

Occupational Social Work as a Catalyst for Sustainable Health and Wellbeing in Indian Tea Garden Workers

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Abstract

Occupational Social work (OSW) is an emerging field that analyzes the relationship between individuals' lives and their employment, promoting social justice and improving worker well-being and fostering healthy, sustainable workplaces. The Indian tea industry, a major employer, confronts challenges such as occupational hazards, low wages, and limited healthcare access, adversely affecting worker's conditions. This study advocates applying OSW interventions to cultivate healthful, sustainable environments within Indian tea gardens, benefiting workers, factory personnel, and their communities. A theoretical review-based approach using descriptive design to analyze the relevant secondary data sources. This study assesses the physical and mental health, stress, and disease prevalence among tea garden workers. Anticipated outcomes highlight the potential of Occupational Social Work to enhance long-term well-being by identifying worker's needs, implementing interventions like support groups and health education, advocating for safety regulations, fair compensation, and healthcare access, and promoting self-care awareness among the workforce.

Keywords: Occupational Social Work, Sustainable Health and Wellbeing, Occupational Hazards, Tea Garden Workers,

Introduction

Tea is the popular drink in the world, second only to water. It is obtained from the leaves of the plant known as *Camellia Sinensis*. Globally, India ranks second in tea production and top five among exporters. According to Mittal, A., and Gupta, R. (2008), India's tea plantation sector, which is often overlooked by agricultural workers, is critical to the country's economy because tea is the major beverage consumed by around 85 percent of households. India is the

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world's largest tea grower and consumer, accounting for 27 percent of total production. Approximately, eighty-three percent of India's total production originated in the northern region, led by Assam as the top most producer, followed by West Bengal, Tamil Nadu, Kerala, and Karnataka.

According to Deshpande P.P. (2022) The tea industry in India employs over 1 million people directly and indirectly, supporting another 10 million through its linkages. In Northeast India, it employs around 0.9 million people on permanent rolls. This sector is one of the greatest employers of women, accounting for about 51 percent of the overall workforce.

There is a prejudice and notion that women are more adept at choosing and plucking tea leaves than males because of their "soft hands and naturally quick fingers. At the same time in plantations, male tea workers are frequently given additional tasks like weeding, applying fertilizer, and spraying pesticides. The type of labour that tea sector employees conduct puts them at an equal or even higher risk of injury. Major risk include faulty tools & machinery, chemical and biological hazards, and adverse working environments, like extreme heat. The research by Dey et al. (2012) indicates that within the tea industry, the well-being and safety of workers are commonly seen as superfluous costs that undermine productivity. Due to management's attitude that safety is a business liability and workers' lack of safety awareness, the tea sector has difficulties maintaining occupational safety and health. The study by Castellan et al. (1981) indicates that the dustiest activities in the tea industry are sifting and blending, putting workers at risk of inhaling dust. It is well-recognized that breathing in tea dust can cause both acute and long-term respiratory issues. However, a significant segment of the workforce toils relentlessly, facing multifaceted challenges that affect their overall health and well-being. The confluence of labour-intensive work, socio-economic disparities, and limited access to healthcare resources has engendered a complex web of health-related issues among Indian tea garden workers. In this scenario, Occupational Social Work appears as a potentially powerful catalyst for boosting long-term health and well-being among this vulnerable population.

A specialized area of social work practice, occupational social work aims to address the complex relationship between work conditions and employees' social, psychological, and physical well-being. According to Danto (2017), occupational social work is a specialization that focuses on programs and interventions for workplace populations such as employees, job seekers, labor union members, and retirees. As the youngest practice domain in social work,

it is governed by the National Association of Social Workers' Code of Ethics and Guidelines for Culturally Competent Practice. Occupational social workers must meet the social welfare needs of employees and workplace organizations on numerous levels and in a variety of roles. They must follow ethical practice standards, be familiar with social policy fundamentals, understand the cultural value of "work" within ideological frameworks, and recognize the importance of workplace variables such as substance abuse, mental illness, gender, race, national origin, sexual orientation, and disability.

Its application in industries or workplaces characterized by labour-intensive occupations, such as the tea gardens of India, presents a unique opportunity to mitigate the adverse effects of occupational hazards and enhance the overall quality of life for workers. This research explores the multifaceted dimensions of Occupational Social Work within the context of Indian tea garden workers, with a central emphasis on its potential to foster sustainable health and well-being.

Sustainable health and well-being among tea garden workers refers to advancing physical, mental, and social health in a way that is long-lasting, balanced, and mindful of ecological and socioeconomic aspects. It includes preserving the environment, promoting local communities, and ensuring the overall well-being and standard of living of tea plantation workers. In the context of tea plantation populations, this strategy acknowledges the connection of human health, environmental sustainability, and social equity. This part introduces the study paradigm and lays the groundwork for a thorough examination of synergistic association between Occupational Social Work and the health and well-being of Indian tea garden workers. This study explores the interaction of various factors, specifically economic inequality, limited resources, health-related issues, and unique cultural factors, on sustainable practices in an occupational setting like tea gardens. It aims to contribute to the ongoing discussion on making workplaces more sustainable, focusing on long-term solutions without causing harm to people or the environment. The study aims to understand how different factors impact the well-being of tea garden workers in challenging environments and how it can be improved for both people and the planet.

Objective

The objective is to shed light on challenges faced by tea garden workers and emphasize the importance of occupational social work in enhancing their sustainable health and well-being.

Literature Review

Subrata and Shyam (2023) conducted a study, "Decolonising Social Work in Industrial Settings: Roles, Challenges, and Prospects in India". The authors argue that Western theories and methods have colonized social work in India, leading to a disregard for the concerns of oppressed and underprivileged populations. They discuss the history of social work in India, which was brought by British colonial authorities and has been influenced by Western ideology and values. They call for the development of decolonized social work that is committed to social justice and based on Indian society's reality. Despite the challenges, the authors remain optimistic about the chances of decolonizing social work in India. They argue that social workers are increasingly pushing for decolonization, and the Indian government's growing appreciation of social work's value could provide a chance for further decolonized methods. They also outline the functions social workers can play in the decolonization of social work, such as contributing to the development of decolonized theories and practices and promoting social justice by increasing public awareness. Thus, Occupational Social Work, as a subset of core social work, can intervene in this vulnerable occupational sector, tea plantations, and workers who are affected by low wages, poor working conditions, a lack of social security, limited access to education and healthcare, exploitative labor practices, gender inequality, and environmental degradation.

Spires, Joseph, and Tost (2022) examine into the insecure living and working conditions of tea garden laborers. This study is based on a survey of over 3000 respondents, reveals that workers face challenges such as low wages, inadequate housing, inadequate healthcare, sanitation facilities, and lack of access to education and social services. They are also vulnerable to exploitation and abuse by employers and powerful actors. The authors argue that the stickiness is rooted in factors such as colonialism, social and economic isolation, and lack of political and legal protections for workers. They also suggest that the stickiness is perpetuated by neoliberal economic policies in India. To address the situation, the authors propose increasing wages, improving working conditions, providing access to social services, strengthening legal and institutional protections, and a broader social movement to challenge the root causes of the workers' vulnerability.

Sharma and Thulaseedharan (2022) did a cross-sectional study to determine the prevalence of musculoskeletal symptoms (MSS) among various plantation workers in Kerala. The study involving 260 participants found that 87.7 percent of them had musculoskeletal stress

symptoms (MSS) in the previous twelve months. Lower back (61 percent) was the most affected body region, followed by the knees (47 percent) and shoulders (44 percent). There was no significant difference in MSS prevalence between the three groups. However, there was significant heterogeneity in MSS between body areas. Cardamom plantation workers were more likely to develop MSS in their hips/thighs and wrists, but tea plantation workers had a decreased risk in their elbows and knees. The authors noted that the high frequency of MSS among plantation workers is a major concern, and they advised employing supportive aids and basic stretching exercises during breaks.

Chakraborty et al. (2021) conducted a study, “ The prevalence of musculoskeletal illnesses and their relationship to ergonomic physical risk factors among women working in Darjeeling tea estates in West Bengal, India”. The study included 270 tea garden workers who used the Nordic Musculoskeletal Questionnaire (NMQ) to detect Musculoskeletal Disorders (MSDs) and the Rapid Upper Limb Assessment (RULA) tool for ergonomic evaluation. A study on Musculoskeletal Disorders (MSDs) and ergonomic physical hazards among women employed in tea gardens discovered a prevalence of 84.8 percent in previous twelve months. The lower back was the most impacted body area (68.9 percent), neck (56.7 percent), and shoulders (53.7 percent). The study found a significant association between MSDs and ergonomic physical risk factors, with high odds of MSDs in the neck and shoulders among workers exposed to high levels of repetitive and forceful movements. The authors stated that the high frequency of MSDs amongst female tea garden workers, is a major concern and advocated for ergonomic measures to lower risk factors and promote musculoskeletal health.

Saju and Abraham (2021) conducted a quantitative, descriptive study to analyze the living conditions and physical health status of tea plantation workers living in line rooms in Idukki District, Kerala, India. The study of 50 (25 men and 25 women) tea plantation workers revealed poor living conditions, with most living in overcrowded and dilapidated line rooms. Common physical health problems reported included musculoskeletal pain, respiratory issues, and gastrointestinal disorders. The study found a significant association between living conditions and physical health status, with better conditions reporting fewer health problems. However, there was no significant difference in physical health status between men and women. The authors concluded that poor living conditions are a major concern and recommended government and plantation owners to improve these workers' living conditions.

Xaxa V. (2019) emphasizes the “need for a restructuring the Indian tea plantation system to improve working conditions and living standards for tea garden workers”. The system, characterized by exploitative labour practices and poor living standards, is among the lowest-paid and most marginalized workers in India. He proposes measures to dismantle the colonial structure, including land reform, worker cooperatives, and government regulation. Land reform would give workers greater control over their lives and improve their economic security. Workers could form cooperatives to manage and operate the plantations, benefiting from profits. Government regulation would ensure fair wages, benefits, and access to basic amenities.

Panner (2019) provides a comprehensive review of the health, safety, and well-being of workers in the informal sector in India. It discusses the prevalence of occupational hazards, their impact on workers' health, and the challenges and opportunities for improving their health and safety. The book highlights the risks of developing occupational diseases such as respiratory problems, musculoskeletal disorders, cancer, mental health problems, and stress. He suggests that improving legislation, providing training and education, and promoting safe work practices can improve the health and safety of these workers. The book calls for a comprehensive approach involving all stakeholders, including the government, employers, workers, and trade unions.

Gayathri and Arjunan (2019) investigated health related issues and availability of healthcare benefits among tea plantation workers in Coonoor, Nilgiris district, Tamil Nadu, India. The research of 50 tea estate workers discovered that typical health conditions included fever, cough, back pain, hypertension, respiratory problems, and skin disorders. Employees had little health knowledge and did not seek frequent medical attention for their health problems. They also had restricted access to health benefits, which were exclusively accessible from tea estate owners. The authors found that tea plantation workers had poor health and require improved access to healthcare and health education. They suggested that tea estate owners give better health benefits for their employees. The study highlighted the requirement of improved healthcare and education for tea estate labours.

Govindankutty and Priyadarshan (2018) assessed the “prevalence of occupational health hazards and safety measures taken by tea plantation workers in Kerala, India”. This study included 225 tea plantation workers who were selected using a random sampling technique. The study found that the most common occupational health hazards faced by tea plantation

workers were musculoskeletal disorders (MSDs), respiratory problems, and skin problems. The study also found that the safety protocols followed by tea plantation workers were inadequate. Authors concluded that the occupational health hazards faced by tea plantation workers in Kerala are a major concern. They recommended that the government and tea plantation management take steps to improve the workplace health and safety of tea plantation labours by providing them with better safety training and protective equipment, and by establishing occupational health clinics in tea plantations.

Surekha et al. (2017) did a study entitled "Profile and Determinants of Occupational Injuries Reporting to a Tea Garden Hospital over the Past Decades-A Mixed Method Study". The study conducted over ten years found that cut injuries were the most common type of occupational injury among plantation workers. The study used qualitative interviews and a record-based analysis of injuries reported to a tea garden hospital. The majority of the injuries were caused by men, aged 41-50, with the hands being the most common body region. Poor health and safety training, restricted usage of personal protective equipment (PPE), extended working hours, smoking and alcohol consumption were all contributing factors to these injuries. The authors concluded that South Indian plantation workers are especially concerned about occupational injuries and proposed interventions to address these issues, such as providing comprehensive fitness and protection training, encouraging the use of personal protective equipment (PPE), and shortening workdays.

GS, Naveen, and Navya (2015) investigated the frequency of apparent mental illness and allied factors among tea estate workers in South India. The study comprised 400 workers, and the General Health Questionnaire (GHQ) 28 was used to test for probable mental illnesses. The study discovered that 12.8% of the workers tested positive for probable mental disorder, with the most prevalent symptoms being physical symptoms, anxiety/insomnia, and social dysfunction. The study also discovered that workers who tested positive for probable mental disorder had taken much more leave in the previous year. The authors stated that the frequency of mental disease among tea estate workers is a big concern, and they advocated for additional research to identify risk factors for mental illness and develop interventions to enhance tea estate workers' mental health.

Vasanth et al. (2015) in their study entitled "Prevalence, pattern, and factors associated with work-related musculoskeletal disorders (WRMDs) among pluckers in a tea plantation in Tamil Nadu, India". The study of 195 tea pluckers aged 18 to 60 years discovered a high

occurrence of musculoskeletal pain (WRMDs) in the previous twelve months. Major affected body parts were the shoulders (59 percent), lower back (52.8 percent), and knees (38.5 percent). The prevalence was higher among older workers, those with longer employment durations, and those carrying heavier loads. The authors concluded that the high prevalence of WRMDs among tea pluckers is a significant concern and recommended implementing ergonomic interventions, such as lightweight baskets and safe work practices, to reduce the risk.

Sfeatcu et al. (2014) provide a comprehensive and well-argued overview of the concept of well-being to health and quality of life. The writers start by outlining the multiple dimensions of well-being, including physical, mental, emotional, and social health. The many approaches to measuring well-being, both subjectively and objectively, are then covered. They continue by talking about the connection between overall health, quality of life, and well-being. They contend that while health is a predictor of well-being, it is also a by-product of it. They argue that a crucial element of quality of life is well-being. They examine the implications of their findings for both study and practice in their conclusion. They want further study on the biopsychosocial factors that influence well-being and the creation and assessment of interventions that support well-being.

Joseph and Minj (2010) highlighted in their study, "Risk rating in the tea planting industry: The employees' opinion." Due to risk, the prevalence of occupational hazards in the tea planting industry revealed that backache, insect bites, cuts, abrasions, falls from height, and chemical exposure were the most common hazards. The risk rating varied based on gender, age, and work experience. Male workers were found to be at a higher risk, while older workers were at a higher risk. Workers with more experience were at a lower risk. The study suggests interventions to reduce occupational hazards, including safety and health programs, training, and personal protective equipment.

Bates and Thompson (2007), in "Workplace Well-being: An Occupational Social Work Approach," provide a thorough examination of workplace well-being via the lens of occupational social work. Authors explore workplace well-being, emphasizing its importance for individual health and organizational success. They use a holistic approach, encompassing physical, mental, and social dimensions. It integrates occupational social work principles, addressing employee well-being within the organizational context. They propose practical insights and solutions, such as organizational policies, employee support programs, and

conflict resolution strategies, based on occupational social work concepts. The study is a valuable resource for professionals, researchers, and policymakers interested in fostering a healthy work environment. Despite some challenges, it provides valuable insights into workplace well-being.

Balgopal (1989), states in the study "Occupational Social Work: An Expanded Clinical Perspective, offers a comprehensive exploration of the concept of occupational social work from a clinical standpoint. The author discusses the need for a more comprehensive understanding of clinical social work in the context of work environments. Traditional clinical social work focuses on individual clients' psychological well-being, while occupational social work considers the impact of work settings on individuals. The author uses theoretical frameworks and case studies to demonstrate how occupational social work is applied in practice. He highlights the necessity of structural changes inside firms to foster healthier work environments, such as policy formulation, dispute resolution, and assistance for employees confronting occupational obstacles. The author also highlights the role of clinical social workers in facilitating communication and collaboration among employees and management. The author contends that fostering a more inclusive and supportive work culture can contribute significantly to employees' overall well-being.

Bhadra, R.K. (1997) Social factors of health among tea plantation workers in India have been widely researched. Studies show that tea garden workers, despite facing poor socio-economic conditions, a lack of education, and unhygienic living conditions, are vulnerable to health issues. High tobacco use, including smoking and smokeless tobacco, leads to oral mucosal lesions and potentially malignant lesions. Nutritional deficiencies, particularly anaemia, are observed among tea garden workers, especially females, due to inadequate dietary intake. Additionally, women workers in tea plantations are exposed to pesticides, which can have detrimental health effects. These findings underscore the need for comprehensive public health policies and raising awareness about tobacco use and pesticide exposure risks.

Title	Author	Objective	Methodology	Key Findings
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“Decolonising Social Work in Industrial Settings: Roles, Challenges, and Prospects in India”	Subrata and Shyam (2023)	To study the obstacles and the perspectives of the social work practice in industrial settings.	The research was conducted using secondary data only. Data was collected from different journals, books, and internet websites. First of all, as per the study objectives, the researcher chose some articles from all the collected materials.	The authors argue that Western theories have colonized social work in India, disregarding the concerns of oppressed and underprivileged populations. They discuss the history of social work in India, influenced by British colonial authorities and Western ideology. They call for decolonized social work committed to social justice and based on Indian society's reality. Despite challenges, they remain optimistic about the chances of decolonizing social work in India. Social workers can contribute to this process.
“The Stickiness of Tea Garden Workers’ Situation in Assam, India.”	Spire, Joseph, and Tost (2022)	This study explores a survey of over 3,000 tea garden workers in three sites across Assam to know material realities and sufferings of these workers and their families.	Empirical Research Design	Tea garden workers are trapped in a cycle of poverty and debt. The tea industry is highly exploitative, with workers paid low wages and forced to work long hours in dangerous conditions. Tea garden workers have little access to education and healthcare. The tea industry is environmentally destructive, with deforestation and water pollution being major problems. The social isolation of tea garden workers. The lack of alternative employment opportunities. The debt bondage system. The lack of political representation.
Musculoskeletal Symptoms among Plantation Workers in Kerala, India	Sharma and Thulasee dharan (2022)	To study the frequency of Musculoskeletal Stress Symptoms (MSS) amid diverse plantation workers in Kerala, India.	In January and February 2021, a cross-sectional survey was performed with 83 rubber tappers, 90 cardamom plantation laborers, and 87 tea pluckers (for a total of 260 participants).	This study involving 260 participants found that 86.2 percent of musculoskeletal stress symptoms (MSS) in tea plantations in the last 12 months. Mostly affected body parts were the lower back (56.3 percent), knees (37.9 percent), and shoulders (59.4 percent).
“Prevalence of musculoskeletal disorders and their association with ergonomic physical risk factors among women working in tea gardens of Darjeeling district of West Bengal, India”	Chakraborty, Bhattacharjee, Mukherjee & Dasgupta (2021)	The aim of this investigation was to find out the risk factors and frequency of musculoskeletal problems among tea garden workers.	Using 30 cluster sample designs, a cross-sectional research of 210 female tea garden workers working in the tea gardens of Darjeeling was carried out.	MSD prevalence among women is 84.8 percent, Majorly affected body regions were the lower back (68.9 percent), neck (56.7 percent), and shoulders (53.7 percent). The study found a significant association between MSDs and ergonomic physical risk factors, with high odds of MSDs in the neck and shoulders among workers exposed to high levels of repetitive and forceful movements.
“The Concept of Wellbeing in relation to Health and Quality of Life”	Ruxandra Sfeatu et. al (2014)	To access the concept of wellbeing in relation to health and quality of life.	Qualitative Descriptive	Wellbeing is a multifaceted concept encompassing social, economic, psychological, spiritual, and physical health. It is measured using objective and subjective indicators. Quantitative indicators are preferred but not mandatory. When objective data is unavailable, subjective information can

				be used. Wellbeing is a spectrum, with high levels indicating positive experiences and low levels indicating negative ones.
Living Conditions and Physical Health Status of Labourers Living in Line Rooms in Idukki District	Saju and Abraham (2021)	To examine the lifestyle, health, and disparities between the health of men and women, as well as one's understanding of the Plantation Labour Act.	The research design is descriptive, and quantitative methods is employed.	The line rooms lacked amenities including adequate ventilation, sanitary conditions, and clean drinking water. They were likewise small and crowded. There were several occupational risks that the workers had to deal with including accidents, respiratory problems, skin disorders, and musculoskeletal illnesses. Significantly more workers had physical health problems than average, including back pain, joint pain, and respiratory problems.
“Health, safety, and well-being of workers in the informal sector in India”	Panner (2019)	To investigate the status of work-related health, the degree of health risks, living and working environments, pay scales, safety of females employed in India's informal economy.	Quantitative approach is based on the empirical evidence of reviewed papers.	Highlights the risks of developing occupational diseases such as respiratory problems, musculoskeletal disorders, cancer, and mental health problems, and stress.
“Health afflictions and availability of health benefits of tea plantation workers in Coonoor, the Nilgiris district of Tamil Nadu, India.”	Gayathri and Arjunan (2019)	To find out the health issues and resources available for the tea estate workers.	The study employed a descriptive investigation strategy in conjunction with a quantitative approach. 50 tea estate employees were chosen using simple random sampling method.	The study involving 50 tea estate workers found that common health issues include fever, cough, back pain, hypertension, respiratory problems, and skin problems. Workers had poor health awareness and did not seek regular medical care for their health issues.
“Need for Restructuring the Tea Plantation System in India”	Virginus Xaxa (2019)	The plantations' deeply ingrained colonial structure and ethos must be eliminated to restructure them and bring about constructive change.	Descriptive research approach.	Tea garden workers are among the lowest-paid and most marginalized workers in India. The tea plantation system is characterized by several problems, including poor working conditions, lack of access to healthcare and education, and gender-based discrimination. Tea garden workers' livelihoods can only be improved by tearing down the plantations' deeply ingrained colonial ethos and structure and reconstructing them in a new way.
“Occupational Health Hazards and the Safety Measures Taken by the Tea Plantation Workers of Kerala”	Govinda nkutty and Priyadars han (2018)	To outline many health risks associated with work and the safety precautions among tea plantation workers in Kerala have adopted.	Quantitative	A random selection technique was used to choose 225 tea plantation workers for the study. According to the study, the most frequent occupational health risks that tea plantation workers encountered were skin, respiratory, and musculoskeletal illnesses (MSDs). It also found that the inadequate safety measures taken by tea plantation

				management.
“Profile and Determinants of Occupational Injuries Reporting to a Tea Garden Hospital over the Past Decades-A Mixed Method Study”	Surekha et al. (2017)	To investigate the characteristics of work-related injuries that are reported to Garden Hospital, to explain the temporal pattern of these incidents, and to investigate the causes and contributing variables of work-related injuries among plantation laborers.	A mixed methods research was conducted in a Garden hospital in South India on three particular tea estates.	The majority of the injuries were caused by men, aged 41-50, with the hands being the most common body region. These injuries were caused by insufficient health and safety training, restricted usage of personal protective equipment, long working hours, and behaviour like smoking and alcohol consumption.
“Mental health status of workers in selected tea estates, Tamil Nadu, India”	GS, Naveen, and Navya (2015)	To investigate the frequency of possible mental illness and its related factors amongst workers on certain tea estates in South India.	A cross-sectional research carried out in two tea estates in Tamil Nadu from March to May 2012. The study comprised 400 workers, and the GHQ 28 was used to screen for potential mental illness.	It discovered that 12.8% of the workers tested positive for probable mental disorder, with the most prevalent symptoms being physical symptoms, anxiety/insomnia, and social dysfunction. It was also discovered that workers who tested positive for probable mental disorder had taken much more leave in the previous year.
“Prevalence, pattern, and factors associated with work-related musculoskeletal disorders (WRMDs) among pluckers in a tea plantation in Tamil Nadu, India”	Vasanth et al. (2015)	To determine the prevalence, trends, and risk factors for work-related musculoskeletal disorders (WRMDs) amongst pluckers in a tea plantation in Annamalai, Tamil Nadu, India.	The quantitative technique, which used an interview schedule, consisted of four parts: socio-demographic information, the Standard Nordic Scale, a numeric and facial pain rating tool, and another tool for assessing characteristics linked with WRMDs.	The study involving 195 tea pluckers aged 18-60 years found that musculoskeletal pain (WRMDs) is highly prevalent in the last 12 months. Most affected body regions were the shoulders (59 percent), lower back (52.8 percent), and knees (38.5 percent). The prevalence was higher among older workers, those with longer employment durations, and those carrying heavier loads.
Risk rating in the tea planting industry: The employees' opinion	Joseph and Minj (2010)	To investigate the work-related health and safety issues in the tea planting region and grade them from the worker's "SQ" perspective.	Quantitative Descriptive Study	Due to risk, the prevalence of OH in the tea planting industry revealed that backache, insect bites, cuts, abrasions, falls from height, and chemical exposure were the most common hazards. The risk rating varied based on gender, age, and work experience. Male workers were found to be at a higher risk, while older workers were at a higher risk. Workers with more experience were at a lower risk.

Workplace Well-being: An Occupational Social Work Approach	Bates and Thompson (2007)	To offers a wider approach based on the problem-solving viewpoint of occupational social work.	Descriptive Research Methodology	The authors emphasize the significance of workplace well-being for individual health and organizational success, using a holistic approach that includes physical, mental, and social dimensions. They integrate occupational social work principles, offering practical insights and interventions like organizational policies, employee assistance programs, and conflict resolution techniques.
“Social Dimensions of Health among Tea plantation workers in India”	Bhadra, R.K. (1997)	To investigate the social aspects of health among tea plantation workers, with a focus on Darjeeling District, West Bengal.	Descriptive Research Methodology	Tea garden workers, despite facing poor socio-economic conditions, lack of education, and unhygienic living, are vulnerable to health issues. High tobacco use leads to oral mucosal lesions, potentially malignant ones. Inadequate dietary intake, particularly for females, causes nutritional deficiencies, particularly anaemia. Exposure to pesticides also poses health risks.
Occupational Social Work: An Expanded Clinical Perspective	Balgopal (1989)	The goal is to develop a professional role that goes beyond employee assistance programs. Social workers collaborate with management, employees, and technical experts to improve the work environment.	Descriptive Research Methodology	Clinical social work focuses on psychological well-being, while occupational social work considers work settings' impact. Both emphasize systemic changes within organizations for healthier work environments, policy development, conflict resolution, and support for employees. Clinical social workers facilitate communication and collaboration among employees and management.

Table – 1 Literature Review Matrix

Materials and Methods

This study is a review of work conducted by various scholars in this area with the help of secondary sources of data from the period of 1989 to 2023. The compilation of the findings from the thorough review of books, journals, research papers, and relevant reports was analyzed to understand the major issues of Indian tea garden workers, especially those related to health and well-being. Additional review of contents regarding occupational social work to counter the crises of tea garden workers, specifically, maintaining the sustainable health and well-being of tea garden workers. After that synthesis of issues of Indian tea garden workers and the role of OSW in finding out the intervention areas where OSW can act as a catalyst to enhance the sustainable health and well-being of Indian tea garden workers.

Findings and Discussion

Based on the literature review, a matrix Table 1 was developed to describe the title of the research, the author's name, the Objectives of the study, the Methodologies adopted, and the key findings of the studies. The matrix aimed to synthesize the findings of various studies in this area to understand the issues of Indian tea garden workers related to health and well-being.

This study provides a panoramic view of the tea plantation labourers' scene based on the review of literature in contemporary India, examining employment relations and working conditions in the context of existing legal provisions to protect labours' interests in this largely exploitative system. Tea garden workers face numerous challenges, including limited rights, poor working conditions, minimal education, and poor health. Common health problems include fever, coughing, back discomfort, hypertension, respiratory problems, and skin disorders. Poor health awareness and lack of regular medical care contribute to these issues. Tea garden workers are exposed to occupational risks such as accidents, respiratory problems, skin disorders, and musculoskeletal illnesses. Chakraborty et al. (2021) and Sharma et al. (2022) conducted studies on the prevalence of problems with muscle disorders, as well as other physical and ergonomic problems. Panner (2019) highlights the risks of developing occupational diseases such as respiratory problems, musculoskeletal disorders, cancer, and mental health problems.

Thus, we have a web of physical and mental health disparities, including stress and other significant issues related to tea garden workers. Other pressing issues, such as low wages and inadequate working conditions, include the lack of essential amenities at the workplace, including sanitation, drinking water, and healthcare facilities. Moreover, malnutrition, discrimination, burnout, exploitation, disputes, migration, etc., are a chain of problems which are somehow directly or indirectly affect the worker's health and well-being.

Despite the requirements to prevent hazards, accidents, injuries, bug bites, and correct pesticide use, the Ministry of Commerce and Industry of the Government of India developed a Policy on the Use of Plant Protection Formulations in India's Tea Plantations. Provisions for labourers in response to the Plantation of Labour Act, 1951, and settlement of disputes, unionization, and a few welfare activities are taken into consideration in tea plantation estates of India; however, a large labour segment is consistently deprived in this sector. Due to the exploitative work culture and pathetic working conditions of tea garden workers, they are

deprived and marginalized from the mainstream. The tea market and management, and other concerned authorities make profits but do not treat the workers fairly. Significantly more workers are under stress, which ultimately affects financial crises, physical health, mental wellness, and other pertinent issues which leading to lower socio-economic status. The study's goal is to emphasize the work-related risks and health problems that tea garden workers experience, as well as the role of Occupational Social Work (OSW) in promoting the long-term health and well-being of Indian tea garden workers.

In situations where there is a certain number of workers, professional social workers can be appointed under several labour statutes and laws. The Factory Act of 1948, Section 49, mandated the employment of a Labour Welfare Officer in any facility with 500 or more workers. The Mine Act of 1952's subsection 58 discusses the appointment section 18 of the Plantation Act, 1951, which mandates the deployment of labour welfare officers in factories employing 300 or more people, highlighting the need to do so (Labour and Industry legislation, Government of India, 2017).

Any industrial context incorporates six social work strategies to handle a wide range of difficulties. These strategies include casework, group work, community organization, social welfare administration, social work research, and social action (Chukwu et al., 2017). Casework is a method that involves direct interventions with individual workers to address their psycho-social problems and improve their adjustment and development within the work environment. Social group work focuses on developing the capacities and potentialities of worker groups, while community organization focuses on the development of the work community and its resources to support worker well-being. Social welfare administration administers social welfare services and programs within the work organization, supporting primary occupational social work methods. Social work research studies work-related social problems, identifies needs, and develops programs and policies to address these needs. Social action involves developing programs and policies to bring desired changes in the work organization and address the root causes of workers' psycho-social problems.

However, a distinct three-method approach to social welfare administration, social work research, and social action benefits workstations in a variety of ways, including program development, strategy development, and successful implementation of suggested plans to effect positive change (Sehgal, 2005).

Highlighting the objective of the study, here we state how OSW is a Catalyst to sustainable health and well-being, and other core issues of tea garden workers in India. OSW focuses on work, workplace environment, people, and organizations, offering unique potential for social service innovation. Despite the risks, social workers can provide professional assistance and promote social change by assisting employees, labourers, families, and job seekers, offering unique opportunities for social service and practice innovation. Thus, OSW can strengthen the system to maintain the potential health and well-being of tea garden workers.

Intervention of Occupational Social Work

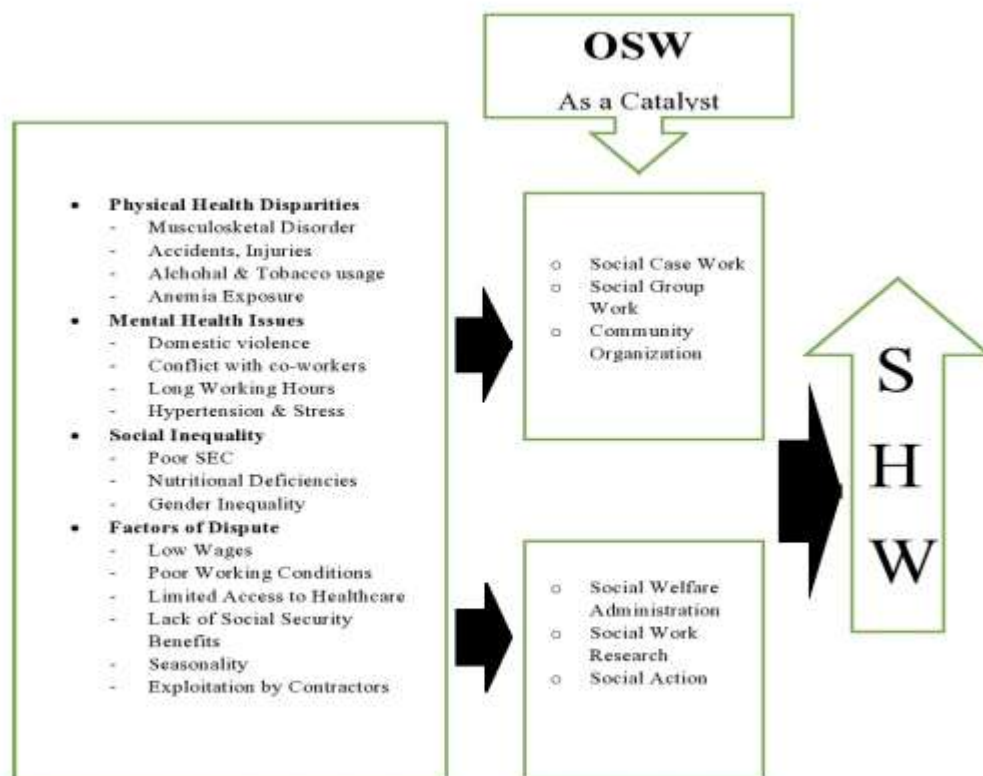


Figure 1: Interventions of Occupational Social Work (OSW)

The flow diagram, as shown in Figure 1, showcases how OSW can strengthen the Sustainable Health & Wellbeing (SHW) of Indian tea garden workers' health and welfare related issues by incorporating occupational social work techniques or services provided to the workplace, especially in the tea plantation sector.

Occupational Social Work as a Catalyst

Occupational social work, as described by Balgopal (1989), involves an expanded clinical perspective that integrates social work principles into the workplace. It provides a unique framework for addressing the complex issues faced by tea garden workers, including physical health, mental health, and social wellbeing. Occupational social work focuses on addressing issues such as job dissatisfaction, alienation, and boredom among workers, trade unions, management, and the community. Social workers are integral to delivery of mental health, community health, and occupational health, as noted by Gibelman (2005). With a large working population, accessing health services can be challenging. Social workers collaborate with doctors to improve health care delivery through neighborhood clinics, inpatient facilities, employer insurance plans, and treatment resources. They often meet with doctors to devise solutions to workplace issues. In addition to their workplace responsibilities, social workers assist workers in addressing financial, family, legal, and individual psychological issues.

Services provided by occupational social workers are essential to the workplace. The services have a significant chance of improving staff performance. The occupational social worker's target audience consists of individual employees and/or their families, members, management, and additional pertinent parties. The emphasis is on using tactics that support optimal functioning to address organizational, societal, and human demands. Due to the social, physical, and psychological effects of health and well-being on the workforce, effective functioning may be challenging or even impossible. Consequently, in this particular situation, occupational social work practice is particularly pertinent to the workplace.

Organizational social workers may hold a variety of titles, including personal services worker, education program director, occupational safety and health officer, health and security plan manager, membership services coordinator, career training adviser, preretirement services worker, day care consultant, legislative analyst, benefit plan administrator, community services liaison, substance abuse program supervisor, and director of retiree services (Akabas & Kurzman 2005). These tasks of occupational social workers address the concerns of tea garden workers, and by embracing this strategy, tea garden workers' long-term health and well-being can be improved.

After analysing the results of various findings of various research and understanding of OSW, the following major intervention areas emerged where OSW can act as a catalyst for the Sustainable health and well-being of Indian tea garden workers.

Poor Working Conditions

Bandyopadhyay (2022) and Rowlatt (2016) have both reported on the persistently poor working conditions in Indian tea gardens. Occupational social work can help advocate for greater safety measures, fair compensation, and better living situations. It can also facilitate dialogues between workers, labour unions, employers or management, and government authorities to address these issues effectively. The role of legislative analyst, benefit plan administrator, and welfare officer can play an important role in suggesting appropriate measures to address tea workers' issues in policy formulation with relevant authorities in the realm of related acts, such as the Plantation of Labour Act of 1951 and the Factories Act of 1948, among others.

Health Hazards

Several studies (Dey & Gupta, 2012; Nair & Priyadarshan, 2018; Vasanth et al., 2015) have revealed the occupational health dangers experienced by tea plantation workers, such as musculoskeletal diseases and respiratory concerns. Occupational social workers can collaborate with healthcare professionals to implement preventive measures like to prevent musculoskeletal disorders (MSDs), ergonomic interventions, safe work practices, respiratory problems, injuries, and exposure to chemicals and pesticides are crucial. Ergonomic tools, training on lifting techniques, stretching exercises, and breaks are essential. Job rotation reduces repetitive movements and muscle recovery. Protective equipment like PPE kit, masks necessary for workers exposed to pesticides or fertilizers. Regular health checkups, cleaner burning practices, safety training, and maintaining safe work environments are also essential to provide workers with access to healthcare services. Role of professional social worker as an occupational safety & health officer can facilitate adequate training to reduce hazardous accidents at the workplace.

Mental Health

GS et al. (2015) and Saju and Abraham (2021) have highlighted the mental health challenges faced by tea garden workers. Isolation, long working hours, and difficult housing conditions can cause stress and mental health problems. Various reports from Assam tea estate hospitals revealed a high prevalence of hypertension among workers. Occupational social work can

offer counseling, support groups, and mental health interventions to improve the psychological well-being of workers.

Social Inequality

Bhadra (1997) and Sfeatcu et al. (2014) have emphasized the social dimension of health and wellbeing. Occupational social work can address social inequalities by promoting inclusivity, equity, and community development initiatives within tea garden communities. The occupational social worker as community service liaison can play a prominent role through various social inclusion practices to connect this marginalized segment of the workforce still struggling with deprivation.

Dispute Resolution

Anand and Sengupta's (2023) study underscores the importance of effective dispute resolution mechanisms. Occupational social workers can act as mediators and facilitators in resolving conflicts between workers and management, ensuring that grievances are addressed promptly and fairly.

Decolonizing Social Work

Subrata and Singh (2023) address the obstacles and opportunities for decolonizing social work in industrial contexts in India. This involves redefining the roles of social workers to align with the specific needs and cultural context of tea garden workers, ultimately contributing to their health and well-being.

Conclusion

This study highlights the challenges faced by Indian tea garden workers, including poor working conditions, health hazards, mental health struggles, and social inequalities. It emphasizes the need for intervention to improve the sustainable health and well-being of this marginalized workforce. Occupational Social Work (OSW) can play a vital role in this situation, offering a specialized framework that integrates social work principles into the workplace. By assuming roles such as personal services workers, legislative analysts, health and security plan managers, and community services liaisons, occupational social workers can advocate for improved safety measures, fair wages, and better living conditions, while addressing health concerns. They can also collaborate with healthcare professionals to implement preventive measures, facilitate access to healthcare services, and provide mental health support. Occupational social workers can also resolve disputes, ensuring timely and

fair handling of conflicts between workers and management. They can contribute to decolonizing social work by adapting approaches to the specific needs and cultural context of tea garden workers, fostering inclusivity, equity, and community development. This study presents the role of OSW as a clear path forward towards enhancing the sustainable health and well-being of Indian tea garden workers, benefiting both individuals and the tea industry in India.

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