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Addressing Remote Work Challenges in Türkiye: A New Paradigm for Workplace Safety

Türkiye'de Uzaktan Çalışmada İş Sağlığı ve Güvenliği Bağlamında Zorlukların Ele Alınması : İş Sağlığı ve Güvenliği İçin Yeni Bir Paradigma

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Research Article - Araştırma Makalesi

Addressing Remote Work Challenges in Türkiye: A New Paradigm for Workplace Safety

Türkiye'de Uzaktan Çalışmada İş Sağlığı ve Güvenliği Bağlamında Zorlukların Ele Alınması : İş Sağlığı ve Güvenliği İçin Yeni Bir Paradigma

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ABSTRACT

The COVID-19 pandemic has exposed critical gaps in Türkiye's Occupational Safety and Health (OSH) framework, particularly for remote work. This study identifies the urgent need to redefine core concepts like the "workplace" and "work accident," focusing on protecting remote workers while addressing broader OSH considerations. Through a comparative analysis of Germany, France, and the UK, the research highlights priority areas such as ergonomic risks, mental health challenges, and home-based commuting accidents, alongside the integration of remote work into legal definitions. Recommendations include secondary regulations clarifying employer and employee responsibilities, tailored to Türkiye's socio-economic context. By bridging European practices with local needs, the study emphasizes legal clarity, equitable resource access, and mental health inclusion in OSH policies, contributing to global OSH advancements and adaptive worker well-being strategies in remote work settings.

Keywords: Work accident, remote work, occupational safety and health (OSH), workplace concept, employee psychology

ÖZ

COVID-19 pandemisi, özellikle uzaktan çalışma bağlamında Türkiye'nin İş Sağlığı ve Güvenliği (İSG) sistemindeki kritik eksiklikleri ortaya çıkarmıştır. Bu çalışma, uzaktan çalışanları korumak için "işyeri" ve "iş kazası" gibi temel kavramların yeniden tanımlanması ihtiyacını vurgulamakta ve daha geniş İSG kapsamına yönelik öncelikleri ele almaktadır. Almanya, Fransa ve Birleşik Krallık uygulamalarını karşılaştırmalı olarak inceleyen araştırma, ergonomi riskleri, çalışan psikolojisi ve evden işe ulaşım kazaları gibi öncelikli alanlara odaklanmakta ve uzaktan çalışmanın yasal tanımlara dahil edilmesi gerektiğini ortaya koymaktadır. Calışma, Türkiye'nin sosyo-ekonomik koşullarına uygun olarak işveren ve çalışan sorumluluklarını netleştiren ikincil düzenlemeler önermektedir. Avrupa uygulamaları ile yerel ihtiyaçları birleştirerek yasal netlik, kaynaklara eşit erişim ve çalışan psikolojisinin ISG politikalarına dahil edilmesi üzerinde durulmakta; uzaktan calisma ortamlarında calisan refahini artırmaya yönelik uyumlu stratejilere katkı sağlanmaktadır.

Anahtar Sözcükler: İş kazası, uzaktan çalışma, iş sağlığı ve güvenliği (İSG), iş yeri kavramı, çalışan psikolojisi

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Background

Remote work has introduced significant ambiguities in the classification of work accidents, particularly in home-based settings. Incidents such as tripping while commuting within the home or experiencing ergonomic injuries due to inadequate setups are often inconsistently recognized as workplace accidents, creating legal uncertainties for both employers and employees. These challenges are exacerbated by socio-economic disparities, as workers with limited financial means often lack access to ergonomic equipment or safe workspaces, leading to inequities in remote work arrangements. Mental health issues, including isolation, stress, and blurred work-life boundaries, add another layer of complexity, highlighting the need for tailored support systems to ensure worker well-being. Although recent updates to Türkiye's labor laws acknowledge the importance of remote work safety, significant gaps persist in defining workplace boundaries and addressing work-related accidents. This study addresses these gaps by examining the evolving concept of the workplace, identifying legal ambiguities, and proposing innovative solutions for managing OSH standards in remote work settings, using Türkiye as a case study to offer broader insights.

Importance

Occupational Safety and Health (OSH) remains a cornerstone of worker well-being and productivity, yet the rise of remote work has disrupted traditional OSH practices, necessitating the development of revised policies tailored to decentralized work environments. This study is particularly significant as it underscores the urgent need to redefine foundational concepts such as the "workplace" and "work accident" to reflect the realities of remote work. Current frameworks often fail to capture the complexities of decentralized work, particularly in Türkiye, where secondary regulations are underdeveloped and inconsistencies in practice persist.

By integrating international perspectives through a comparative analysis of case studies from Germany, France, and the United Kingdom, this research bridges global best practices with Türkiye's unique socio-economic challenges. A critical emphasis is placed on addressing mental health issues, such as isolation, stress, and the blurring of work-life boundaries, which are underexplored in Türkiye's OSH discourse. The study advocates for a holistic understanding of worker well-being that encompasses both physical and mental health, offering actionable recommendations for policymakers, employers, and stakeholders to foster safety, equity, and well-being in remote work settings. These contributions aim to align policy and practice with the evolving realities of work, ensuring robust protections for workers in decentralized environments while advancing modern OSH frameworks.

Objectives

This study seeks to establish a new paradigm for defining and managing work accidents within remote work settings, with a specific focus on the evolving context of Türkiye. Drawing on global best practices and comparative analyses of examples from Germany, the United Kingdom, France, and Türkiye, the research addresses three key objectives.

First, it advocates for a comprehensive redefinition of the workplace, expanding its scope to include decentralized environments such as home offices. This redefinition aims to align Türkiye's Occupational Safety and Health (OSH) regulations with international standards, ensuring consistency and clarity in addressing the unique challenges of remote work.

Second, the study provides guidelines for identifying and managing work accidents in remote

environments. It focuses on addressing critical yet underexamined issues, such as accidents occurring during internal commutes, ergonomic injuries resulting from inadequate setups, and mental health challenges linked to remote work conditions.

Third, it emphasizes the need to bridge policy gaps in Türkiye, highlighting deficiencies in existing labor laws. The study proposes secondary regulations to clarify employer and employee responsibilities, thereby reducing legal ambiguities and ensuring equitable protection for all remote workers.

By addressing these objectives, this research offers a novel contribution to the discourse on OSH in remote work settings. It provides one of the first comprehensive analyses focused on redefining workplace safety standards in Türkiye, delivering actionable insights to promote safer and more supportive working conditions in a rapidly transforming work environment.

I- LITERATURE REVIEW

A- Traditional Occupational Safety and Health (OSH) Frameworks

Occupational Safety and Health (OSH) standards have historically focused on centralized workplaces, such as offices, factories, and construction sites, with the primary aim of safeguarding workers against various hazards. These frameworks emphasize three key areas: Workplace Safety Regulations, which provide guidelines to prevent physical injuries like slips, trips, and falls (EU-OSHA, 2020: 45); Ergonomics, which ensure workstations are designed to prevent musculoskeletal disorders, including repetitive strain injuries (NIOSH, 1997, p. 12); and Health Monitoring, involving regular assessments to mitigate exposure to harmful substances and environments (EU-OSHA, 2020: 50). Notably, the European Agency for Safety and Health at Work (EU-OSHA) offers comprehensive guidelines covering areas such as machine operation, hazard communication, and fall protection, all tailored to traditional workplace environments (EU-OSHA, 2020: 47). These standards, however, reflect the needs of supervised and controlled workspaces, presenting challenges when applied to the decentralized nature of remote work.

B- Transition to Remote Work

The transition to remote work has exposed significant limitations in traditional OSH frameworks, as decentralized environments differ fundamentally from centralized workplaces. Remote work environments are marked by three key challenges: First, decentralized workspaces span diverse locations, including homes, co-working spaces, and other remote setups, each lacking the controlled safety standards of traditional offices (ILO, 2020: 18). Second, the variability in work conditions creates disparities, particularly as ergonomic standards depend on individual financial capacities (Gajendran & Harrison, 2007: 1530). Finally, blurred boundaries between personal and professional spaces increase physical and mental health risks, such as stress, isolation, and musculoskeletal disorders (Felstead & Henseke, 2017: 198). These unique dynamics demand a reevaluation of OSH standards to better support remote work arrangements (ILO, 2020: 21).

C- Existing Research

Current research on Occupational Safety and Health (OSH) in remote work settings is still emerging, but several critical themes have been identified, particularly in relation to work accidents. Legal and insurance gaps remain a significant challenge. Many legal systems lack clarity on the coverage of work-related accidents in remote settings. For example, in France, insurance policies often fail to

address the unique risks of remote work, leaving gaps in protection (ANACT, 2021: 22). Similarly, in Türkiye, while the legal framework for remote work is evolving, uncertainties persist regarding employer responsibilities for accidents occurring in remote settings.

The definition of work-related accidents also varies significantly. In Germany, the Federal Social Court has ruled that an accident at home may be considered work-related if it occurs during a work-related activity (Bundessozialgericht, 2021: 3). However, what constitutes a work accident in a remote setting remains inconsistent across jurisdictions. France's National Agency for the Improvement of Working Conditions (ANACT) highlights that insurance coverage for such accidents is often unclear, leading to significant protection gaps for remote workers (ANACT, 2021: 22).

Ergonomic risks are particularly pronounced in remote work settings, as many workers lack access to ergonomically sound workstations. A German study found a strong association between inadequate home office setups and increased rates of musculoskeletal complaints (Becker et al., 2020: 67). Similarly, the European Agency for Safety and Health at Work (EU-OSHA) underscores the importance of addressing ergonomic risks to prevent work-related musculoskeletal disorders (European Agency for Safety and Health at Work, 2020: 46).

The mental health challenges associated with remote work also demand attention. The lack of social interaction and blurred boundaries between work and personal life contribute to increased feelings of stress, isolation, and burnout. Research conducted in the UK indicates that remote workers face a higher risk of mental health issues compared to their on-site counterparts (CIPD, 2020: 15). Employers often overlook the mental health impacts of remote work, which may lead to absenteeism and decreased productivity (CIPD, 2020: 19).

Policy development to address the challenges of remote work is underway in several countries. In the UK, the Health and Safety Executive (HSE) has issued guidelines emphasizing the importance of risk assessments and proper workstation setups (HSE, 2024). France has taken similar steps, with the French Labour Code specifying employer responsibilities for ensuring a safe work environment in remote work arrangements (Code du travail, 2021). These examples highlight the growing recognition of the need to adapt OSH standards to decentralized work environments.

D- Challenges and Gaps

The rapid transition to remote work has exposed several challenges and gaps in OSH standards, necessitating the redefinition of workplace concepts and regulatory frameworks. The traditional concept of the workplace as a centralized, employer-controlled space is increasingly inadequate. Incidents such as tripping within one's home or ergonomic injuries due to poor setups underscore the need to revise workplace definitions (Messenger & Gschwind, 2016: 202). This lack of clarity creates gaps in social security coverage, complicates labor law compliance, and increases the risk of disputes over liability.

Legal ambiguities surrounding work accident coverage exacerbate these challenges. Türkiye's legal framework, for example, lacks detailed guidelines on defining and addressing remote work accidents, leaving employees vulnerable to denied claims and employers exposed to financial and reputational risks.

Ensuring monitoring and compliance is another significant challenge. The decentralized nature of remote work makes it difficult to standardize and enforce safety protocols, particularly in socioeconomically diverse regions like Türkiye. Employers face increased costs in ensuring safe remote

work conditions, while insufficient monitoring exposes workers to risks such as ergonomic injuries and unsafe environments (ILO, 2020: 18).

The mental health impacts of remote work, including stress, isolation, and burnout, are frequently overlooked in traditional OSH frameworks. These challenges not only reduce productivity but also strain social security systems through increased mental health claims (Felstead & Henseke, 2017, p. 198; CIPD, 2020: 15).

Finally, policy development remains insufficient in addressing the unique demands of remote work. Definitions of work accidents, employer responsibilities, and effective governance mechanisms are often unclear or underdeveloped, limiting the ability of policymakers to provide equitable.

II- COMPARATIVE PERSPECTIVES ON OSH IN REMOTE WORK: INSIGHTS FROM GERMANY, FRANCE, THE UK AND TURKIYE

The rapid transition to remote work has challenged traditional Occupational Safety and Health (OSH) frameworks, prompting countries to adapt their policies and practices to safeguard workers in decentralized environments. This section provides a comparative analysis of OSH policies in Germany, France, the United Kingdom, and Türkiye, highlighting legal frameworks, employer responsibilities, and insurance coverage. By examining these countries' approaches, this analysis offers valuable insights into emerging best practices and the lessons Türkiye can adopt to strengthen its own OSH standards for remote work.

A- Germany

Germany has established a comprehensive and forward-thinking framework to adapt its Occupational Safety and Health (OSH) policies to the unique challenges posed by remote work. With robust legal instruments such as the Social Code Book VII (SGB VII) and the Occupational Safety and Health Act (Arbeitsschutzgesetz, ArbSchG), Germany ensures that employers are held accountable for providing safe and supportive conditions in decentralized work environments. The inclusion of mental health considerations and comprehensive insurance coverage further underscores Germany's commitment to safeguarding employee well-being in remote settings.

i) Evolving Legal Framework and Employer Responsibilities

Germany's legal framework for OSH is rooted in clear and detailed legislative provisions that extend workplace protections to remote settings. Section 8 of the Social Code Book VII (SGB VII) defines workplace accidents broadly, including those occurring during remote work, provided there is a direct connection to professional duties. A significant decision by the Federal Social Court (Bundessozialgericht) in 2021 expanded this understanding by ruling that accidents occurring during home commutes—such as moving between rooms for work-related purposes—qualify as workplace accidents. The court emphasized that such incidents are covered if they are inherently tied to the execution of work tasks (Bundessozialgericht, 2021, para. 3).

The Occupational Safety and Health Act (ArbSchG) reinforces employer responsibilities for ensuring employee safety, including in home offices. Specifically:

• Section 3 ArbSchG mandates that employers take all necessary measures to protect the safety and health of employees, regardless of where work is performed.

• Section 5 ArbSchG obliges employers to conduct comprehensive risk assessments of work environments, including home offices, to identify potential hazards and implement preventive strategies.

These legal requirements ensure that remote workers receive protections comparable to those in traditional office settings. The practical implementation of these responsibilities is supported by the Federal Institute for Occupational Safety and Health (BAuA), which has issued detailed guidance on ensuring ergonomic and safe workspaces. For instance, BAuA's 2020 recommendations include:

- Providing **ergonomic furniture** such as adjustable chairs and desks to minimize musculoskeletal risks.
- Conducting **regular risk assessments** to address the unique challenges of home offices.
- Offering **training and resources** to help employees establish safe and efficient work environments (BAuA, 2020).

Research highlights the significance of these measures, with studies such as Becker et al. (2020) reporting a high prevalence of musculoskeletal disorders among remote workers due to inadequate home office setups. Employers are therefore encouraged to provide financial or logistical support to facilitate compliance with ergonomic standards.

Germany's OSH framework also recognizes the increasing importance of addressing mental health risks associated with remote work. Isolation, stress, and work-life balance challenges have been identified as significant issues affecting remote workers. The Federal Institute for Occupational Safety and Health (BAuA) and related institutions recommend strategies to support mental well-being, including:

- Regular Virtual Check-Ins: Facilitating ongoing communication between employees and managers to reduce feelings of isolation.
- Access to Counseling Services: Providing psychological support for employees experiencing stress or burnout.
- **Training on Work-Life Balance:** Educating workers on managing boundaries between personal and professional responsibilities (BAuA, 2020).

These measures align with international best practices and underscore Germany's commitment to fostering holistic employee well-being in remote work settings.

ii) Insurance Coverage for Remote Work Accidents

Germany's Social Accident Insurance (Deutsche Gesetzliche Unfallversicherung, DGUV) provides comprehensive protection for remote workers under Section 8(1) SGB VII. This provision ensures that incidents occurring in remote work environments are treated as workplace accidents if they are directly linked to professional duties. For example, injuries sustained while attending virtual meetings or completing work tasks in a home office fall within the scope of workplace accidents.

Employers are obligated to:

- Assess Risks: Conduct thorough evaluations of remote workspaces to mitigate potential hazards, in accordance with DGUV Regulation 2.
- **Report Accidents:** Promptly report workplace accidents to the DGUV to ensure timely claims processing and compliance with legal obligations.
- Implement Preventive Measures: Provide employees with ergonomic tools and training on workplace safety, focusing on risks specific to remote work environments.

The coverage extends to accidents that occur during activities integral to professional responsibilities, ensuring parity in protection for remote and on-site employees. However, activities that blur the line between personal and professional contexts (e.g., moving to retrieve personal items during work hours) may present interpretative challenges.

The DGUV guidelines allow for compensation in cases where mental health issues are clearly documented and linked to professional duties. Employees suffering from conditions like burnout syndrome or depression caused by workplace stress may receive:

- Coverage for therapy and medical treatment.
- Rehabilitation programs aimed at reintegration into the workforce.
- Financial compensation for periods of reduced productivity or inability to work.

B- France

France has developed a detailed and robust legal framework to address the Occupational Safety and Health (OSH) needs of teleworkers. Anchored in the French Labour Code (Code du travail) and supplemented by specific telework regulations, the country emphasizes the equality of protections and rights for remote and on-site employees. These provisions, coupled with updated insurance mechanisms, highlight France's commitment to safeguarding the health and safety of remote workers while ensuring comprehensive legal clarity.

i) Evolving Legal Framework and Employer Responsibilities

The French Labour Code (Code du travail), particularly Article L1222-9, mandates that employers ensure the health and safety of teleworkers. This provision requires employers to conduct risk assessments to identify and mitigate hazards in home work environments, ensuring adherence to occupational safety and health (OSH) standards. The regulation underscores the principle of parity between teleworkers and on-site employees, affirming equal protection under the law (Legifrance, 2021). The Regulation on Teleworking, introduced in 2021, further elaborates on employer responsibilities. These include:

- Conducting Regular Inspections: Employers are required to monitor teleworking conditions periodically to ensure compliance with safety standards.
- **Providing Ergonomic Equipment:** As per Article L1222-9, employers must supply necessary ergonomic tools such as chairs and desks to prevent health issues like musculoskeletal disorders.

• **Delivering OSH Training:** Employers must train teleworkers on safety protocols applicable to remote settings, as stipulated in **Article R4624-10** of the Labour Code.

Additionally, French law requires that telework arrangements be formalized through written agreements. These agreements must specify terms related to employer responsibilities, equipment provisions, and compliance with OSH standards. Such agreements, integrated into internal company policies or employment contracts, ensure legal accountability and clarity (Ministère du Travail, 2021).

ii) Insurance Coverage for Remote Work Accidents

France has revised its insurance policies to address the unique risks associated with teleworking. Work accidents occurring in home offices are recognized under Article L411-1 of the French Labour Code, which defines work-related accidents as incidents arising from activities performed under the employer's authority, regardless of location. This ensures that teleworkers receive the same protections as on-site employees.

The National Agency for the Improvement of Working Conditions (Agence Nationale pour l'Amélioration des Conditions de Travail, ANACT) has emphasized the importance of clear policies to safeguard remote workers. These policies address:

- Ergonomic Risks: Employers are encouraged to implement preventive measures, such as ergonomic training and workspace assessments, to reduce the incidence of musculoskeletal injuries.
- **Documentation of Accidents:** To ensure smooth claims processing, teleworkers are advised to document incidents thoroughly, including time, context, and any work-related evidence (ANACT, 2021, p. 22).

Employers are obligated to provide teleworkers with resources to minimize risks and offer compensation for work-related injuries. Benefits include:

- Medical Coverage: Full access to medical care for injuries sustained during work-related activities.
- Disability Benefits: Compensation for temporary or permanent disabilities resulting from remote work accidents
- Death Benefits: Provisions for dependents in cases of fatal accidents.

By aligning legal mandates with comprehensive insurance coverage, France ensures equitable treatment for teleworkers, underscoring its dedication to employee safety and well-being in decentralized work environments.

C- United Kingdom

The United Kingdom's legal framework for Occupational Safety and Health (OSH) in remote work provides comprehensive coverage for most scenarios. However, as remote work increasingly blurs the boundaries between professional and personal life, certain ambiguities challenge the application

of traditional legal principles. While the Health and Safety at Work Act 1974, related regulations, and case law offer a strong foundation, complex scenarios such as mixed-purpose activities in home environments highlight areas where clarity could be improved.

i) Legal Framework and Employer Responsibilities

The Health and Safety at Work Act 1974 (§ 2(1)) imposes a duty on employers to ensure the health, safety, and welfare of all employees, extending this obligation to those working from home. The accompanying Management of Health and Safety at Work Regulations 1999 (Reg. 3) further specifies that employers must conduct risk assessments of remote work environments. These risk assessments should evaluate:

- Ergonomic safety: Ensuring workspaces minimize risks of musculoskeletal disorders.
- Electrical safety: Assessing risks related to the use of electronic devices in home environments.
- Psychological safety: Addressing risks such as stress, isolation, and mental health concerns.

Employers must also provide adequate training and resources, as per Regulation 13 of the Management of Health and Safety at Work Regulations 1999, ensuring employees understand how to work safely from home (Health and Safety at Work Act, 1974, § 2(1); Management of Health and Safety at Work Regulations, 1999, Regs. 3, 13). The Health and Safety Executive (HSE) offers detailed guidelines to operationalize these obligations. Employers are recommended to:

- **1. Supply ergonomic equipment:** Adjustable desks, chairs, and monitors are critical to prevent repetitive strain injuries.
- **2. Regularly review arrangements:** Conduct periodic assessments to ensure ongoing compliance with safety standards.
- **3. Ensure work-life balance:** Implement measures to prevent burnout, such as flexible scheduling or mandated breaks.

However, these guidelines are not legally binding, leaving room for varied implementation. Employers who fail to adequately assess risks or provide sufficient resources may face liability under Employers' Liability (Compulsory Insurance) Act 1969, particularly if employees sustain injuries related to work tasks.

Legal precedent, such as Allison v. London Underground Ltd [2008] EWCA Civ 71, emphasizes the employer's responsibility for ensuring the safety of tools and work arrangements, even in non-traditional settings. This principle applies to remote work but is limited in its ability to address mixed-purpose activities.

ii) Evolving Legal Framework and Employer Responsibilities

Injuries sustained during remote work are covered under the Employers' Liability (Compulsory Insurance) Act 1969 (§ 1) and must be reported in accordance with Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR). These laws establish clear parameters

for work-related incidents but encounter ambiguities when assessing activities that may serve both professional and personal purposes.

- Mixed-purpose activities: Activities such as walking to retrieve a document (work-related) and tripping while fetching a personal beverage (personal activity) challenge the determination of liability. In such cases, courts must evaluate whether the injury occurred "in the course of employment."
 - UK courts, unlike Türkiye, benefit from a stronger body of precedent. However, they face similar challenges in distinguishing between tasks integral to employment and personal tasks.
- **Undefined workspace boundaries:** The absence of clear boundaries between "work areas" and "personal areas" in the home complicates the attribution of liability for accidents. For example:
 - If an employee falls in a shared space, such as a kitchen or living room, courts may question whether the employer should have assessed risks beyond the designated workspace.
- **Proving causation:** Employees must demonstrate that the injury resulted from their work duties. This requirement is straightforward in traditional offices but more contentious in remote environments.

While direct case law addressing remote work accidents is scarce, established principles guide judicial interpretation:

- In Allison v. London Underground Ltd [2008] EWCA Civ 71, the court emphasized the employer's obligation to mitigate foreseeable risks associated with the use of equipment.
- Hypothetically, a case involving a fall while fetching water might draw from this principle if the employer failed to address ergonomic issues, such as the need for frequent breaks to avoid fatigue, which could indirectly lead to the accident.

Similar ambiguities exist in Türkiye under Article 13 of the Social Insurance and General Health Insurance Law (No. 5510), where "work-related accidents" include those occurring during professional duties. However, in Türkiye, the lack of precedent and detailed regulations exacerbates uncertainties about what constitutes a work-related activity in remote settings.

D- Türkiye

Türkiye's response to the shift toward remote work involves an evolving legal framework guided by the Labour Law (No: 4857), the Occupational Health and Safety Law (No: 6331), and the Social Insurance and General Health Insurance Law (No: 5510). While regulations such as the 2021 Regulation on Remote Working provide a foundation, ambiguities persist regarding employer responsibilities and insurance coverage for remote work accidents. Addressing these gaps is essential for enhancing OSH standards in Türkiye's remote work landscape.

i) Evolving Legal Framework and Employer Responsibilities

The legal framework regulating remote work in Türkiye has evolved significantly, driven by the increasing adoption of flexible working arrangements and technological advancements. This evolution

has introduced comprehensive responsibilities for employers, particularly in ensuring occupational health and safety in decentralized work settings. The framework is built upon binding laws such as the Turkish Code of Obligations, the Occupational Health and Safety Law (No: 6331), and the Labour Law (No: 4857), as well as supplementary guidelines and regulations. Together, these instruments aim to create a cohesive approach to managing remote work environments.

a- Obligations Under the Turkish Code of Obligations

Article 317/II of the Turkish Code of Obligations establishes a foundational obligation for employers to provide a workplace that is safe and suitable for employees' health, taking into account the nature of the work (Türk Borçlar Kanunu, 2011, madde 317/II). This general duty of care applies to all forms of employment, including remote work arrangements, requiring employers to adapt their occupational safety measures to diverse working environments.

b- Occupational Health and Safety Law (No: 6331)

The Occupational Health and Safety Law (No: 6331) further expands on these responsibilities. Article 4/1, a mandates employers to ensure the health and safety of employees in all work environments, including home offices. Employers are required to identify risks, implement preventive measures, and regularly monitor working conditions (İş Sağlığı ve Güvenliği Kanunu [Occupational Health and Safety Law], 2012, madde 4/1,a). Additionally, Article 10 obligates employers to conduct detailed risk assessments, with a specific focus on mitigating hazards associated with remote work (İş Sağlığı ve Güvenliği Kanunu [Occupational Health and Safety Law], 2012, madde 10). While the law does not explicitly require employers to supply ergonomic equipment, its provisions emphasize the need for safe and appropriate working conditions in all environments.

c- Labour Law and Remote Work

Article 14 of the Labour Law (No: 4857) serves as the legal basis for remote work in Türkiye, explicitly permitting remote work agreements and detailing the rights and responsibilities of employers and employees. Article 14/VI specifically states:

"Employers are required to inform employees about occupational health and safety measures, provide necessary training, ensure health surveillance, and implement safety measures related to the equipment provided to the employee."

This regulation underscores the necessity of integrating occupational health and safety principles into remote work practices and highlights the employer's obligation to create a safe and supportive work environment.

d- Regulation on Remote Working

The Regulation on Remote Working, published in the Official Gazette in 2021, elaborates on the provisions of the Labour Law, providing detailed guidance on the implementation of remote work practices. Key employer responsibilities under this regulation include:

- Informing employees about health and safety measures specific to remote work.
- Providing training on occupational safety standards applicable to remote work environments.
- Monitoring and assessing risks associated with remote work settings to prevent accidents and health issues.

These provisions bridge gaps in statutory requirements by offering practical solutions tailored to the unique challenges of remote work.

e- Supplementary Guidelines

In addition to binding legal requirements, the Ministry of Labour and Social Security¹ and the Social Security Institution (SGK) have issued several non-binding guidelines to assist employers in addressing the physical and psychological risks of remote work. These guidelines serve as practical tools to promote a proactive and comprehensive approach to occupational health and safety.

Ministry of Labour Guidelines:

- "Remote Work and Ergonomics Guide": This guide focuses on optimizing home office setups to prevent musculoskeletal disorders, recommending ergonomic adjustments such as the use of adjustable chairs and desks.
- "Risk Assessment Guide for Remote Work": Provides methods for identifying and mitigating hazards in remote work environments, including virtual risk assessments and self-reporting mechanisms for employees.
- "Mental Health and Well-being in Remote Work Guide": Addresses psychological risks such as isolation, burnout, and stress, offering strategies for employers to support employees' mental health.

Social Security Institution (SGK) Circulars:

- "Occupational Accident Reporting Circular (2020)": Outlines the procedures for recognizing and reporting work accidents in decentralized work environments, clarifying the respective obligations of employers and employees.
- "Guidance on Reporting Remote Work Accidents": Specifies the criteria and documentation required to classify incidents as work accidents under Article 13 of Law No. 5510.

These guidelines, although not legally enforceable, provide a roadmap for employers to enhance both physical and mental well-being in remote work settings, fostering safer, healthier, and more productive working conditions.

ii) Insurance Coverage for Remote Work Accidents

The Social Insurance and General Health Insurance Law (No: 5510) establishes the foundational legal framework for defining and addressing work accidents in Türkiye. According to Article 13, work accidents are defined as incidents occurring during the execution of work-related duties, leading to physical or mental harm. This includes accidents that occur at the workplace, during

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¹ The Ministry of Labour and Social Security (*Çalışma ve Sosyal Güvenlik Bakanlığı*) underwent a name change following a Presidential Decree issued on July 10, 2018, which restructured the institution as the Ministry of Family, Labour, and Social Services (*Aile, Çalışma ve Sosyal Hizmetler Bakanlığı*). However, on April 21, 2021, the name reverted to the Ministry of Labour and Social Security (*Çalışma ve Sosyal Güvenlik Bakanlığı*), aligning with the reinstatement of its traditional functions and scope.

employer-arranged travel, or while performing tasks on behalf of the employer, irrespective of location. However, the application of this framework to remote work environments introduces ambiguities, particularly in defining the home as a workplace.

Traditional workplaces have clearly delineated boundaries under employer control. In contrast, remote work blurs these boundaries, making it challenging to determine the extent of employer liability and insurance coverage. For instance, while tasks such as commuting between home workspaces or setting up home office equipment may fall under work-related duties, the lack of explicit legal definitions leaves these scenarios open to interpretation. This ambiguity is compounded by the absence of case law or detailed regulations clarifying which parts of the home environment qualify as a workplace and which activities are considered work-related. The application of Article 13 to remote work contexts raises critical issues regarding insurance coverage and employer responsibilities:

Liability Disputes: Employers and employees may disagree on whether an incident qualifies as a work-related accident, leading to delays in insurance claims and legal disputes. For example, tripping within the home while attending a video call or injuries sustained while assembling office furniture can result in differing interpretations of liability.

Coverage Gaps: Employees may face difficulties proving that an incident occurred during the execution of work-related tasks, potentially leaving them without compensation or support for injuries sustained during remote work.

Policy Ambiguity: The lack of secondary regulations addressing remote work-specific scenarios contributes to uncertainty for employers and employees alike, limiting the efficacy of existing frameworks in addressing the complexities of remote work environments.

Work accidents occurring in remote environments are regulated under Article 13 of Law No: 5510, but their classification often relies on the employer's and employee's ability to document the work-related nature of the incident. Employers are required to report accidents to the Social Security Institution (SGK) within three business days, ensuring compliance with legal obligations. Employees injured during remote work are entitled to:

- Comprehensive Medical Coverage: Full access to treatment for injuries sustained during work-related activities.
- **Disability Compensation:** Support for temporary or permanent disabilities resulting from work accidents.
- **Death Benefits:** Provisions for dependents in cases of fatal accidents.

Guidelines issued by SGK emphasize the need for detailed documentation to verify incidents as work-related. These include procedures for evaluating remote work accidents and ensuring compliance with reporting requirements. However, without secondary regulations, many aspects of insurance coverage and employer liability remain unresolved.

Tablo 1. Comparative Table: OSH Frameworks for Remote Work in Germany, France, the UK and Türkiye

Aspect	Germany	France	United Kingdom	Türkiye
Legal Framework	Social Code Book VII (SGB VII), Occupational Safety and Health Act (ArbSchG)	French Labour Code (Code du travail), Teleworking Regulation	Health and Safety at Work Act 1974, Management of Health and Safety Regulations 1999	Labour Law (No. 4857), Occupational Health and Safety Law (No. 6331), Law No. 5510
Employer Responsibilities	Conduct risk assessments; ensure ergonomic workspaces; provide training (ArbSchG, § 3, § 5)	Conduct risk assessments; provide ergonomic tools; formal telework agreements (L1222- 9)	Conduct risk assessments; supply ergonomic furniture; address mental health (HASWA § 2)	Conduct risk assessments; inform employees about safety measures; provide training (6331)
Insurance Coverage	Accidents during professional duties covered (SGB VII § 8(1)); parity with office workers	Telework accidents covered under Labour Code (L411- 1); equal rights for teleworkers	Injuries covered under Employers' Liability Act 1969; RIDDOR for reporting accidents	Accidents defined under Article 13 of Law No. 5510; ambiguities in remote work application
Ambiguities in Liability	Clear boundaries for work-related activities; supported by case law	Minimal ambiguities; formal agreements reduce disputes	Ambiguities in mixed-purpose activities (e.g., personal tasks); workspace boundaries	Lack of detailed regulations; unclear boundaries between work-related and personal tasks
Guidelines and Support	Federal Institute for Occupational Safety and Health (BAuA) provides detailed guidance	ANACT provides ergonomic recommendations and clear reporting standards	HSE offers detailed non-binding guidance; focus on mental health	Ministry of Labour offers non-binding guides; less comprehensive compared to other nations
Judicial Precedents	Clear rulings extend protections to remote work (e.g., BSG, 2021)	Strong legal clarity; few court disputes due to explicit telework rules	Case law supports employer liability for work equipment (e.g., Allison v. London, 2008)	Limited precedents; reliance on interpretation of general laws
Psychological Health Provisions	Encouraged by BAuA; virtual check- ins and counseling support, covered by social insurance	Emphasized by ANACT in mental health training for teleworkers	CIPD and HSE prioritize stress management and mental health initiatives	Non-binding guidelines address psychological risks (e.g., isolation, burnout)

III- DISCUSSION: TOWARD A NEW PARADIGM

A- Redefining Work Accidents

The shift to remote work has introduced a redefinition of traditional workplace boundaries, necessitating a comprehensive re-evaluation of Occupational Safety and Health (OSH) standards. One of the most notable changes is the concept of commuting within the home, which replaces the traditional commute to a physical office. Accidents occurring during this internal "commute," such as moving from the bedroom to the home office, should be recognized

as workplace incidents, requiring an expanded definition of the workplace to include any area within the home designated for work activities.

To address the unique risks associated with remote work, governments and regulatory bodies must adopt a new paradigm for defining work accidents. This paradigm should be comprehensive and adaptable, recognizing the increasingly blurred boundaries between work and personal life. Key considerations include:

- Integrating Home and Work Spaces: Acknowledging the home as a legitimate part of the work environment, with accidents during work hours within this space classified as work-related.
- Equal Consideration for Physical and Mental Well-being: Expanding work accident definitions to encompass mental health issues, such as stress and anxiety, alongside physical injuries.
- **Diverse Remote Work Arrangements:** Adapting definitions to cover various remote work models, from full-time home-based work to hybrid setups.
- **Promoting Work-Life Balance:** Addressing the challenges of blurred boundaries between professional and personal life in remote work settings. This includes recognizing the impact of domestic responsibilities and ensuring that policies support workers in managing these demands without compromising their mental well-being or productivity. Such measures are crucial for fostering a sustainable and balanced work environment.

Ergonomic injuries resulting from inadequate home office arrangements should also be recognized as workplace incidents. Employers must take an active role in providing ergonomic equipment and conducting regular assessments to prevent such injuries. Similarly, mental health issues, including stress and anxiety linked to remote work conditions, should be treated as work-related events. Employers are encouraged to implement mental health support programs and facilitate regular virtual check-ins to address these challenges.

Furthermore, technological and environmental hazards arising from remote work must be included within the OSH framework. This encompasses risks such as poor indoor air quality, inadequate lighting, and injuries involving work-related electronic equipment. Employers should offer guidance on creating a safe home office setup and provide tools or subsidies to enhance these environments.

Cybersecurity and data breach risks are additional concerns for remote workers, as these threats can contribute to both stress and potential legal complications. Employers should mitigate these risks through cybersecurity training, provision of tools, and ongoing support.

Finally, the distinction between work-related and non-work-related activities during working hours must be clarified. For example, accidents occurring during personal errands, such as going to the market during working hours, should be carefully assessed to determine their classification as work accidents. These scenarios underscore the need for detailed policy frameworks that address the complexities of remote work arrangements.

A holistic and inclusive approach to these issues is essential for effectively updating OSH standards to align with the evolving realities of the modern workforce.

Tablo 2. Redefining Work Accidents

Aspect	Description	Recommendations
Commute within the Home	Accidents during movement within the home, such as walking from the bedroom to the home office.	Redefine "workplace" to include designated work areas within the home and recognize such incidents as work accidents.
	A comprehensive framework that	- Include the home as part of the work environment.
New Paradigm for Definitions	integrates home and workspaces, addresses physical and mental health,	- Expand to cover mental health issues.
	and adapts to diverse setups.	- Adjust definitions to include full-time and hybrid remote models.
Ergonomic Injuries	Injuries caused by inadequate home office setups, such as musculoskeletal disorders from poor ergonomics.	Employers should provide ergonomic equipment and conduct regular assessments of home office setups.
Mental Health Issues	Stress, anxiety, or other mental health problems arising due to remote work conditions, such as isolation and blurred boundaries.	Employers should implement mental health programs, offer counseling services, and conduct regular virtual check-ins with employees.
Technological and Environmental Hazards	Injuries or health issues caused by poor indoor air quality, inadequate lighting, or malfunctioning electronic equipment.	Employers should offer guidance on safe home office setups and provide subsidies or tools to improve home working conditions.
Cybersecurity and Data Breach Risks	Stress and potential legal issues arising from increased cybersecurity threats and data breaches while working remotely.	Employers should provide cybersecurity training, tools, and ongoing support to protect both personal and professional data.
Non-Work-Related Activitiesz	Accidents during personal activities performed during work hours, such as errands or personal appointments.	Develop clear guidelines to assess such incidents and determine their eligibility as work accidents based on the context and nature of the activity.

B- Challenges and Opportunities

i) Challenges

Remote work presents several significant challenges that must be addressed to ensure the safety, well-being, and productivity of employees. Legal ambiguities remain a critical issue, as many countries are still adapting their frameworks to the unique demands of remote work. These gaps create uncertainties regarding employer responsibilities and insurance coverage, often leading to disputes and inconsistent application of laws. Employers and employees alike struggle to navigate their rights and obligations within this evolving landscape.

Ensuring compliance with Occupational Safety and Health (OSH) standards in decentralized work environments is another major challenge. The lack of direct oversight in home offices makes it

difficult for employers to enforce safety measures effectively. Without physical inspections, ensuring adherence to guidelines becomes inconsistent, leading to varying levels of risk across different home settings. This highlights the need for innovative monitoring and compliance strategies.

Remote work also significantly impacts work-life balance, as the boundaries between personal and professional life often blur. This can result in increased stress, burnout, and reduced productivity. Employers must implement measures to help employees manage their time effectively and establish clear boundaries to prevent work from encroaching on personal life. Similarly, the lack of social interaction in remote work environments can lead to employee isolation and negatively affect mental health. Addressing these issues requires innovative approaches, such as fostering virtual communities and providing accessible mental health resources.

Finally, resource disparities among employees pose significant challenges. Unequal access to technology, internet connectivity, and ergonomic office setups can create disparities in work quality and employee well-being. To address this, employers must provide or subsidize the necessary tools and resources to ensure all employees have access to a safe and productive work environment, regardless of their personal circumstances.

These challenges underscore the need for comprehensive policies and proactive employer interventions to adapt OSH practices effectively to the realities of remote work.

ii) Opportunities

Remote work presents significant opportunities to enhance Occupational Safety and Health (OSH) practices and address the challenges of modern work environments. Technology and innovation play a pivotal role in transforming remote work safety. Tools such as virtual reality (VR) for ergonomic assessments and AI-based mental health applications offer continuous monitoring and support, helping to mitigate risks and improve employee well-being. Virtual platforms can also facilitate risk assessments, ergonomic training, and mental health support, making OSH practices more accessible and effective.

The shift to remote work creates an opportunity for policy development that specifically addresses the unique challenges of decentralized work environments. By establishing comprehensive policies with clear definitions of work accidents, employer responsibilities, and insurance coverage, policymakers can provide consistent protection for remote workers. These policies should be flexible and adaptable to accommodate various remote work scenarios while ensuring uniform enforcement.

Flexible work arrangements are another advantage of remote work, enabling employees to achieve better work-life balance and increased job satisfaction. Employers can adopt flexible scheduling, hybrid models, and other strategies that empower employees to balance their personal and professional responsibilities more effectively.

Enhanced training and support can address challenges such as isolation and resource disparities. Employers can offer time management workshops, mental health programs, and ergonomic training to improve home office setups and ensure connectivity. These initiatives not only improve individual productivity but also create a healthier and more supportive work environment.

Encouraging community building among remote workers can foster a sense of connection and mutual support. Online forums, peer mentoring programs, and local support groups enable employees to share best practices and collaborate on creating safe and healthy home workspaces. Such efforts enhance both employee engagement and overall well-being.

Remote work also brings environmental benefits, contributing to sustainability by reducing commuting and the associated carbon footprint. Employers can align these efforts with corporate social responsibility (CSR) initiatives, promoting energy-efficient home offices and environmentally friendly practices.

Lastly, cost savings present a dual advantage for employers and employees. Employers can reduce expenditures on office space and utilities, while employees save on commuting and work-related expenses. These financial benefits can be redirected to remote work initiatives and employee support programs, further enhancing the remote work experience.

These opportunities underscore the transformative potential of remote work to improve safety, sustainability, and employee satisfaction when supported by innovative technology and robust policies.

Tablo 3. Challenges and Opportunities in Remote Work

Category	Aspect	Description	
	Legal Ambiguities	Uncertainties in legal frameworks regarding employer responsibilities and insurance coverage.	
Challenges	Monitoring and Compliance	Challenges in enforcing OSH standards due to lack of direct oversight in decentralized environments.	
	Work-Life Balance	Difficulty maintaining boundaries between personal and professional life, leading to stress.	
	Employee Isolation and Mental Health	Feelings of isolation and negative mental health impacts due to lack of workplace social interaction.	
	Resource Disparities	Unequal access to resources like ergonomic setups, internet, and technology affecting well-being.	
Opportunities	Technology and Innovation	Utilizing tools like VR and AI for ergonomic assessments and mental health support.	
	Policy Development	Developing clear, adaptable policies to address remote work challenges, such as insurance coverage.	
	Flexible Work Arrangements	Implementing flexible schedules and hybrid models to improve work-life balance and satisfaction.	
	Enhanced Training and Support	Providing training on time management, mental health, and ergonomic practices, and improving setups.	
	Community Building	Encouraging peer support networks and community-based safety initiatives for remote workers.	
	Environmental Benefits	Reducing commuting-related carbon footprints, contributing to sustainability goals.	
	Cost Savings	Savings on office space, utilities, commuting, and work attire for both employers and employees.	

C- Policy Recommendations for Türkiye

In light of Türkiye's evolving legal and socio-economic context, the following policy recommendations aim to enhance occupational safety and health (OSH) standards and address the unique challenges of remote work, aligned with relevant primary and secondary regulations.

Strengthening Legal and Regulatory Frameworks

Türkiye's Labour Law (No: 4857) and Occupational Health and Safety Law (No: 6331) provide the foundational legal basis for remote work. However, gaps remain in defining employer responsibilities, particularly concerning ergonomic equipment and mental health support. The Regulation on Remote Working, introduced in 2021, partially addresses these issues by mandating employer responsibilities such as risk assessments and OSH training. To ensure comprehensive protection, secondary regulations should explicitly define:

- The boundaries of the workplace within home environments, clarifying areas and tasks considered work-related under Article 13 of Law No: 5510.
- Employer obligations regarding ergonomic furniture provision and risk mitigation for mental health challenges associated with remote work.

The non-binding guidelines issued by the Ministry of Labour and Social Security and the Social Security Institution (SGK) emphasize these areas but lack enforceability. For instance:

- "Guidelines for Remote Working" focus on ergonomic setups, risk assessments, and communication strategies to ensure safety but do not impose mandatory compliance.
- "SGK Occupational Accident Reporting Circular" provides a framework for classifying and reporting remote work accidents but does not establish concrete employer responsibilities.

Strengthening these guidelines by integrating them into enforceable secondary regulations would ensure consistent application and accountability across workplaces. Binding these measures under the legal framework would enhance safety, reduce ambiguities, and ensure equitable protections for all remote workers in Türkiye.

Improving Monitoring and Compliance

Employers should implement virtual inspections and self-assessment mechanisms to monitor home office conditions. Risk assessment guidelines, as outlined in Labour Law No: 4857 and OSH Law No: 6331, should be adapted for remote work environments to identify hazards and enforce safety standards. Government support, including technical assistance for small and medium-sized enterprises (SMEs), can ensure uniform compliance across different sectors.

Enhancing Employee Protections and Benefits

To address insurance ambiguities for remote work accidents, the Social Insurance and General Health Insurance Law (No: 5510) should include secondary regulations that:

- Define work accidents in remote contexts, including ergonomic injuries and mental health issues.
- Introduce tailored insurance premium rates for remote workers, reflecting unique risks.
- Streamline reporting procedures to ensure timely and accurate documentation of remote work accidents.

Addressing Socio-Economic Disparities

Equitable access to resources is critical for ensuring safe remote work conditions. Employers should offer financial assistance or subsidies for ergonomic equipment, especially for low-income employees. Government programs could bridge digital divides by providing support for internet access, technology procurement, and digital literacy training.

Promoting Mental Health and Work-Life Balance

Employers are encouraged to develop mental health programs that include counseling services, stress management workshops, and regular virtual check-ins. Flexible work schedules, as endorsed by Labour Law No: 4857, should promote work-life balance, preventing burnout and enhancing productivity.

Leveraging Technology and Sustainability

Technological solutions, such as **virtual risk assessments**, **online training modules**, **and AIdriven safety tools**, can help employers ensure compliance and proactively address safety concerns. Promoting sustainability through remote work, including reduced commuting and energy-efficient home offices, aligns with corporate social responsibility (CSR) goals and national environmental objectives.

Public Awareness and Community Engagement

The government and employers should launch public awareness campaigns to educate stakeholders on rights, responsibilities, and best practices under the new remote work regulations. Collaborative platforms and peer support networks can foster a sense of community among remote workers, enhancing engagement and well-being.

By integrating these measures, Türkiye can create a robust framework that supports the safety, equity, and productivity of its growing remote workforce while addressing its unique legal and socio-economic challenges.

Tablo 4. Policy Recommendations for Türkiye

Policy Area	Recommendations	Key Actions	
	- Clarify workplace boundaries for remote work under Article 13 of Law No: 5510.	- Integrate "Guidelines for Remote Working" and "SGK Occupational Accident Reporting Circular" into binding regulations.	
Strengthening Legal Frameworks	- Define employer obligations for ergonomic support and mental health mitigation.	Introduce secondary regulations for consister application.	
	- Make non-binding guidelines enforceable.		
Improving Monitoring and Compliance	- Implement virtual inspections and self-assessment tools.	- Support SMEs with technical assistance.	
	- Adapt risk assessments for remote work environments.	- Align risk assessment practices with Labour Law No: 4857 and OSH Law No: 6331.	

	- Define work accidents specific to remote work, including ergonomic and mental health risks.	- Update secondary regulations under Social Insurance Law No: 5510.	
Enhancing Employee Protections	- Introduce tailored insurance premiums for remote workers.	- Simplify reporting procedures for remote work	
	- Streamline reporting of remote work accidents.	incidents.	
Addressing Socio-	- Provide financial assistance for ergonomic equipment.	- Offer subsidies for low-income employees.	
Economic Disparities	- Bridge digital divides with government programs for internet, technology, and training.	- Launch initiatives for digital literacy and technology procurement.	
Promoting Mental Health	- Develop mental health programs, including counseling and stress management workshops.	- Embed mental health initiatives in employer policies.	
	- Promote flexible work schedules to enhance work-life balance.	- Utilize Labour Law No: 4857 to support flexible work arrangements.	
Leveraging Technology	- Use technology like AI tools, virtual risk assessments, and online training modules.	- Promote CSR goals through sustainable remote work practices.	
and Sustainability	- Encourage energy-efficient home offices and reduced commuting.	- Develop AI-driven safety tools for compliance.	
Public Awareness and	- Educate stakeholders through awareness campaigns on remote work rights and responsibilities.	- Launch government and employer-driven campaigns.	
Community Engagement	ommunity - Build collaborative platforms and - F	- Foster engagement through online forums and community initiatives.	

CONCLUSION

The transition to remote work, accelerated by the COVID-19 pandemic, has revealed significant deficiencies in traditional Occupational Safety and Health (OSH) standards, emphasizing the urgent need for modernized and inclusive frameworks. Key findings underscore the importance of recognizing remote work-related incidents, such as home-based commuting accidents, ergonomic injuries, and mental health challenges, within the scope of OSH regulations. Additionally, the implementation of regular risk assessments, facilitated by virtual inspections and self-assessment tools, is critical to addressing hazards in diverse home-based work environments.

Employers have a central responsibility in mitigating these risks by providing ergonomic support, such as appropriate furniture, safety training, and mental health resources. In this context, work-life

balance and gender-specific concerns warrant particular attention, given their role in exacerbating psychosocial and mental health challenges in remote work settings.

In Türkiye, existing legal and policy gaps demand urgent action, including the establishment of clear definitions of work accidents, comprehensive employer responsibilities, and inclusive insurance coverage. Tailored policies must address socio-economic disparities, ensuring equitable access to resources, particularly for disadvantaged groups and those disproportionately impacted by gender inequalities.

The adoption of technological innovations, such as AI-driven ergonomic systems and virtual reality platforms, is recommended to enhance OSH strategies and ensure adaptability to the evolving realities of remote work. For Türkiye, strengthening government support mechanisms, including financial incentives for employers and targeted training programs, is essential. These measures highlight the need for a holistic and inclusive approach to modernizing OSH standards, addressing both the physical and mental health dimensions of remote work, and fostering sustainable solutions for a rapidly changing workforce.

Implications for Future Work and Future Research Directions

This study underscores key implications for advancing Occupational Safety and Health (OSH) policies, practices, and research, emphasizing the need for collaborative efforts among employers, policymakers, and researchers. Such collaboration should focus on integrating flexible safety standards, utilizing advanced technologies like AI for personalized safety recommendations and VR for ergonomic assessments, and fostering community-based support systems to address the unique challenges of remote work.

Future research should prioritize the examination of long-term physical and mental health impacts associated with remote work, emphasizing the need for comparative analyses of best practices across different countries. Such efforts aim to establish a globally applicable framework for occupational safety and health (OSH). In the context of Türkiye, it is imperative to develop tailored solutions that address local challenges. These include the formulation of clear and comprehensive legal frameworks, the provision of government incentives, and ensuring equitable access to essential resources to mitigate socio-economic disparities. Furthermore, gender-specific considerations, particularly in relation to achieving a sustainable work-life balance, require focused attention. Lastly, systematic evaluations of policy recommendations and government-led initiatives are crucial to ensure they effectively address the evolving needs of the workforce.

In the realm of social security, further investigation is needed to assess whether flexible home-based workers require a distinct social security status. This includes examining the potential benefits and drawbacks of such a classification and its implications for the labor market and social security systems. Addressing these areas will contribute to a more inclusive and effective approach to modernizing OSH standards for remote work settings.

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