Inequalities in the Uptake of Occupational Health Services in the Construction Sector

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Abstract: Recent report reveals that significant occupational health inequalities exist in the construction sector. The report suggests that on average, unskilled construction workers with low income have less access to occupational health services in the workplace and most likely to be victims of severe occupational ill-health on the long run when compared to other industries. Research regarding inequality, access, and uptake of occupational health services in the construction sector vis-à-vis workplace health improvement governance is scarce. To create awareness of inequalities, access, and uptake of occupational health improvement measures in the construction sector. What are the likely material factors required to improve access and uptake of occupational health services in the construction workplace? The study adopted pragmatic research philosophy, that involves mixed research methods including archive data, observational, interventional, and phenomenological research strategy. The study used stratified and purposive sampling techniques, with data collected from array of professionals and occupational health diagnoses data from three medical centres in England. From the study suggest that on average construction and infrastructure workers have less access to occupational health intervention compared to safety practices activities in a ratio of 1:18. Other findings indicate that 78% of occupational ill-health are linked to construction and infrastructure workers from poor/deprived background, low-income earners, or migrants. The findings are clear pointer to glaring occupational health uptake inequality in the construction sector.

Introduction

Recent reports reveal that significant occupational health inequalities exist in the construction sector, and workers that bear the brunt of work-related ill-health are mainly from poor/deprived background, low-income earners, or migrants [1] [2]. [3] avow that the most commonly occupational health conditions reported by construction workers include occupational Asthma (with 7 people per 100,000 workers), Chronic Obstructive Pulmonary Disease, Occupational cancer, 8,000 cancer deaths linked to occupational health and 3,700 were attributed to past work in the construction industry. The reports also suggest that on average unskilled construction workers with low income have less access to occupational health services in the workplace and are more likely to be victims of severe occupational ill-health on the long run, when compared to other industries in the UK. Global 2023 statistics reveal that there were approximately 340 million occupational

accidents and 160 million victims of work-related illnesses annually [4]. [5a] labour data show that an estimated 185.6 million working days were lost, due to sickness or injuries. The figures are even projected to be higher for 2023/24 for array of reasons [6]. Detail review of the data suggest that workers sickness, absence rate, including number of days lost and reasons for absence, increased by 0.4% from 2021 and the highest since 2004 when it was 2.7%. [5b] claim that the main reasons for a large rise in absence and sickness in some industries (such as construction, healthcare, transportation, etc) in the UK, relates to mild illnesses such as cold, cough, and flu; with infectious diseases accounting for 29.30% in 2022/23 compared to 10.03% in 2019. Moreover, the data also suggest that musculoskeletal Disorders illness account for 23.80% compared to 13.73% in 2019, and anxiety, depression, and other psychiatric illnesses account for 7.9% compared to 7% in 2019 mainly in the construction sector.

A recent consultation by [6] titled "Occupational Health: Working Better" opines that only 45% of workers in Great Britain have access to occupational health services, which is significantly lower than some international comparators such as Germany with 67% access to occupational health services in the workplace. [7] posits that surprisingly only a few (less than 20%) of healthcare staff in the UK, take advantage of occupational health services in the workplace. In many cases, workers in certain industries such as construction, gig economy, etc simply do not have access to occupational health services, due to array of reasons ranging from lack of occupational health facilities, work pattern of staff, workload, pattern of some shift work, etc. Indeed, inadequacy or lack of occupational health services have the potential to impede worker performance, confidence and in worst case scenario lead to adversely effect on workers' ill health and absenteeism [8]. Thus, reducing long-term sickness and absent from work should be government, organisations, and individual priorities.

Besides, it is reasonable to assume that inequality and social mobility elements also play a vital role in the access and uptake of occupational health services in the workplace. For example, [9] stated that "at the peak of the pandemic, … almost all minority ethnic groups had higher risks of dying from COVID-19 compared to white British majority of similar age … due to nature of work, access to occupational health services, among other biological factor". The Chartered Institute of Personnel and Development [10] avow that many individuals from black and ethnic minority backgrounds in sectors such as nursing homes, construction, health, and care, etc still face discrimination and are disadvantaged when trying to make career progress at work and access to amenities such as health improvement facilities. [11] argues that a detail examination of the UK health and safety statistics from 2012 to 2022 suggests that skilled workers with low income in the construction, mechanical, agriculture, health, and care sectors are most likely to be victims of adverse occupation health and safety incidents, compared to better-paid workers in tertiary industries. Similarly [12] in a publication at the University College London (UCL) longitudinal study identified that Millennials from Black, Asian, and Minority Ethnic (BAME) backgrounds are 47% more likely to be on a zero-hours contract … BAME group also have 10% greater odds of working a second job, 5% more likely to be doing shift work, and are 4% less likely to have a permanent contract compared to their White peers. While array of studies suggests that inequality and social mobility have the potentials to impede on certain categories of workers' access and uptake of occupational health services in the workplace, independent research that creates awareness of inequalities, access, and uptake of occupational health services improvement in the construction sector are rare.

The significance of the study stem from the fact that awareness and understanding of occupational health improvement measures in the workplace have the potential to enhance longevity of workers' lives and reduce sickness and absence from work. [4] argues that a healthy workforce is a veritable tool and bedrock of any nation. Besides, the full impact of occupational health services on construction workers' well-being, productivity, micro, and macro-economy remains elusive. [3] is of the view that ill-health among lower socio-economic

background workers costs the UK economy more than £100 billion a year, with sickness and absenteeism costing employers over £11 billion a year. The study will also help unmask gaps in ethnic, racial, and other inequality issues that exist in terms of access and uptake of occupational health services in the construction sector. Moreover, the significance of the study is also entrenched in [13] publication titled "Working for a Healthier Tomorrow". The review asserts that "if organisations placed an increased focus on improving workplace health, then cost savings could be generated for both organisation and government". Besides, practitioners in the construction sector need a conscious shift in attitude to ensure that both employees and employers understand and recognise the importance of preventing ill health so that the workforce becomes motivated, resourceful, and resilient to enhance strategic success. Therefore, to enhance understanding of the research variables, there is a need for a thorough literature review concerning occupational health intervention strategy, access, and uptake of occupational health services in the construction sector.

Literature Review

There is a need for working definitions of the phrases "Occupational Health Services (OHS)" and "Health Improvement in the Workplace" (HIW). [14] bulletin claims that OHS is an act (measurable actions) of helpful activities that focuses on the health and well-being of staff (employees) in the workplace. A good example of OHS may include the appointment of an occupational health specialist or occupational professional tasked with the responsibilities of regularly finding out the impact of work on workers' health and ensuring they are fit to undertake their role both physically and emotionally. On the other hand, HIW entails information, and practical measures available to encourage and support employees and employers to be healthier. For example, the availability of information about healthy eating, health risks associated with a particular profession, task, activities, alcohol, drugs, etc. Overall, the long-term goal of HIW includes but is not limited to workplace health promotion programmes such as on-site fitness facilities [15].

Literature review suggests that access and uptake of OHS and HIW are lagging in the construction sector compared to industries such as agriculture, aviation, nuclear, oil and gas. [16] argues that the biggest influence for adopting OHS and HIW are management commitment, employee involvement, training/competence, communication, compliance with procedures, and organisational learning. Yet, in the construction sector awareness about Occupational safety seem to have precedence over and above occupational health issues that is widely considered to be the largest killer in the workplace. Arguably, though the phrases "health and safety" are interchangeably used, there is more awareness about safety compared to occupational health in the UK construction sector. [17] data show that occupational health challenges remain the leading cause of adverse health and safety statistics relating to absenteeism, time off work, loss of working hours, etc. Furthermore, it is often alleged that minor illnesses (such as colds, coughs, or flu; infectious diseases), particularly in post-COVID-19 are the resultant effect of long Covid-19 [18]. Society of Occupational Medicine (2022) asserts that the impact of Covid-19 on the workforce could have detrimental and long-term effects on both individuals and the economy. Recent research evidence suggests that 45% of patients with long-term Covid had to decrease their work commitment compared to before having Covid-19 in many sectors including workers in the construction industry [18].

Moreover, [6] consultation report reveals that reported reasons for absences due to illness vary by profession and staff group. For example, [14] bulletin claims that in the pre- and post-COVID-19 pandemic era, nurses, and midwives were more likely to have reported sickness absence for mental health reasons accounting for (28% of all absences) than doctors (24%). Moreover, around twice the proportion of reported sickness days for ambulance staff and

clinical support staff relates to musculoskeletal conditions than for doctors (17% compared to 9%). In the last three years to 2023, some groups of professionals such as truck drivers, nurses, teachers, and construction professionals have been disproportionately affected by sicknesses and absence from work. For example, the main reasons for absence from work by these group of professionals relates to illness such as influenza, chest and respiratory problems, and infectious disease (i.e., those that could relate to Covid-19) for ambulance staff alone rose from the equivalent to a 0.3% sickness absence rate to 1.9% (for all staff the sickness absence rate for those reasons alone increased from 0.4% to 1.5%). Other professionals such as construction workers, university lecturers, career workers, and warehouse/factory workers are not immune from reported reasons for absences due to illness [5].

Apart from colds, cough, flu, and other infectious diseases, Musculoskeletal disorder (MSD) is also identified as a leading cause of ill health that results in absenteeism, particularly in the construction sector [19]. [20] study concludes that musculoskeletal disorder (MSD) represents a large burden (over 55%) of disease among construction and gig economy workers. MSD causes significant impairment in physical and mental health along with limitations in daily activities. The study specifically identified lower back, shoulder, neck, upper back, hand/wrist, knee, ankle/foot, elbow, and hip/thigh pains as the most affected body areas for most construction, infrastructure, truck drivers, and other long-shift workers.

Statistics of Occupational ill-health

[21] in a publication titled Construction Health Risk, highlighted that construction professionals have the largest burden of occupational cancer, accounting for 40% of occupational cancer deaths and cancer registration. The report also claims that skilled construction and building tradesmen are one of the occupations with the highest estimated prevalence of back injuries, upper limb disorders, nerve damage, broken bones, joint displacement, ligament damage, and muscles, and tendon disorders. Overall, work-related ill health and occupational disease in Great Britain show that 12,000 deaths were recorded, and 1.8 million workers are diagnosed or known to be suffering from work-related ill health (new or long-standing) according to [22] as illustrated in figure 2.1 below.

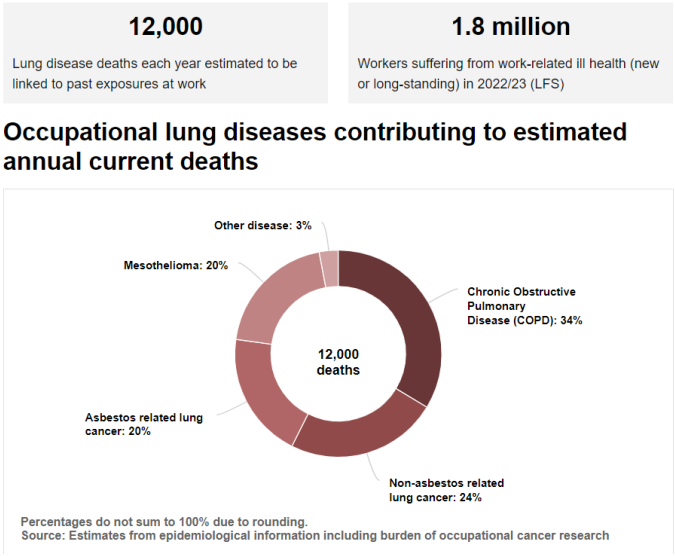

Figure 2.1: Occupational lung diseases contributing to estimated annual current deaths adapted from [22]

Contextual Influences of Inequality, Health, and Work

Arguably, within the construction sector, OHS and HIW usually receive less research attention compared to costs, budgetary, time, and quality requirements [23]. Though, scholars of social stratification and inequality long recognised the centrality of employment and working conditions as a reflection and determinants of individuals' life chances [24], [25]. [26] assert that "studies on work and health found that the quality and stability of work are key factors in the work-health relationship … the research findings also show that low-quality, unstable, or poorly paid jobs lead to or are associated with adverse effects on health". [7] and [27] claim that long hours of shift work, working environment have the potential to impact the health, safety, and well-being of workers. Findings from the report allude to the fact that health workers, construction personnel, truckdrivers, university lecturers, long hours shift work (such as midwives, nurses, care workers, and security personnel) that requires standing and or walking continuously for more than five hours per shift usually report fatigue, sleep disorders, Obesity-related type 2 diabetes symptoms, cardiovascular disease, digestive disorders, and mental ill health (anxiety, depression). The studies also suggest that long hours of work, and use of vibrating machine has potential to impact on reproductive health and increase incidence of cancer.

Indeed, work and working conditions are essential contributors to social inequality across generations. For example, [28] in a study titled "A Study of Migrant Workers and the National Minimum Wage and Enforcement Issues that Arise" opine that migrant workers often gravitate toward specific sectors of most economy such as hospitality, healthcare, and the construction sectors. Perhaps, the key prerequisite for understanding occupational health inequality in these sectors are low-paying jobs, professional qualifications of workers, work/shift patterns and with little or no access to of occupational health services. While most research about construction workers' health are conducted at the individual level, the contextual influence of how access to OHS and HIW affects the health of both individual and collective workforce remains largely unsubstantiated. [29] claim that migrant male workers are more likely to be employed than UK-born men, this category of workers often do long shift work, meagre jobs, low pay, etc, and are less likely to take advantage of OHS and HIW. Yet, research that examines inequalities, access, and uptake of occupational health improvement measures in the construction sector are scarce. Therefore, the study focus is on key macro-level factors including occupational structure, worker ill-health and materials factors required to enhance occupational health services in the workplace and its influence on structural inequality.

Theory of Occupational Health Inequalities

Arguably, [30] theory is the closest occupational health and inequalities supposition that perfectly describes the study variable. The theory postulates that workers who are employed in manual occupations (such as the construction sector) have worse health conditions compared to those who work in professional occupations; and that the health effect of any occupation operates at least in part independently of the personal characteristics of the workers. The theory also suggests that "the gradient between socio-economic status and health becomes steeper if workers with lower socio-economic status in terms of education, parental background, and financial wealth, (i.e., people in lower socio-economic status) are more likely to choose occupations with harmful workplace conditions, and the only way to fully offset the negative effects of occupational health is by making health investments".

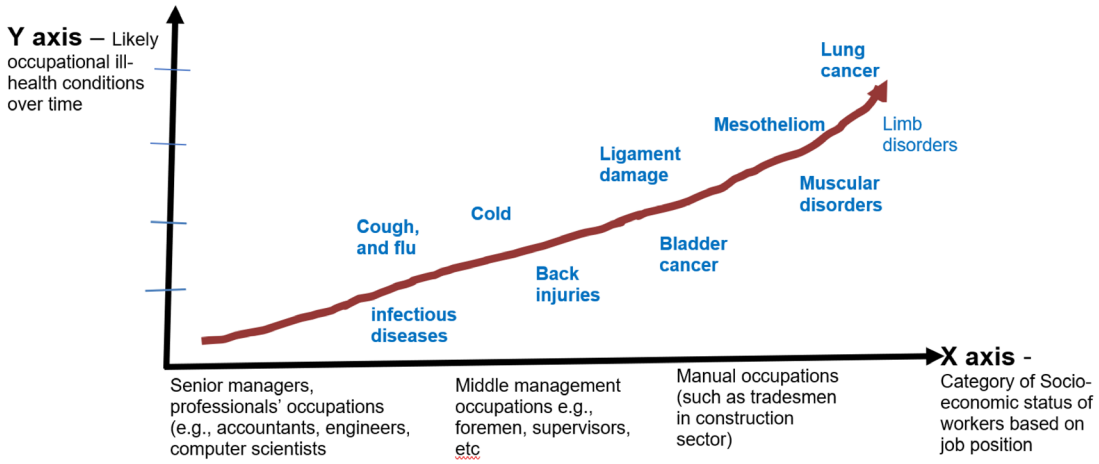

Figure 2.2: Socio-economic status of worker and occupational ill-health adapted from Case and Deaton (2005)

The theory simply implies that workplace conditions could directly contribute to health inequalities. But, health disparities, racial, ethnic, and socioeconomic lines are observed in both low and high-income countries, and the gap may be widening. In many cases, employment is often linked to health in positive ways, both as a predominant mode of earning income and other material benefits and as a source of social integration, prestige, and meaning. Conversely, employment or occupation also exposes workers to potentially health-harming physical and psychosocial stressors.

Study Design

The study adopted a pragmatic research philosophy, that involve mixed research methods including archive data, observational, interventional, and phenomenological research strategies. The research strategy allows respondents to express their perceptions and experiences about the research variables. The observational and interventional studies were subdivided into cohort studies (follow-up studies), case-control studies, cross-sectional studies (prevalence studies), and wellness studies (with aggregated data) for a better understanding of the research variables. **Data Collection:** Stratified and purposive sampling techniques was adopted, with data collected from array of specific construction professionals in the UK. Both quantitative and qualitative data were collected and analysed for a better understanding of the study variables. The researchers relied on the Freedom of Information Act 2000 to obtain proven occupational health data from construction and engineering companies, General Practices (GP) and other medical/health institutions. To avoid a breach of the General Data Protection Regulation (GDPR) act, workers, and patient's personal health data such as names, age, etc were removed from all data obtained from three GPs, four construction and engineering companies, and one mental health institution. The researchers asked health institutions, construction and engineering companies for workers'/patients' health symptoms linked to occupational health issues. Two occupational health therapists, a Physiatrist/Rehabilitation Physician, and five construction manual workers from different construction trades were recruited for the phenomenological study. The role of the medical doctor i.e., a Physiatrists and Rehabilitation Physician (PM&R) is to advise the researchers on occupational injury medicine, treatment of disabling conditions, diagnosis, and treatment of pain, physical and

occupational therapists, optimise patient care, nerves, bones, joints, ligaments, muscles, and tendons disorder.

[31] claim that phenomenological study brings to bear the experiences, understanding, and perceptions of individuals (about a phenomenon) from their perspectives. The study data were collected using Focus Group Discussions (FGDs) and scrutiny of archived data. A total of three focus group forums were organised and intensively discussed issues about occupational health, access to occupational health services and Health Improvement in the Workplace. [31] believe that studying multiple perspectives of a phenomenon could help in the development of a theory and generalisation of findings from phenomenological studies. [32] stated that 3 to 10 participants are acceptable for a typical FGD. Thus, this study adopted a minimum of three to ten participants per FGD. Discussions and interactions in each FGDs were tape-recorded and transcribed. Microsoft Teams and Word 2023 versions were used to facilitate all transcriptions. Textual contents from each FGDs were inputted into Nvivo 12 software for content analysis. All data captured were coded using keywords and phrases such as "occupational health", "occupational health services", "workplace health improvement measurement", "optimise patients care", "pain" "muscular disorder", etc. Data obtained were analysed using content analysis. Reasons for using content analysis include the ability to easily extrapolate antecedents of interviewee's discussions, concerning the study subject matter, it provides valuable insight about the research data, code/text allows for unobstructed means of analysing interactions, and better examination of communications using captured texts that emanated from the FGDs. However, the limitation of FGDs include the use of small cohorts of participants and establishment of truth during discussions.

Validity of Qualitative Research Method Adopted

The researchers were mindful of endless theoretical arguments about validity of qualitative research methods, particularly FGDs. The study archive, observational, and interventional data were deemed to reliable because they were actual and factual patients' occupational diagnostic records from national Health Services. However, qualitative inquires data of often subjected to validity argument. To avoid philosophical arguments about validity of qualitative research, the authors accepted the standpoint of [33] assertion that "there is a pure 'form of truth' which can be discovered (through construct, external and internal validity) using appropriate and most importantly valid research methods". For straightforwardness, the authors inferred valid qualitative research (interview data) to represent credible social worlds (construct) or different interpretations of words that constitute meaning to the study research variables. Thus, validity of the phenomenological inquiry was addressed through three fundamental areas: production (design of interview questions, interview process, and recording of the data), presentation (replicability, valid inference, and arrangement of the data), and interpretation (meaningful discussion of data).

Summary of Archive, Observational and Interventional Data

Table 3.1 presents a record of commonly diagnosed occupational illnesses and evidence of interventions from three (3) medical/health centres in London, England. The aggregation of data from the three medical centres suggests that Muscular disorders, Osteoarthritis pains, Limb disorders (including hand-arm vibration syndrome HAVS), and Tendons and ligament injuries are the frequently diagnosed occupational illness. Strangely, record of accumulated occupational health issues shows that the Construction & Infrastructure sector had 129 diagnosed occupational illnesses, from a total of 164 combined diagnoses. The data reveal that the Construction & Infrastructure sector leads occupational illness diagnosis by approximately 78.65% compared to the Engineering and Factory work sectors with 21.34%. The researchers also

interviewed a medical expert in the three medical centres to ascertain how interventions such as therapy, Occupational Health Services (OHS), and Health Improvement in the Workplace (HIW), help workers return to work. Surprisingly, at of 45 evidence-based patient cases, 62% of occupational health interventions were recorded for workers from Engineering and Factory background compared to 38% of workers from the construction and infrastructure sector.

Table 3.1: Record of Commonly Diagnosed Occupational Illness

S/No.	Commonly diagnosed Occupational health issues three health Centres from 2010 to 2023	No. of Patients linked to Construction & Infrastructure sectors	No. of Patients linked Engineering and Factory sector	Evidence of Workers returning to work because of timely and proactive interventions such as Therapy, OHS and HIW	
				Construction sector	Engineering and Factory sector
1	Occupational Cancer - caused by significant exposure to carcinogens in the workplace	11	3	2	1
2	Tendons and ligaments injuries	17	5	2	4
3	Limb disorders including hand-arm vibration syndrome (HAVS)	29	7	1	3
4	Osteoarthritis pains	31	11	4	11
5	Muscular disorder	41	9	4	9
Total		**129**	**35**	**17**	**28**

Findings from the archive, observational, and interventional data illustrated in Table 3.1 above, show some degree of disproportionality of occupational health issues between workers in construction & infrastructure and those from Engineering and Factory backgrounds. The findings prompted the researcher to dig deeper and to investigate the provision and availability of occupational safety activities, Occupational Health Services and Health Improvement in

the Workplace events. Data presented in Table 3.2 were deduced from six large construction companies and five selected engineering and factory sectors in the south and west midlands of England. The data were obtained via inspection of companies' occupational health records and six month naturalistic and participant observations. The data suggest a better blend between occupational health and safety interventions in engineering and factory works compared to the construction sector. Data in 3.2 are indeed skewed toward safety interventions. However, the common denominator between construction/infrastructure and Engineering/Factory workers' occupational health diagnosis is the glaring inequality in the data analysed. For example, background checks of 164 combined diagnosis from the three medical centre shows that 98% of occupational health diagnosis relate to construction workers who are socio-economically disadvantage in terms of low paid poor professional qualifications, workers that do long hours shift, migrant workers, and are from deprived family lineage. Also, the occupational health diagnosis data suggest that these categories of workers have little or no access to occupational health services in the workplace.

Table 3:2: Occupational Health and Safety Interventions Data for construction and Engineering and Factory sectors

	Occupational Health Interventions in the Construction & Infrastructure sector		**Occupational Health Interventions in Selected Engineering and Factory sector**	
	Health	**Safety**	**Health**	**Safety**
Occupational Health Services in the workplace (engagement of occupational specialist, fitness, and wellness unit, workplace health education, etc)	1	13	11	5
Other Health Improvement Measures in the Workplace	0	-	7	-
Occupational Safety Interventions (toolbox, safety risk assessment, enforcement of PPE, etc	-	5	9	7
Total	**1**	**18**	**27**	**12**

3.3 Presentation of Findings from FGDs Inquiries

Participants in the FGDs were asked to express their views about inequalities, access, and uptake of occupational health improvement measures in the construction sector. For example, when asked: What are the likely material factors required to improve access and uptake of occupational health services in the construction workplace? The study participants put forward array of views and opinions. Some textual excerpts were expressed verbatim as illustrated below for a better understanding of participants' viewpoints regarding the research variables.

> "… renewed awareness about occupational health is needed … there seem to be over-emphasis on occupational safety instead of occupational health which is the main killer …" – (similar views were upheld 8 times by study participants P1,2,3,5,7,8).

Probing question: What are the likely material factors required to improve access and uptake of occupational health services in the construction workplace?

> "... improvement to psychosocial conditions (e.g., social participation, job demand control), ... living conditions of workers (e.g., income and wealth) ... lifestyle (e.g., tobacco, alcohol, obesity, physical activity, diet), and access to essential services (e.g., education, awareness of health services in the workplace)" - (similar views expressed 12 times by study participants P,2,4,5,6,7,11)

Research Question: What is your view about the indisputable inequality of occupational health diagnosis data? Why are construction workers at increased risk of occupational health illness?

> "... poor access to occupational health services, ... misplaced priorities from industry leaders, government and workers, lack of occupational health specialists ..." (similar views expressed 14 times by study participants P1,2,4,5,6,7,10).

Discussion Results

Inference from the study suggest that the construction industry is in dire need of renewed awareness of occupational health risks and uptake of occupational health improvement measures. For example, suggestions from study participants indicate that poor access to occupational health services is indeed a misplaced priory by workers, industry leaders, and government. Findings from existing literature and contemporary data analysis illustrated in table 3.1 relating to record of commonly diagnosed occupational illness reveal that Muscular disorder, Osteoarthritis pains, Limb disorders including hand-arm vibration syndrome (HAVS), Tendons and ligaments injuries, and occupational cancer caused by significant exposure to carcinogens in the workplace as frequently diagnosed occupational illnesses linked to workers in the construction sector. The findings align with [34] assertion that "construction workers are at increased risk of work-related ill health worldwide; particularly, less privileged tradesmen are significantly increased incidence of work-related ill-health such as musculoskeletal disorder, and ligaments injuries, back pains, occupational cancer, etc". Yet, there is little attention from researchers, governments, and industry practitioners on how to alleviate chronic occupational health challenges. It appears that little attention is given to occupational health interventional measures such as Occupational Health Services and Health Improvement measures in construction workplace. Archive and observational data presented in tables 3.1 and 3.2 show significant increases in occupational health diagnosis among workers in the construction & infrastructure compared to workers in the Engineering and Factory sectors. In terms of occupational health interventions, patients' data analysed suggest that there is a better blend of occupational health and safety interventions in engineering and factory works compared to the construction sector as illustrated in table 3.2. The researchers observed that occupational health and safety in the construction and infrastructure sector is overly skewed toward occupational safety awareness, compared to occupational health, which is currently a major contributor to death, absenteeism, loss of work hours, and other social problems.

Conclusion

Key deduction from the study suggests that on average construction and infrastructure workers have less access to occupational health intervention compared to safety practices in a ratio of 1:18. In contrast, the study findings also reveal that on average engineering and

factory workers have better access to occupational health intervention compared to safety practices in a ratio of 9:4.as illustrated in Table 3.2 above. Deep dive into the data also indicate that 78% of occupational ill-health are linked to construction and infrastructure workers from poor/deprived background, low-income earners, or migrants. The findings are clear pointer to glaring inequality that exist in terms of access and uptake of occupational health services in the construction sector. Perhaps, the gap in occupational health inequality is exacerbated by misplaced priorities by industry leaders, government, workers, lack of occupational health specialists, and access to occupational health facilities in the construction workplace. Besides, there is clear lack of occupational health leadership in most construction organisations. Thus, stakeholders in the construction sector need to be aware that prioritising resources for the prevention and management of occupational health is an investment, because employees with good health are more engaged and motivated, leading to increased productivity and improved performance. Besides, the study archive and observation data show that engineering and factory workers have better awareness of occupational health services, workplace health improvement support such as wellness and fitness facilities in the workplace, availability of occupational health specialists, education about health risks associated with certain task, activities, use of alcohol and drugs in the workplace, etc, compared to average construction workers. Yet, construction workers are more exposed to increased occupational ill-health related issues. Ultimately, the study deduced that the likely material factors required to improve access and uptake of occupational health services in the construction workplace include but are not limited to improvement to psychosocial conditions (e.g., social participation, job demand control), enhancing living conditions of workers (e.g., income and wealth), worker themselves need be aware of their lifestyle (e.g., use tobacco, alcohol, obesity, physical activity, diet, etc). Besides, there is a need for government intervention in terms of renewing campaign for construction organisations to create access to essential occupational health services e.g., occupational health education, and awareness of health services in the workplace.

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