness plans, issues related to workload management contribute to exhaustion among social workers. Dissatisfaction with existing security procedures is also evident. Recommendations put forth include the enhancement of communication to augment comprehension of social workers' roles, improvement in workload distribution, allocation of budgets for safety gear and training, and the cultivation of an organizational culture cognizant of safety. Furthermore, additional proposals advocate for specialized education, incentives, job rotation, assessments, and legislative measures to elevate support for the essential yet high-risk roles of social workers in health crisis management.

Keywords: Social Workers, Health Sector, Professional Security, Safety Dimensions, Recommendations.

1. Introduction

The escalating intricacies of healthcare environments and the expanding responsibilities undertaken by social workers within these contexts have given rise to apprehensions concerning their occupational safety and security. This heightened concern is manifested in contemporary academic literature, which delves into diverse facets of workplace safety, with a specific focus on sectors associated with health [1, 2]. The inherently dynamic and frequently unpredictable characteristics inherent to healthcare settings, combined with the distinctive challenges encountered by social workers, underscore the imperative for a thorough comprehension of the multifaceted dimensions of occupational safety and security.

Contemporary research has brought attention to the nuanced character of occupational hazards confronted by individuals, encompassing social workers, employed in the health sector. These hazards span a spectrum from potential exposure to physical and psychological risks to grappling with the complexities posed by cultural and linguistic barriers within progressively diverse work environments [2, 3]. The susceptibility of these professionals is compounded by elements such as insufficient implementation of health and safety protocols, absence of comprehensive social

safeguards, and the pervasiveness of gender-based violence in the occupational milieu [4].

The imperative for bespoke safety protocols and policies is accentuated by the dynamic characteristics inherent in these risks. As exemplified by the prevalent use of potentially hazardous chemicals in specific sectors, as evidenced in Thai agriculture, inquiries arise regarding the sufficiency of extant safety regulations and their relevance to the health sector [1]. This circumstance necessitates a reassessment of prevailing safety benchmarks and the formulation of strategies tailored to the sector, aimed at guaranteeing the welfare of social workers.

Given the challenges, the primary objective of this paper is to investigate the diverse dimensions associated with attaining security and occupational safety for social workers within the health sector. Through an examination of contemporary research and emerging trends, the paper aspires to enrich the ongoing discourse surrounding this pivotal matter, proffering insights and recommendations aimed at augmenting the safety and security measures for social workers operating in healthcare settings [5].

This investigation is of paramount significance owing to the elevated susceptibility to injuries and illnesses encountered by

individuals within the healthcare and social services sector. Recent data underscore the heightened risk faced by workers in these domains concerning work-related injuries and illnesses, accentuating the imperative for comprehensive measures to safeguard their safety and overall well-being [6]. Moreover, this inquiry is timely within the framework of the COVID-19 pandemic, as it becomes imperative to evaluate the occupational safety and health risks confronted by social workers and healthcare professionals. This assessment is crucial not only to mitigate the dissemination of infection but also to guarantee their well-being. Additionally, the study assumes significance in addressing the occupational safety and health concerns pertinent to informal sector workers, as existing research has predominantly concentrated on appraising health risks and formulating care protocols for this specific demographic [7]. The study, "Dimensions of Achieving Security and Occupational Safety for Social Workers in the Health Sector," is crucial for addressing the substantial burden of occupational injuries and illnesses in healthcare and social services, especially amidst the COVID-19 pandemic. It also holds relevance for informal sector workers, specific industries like logging, and diverse countries such as Spain, emphasizing the universal importance of ensuring occupational safety and health across various work settings [8].

2. Statment the problem

The multifaceted matter of occupational health and safety concerning healthcare workers, inclusive of social workers, constitutes an imperative concern warranting immediate attention, particularly within the healthcare sector. Recent scholarly investigations elucidating diverse facets of occupational health and safety underscore the intricate nature inherent in this subject.

Mukhtad, et al. [9] brought to attention is a disconcerting absence of awareness pertaining to occupational health and safety within healthcare workers at a paediatric hospital in Benghazi City. This revelation signifies a pivotal deficit in knowledge and readiness, potentially heightening susceptibility to workplace hazards. The study advocates for the imperative implementation of specialized training and policies to augment awareness and promote safety practices.

Kumari and Kaur [10] examined was the involvement of social work professionals in advocating for occupational health and safety within the healthcare workforce. The outcomes elucidate the pivotal role social workers play in addressing the diverse facets encompassing physical, biological, and social dimensions of worker well-being. This underscores the imperative for a collaborative and interdisciplinary approach to effectively address occupational health concerns.

Gungordu, et al. [11] furnished insights into the perspectives, knowledge, and attitudes of healthcare workers specializing in anaesthesia regarding occupational health and safety. The research illuminates the distinct challenges and risks encountered by individuals operating within high-stress medical contexts, particularly in anaesthesia departments. This underscores the significance of devising customized strategies to effectively attend to the distinctive requirements of varied healthcare sectors.

Extending from these observations, it is apparent that Cairo University confronts a intricate challenge in managing the occupational health and safety issues affecting its social workers and healthcare professionals [12]. The university must deliberate on multiple dimensions, encompassing the augmentation of awareness and knowledge, the cultivation of interdisciplinary collaboration, and the formulation of safety strategies tailored to the specific sector. Additionally, there exists a necessity to examine the integration of these strategies into the prevailing healthcare system at Cairo University, ensuring a comprehensive approach to the safety and well-being of workers [13].

The broadened inquiry now poses the question: In what manner can Cairo University formulate and execute a comprehensive, multidimensional strategy that proficiently tackles the occupational health and safety issues confronting social

workers and healthcare professionals, thereby safeguarding their well-being, productivity, and resilience amidst the array of challenges encountered within the healthcare sector?

3. Study Questions

1. To what extent can social workers in the medical domain anticipate professional-level protection and safety measures?
2. What individual attributes are essential for social workers in the healthcare domain to achieve professional security and safety?
3. What professional elements are requisite for social workers in the healthcare sector to achieve occupational security and safety?
4. What physiological criteria must social workers in the healthcare sector satisfy to ensure their professional security and safety?
5. What organizational factors are essential to cultivate a sense of professional security and safety among social workers in the healthcare sector?

4. Methodology

4.1 Study Approach

The methodology employed in this study adopted a descriptive approach, centring on the systematic collection and analysis of data to delineate the requisite factors and conditions essential for social workers within the health sector at Cairo University Hospitals to attain safety within their work environments. This descriptive method encompassed a comprehensive scrutiny of the existing circumstances encountered by these health social workers, with the aim of furnishing evidence-based guidelines for the mitigation of risks.

4.2 Data Collection

The data collection employed the social survey technique, utilizing a purposive sample comprising social workers from Cairo University Hospitals. The selection criteria encompassed a minimum of 3 years of hospital experience, active participation in overseeing or implementing workplace safety programs, and completion of at least one pertinent training course. This approach facilitated the identification of areas requiring enhancement to bolster occupational safety .

4.3 Study Population

The population exclusively comprised social workers functioning within the healthcare sector at Cairo University Hospitals, encompassing individuals fulfilling diverse roles such as care coordination, counselling, discharge planning, and other supportive services for patients. The sample, drawn from the Social Service Department of Cairo University Hospitals, constituted the human domain of this study, comprising a total of 41 participants.

4.4 Study Tools

The principal instrument for collecting data was a customized questionnaire designed for social workers operating in healthcare settings within the hospitals. It specifically aimed to elicit metrics and insights pertaining to four principal dimensions associated with the realization of workplace safety and security: personal factors, professional responsibilities, physiological considerations, and

organizational/environmental factors.

4.5 Study Scope

1. **Objective Scope:** To discern and analyse pivotal dimensions pertinent to the attainment of security and occupational safety for social workers within the health sector at Cairo University.
2. **Time Scope:** Restricted to scrutinizing the existing condition as of the academic year 2023.
3. **Spatial Scope:** Concentrated exclusively on social workers functioning within the health facilities affiliated with Cairo University. It does not encompass individuals employed in other organizations or disciplines.
4. **Human Scope:** Precisely, the study targets social workers within the health sector at Cairo University in Egypt. The sample will exclusively comprise these social workers, delineating the population of interest, without inclusion of other employee types or professionals within the university.

4.6 Study Significance

1. This investigation addresses a pivotal lacuna in research by scrutinizing the distinctive security risks and precarious conditions confronted by social workers within the health settings of Cairo University.
2. The results will provide insights for the formulation of focused safety policies and training programs aimed at mitigating hazards at Cairo University, thereby directly enhancing the occupational safety of social workers.
3. The acquired insights may catalyse broader safety initiatives for social workers in Egypt, addressing a sector that is in pressing need of substantial support.
4. The study has the potential to assist social workers in analogous developing-world contexts by delineating risk factors and elucidating protective strategies.
5. With a focus on occupational hazards in healthcare, the study aims to enhance job satisfaction and professional commitment among social workers, emphasizing the significance of safety in their roles and its broader impact on organizational quality and the acknowledgment of their rights.

4.7 key Terms

1. **Occupational Safety and Health (OSH):** This pertains to the policies and managerial choices directed towards safeguarding the safety, health, and well-being of individuals involved in employment or labour. The objective of OSH is to cultivate a work environment that is both secure and conducive to health [14]. OSH additionally serves to safeguard customers, family members, colleagues, employers, and various other individuals who could be influenced by the conditions prevailing in the workplace environment.
2. **Workers' Compensation:** This constitutes a type of insurance that furnishes wage replacement and medical benefits to employees sustaining injuries during the course of their employment. Its objective is to furnish financial and medical assurance for injured workers while concurrently offering incentives for employers to prioritize prevention measures [15].
3. **Vulnerability in Health Professionals:** This terminology encompasses a spectrum of risks and challenges encountered by healthcare professionals, inclusive of social workers, within their work settings. Such challenges

encompass excessive workloads, manifestations of depression, stress, and other factors contributing to physical and emotional strain, as well as resultant health issues [16].

4. **Mental Disability Care in Egypt:** This pertains to the historical and contemporary methodologies and systems implemented for the provision of care to individuals with mental disabilities in Egypt. It encompasses the evolutionary trajectory of care and support systems, spanning from ancient periods to contemporary practices [17].

4.8 The Theoretical Framework

The theoretical foundation for this study can be formulated by integrating various key theories and concepts derived from contemporary scholarly literature:

1. **Occupational Accidents and Worker Safety:** Ranganathan and Sujatha [18] highlighting the vital role of OSMs in mitigating occupational accidents and bolstering worker safety, especially in high-risk industries, this framework is pertinent for comprehending the risks encountered by health sector social workers and underscores the imperative for efficacious safety measures.
2. **One Health Approach:** Gargano, et al. [19] examine the One Health approach, which amalgamates perspectives from public, animal, and environmental health. This approach holds significance in comprehending the interrelated aspects of health and safety within the health sector, encompassing the welfare of social workers.
3. **Job Insecurity and Health:** De Witte [20] investigates the impact of job insecurity on health and well-being, a concept pertinent for elucidating the potential influence of perceived job insecurity on the occupational safety and holistic health of social workers.

5. Literature Review

Bahuguna [21] examined the efficacy of Indian labour laws in safeguarding workers' rights, with a specific focus on minimum wages, working hours, social security, and occupational safety. The study underscored the deficient enforcement of these laws, particularly within the informal sector, resulting in the exploitation of workers. The research advocates for enhanced legal safeguards for all workers, encompassing those in the informal sector.

Jeebhay, et al. [22] presented an account of South Africa's COVID-19 strategy within workplaces, accentuating the formulation of occupational health and safety policies, risk management, and health surveillance. The study illustrated a cooperative approach involving governmental entities, labour representatives, and community collaborators.

Radionova, et al. [23] performed a scoping review encompassing 15 publications that explored the ramifications of symptom checkers and AI diagnostic tools on physicians. Predominant themes centred on the accuracy of diagnoses, the significance of human factors, interactions with patients, physician workload, and the anticipated future roles of these technologies. Notably, there is a scarcity of empirical evidence elucidating the tangible effects of these technologies on the professional practices of physicians. Recommendations put forth advocate for additional investigations into the lived experiences of physicians employing such tools, encompassing their influences on daily work routines and occupational health outcomes, such as stress.

Hayden, et al. [24] undertook a literature review examining technological advancements in the agricultural sector, with a specific emphasis on robotics and automation. The research evaluated the implications of these technologies on occupational safety, discerning emerging risks and benefits pertinent to agricultural workers.

Saputri and Absori [25] investigated the legal safeguards pertaining to occupational safety and health for pharmacists employed in clinics in Semarang, Indonesia. The findings indicated a misalignment between the implementation of safety and health norms and existing laws and regulations. Many clinics were observed to lack standardized personal protective equipment, as well as guaranteed rights ensuring health and safety for pharmacists.

Felknor, et al. [26] summarized insights from an expert workshop on the anticipated impact of changing work dynamics on OSH research. Key findings emphasize the need for more comprehensive, transdisciplinary research addressing diverse risks, innovative methodologies, heightened stakeholder involvement, and further exploration of areas such as effects on vulnerable workers and alternative work organization frameworks enhancing worker well-being.

Lv, et al. [27] conducted a survey of healthcare workers in China both prior to and during the COVID-19 outbreak. The prevalence of anxiety, depression, and insomnia exhibited a notable escalation from pre-outbreak to during the outbreak across varying severity levels, ranging from mild to severe. Specifically, during the outbreak, approximately 25% of the participants reported experiencing at least mild levels of anxiety, insomnia, depression.

Schulte, et al. [28] executed one-hour video support sessions for healthcare workers reassigned to the frontline during the COVID-19 pandemic. These sessions facilitated the articulation of the pandemic's impact, encouraged reflection on personal strengths, and fostered collaborative brainstorming of coping strategies. The primary objective of these sessions was to offer collegial support and enhance individual resilience.

Muller, et al. [29] conducted a systematic review of 59 studies involving 54,707 healthcare workers, revealing varying prevalence rates for general psychological distress (7-97%), anxiety (9-90%), depression (5-51%), and sleeping problems (34-65%). Mental health interventions in seven studies primarily addressed individual symptoms. Healthcare workers exhibited low interest in professional help but leaned on social support. Key risk factors included exposure to COVID-19 patients and infection-related concerns, while social support emerged as a protective factor.

Lindholm, et al. [30] performed a systematic review of 31 studies addressing future OSH risks and challenges. Key risks encompassed heat stress, rising psychosocial load, human-machine interactions, biological/chemical exposures, and injuries from emerging technologies. Recommendations advocate updating risk management processes, exploring long-term and mental health impacts, considering effects over working lifetimes, and involving multiple stakeholders in addressing the diverse array of anticipated risks.

Schulte, et al. [31] posit that an expanded emphasis is imperative in the realm of OSH to adeptly address forthcoming transformations in work. While examining the WHO model for action, European well-being initiatives, and the Total Worker Health concept as foundational frameworks, the argument advocates for a paradigmatic enlargement to acknowledge worker and workforce well-being as pivotal outcomes of OSH. This necessitates the adoption of a more holistic, systems-thinking approach, necessitating alterations in

OSH research and training, the formulation of forward-looking organizational policies, and the proactive promotion of OSH as an enticing career pursuit.

Ahmed, et al. [32] conducted a systematic review of 15 studies on the role of social distancing in reducing influenza transmission in non-healthcare workplaces. The main finding is that targeted measures like workplace closure, remote work, and contact restrictions effectively control epidemic and pandemic influenza. The key recommendation is for further empirical studies assessing the health and economic impacts of workplace interventions involving social distancing.

Haby, et al. [33] conducted an overview of 14 systematic reviews on interventions promoting sustainable jobs with positive effects on workers' health. Key findings highlight the efficacy of enforcing OHS regulations, implementing flexible working arrangements, specific organizational changes in shift work, and employee participation schemes. Conversely, interventions with adverse health impacts encompassed downsizing, temporary work arrangements, outsourcing, and certain task restructuring. The study emphasizes the importance of careful implementation of effective interventions, rigorous evaluation of their effects, and the discontinuation of detrimental interventions, maintaining a balance between business requirements and worker health and well-being.

Multiple scholarly works advocate for a broader emphasis on the health and safety of workers in anticipation of forthcoming changes in work [31, 33]. A requisite exists for increased empirical research into the effects of diverse interventions and technologies on worker health outcomes [23, 32]. An encompassing, systems-thinking approach is essential, contemplating both work and non-work factors that exert influence on health throughout the lifespan [26, 31].

Concerning Points of Divergence: Distinctive risk factors investigated vary among studies, encompassing considerations such as pandemic health risks [27] to new technologies in agriculture [24] and healthcare automation [23]. Contexts range from high-income countries examining future challenges [30] to emerging economies evaluating current protection gaps [25]. Interventions reviewed span occupational health regulations [33], workplace distancing policies [32], and individual resilience strategies [28].

Concerning the Research Gap: Limited evidence exists regarding the impacts of diverse risk factors and interventions on worker health and safety outcomes. Few studies adopt a comprehensive, systems-level viewpoint integrating both organizational and individual factors that influence occupational health. Moreover, research is deficient in supporting vulnerable worker groups facing multiple socioeconomic barriers to occupational health, well-being, and security [34].

Concerning the Unaddressed Key Points: There is an exigency to investigate occupational security and safety specific to healthcare social workers, who grapple with distinct personal and professional pressures. Devising comprehensive organizational- and individual-level strategies tailored to uphold the dignity, integrity, and interests of healthcare social workers warrants further exploration. Additionally, studies have yet to adequately explore the obstacles and facilitators in establishing support structures for social workers within the healthcare practice and culture.

Regarding the Author's Potential Contribution: This study aims to foster a profound comprehension of healthcare social workers' experiences and requisites concerning occupational security and safety. It aspires to take a holistic stance, encompassing multiple dimensions—personal, professional, physiological, and organizational. By identifying gaps and proposing a targeted plan for this group, integrating

organizational initiatives and individual capacity building, the study intends to influence organizational policies and programs, fostering enhanced workplace dignity, integrity, interests, and professionalism among healthcare social workers.

6. The Results

The presentation will delineate the outcomes in the subsequent manner: "Validation and Reliability Assessment at Helwan University's Faculty of Social Work."

In the assessment of validation and reliability for a questionnaire at Helwan University's Faculty of Social Work, a thorough process was executed. Initially, the questionnaire underwent scrutiny through an expert review by university faculty, focusing on the content's relevance and clarity, resulting in crucial modifications. These adjustments included refining the number of statements and their allocation based on feedback, with a particular emphasis on those garnering less than 80% agreement.

The questionnaire employed a structured response format, utilizing a three-way hierarchy ("Yes, to some extent, no") with corresponding weights, facilitating a nuanced capture of responses. For reliability testing, the questionnaire was administered to social workers and subsequently re-administered after a fifteen-day interval. The correlation coefficient between the two applications indicated a high level of consistency over time.

The test-retest method demonstrated impressive reliability and validity coefficients of 0.89 and 0.94, surpassing the generally accepted threshold of 0.7 in social science research. This attests to the questionnaire's efficacy in accurately measuring the intended variables.

In summary, the undertaken steps in revising and validating the questionnaire, including expert review, feedback-based modifications, a clear response format, and rigorous reliability testing, collectively demonstrate a robust approach to questionnaire design within the realm of social science research. The notably high reliability and validity coefficients provide additional affirmation of the efficacy of these employed methodologies.

6.1 The Study Sample's Characteristics:

The field study provided detailed insights into the demographic and professional characteristics of the sample. Females constituted the majority (75.60%), while males comprised 24.40%. The age distribution indicated the highest representation in the 35 to under 40 years group (29.2%), followed by those aged 45 and older (26.8%), and the 40 to under 45 years group (21.9%). Smaller proportions were observed in the 30 to under 35 years and 25 to under 30 years groups at 17% and 4.8%, respectively.

Marital status revealed that the majority were married (70.73%), followed by divorced individuals (14.63%), and single or widowed participants (7.31%). In terms of academic qualifications, the majority held a Bachelor's degree (70.73%), while postgraduate diploma holders constituted 12.19%, and those with a master's degree accounted for 7.31%. A smaller fraction had either an intermediate certificate or a doctorate, each representing 4.87%.

Experience in the health field varied, with the largest group (36.58%) having 10 to less than 15 years of experience. Those with 5 to less than 10 years of experience constituted 31.70%, followed by individuals with less than 5 years (17.07%), and those with 15 years or more (14.63%) as

shown in Table 1.

Table 1: The Characteristics of the Study Sample, Consisting of 41 Participants (n=41).

No.	Variable	Repetition	Percentage (%)	
1	Type	Male	10	24.40
		Female	31	75.60
2	Age	20-30 Years	2	4.80
		31-40 Years	19	46.20
		41-50 Years	9	21.90
		50 Years and more	11	26.80
		Single	3	7.31
3	Marital status	Marrid	29	70.73
		Widower	3	7.31
		Separated	6	14.64
		Diplom/Bachelor/License	31	75.60
4	Qualification	Diploma	31	12.19
		Master	5	7.31
		PhD	3	4.87
		Less than 5 Years	2	17.07
5	Years of experinces	5-10 Years	7	31.70
		11-15 Years	13	36.58
		16 years and more	15	14.63

6.2 The Dimensions Necessary for Professional Security and Safety among Social Workers in the Health Sector

The findings in Table 2, emphasizing the crucial dimensions for attaining professional security and safety for social workers in the health sector, unveil noteworthy insights. The top three identified personal dimensions are: the imperative of readiness and willingness to work, essential for success in health organizations, scoring an average of 2.95 with a standard deviation of 0.22; the significance of fulfilling basic organizational needs for optimal work performance, averaging a score of 2.88 with a standard deviation of 0.23; and the requirement for excellent physical health and safety, also scoring an average of 2.88 but with a standard deviation of 0.40. Collectively, these personal dimensions attain an average score of 2.51, signifying a high level of consensus among respondents.

Furthermore, professional dimensions carry equal significance, with the establishment of robust professional relationships with academic and scientific entities in the health sector scoring 2.85, and the necessity for continuous professional and technical training scoring 2.66. These outcomes underscore the critical importance of both personal readiness and professional advancement in ensuring the safety and efficacy of social workers in health environments.

6.3 Key Dimensions of Professional Security and Safety for Social Workers in Health Organizations: Insights from a Field Study

Table 3 delineates the requisite professional dimensions crucial for safeguarding the occupational security and safety of social workers within health organizations. The conducted field study pinpointed three fundamental personal dimensions imperative for ensuring occupational security and safety:

1. Preparedness and eagerness for work, securing the top position with an average score of 2.95 and a standard deviation of 0.22.
2. Meeting the foundational requirements of the organization for effective work performance, positioned second, garnering an average score of 2.88 and a standard deviation of 0.23.
3. Outstanding physical health and safety, securing the third position, presenting an average of 2.88 with a standard deviation of 0.40. This dimension exhibited an elevated overall level, registering an arithmetic mean of 2.51 and a standard deviation of 0.31.

In summary, the study highlights crucial professional dimensions for the security and safety of social workers in

health organizations, as indicated in Table 3. It emphasizes three key personal dimensions: readiness to work, meeting organizational requirements, and maintaining excellent physical health and safety.

The prioritization of these dimensions underscores their

significance. Organizations should focus on nurturing these key elements to enhance overall security and safety, contributing to more effective and sustainable health services. The study serves as a guide for organizational policies to improve workplace safety and job satisfaction.

Table 2: The Necessary Personal Dimensions for Ensuring Professional Security and Safety For Social Workers in Health Organizations.

No.	Personal dimensions	Responses						SMA	Standard Deviation	Ranking
		Yes		To some extent		No				
		K	%	K	%	K	%			
1	Wearing the clothes and protective gear that the health organisation provides is essential.	26	63.4	7	17.1	8	19.5	2.44	0.81	8
2	Being physically safe and in decent health is required to work for the company.	37	90.2	3	7.3	1	2.4	2.88	0.4	3
3	Being vivacious, energetic, and full of life is crucial for those who work in health organisations.	32	78.0	4	9.8	5	12.2	2.66	0.69	6
4	Working in health organisations requires a certain level of readiness and motivation.	39	95.1	2	4.9	-	-	2.95	0.22	1
5	Improved work performance and a sense of job satisfaction are related.	20	48.8	12	29.3	9	22.0	2.27	0.81	9
6	In order to succeed in my work, I must meet the organization's basic demands.	36	87.7	5	12.2	-	-	2.88	0.33	2
7	Sustaining oneself under pressure is not a prerequisite for employment in health organisations.	27	65.9	14	34.1	-	-	2.66	0.48	5
8	My role in the health organization's work team is impacted by my health.	8	19.5	17	41.5	16	39.0	1.8	0.75	11
9	In order for me to do my job, the health organisation must provide me with material and psychological assistance.	16	39.0	13	31.7	12	29.3	2.1	0.83	10
10	It takes a balanced personality as well as the capacity to tolerate and adjust to changing working situations to operate in health organisations.	21	51.2	12	29.3	8	19.5	2.32	0.79	7
11	To successfully fulfil my function as a member of the health organization's work team, I require their support.	28	68.3	13	31.7	-	-	2.68	0.47	4
Dimension as a whole								2.51	0.31	High level

Table 3: Required Professional Dimensions for Achieving Occupational Health And Safety for Social Workers in Health Organizations.

No.	Professional dimensions	Responses						SMA	Standard Deviation	Ranking
		Yes		To some extent		No				
		K	%	K	%	K	%			
1	Professional and technical training must be ongoing for employees in health organizations.	28	68.3	12	29.3	1	2.4	2.66	0.53	2
2	I need to divide my workload equally among my colleagues.	20	48.8	18	43.9	3	7.3	2.41	0.63	6
3	In health organizations, career development is unrelated to workload amount or relevance.	27	65.9	11	26.8	3	7.3	2.59	0.63	3
4	Distinguished professional ties with academic and scientific organizations involved in the health sector are required.	35	85.4	6	14.6	-	-	2.85	0.36	1
5	There is an ethical and professional charter while working in health organizations.	26	63.4	12	29.3	3	7.3	2.56	0.63	4
6	As a social worker, I am not required to ensure that I am familiar with the working conditions and procedures in health organizations.	19	46.3	12	29.3	10	24.4	2.22	0.82	7
7	Working in health organizations demands graduates with specialized knowledge.	6	14.6	7	17.1	28	68.3	1.46	0.74	9
8	We require a distinguished network of professional and functional ties to carry out our work in the health organization.	11	26.8	9	22	21	51.2	1.76	0.86	8
9	I clearly understand the nature of my work and the professional requirements necessary to work in health organizations.	30	73.2	2	4.9	9	22	2.51	0.84	5
10	My employment at the healthcare organisation keeps me from finishing my professional and academic training.	30	48.8	18	43.9	3	7.3	2.41	0.63	6m
11	I no longer give a damn about insisting that the hospital have professional security and safety procedures. I work as a hospital social worker without enthusiasm or drive.	6	14.6	7	17.1	28	68.3	1.46	0.74	9m
Dimension as a whole								2.89	0.14	High level

6.4 The Field Study Also Identified Crucial Professional Dimensions for Occupational Security and Safety.

1. Cultivating exemplary professional relationships with academic and scientific entities in the health sector, securing the top position with a mean of 2.85 and a standard deviation of 0.36.
2. The imperative of ongoing professional and technical training within health organizations, claiming the second position with a mean of 2.66 and a standard deviation of 0.53.
3. The proposition that career progression within health organizations is independent of workload significance, coupled with the observation that social workers frequently engage in hospital duties without enthusiasm or passion, jointly secure the third position with an average mean of 2.59 and a standard deviation of 0.63. The collective professional dimensions exhibit a robust overall average mean of 2.89, accompanied by a standard deviation of 0.14.
4. This table summarizes survey results from health organization social workers, highlighting key insights. Respondents recognize the importance of ongoing professional training, academic connections, and ethical standards. Concerns include workload distribution and

dissatisfaction with professional security measures. The findings underscore the need for continuous training, fair workload distribution, and enhanced professional security measures to promote the well-being and development of healthcare social workers.

6.5 Assessing Physiological and Organizational Needs for Occupational Security and Safety in Healthcare: A Field Study of Social Workers

Table 4 in the study's findings delineated the physiological dimensions necessary to ensure occupational security and safety, which are as follows:

1. The paramount dimension was the imperative reliance on the utilization of technology in all its manifestations at every stage of work, garnering an average score of 2.44 and a standard deviation of 0.5.
2. The second most pivotal dimension was the requisite provision of suitable lighting tailored to the nature of work in health organizations, achieving an average score of 2.41 and a standard deviation of 0.67.
3. The third most crucial dimension involved the upkeep of equipment, machinery, and occupational health and safety measures, garnering an average score of 2.39 and a standard deviation of 0.67. This aligns with contemporary scientific

- trends, highlighting the integration of information and communication technology programs and ensuring a conducive physical environment for workers to effectively fulfil their roles.
- This reveals survey results pertaining to the indispensable physiological and organizational dimensions necessary to safeguard the professional security and safety of social workers in healthcare organizations. Notably, respondents underscore the significance of adequate illumination, ventilation, safety equipment, and technology integration in their work environment, reflecting their emphasis on physiological factors influencing safety. On the organizational aspect, there is consensus that hospital leadership should prioritize measures for professional security and safety, and there is an appreciation for support from colleagues. However, respondents also convey fatigue resulting from heavy workloads and frustration arising from work pressures.
 - In summary, the outcomes underscore a notable disparity in administrative awareness regarding the roles of social workers, indicating a necessity for more comprehensive support systems. Additionally, the findings emphasize the influence of organizational culture on safety initiatives,

- illustrating the intricate interplay of factors that shape professional security and safety in healthcare environments.
- In summary, the analysis of physiological dimensions in Table 4 concerning the occupational health and safety of social workers in health organizations provides noteworthy insights. The ranking of dimensions based on importance and effectiveness, as determined by responses and Standard Mean Averages (SMAs), underscores diverse organizational needs. Crucial findings include the significance of adequate lighting, ventilation, safety equipment, with a specific emphasis on technology integration and regular maintenance of machinery and safety protocols. The table also underscores the requirement for financial resources to oversee safety components and the continuous learning of workplace safety in the medical field. Overall, the table suggests a moderate level of implementation of these dimensions within health organizations, indicating areas for enhancement to improve the occupational health and safety of social workers.

Tabl 4: Required Physiological Dimensions For Ensuring Occupational Health And Safety Of Social Workers In Health Organizations.

No.	Organizational dimensions	Responses						SMA	Standard Deviation	Ranking
		Yes		To some extent		No				
		K	%	K	%	K	%			
1	Proper illumination is essential due to the nature of work in health organizations.	21	51.2	16	39	4	9.8	2.41	0.67	2
2	Follow ventilation and cooling methods while working	20	48.8	14	34.1	7	17.1	2.32	0.76	5
3	optimum usage of safety gear and equipments mandated by quality standards	11	26.8	17	41.5	13	31.7	1.95	0.77	9
4	Allocate safe places that meet confidentiality and privacy conditions when meeting patients and their families	16	39	24	58.5	1	2.4	2.37	0.54	4
5	depending on technology in all of its manifestations at every level of the work process	18	43.9	23	56.1	-	-	2.44	0.5	1
6	The financial resources must be available to oversee the hospital's occupational security and safety components.	20	48.8	12	29.3	9	22	2.27	0.81	6
7	maintaining machinery, equipment, and workplace security and safety procedures on a regular basis	20	48.8	17	41.5	4	9.8	2.39	0.67	3
8	The requirement to learn anything new regarding workplace safety and security in the medical industry	16	39	7	17.1	18	43.9	1.95	0.92	10
9	The financial benefits of using occupational security and safety tools at the hospital must be ascertained.	19	46.3	10	24.4	12	29.3	2.17	0.86	7
10	Signs with information about workplace safety and security are placed all over the hospital.	16	39	13	31.7	12	29.3	2.1	0.83	8
	Dimension as a whole							2.24	0.4	Medium level

7. Essential Organizational Dimensions for Occupational Safety of Social Workers

Table 5 presents the organizational dimensions essential for attaining occupational security and safety, as identified in the results of the field study:

- Topping the list were two facets: the managerial misconceptions regarding the fundamental role of social workers in ensuring effective patient care, and the influence of the organizational climate within health institutions on the efficacy of occupational health and safety initiatives. Both aspects attained an average score of 3.00, with a standard deviation of 0.0.
- Securing the second position were apprehensions about hospital administrative leaders prioritizing essential occupational health and safety provisions and the taxing workload inducing physical and psychological fatigue among social workers. Simultaneously crucial was the active participation of all preventive medicine specialists in contributing to the domain of occupational health and safety within hospitals, garnering an average score of 2.95, along with a standard deviation of 0.22.
- The third dimension emphasized the need for support and assistance from the hospital team in fulfilling one's role in the treatment process, registering an average score of 2.9 and a standard deviation of 0.3. This observation aligns with the findings of Suleiman's 2020

study, underscoring the significance of the social worker's role within the healthcare sector team. Overall, the organizational dimensions exhibited a substantial average score of 2.89, accompanied by a standard deviation of 0.14.

In summary, Table 5 offers a comprehensive examination of organizational dimensions crucial for the occupational safety of social workers in health organizations. The responses demonstrate a heightened awareness and implementation level, evident in the SMAs and rankings. Key elements encompass the acknowledgment of the social worker's pivotal role in patient care, the administration's dedication to professional security and safety measures, and the provision of both moral and material incentives for compliance with safety requirements.

Noteworthy aspects include the existence of pre-contingency plans, support from hospital staff, and the influence of organizational culture on safety initiatives. Nevertheless, challenges such as workload-induced exhaustion and work pressures underscore areas that necessitate improvement. Overall, the elevated dimension level indicates a robust foundation in occupational safety within these organizations, yet ongoing efforts are essential to address prevailing challenges and enhance the overall safety and well-being of social workers.

Table 5: Shows the Necessary Organizational Dimensions for the Occupational Safety of Social Workers in Health Organizations.

No.	Organizational dimensions	Responses				SMA	Standard Deviation	Ranking		
		Yes		To some extent					No	
		K	%	K	%	K	%			
1	The administration is unaware of my fundamental responsibility in successfully delivering patient care.	41	100	-	-	-	-	3	0	1
2	The hospital's administrative leadership is concerned with providing the required professional security and safety measures	39	95.1	2	4.9	-	-	2.95	0.22	2
3	I receive moral and material rewards if I adhere to occupational security and safety requirements	31	75.6	8	19.5	2	4.9	2.71	0.56	7
4	There is a pre-contingency plan that is implemented when the situation requires it	34	82.9	7	17.1	-	-	2.83	0.38	4
5	I receive the support and support of the hospital staff for my role in the treatment process	37	90.2	4	9.8	-	-	2.9	0.3	3
6	The large workload makes me feel exhausted and physically and psychologically tired	39	95.1	2	4.9	-	-	2.95	0.22	2
7	There is no correlation between my professional performance and my dedication to the aspects of workplace security and safety.	31	75.6	10	24.4	-	-	2.76	0.43	6
8	The health organization's organizational culture impacts how well its plans for occupational safety and security work.	41	100	-	-	-	-	3	0	1m
9	I feel frustrated due to work pressures that I cannot overcome	36	87.8	3	7.3	2	4.9	2.83	0.5	5
10	Enlisting the aid of all preventive medicine experts to fulfill their responsibilities in the area of hospital occupational security and safety	39	95.1	2	4.9	-	-	2.95	0.22	2
Dimension as a whole								2.89	0.14	High level

8. Suggestions for Enhancing Safety and Security of Social Workers in the Medical Field:

8.1 Proposals for Medical Organizations

Medical organizations are instrumental in fostering the well-being and effectiveness of their social workers. To achieve this, streamlining administrative tasks is crucial to prevent hindrances to their core responsibilities. It is equally vital to allocate a dedicated budget for occupational security and safety equipment, ensuring that social workers are well-prepared for diverse challenges in their work environment. Providing both material and moral support can significantly elevate their morale and job satisfaction. Enhancing their effectiveness and recognition within the healthcare system can be achieved through specialized courses, designated workspaces, and educating medical teams on the role of social work in managing infectious diseases. Implementing a fair wage and incentive system that aligns with the risks faced by social workers is essential for acknowledging their valuable contribution to the healthcare sector.

8.2 Proposals for Social Workers

For social workers, maintaining high standards of practice in occupational security and safety necessitates regular assessments of their knowledge and skills. Granting special cadre status to medical social workers can acknowledge and compensate them appropriately for their specialized skills. Providing financial and moral support to those in high-risk hospital roles is imperative for their well-being and motivation. Encouraging their active participation in security, safety, and professional training within the medical sector will further enhance their capabilities and preparedness for diverse challenges. The implementation of a systematic approach to regular professional job rotation can contribute to broadening their experience and preventing burnout. Moreover, dedicating full-time roles to social workers is increasingly crucial, particularly given the escalating prevalence of infectious diseases and epidemics, demanding focused attention and expertise.

8.3 Community-Oriented Proposals

At the community level, the establishment of a council or supreme body specifically focused on occupational security

and safety within health organizations can foster more cohesive and efficient strategies for worker safety. Introducing legislation tailored to occupational security and safety across diverse health organizations will establish a legal framework to underpin these initiatives. Encouraging media outlets to spotlight the roles and risks confronted by social workers in hospitals can enhance public awareness and recognition of their crucial contributions. Incorporating occupational security and safety topics into educational curricula at various levels will contribute to cultivating a more informed and empathetic society. Lastly, the formation of a civil association dedicated to supporting social workers engaged in managing pandemics, infectious diseases, and epidemics will furnish them with essential resources and a supportive network to adeptly navigate these critical situations.

9. Discussion

The study's outcomes provide a thorough examination of diverse facets related to the occupational security and safety of social workers in the health sector, elucidating the intricate interplay among personal, professional, physiological, and organizational factors within healthcare environments.

The diverse demographics of the sample, spanning gender, age, marital status, qualifications, and experience, are pivotal in comprehending the distinctive challenges and requisites of social workers at various career and life stages. This diversity underscores the significance of considering a broad spectrum of personal attributes when scrutinizing occupational contexts.

A pivotal aspect of the study emphasizes the significance of personal preparedness and professional development. These findings align with the increasing emphasis on the importance of individual readiness and continuous learning for effective healthcare delivery. The emphasis lies in recognizing how personal well-being and professional advancement are integral components of the healthcare sector.

Moreover, the study underscores crucial organizational dimensions such as administrative awareness and the impact of organizational culture. Understanding how these aspects influence the efficiency and effectiveness of health workers is vital. The findings advocate for administrative coherence and the cultivation of a safety-conscious culture within healthcare organizations.

The identified physiological dimensions, encompassing the need for adequate illumination, proper ventilation, and safety equipment, underscore a growing focus on the role of the

physical work environment in ensuring worker safety. This is particularly pertinent in health organizations, where the physical setting significantly influences safety and operational efficiency.

In summation, the study's findings contribute to the existing knowledge base by illuminating comprehensive aspects of professional security and safety in the health sector. They underscore the imperative of adopting a holistic approach that encompasses personal, professional, physiological, and organizational dimensions to guarantee the well-being and efficacy of social workers in healthcare settings. The proposed recommendations for enhancing safety and security in the medical field align with practical considerations and current trends in healthcare management and policy.

The present study's results regarding the dimensions essential for the professional security and safety of social workers in healthcare settings are consistent with findings from various previous studies. Bahuguna [21] emphasized the insufficient legal safeguards and enforcement mechanisms concerning workers' rights and safety in India, notably within the informal sector. This corresponds to the current study's identification of deficiencies in safety protocols and challenges related to workload encountered by social workers.

Further, Jeebhay, et al. [22] demonstrated an efficacious collaborative model involving government, labour, and communities in South Africa for managing COVID-19 in workplaces. Analogously, the present study underscores the importance of multifaceted collaboration among hospital administration, social workers, and preventive medicine experts to uphold occupational safety.

Regarding technological impacts, Hayden, et al. [24] identified emerging occupational safety risks due to automation and robotics in agriculture. Similarly, this study revealed a predominant reliance on technology as the foremost physiological dimension affecting the safety of social workers, thereby requiring effective risk management. Meanwhile, Saputri and Absori [25] unveiled deficiencies in safety provisions for pharmacists in clinics in Indonesia, resembling the identified gaps in the current study's context.

Moreover, several common themes emerge across the studies reviewed by Schulte, et al. [31], Lv, et al. [27], Muller, et al. [29], and Yuan, et al. [35] explored the mental health repercussions of COVID-19 on healthcare workers, revealing elevated levels of anxiety, depression, insomnia, and burnout linked to infection concerns, inadequate support, and heightened workloads. The present study aligns with these outcomes, emphasizing exhaustion, frustration, and a lack of comprehension regarding social workers' roles as indicative of a neglect of their well-being.

In conclusion, this study substantiates earlier findings regarding the crucial significance of legal safeguards, collaborative safety cultures within organizations, mitigation of technological effects, and addressing psychosocial stressors to ensure professional security and safety in both health and non-health sectors. While context-specific recommendations are essential, it is evident that numerous shared challenges persist. Future research endeavours can advance these insights by developing interventions and conducting impact evaluations.

10. Recommendations

Based on the primary findings, several recommendations emerge to improve the safety and security of social workers in the healthcare sector:

1. **Reduce Administrative Burdens:** Optimize workflows to enable social workers to concentrate on their fundamental duties more effectively.
2. **Invest in Safety Equipment and Training:** Allocate specific budgets for essential safety equipment and ongoing professional development.
3. **Support Work-Life Balance:** Implement policies aimed at effectively managing workloads to prevent burnout among social workers.
4. **Enhance Career Development Opportunities:** Conduct regular skill assessments and implement professional development programs consistently.
5. **Cultivate a Safety-Conscious Culture:** Facilitate acknowledgment and support from hospital administration for the pivotal role of social workers in patient care and safety.

11. Study implications

1. **Enhancing Organizational Support:** Elevating administrative support for social workers, encompassing the reduction of administrative burdens and provision of requisite resources, is imperative for augmenting work efficiency and fostering job satisfaction.
2. **Investment in Professional Development:** Prioritizing ongoing professional and technical training for social workers is paramount to ensure their alignment with contemporary healthcare practices and the enhancement of their skill set.
3. **Improving Safety Standards:** The research underscores the necessity for enhanced safety protocols and provision of adequate equipment in healthcare environments, aiming to safeguard the physical safety and well-being of social workers.
4. **Fostering a Collaborative Work Culture:** Fostering teamwork and interdisciplinary collaboration within healthcare settings holds the potential to notably enhance patient care and contribute to heightened job satisfaction among social workers.
5. **Policy and Legislative Reforms:** Championing policy changes and legislative reforms that endorse the professional security, equitable remuneration, and effective workload management of social workers in healthcare is imperative for sustained effectiveness and long-term viability.

12. Suggestions for Future Research Directions

1. **Organizational Culture Impact:** Examine the impact of organizational culture on the job satisfaction and performance of social workers within healthcare environments.
2. **Career Progression Studies:** Undertake longitudinal research to analyse the trajectory of career development and job retention among social workers in the healthcare sector over an extended duration.
3. **Technological Integration:** Investigate the role and influence of technology in enhancing the working conditions and effectiveness of social workers within the healthcare sector.
4. **Safety Procedures and Equipment Efficacy:** Evaluate the existing safety protocols and equipment afforded to healthcare social workers, pinpointing opportunities for enhancement.
5. **Professional Training and Development:** Examine the

enduring advantages of sustained professional training on the competencies and professional advancement of healthcare social workers.

References

- [1] O. Kaewboonchoo, P. Kongtip, and S. Woskie, "Occupational health and safety for agricultural workers in Thailand: gaps and recommendations, with a focus on pesticide use," *New Solutions: A Journal of Environmental and Occupational Health Policy*, vol. 25, no. 1, pp. 102-120, 2015, doi: <https://doi.org/10.1177/1048291115569028>.
- [2] F. Misale, "Immigrant workers in the construction sector in Italy: impact on safety and health," *Journal of Advanced Health Care*, vol. 3, no. 1, pp. 16-18, 2021, doi: <https://doi.org/10.36017/jahc202131117>.
- [3] E. P. Rifyana, "The Vulnerability of Occupational Health of Women Home Workers: A Study in Labor-Intensive Industries in Penjarangan, North Jakarta," *Jurnal Perempuan*, vol. 24, no. 3, pp. 177-192, 2019, doi: <https://doi.org/10.34309/jp.v24i3.347>.
- [4] K. B. Clara, "1575 Gender based violence (gbv) and occupational safety and health culture," *Occupational and Environmental Medicine*, vol. 75, no. Suppl 2, pp. A519-A519, 2018, doi: <https://doi.org/10.1136/oemed-2018-ICOHabstracts.1471>.
- [5] M. Becker, R. Eigenfeld, and T. Kerpes, "Understanding the commercialization of intellectual property patents in Europe: Highlighting Implications and Regulations for the biotechnology sector," *Journal of Commercial Biotechnology*, vol. 28, no. 1, pp. 252-264, 2023, doi: <https://doi.org/10.5912/jcb1902>.
- [6] R. J. Guerin and D. A. Sleet, "Using behavioral theory to enhance occupational safety and health: Applications to health care workers," *American Journal of Lifestyle Medicine*, vol. 15, no. 3, pp. 269-278, 2021, doi: <https://doi.org/10.1177/1559827619896979>.
- [7] S. Akhter, S. Rutherford, and C. Chu, "Exploring the system capacity to meet occupational health and safety needs: the case of the ready-made garment industry in Bangladesh," *BMC Health Services Research*, vol. 19, p. 435, 2019, doi: <https://doi.org/10.1186/s12913-019-4291-y>.
- [8] E. Lagerstrom, S. Magzamen, P. Kines, W. Brazile, and J. Rosecrance, "Determinants of safety climate in the professional logging industry," *Safety*, vol. 5, no. 2, p. 35, 2019, doi: <https://doi.org/10.3390/safety5020035>.
- [9] A. A. Mukhtad, F. M. Alomamy, A. A. Almkassbi, A. J. R. Abbas, and A. A. Baker Alfseiy, "Assessment of Occupational Health and Safety Awareness among Healthcare Workers at the Pediatric Hospital in Benghazi City," *PanAfrican Journal of Governance and Development (PJGD)*, vol. 2, no. 2, pp. 31-49, 2021. [Online]. Available: <https://www.ajol.info/index.php/pajgd/article/view/247377>.
- [10] S. Kumari and A. Kaur, "The Relevance of Social Work Professionals in the Promotion of Occupational Health and Safety among Healthcare Workers," *Indian Journal of Public Health Research & Development*, vol. 12, no. 3, pp. 247-256, 2021, doi: <https://dx.doi.org/10.37506/ijphrd.v12i3.16074>.
- [11] N. Gungordu et al., "Evaluation of Perception, Knowledge and Attitudes of Anesthesia Healthcare Workers on Occupational Health and Safety," *Journal of Anesthesia/Anestezi Dergisi (JARSS)*, vol. 31, no. 2, pp. 134-142, 2023, doi: <https://dx.doi.org/10.54875/jarss.2023.26122>.
- [12] O. Prosper et al., "Modeling Seasonal Malaria Transmission," *Letters in Biomathematics*, vol. 10, no. 1, pp. 3-27, 2023, doi: <https://doi.org/10.30707/LiB10.1.1682014077.793816>.
- [13] J. Chen and H. Pang, "Analyzing Factors Influencing Student Achievement: A Financial and Agricultural Perspective Using SPSS Statistical Analysis Software," *Journal of Commercial Biotechnology*, vol. 28, no. 1, pp. 304-316, 2023, doi: <https://doi.org/10.5912/jcb1118>.
- [14] S. Kavouras, I. Vardopoulos, R. Mitoula, A. A. Zorpas, and P. Kaldis, "Occupational health and safety scope significance in achieving sustainability," *Sustainability*, vol. 14, no. 4, p. 2424, 2022, doi: <https://doi.org/10.3390/su14042424>.
- [15] J. R. Chelius and K. Kavanaugh, "Workers' Compensation and the Level of Occupational Injuries," *Journal of Risk and Insurance*, vol. 55, no. 2, pp. 315-323, 1988, doi: <https://doi.org/10.2307/253332>.
- [16] E. I. Feijen-de Jong, J. C. Warmelink, R. A. van der Stouwe, M. Dalmaijer, and D. E. Jansen, "Interventions for vulnerable pregnant women: Factors influencing culturally appropriate implementation according to health professionals: A qualitative study," *PLoS One*, vol. 17, no. 8, p. e0272249, 2022, doi: <https://doi.org/10.1371/journal.pone.0272249>.
- [17] T. A. Okasha, N. M. Shaker, and D. M. Elgabry, "Community Mental Health Services in Egypt," *Consortium Psychiatricum*, vol. 3, no. 2, pp. 123-128, 2022, doi: <https://doi.org/10.17816/CP165>.
- [18] P. Ranganathan and S. Sujatha, "Occupational Accidents and Need for Worker Safety in Manufacturing and High Risk Industries-An Explorative Study With Solutions," *International Journal of Professional Business Review*, vol. 7, no. 6, p. e0670, 2022, doi: <https://doi.org/10.26668/businessreview/2022.v7i6.e670>.
- [19] L. M. Gargano et al., "Issues in the development of a research and education framework for one health," *Emerging Infectious Diseases*, vol. 19, no. 3, p. e121103, 2013, doi: <https://doi.org/10.3201/eid1903.121103>.
- [20] H. De Witte, "On the scarring effects of job insecurity (and how they can be explained)," *Scandinavian Journal of Work, Environment & Health*, vol. 42, no. 2, pp. 99-102, 2016, doi: <https://doi.org/10.5271/sjweh.3545>.
- [21] P. Bahuguna, "The Effectiveness of Indian Labor Laws in Protecting the Rights of Workers: A Quantitative Perspective of Indian Labor Law," *Psychology and Education*, vol. 55, no. 1, pp. 273-281, 2023, doi: <https://dx.doi.org/10.48047/pne.2018.55.1.36>.
- [22] M. F. Jeebhay et al., "Strengthening Social Compact and Innovative Health Sector Collaborations in Addressing COVID-19 in South African Workplaces," *New Solutions: A Journal of Environmental and Occupational Health Policy*, vol. 32, no. 4, pp. 288-303, 2023, doi: <https://doi.org/10.1177/10482911221150237>.
- [23] N. Radionova, E. Ög, A.-J. Wetzel, M. A. Rieger, and C. Preiser, "Impacts of Symptom Checkers for Laypersons' Self-diagnosis on Physicians in Primary Care: Scoping Review," *Journal of Medical Internet Research*, vol. 25, p. e39219, 2023, doi: <https://doi.org/10.2196/39219>.
- [24] M. A. Hayden, M. S. Barim, D. L. Weaver, K. Elliott, M. A. Flynn, and J. M. Lincoln, "Occupational Safety and Health with Technological Developments in Livestock Farms: A Literature Review," *International Journal of Environmental Research and Public Health*, vol. 19, no. 24, p. 16440, 2022, doi: <https://doi.org/10.3390/ijerph192416440>.
- [25] H. Saputri and R. Absori, "Legal protection of occupational safety and health for pharmacists of clinics in Semarang," *Awang Long Law Review*, vol. 5, no. 1, pp. 205-214, 2022, doi: <https://doi.org/10.56301/awl.v5i1.565>.
- [26] S. A. Felknor et al., "How will the future of work shape OSH research and practice? A workshop summary," *International Journal of Environmental Research and Public Health*, vol. 18, no. 11, p. 5696, 2021, doi: <https://doi.org/10.3390/ijerph18115696>.
- [27] Y. Lv, Z. Zhang, W. Zeng, J. Li, X. Wang, and G. Luo, "Anxiety and depression survey of Chinese medical staff before and during COVID-19 defense," Available at SSRN 3551350, 2020, doi: <https://dx.doi.org/10.2139/ssrn.3551350>.
- [28] E. E. Schulte, C. A. Bernstein, and M. D. Cabana, "Addressing Faculty Emotional Responses during the Coronavirus 2019 Pandemic," *The Journal of Pediatrics*, vol. 222, pp. 13-14, 2020, doi: <https://doi.org/10.1016/j.jpeds.2020.04.057>.
- [29] A. E. Muller et al., "The mental health impact of the covid-19 pandemic on healthcare workers, and interventions to help them: A rapid systematic review," *Psychiatry Research*, vol. 293, p. 113441, 2020, doi: <https://doi.org/10.1016/j.psychres.2020.113441>.
- [30] M. Lindholm, A. Reiman, and S. Väyrynen, "On Future Occupational Safety and Health Challenges: A Systematic Literature Review," *International Journal of Occupational and Environmental Safety*, vol. 4, no. 1, pp. 108-127, 2020, doi: https://doi.org/10.24840/2184-0954_004.001_0009.
- [31] P. A. Schulte, G. Delclos, S. A. Felknor, and L. C. Chosewood, "Toward an Expanded Focus for Occupational Safety and Health: A Commentary," *International Journal of Environmental Research and Public Health*, vol. 16, no. 24, p. 4946, 2019, doi: <https://doi.org/10.3390/ijerph16244946>.
- [32] F. Ahmed, N. Zviedrite, and A. Uzicanin, "Effectiveness of workplace social distancing measures in reducing influenza transmission: a systematic review," *BMC Public Health*, vol. 18, no. 1, p. 518, 2018, doi: <https://doi.org/10.1186/s12889-018-5446-1>.
- [33] M. M. Haby, E. Chapman, R. Clark, and L. A. Galvão, "Interventions that facilitate sustainable jobs and have a positive impact on workers' health: an overview of systematic reviews," *Revista Panamericana de Salud Pública*, vol. 40, pp. 332-340, 2016. [Online]. Available: <https://www.scielosp.org/article/rpsp/2016.v40n5/332-340/en>.

- [34] S. Yarahmadian, A. Oroji, and A. K. Williams, "A hybrid differential equations model for the dynamics of single and double strand breaks of cancer cells treated by radiotherapy," *Letters in Biomathematics*, vol. 9, no. 1, pp. 141-158, 2022, doi: <https://doi.org/10.30707/LiB9.1.1681913305.295521>.
- [35] S. Yuan et al., "Comparison of the indicators of psychological stress in the population of Hubei province and non-endemic provinces in China during two weeks during the coronavirus disease 2019 (COVID-19) outbreak in February 2020," *Medical Science Monitor : International Medical Journal of Experimental and Clinical Research*, vol. 26, p. e923767, 2020, doi: <https://doi.org/10.12659/msm.923767>.