

Institutional Blind Spots in OHS: A Study on Awareness, Hazards, and Structural Barriers for Female Workers in Rice Mill Industry

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ABSTRACT

Occupational Health and Safety (OHS) among female workers in the rice mill industry is a critical issue. This study focuses on the level of awareness among both workers and workplace authorities. It also identified the common health hazards women faced due to their working environment and how the system responds to them. Findings show that, despite the hazardous nature of the work environment, Occupational Health and Safety (OHS) awareness remains notably low among both stakeholders: the female workers and the authority, though the inconsideration of Occupational Health and Safety (OHS) is contributing to the persistence of preventable occupational health risks. This study identifies respiratory problems and musculoskeletal disorders as the common health hazards faced by female workers. Female workers frequently identified their working environment as the root cause of their health issue, again never claimed Occupational Health and Safety (OHS) measure due to unawareness. It also explains little institutional education of workers and traditional inheritance of 'Chatal' keep both workers and 'Mahajan' unaware regarding Occupational Health and Safety (OHS) from generation to generation. Following purely qualitative methods this qualitative study critically analyzes the institutional responsiveness and structural gaps in enforcing Occupational Health and Safety (OHS) regulations, revealing a significant disconnect between policy frameworks it's all sector inclusion and on-ground implementation. Findings highlight the need for interventions in informal sector, gender-sensitive Occupational Health and Safety (OHS) training and facilities, and stronger regulatory system to ensure Occupational Health and Safety (OHS) system before establishing rice mill to ensure safer working conditions for female laborers in the rice milling sector.

Keywords: Female Workers, Health Risk, Workplace Safety, OHS, Rice Mill Industry, Structural Barriers

INTRODUCTION

Occupational health and safety focus on promoting and protecting workers' health, safety, and well-being in their workplaces, which involves medical expertise, regular health check-ups, hazard identification, health promotion, absenteeism management, and policy development. Regular health check-ups monitor health status, address workplace hazards, and promote healthy lifestyle choices (Magalhães et al., 2022). Occupational Health and Safety (OHS) is a worldwide issue impacting the economic and social dimensions of countries. Challenges in OHS implementation include a lack of comprehensive policies, inadequate infrastructure, insufficient qualified practitioners, and inadequate information about OHS practices and poor OHS practices can lead to economic losses, especially in developing countries (Amponsah-Tawiah et al., 2011). Occupational health and safety (OHS) are vital for workers' well-being, particularly in developing countries like Bangladesh, where women's participation in the workforce is steadily increasing. Female workers often face unsafe working conditions with limited public or civil society oversight, especially in low-income areas with poor safety records (Kabeer, 2004).

Occupational Health and Safety (OHS) issues pertain to all forms of employment and are intricately associated with poverty and general well-being. The International Labor Organization (ILO) classifies women as "vulnerable workers" with distinct OHS needs due to their biological, physical, and psychological differences (ILO, 2016). Traditional health frameworks tend to emphasize pathologies and cause-effect relationships in

assessing these needs (ILO, 2010). Ensuring a safe and healthy workplace is a fundamental right, particularly for women who spend a significant portion of their time in such environments. Beyond productivity, workplace safety is essential for women's ability to sustain themselves and support their families (ILO, 2019).

Bangladesh's informal economy is dominated by female labor, especially in Ready-Made Garment (RMG) factories, rice husking mills, and other labor-intensive industries. Informal mills (village husking yards or "*chatal*" sites) have very high female participation. Informal sectors serve as significant yet highly exploitative entry points for rural and semi-urban women with limited education. An estimated five million informal workers, many of whom are women, are employed by more than 40,000 rice mills; these establishments frequently lack basic safety precautions (Khatun et al., 2015). Women often work without contracts, lack occupational safety, and earn substantially less than men for equivalent labor. Women are at risk for musculoskeletal injuries, heat stress, and respiratory risks when performing routine tasks like husking, drying, and carrying heavy loads (Roy et al., 2020). They are frequently unable to obtain healthcare, training, or protective gear due to structural and cultural barriers. Bangladesh's labor laws offer some protections, but they are not well enforced in the country's rural informal industries (ILO, 2018).

Despite the critical role that women play in Bangladesh's rice milling sector, there is a significant lack of formalized studies on their occupational health and safety (OHS). Existing studies (e.g., Khatun et al., 2015; Khan et al., 2024) provide valuable insights into hazardous working conditions such as dust exposure, unsafe equipment, poor sanitation, and lack of health services. However, these studies do not employ a structured OHS framework, nor do they use standardized OHS terminology, risk assessment models, or international benchmarks for worker safety rather, has explored the real scenario in a women intensive industry of Bangladesh.

In the study area, women who are engaged in economic activities outside the home, most of them are working in rice mills or various factories. Working in rice mill is common than other factory in rural area as women do not need to leave their village and family. Mostly the poor rural women work in the rice mill industry. They are typically hired as labor. Any types of experience or training is not required in time of hiring. They are employed at minimal pay as unskilled laborers. However, they must deal with several illnesses and physical issues as a result of their unsafe and unhealthy working conditions. These women neither have any union nor part of any organization so, they are unaware about labor and their safety rights in workplace. In case of illness or accident, the authorities rarely take any action or responsibilities. In gender-specific health impacts, such as reproductive health related issues, women are not capable of having leave even.

Moreover, government does not have any strict monitoring in establishing OHS in rice mill industry. To establish rice mill owner only need environmental certificate but they do not have any practical obligation for their workers to establish a safe working place. This study follows a qualitative method to critically analyze the present situation in rice mill industry and to identify the lacking considering personal experiences of the workers.

Objectives of the Study

This study aims to investigate the Occupational Health and Safety (OHS) management situation concerning female workers in the workplaces of Boalia, Naogaon, and Boshipur, Santahar. The specific objectives are:

1. To examine the knowledge regarding Occupational Health and Safety (OHS) among workplace authorities and female workers.
2. To identify common occupational health hazards experienced by female workers in their respective workplaces.
3. To understand the institutional responsiveness and capacity of workplace authorities in addressing female workers' health and safety concerns, with attention to structural gaps in OHS enforcement.

LITERATURE REVIEW

Occupational Health and Safety (OHS) is a multidisciplinary domain that ensures workplace safety, health, and

welfare, including occupational health care, while also safeguarding the public. According to the Joint ILO/WHO Committee (1950), occupational health aims to promote workers' physical, mental, and social well-being, prevent work-related health issues, and adapt work to the worker. In 1995, the Committee further emphasized three key objectives: maintaining and promoting workers' health and capacity, improving the working environment for safety, and fostering organizational cultures that support health, safety, and productivity. A positive working culture is rooted in an organization's core values, management systems, policies, and training, promoting a safe and effective work environment.

In developing countries, OHS regulations are rarely enforced in the informal sector, where many women work in jobs such as domestic work, street vending, and small-scale agriculture (ILO, 2018). These informal jobs often lack basic health insurance, legal protections, and grievance mechanisms (UN Women, 2021). Many women in developing nations work in informal economies, where formal OHS regulations are absent and safety training and awareness initiatives are lacking (UN Women, 2021; ILO, 2016). Women in developing countries face limited education and access, reducing workplace awareness and safety standards, especially in informal and low-income sectors where women are predominantly employed (UNESCO, 2021; ILO, 2019). Workplace safety protocols often cater to men, neglecting women's unique needs like smaller PPE sizes and maternity safety concerns, leading to underrepresentation in safety committees (ILO, 2018; Clean Clothes Campaign, 2019). For example, traditional gender norms frequently deter women from speaking out against harmful working conditions or promoting their right to safety. Women are afraid to voice concerns about workplace dangers for fear of reprisals or losing their jobs (WHO, 2020; UN Women, 2020). Women cannot promote safer working conditions if they are unaware of their rights, which feeds cycles of economic vulnerability and exploitation (UN Women, 2020). However, Women face unique risks including pregnancy complications, lack of breastfeeding accommodations, inadequate maternal leave policies, sexual harassment, and violence, exacerbated by power imbalances and socio-cultural norms (WHO, 2019; UN Women, 2020).

In Bangladesh, Occupational Safety and Health (OSH) is mainly governed by the Bangladesh Labor Act (2006, amended in 2013), which emphasizes the importance of developing an OHS Profile to assess workplace accidents and diseases systematically. In response to the 2013 Rana Plaza disaster, further regulations were introduced, including the Labor Act amendment, the Bangladesh Labor Rules (2015), and the National OSH Policy, reflecting a strengthened commitment to workplace safety (Hossain et al., 2015).

Workers in Bangladesh face inhumane working conditions and living standards despite their significant economic contribution (Rahaman & Rahman, 2021). In 2017, Bangladesh's National Labor Force Survey revealed that 3.1% of employed individuals aged 15 or older experienced at least one occupational injury within a year (BBS, 2018). However, there is limited information available on occupational health and safety (OHS)-related knowledge and workplace practices in Bangladesh (Hossain et al., 2020). The national OHS Policy 2013 did not meet its objectives owing to implementation issues such as a lack of cooperation among stakeholders, a lack of coordinating authority, insufficient monitoring and accountability, and a lack of worker knowledge (Islam et al., 2022). Akram (2014) highlights the need for increased attention to occupational health and safety in Bangladesh, as unsafe work environments and injuries increase the risk of disability and poverty. Employers often prioritize charity over legal obligations, and subcontracting practices make workers more vulnerable and less protected.

60% of the workforce is female, indicating that women's involvement in the rice milling business of Bangladesh is quite substantial (Tama et al., 2018). For example, Kabir (2017) discovered that women made up over 90% of the workforce in traditional husking mills. In addition to working in an "unhealthy working environment" devoid of recreational or health facilities, female rice mill workers frequently endure challenging circumstances with little or no support. For example, a survey conducted in Sherpur found that mills lacked plans for medical assistance, retirement, or workers' health care (Khan et al., 2021).

Hu et al.'s (1998) study reveals gaps in employer awareness and compliance with occupational health and safety (OHS) regulations, particularly in small manufacturing enterprises. Employer awareness is the most significant predictor of compliance, emphasizing the need for improved OHS education and training. Konijn et al.'s (2017) study found that workers who participated in OHS awareness training showed greater awareness of OHS compared to untrained workers. Active training methods, such as workshops and external sessions, were

more effective than passive approaches. Combining active and passive training increased worker empowerment in injury prevention.

The majority of occupational health and safety (OHS) studies on female factory workers in Bangladesh have focused heavily on the ready-made garment (RMG) sector, reflecting its dominance in female industrial employment. Multiple studies (e.g., Akhter et al., 2019; Akhter et al., 1970; Dwyer et al., 2021; Nabi et al., 2021; and Akhter et al., 2017) have reported broad health issues among female RMG workers. They've shown that female RMG workers in Bangladesh remain under-protected, facing multiple occupational hazards without sufficient health services, legal enforcement, or social support systems. Strengthening factory compliance, health education, and gender-sensitive policies is essential for ensuring their safety and well-being. Occupational health and safety (OHS) in Bangladesh's factory sectors beyond the RMG industry remains under-researched. Overall, research on other female-dominated industries is still lacking, with notable gaps in data and intervention-focused analysis, despite the RMG sector having been extensively studied. To guarantee more comprehensive occupational protections for women in Bangladesh's industrial workforce, OHS research must be extended to underrepresented industries. There is no comprehensive study that examines the occupational health and safety of female rice mill workers in Bangladesh through a formal OHS lens, including the explicit use of OHS frameworks, metrics, and gender-specific analysis. This gap limits the development of evidence-based policy and targeted interventions to improve the well-being of one of the most vulnerable labor groups in the country.

METHODOLOGY

This qualitative study has been conducted following a pure anthropological approach. Participant observations, in-depth interviews, focus group discussions and case study have been conducted to collect qualitative data. The primary data were collected directly from participants through fieldwork. To develop a comprehensive understanding of the importance of occupational health and safety (OHS) for Bangladeshi female workers, a thorough review of pertinent reports, empirical studies, and scholarly articles was conducted.

This study was conducted in Boalia, Naogaon, and Boshipur, Santahar, Bangladesh, focusing on Boalia Union, an administrative unit under Sadar Upazila. Boalia Union is bounded by Tilakpur Union Parishad, Chandpur Union Parishad, Naogaon Municipality, and Santahar Municipality. Santahar is a significant urban center. Boshipur Eidgah is a notable landmark. Naogaon district is being considered as the one of the biggest rice hubs in Bangladesh and at the consequence of it, most of the formal and informal rice mills are situated here. So, this study selected this area for studying OHS environment in the rice mill industries.

This study primarily focuses on women's participation and health issues at the workplace. Respondents were selected through purposive sampling technique. A total of 40 in-depth interviews were taken including 20 female workers and 20 male workers. 2 Focus group discussions have been conducted with 1 male group and 1 female group of rice mill workers. Focus group discussions and in-depth interviews have been conducted to explore the working environment and the personal experiences of the workers at workplace. Case studies were utilized to comprehensively explore and interpret the individual perspectives of the participants. Observations were conducted to gain contextual insights into the participants' work environment and daily practices and for data triangulation. This study follows the thematic analysis to conclude the findings.

Rice Mill Industry: The Women Domain with subordination of men

The rice mill industry is a labor-intensive sector where women are the main work force. The research area is widely known for its rice production and is considered one of the important hubs of the rice mill industry in Bangladesh. Women perform most of the essential tasks in the rice mills, while men primarily work as porters, responsible for loading and unloading paddy and rice and transporting them within the mills. Women perform processes such as boiling the paddy, drying it in the sun, checking the temperature, and other necessary steps to produce rice. However, the overall supervision and control are in the hands of men. Men manage the accounts and wages of the women and also monitor the activities. Through this type of gender-based division of labor, rice mill became a workplace of women with male domination and subordination.

In auto rice mill, men operate the machines and women do the rest of the major works. Through this type of distribution of labor, women have to face more health risks than men in the rice mill industry. Men also have occupational risks, but the existing bio-social context creates a double burden and complex situation for women in the workplace. Menstruation, pregnancy, and childbirth are regular biological activities for women that make them more vulnerable to men. The rice mill job is a full-time job where workers, especially the female workers, have to stay in the mill from dawn to dusk and sometimes even more. So, lack of a safe and hygienic resting place, absence of maternity leave, and lack of health insurance make them more vulnerable than men. In spite of all these hardship women do not have the option to leave the work in the rice mill because most of them have to run their household by their own. According to a male worker from mill named salim (Pseudonym),

“Most of the women who work here either do not have a husband or not supported by a husband. That’s why they come here. Again, some of those who have children are addicted to drugs, or unemployed. These women are here to work. One of the reasons they come to work is the hunger.”

Occupational health and safety (OHS) is not practiced, not even talked about, in these mills. We have found the following perspectives of OHS in the rice mill industry and some policy suggestions to improve the situation.

Level of awareness and unawareness of OHS in the study Area

The awareness status of Occupational Health and Safety (OHS) among *chatal* (rice mill) female workers in the study area is a significant concern within the informal labor sector. Most *chatal* workers are unaware of their rights to a safe working environment, and employers, commonly referred to as *mahajans*, frequently fail to provide basic safety instructions, protective equipment, or health-related information. This lack of OHS knowledge exposes female workers to a range of occupational hazards. 45 years female rice mill worker, Shila (Pseudonym) says,

“We come here to work because we need money. Since we need it, we must accept whatever the Mahajan says or does. Nothing is taught while joining our work, and we are not informed about the risks involved in this work”.

These workers, often driven by acute financial necessity, enter physically demanding and hazardous environments with little to no prior training or information regarding workplace risks. They sometimes even never know their rights regarding a safe place to work. The absence of OHS awareness not only compromises their physical well-being but also perpetuates a culture of silence and compliance rooted in power imbalance and economic dependency. In time of menstruation or pregnancy it is not easy to take leave from work. Even women do not have any opportunity to maintain hygiene, even they do not know this is their occupational right.

The most notable thing is that some employers (*mahajans*) even unaware regarding OHS issues and workers’ rights to get safety in workplace. Little academic education, expansion of inherited family *Chital* lead its owners unaware from OHS issues.

Lack of Training in the Rice Mill

In the studied region, both workers and management in industrial facilities such as rice mills exhibit a significant lack of awareness regarding occupational health and safety (OHS) practices. Newly recruited female workers typically receive no formal training or safety orientation before commencing their duties. Instead, they rely on informal, experience-based guidance from existing employees. This absence of structured OHS training reflects a broader institutional neglect, wherein factory authorities demonstrate limited commitment to equipping workers with essential safety knowledge or addressing occupational challenges faced in the workplace. 65 years old Rehana (pseudonym) used to work in semi-formal rice mill, said,

“When a new person joins the workplace, she is only told which department she will work in. If her performance is good, she is hired, and if she cannot work properly, then she is removed from the job. Since

most of the work process is learned from the co-worker after joining the job, these jobs are quite tough for everyone as a newcomer because there is no training for them."

The complete absence of formal training reflects a systemic disregard for worker preparedness and safety, placing the burden of learning solely on peer transmission. This not only creates barriers for newcomers, especially women, but also reinforces a cycle of vulnerability and disposability in the labor force. The lack of orientation fosters unawareness, not just about the job, but also about worker rights and safety, ultimately sustaining a precarious work environment where only those who can quickly adapt under pressure are retained. Unstructured labor practices and institutional negligence or systemic failures in labor governance indicate a critical need for policy-level interventions, including formal induction processes, basic skill training, and protection mechanisms for informal female workers of the rice mills of the study area.

Lack of Basic Protective Measures

In the mills within the study area where women are employed, the provision of safety equipment is either nonexistent or remains largely unrecognized as a necessity. Female workers employed in rice mills in this area frequently face inadequate protection from relevant authorities concerning occupational health and safety. This situation is compounded by their limited awareness of labor rights and safety regulations, which stems from systemic gender-based marginalization, low levels of formal education, and the informal nature of employment in many rice mills.

Rice mill worker Bedena (Age: 35) said,

"We work in the Chatal in the scorching sun, we come to work in this sun to earn money, and we are dependent on this Mahajan for money. To save us from this sun's heat, all of us together appealed to the Mahajan for a head hat, but to no avail. We bought our own "Gamcha" to cover our heads from the sun. If you do not wear a Gamcha or a cloth on your head in the scorching sun, you get sick, and many people faint. We buy Gamcha with our own money, as we'll miss work that day if we get sick."

Here, self-Reliance for Survival of the female workers is compelled to purchase their own protection (*Gamcha*) out of necessity, underscoring both the precarity of their employment and the absence of institutional support.

Vulnerable and Replaceable

Consequently, female workers endure various physical ailments and are prone to accidents over time. In such circumstances, if a worker falls ill, she is often dismissed from her position and replaced by another. In this case, if someone becomes ill, she will be removed from work and another worker will be placed in her place. According to Aklima (pseudonym),

"Here (in chatal), all the work is done by our hard work, and we do it with our legs and hands. Sometimes our coworkers get sick, we face headaches and numbness in the hands and legs, or maybe someone gets faint. I've been doing this for a long time, but I still work here with the fear of this kind of accident. Accidents are frequent here. Also, all the factories of rice in this area do not provide such safety for the chatal worker, so you have to stay careful for yourself."

The burden of safety is entirely shifted onto the workers themselves, exposing a serious failure in labor rights and workplace accountability.

In the study area, workers employed across various types of factories and mills exhibit a marked lack of awareness regarding occupational health and safety (OHS) standards. A significant proportion of these individuals engage in hazardous work practices, primarily driven by economic necessity and the compulsion to earn subsistence-level wages. Female workers, in particular, are frequently classified as unskilled labor, rendering them vulnerable and largely powerless to advocate for their rights in the workplace. Their lack of knowledge concerning statutory OHS provisions further exacerbates their marginalization. Moreover, the issue

is compounded by a general absence of institutional accountability: neither the management authorities nor the workers themselves demonstrate an understanding of, or commitment to, the implementation of occupational health and safety practices. This pervasive unawareness contributes to a systemic neglect of worker welfare and safety protocols in the region.

Health Issues Female Workers Face in the Workplace with Consequences

Female workers in informal rice mills in the study area, particularly those laboring in open-air *chatal*, endure severe occupational health issues due to prolonged exposure to harsh working conditions. ***Common ailments include chronic headaches, numbness in the hands and legs, fainting spells, knee and back pain, asthma, respiratory distress, and in severe cases, spinal cord damage.*** These health problems are exacerbated by long hours of physically demanding work under the scorching sun, with little to no access to protective gear or medical support. Some gynecological issues and urine infections were reported in this study by some women but they are unable to connect them with their low hygiene facilities in the work place.

A substantial proportion of women in the study area, those engaged in income-generating activities outside the home, have experienced, or continue to experience, various forms of physical discomfort or illness. Among the participants 10 female workers are reported ongoing health issues. Due to financial constraints and the recurrent nature of their ailments, many rely heavily on over-the-counter medications, particularly paracetamol, as a routine remedy for pain and fever, often without any medical consultation.

Self-Medication

This self-medication is further reinforced by the impracticality of frequent medical visits, as consistent illness coupled with economic insecurity limits their access to formal healthcare. Additionally, the demanding workload and long working hours contribute to a chronic neglect of personal health, leaving these women with little time or capacity to address their physical conditions adequately. Rice mill worker Shila (Age: 45) added,

“The amount of work we do here is very high, so we will not even know if any complex disease is in the body because we don’t get much time for ourselves during the working sessions. If the body gets sick, we take the painkiller and start working again. Even when I go home after a full day of work, I feel a sharp pain in both knees and have to take painkillers. It’s one kind of habit for me right now, if I visit the doctor, he will prescribe me the same painkillers, so I don’t visit the doctor regularly. Here, many people take a variety of painkillers.”

The physically demanding nature of their work leaves little room for self-care, forcing them to ignore symptoms that could indicate serious health conditions. This cycle of neglect is not just a personal choice but a consequence of systemic issues long working hours, financial insecurity, and limited medical access. Over time, reliance on painkillers may lead to more severe health complications, yet formal medical consultation remains rare due to skepticism about its effectiveness and the costs involved. This highlights a critical need for workplace interventions, such as medical screenings, health education, and better worker rights to ensure that physical well-being isn't sacrificed in the pursuit of livelihood.

Ultimately, the absence of healthcare support and excessive workload are fueling a silent crisis one where chronic pain and potential health risks become an accepted part of life rather than a concern to be addressed.

The Hidden Cost of Labor for Female Workers

Most of the female workers who work in the rice mills have experienced physical complications in some way. Because of a lack of money, sometimes they can't get the necessary treatment. Many people do not have any physical complications before, but after being engaged in this profession, they face many types of physical complications. Rice mill worker Rebeka (age: 46) has been working there for five years, and although she had no problems before coming to work, she is now diagnosed with asthma. According to them, among the female workers, everyone has some problems; some have damaged limbs or damaged spinal cords, some have backaches, and some have respiratory problems. The fact that many enter this field in good health but soon develop chronic ailments suggests a failure in workplace safety measures, including proper ventilation,

protective equipment, and ergonomic considerations.

A rice mill worker, Nargis (Age: 38) said,

“When I go to the doctor for my backache, he gives me many types of tests, and after paying for those tests, I do not have money to buy medicine. All the money is spent on testing. Most of the female workers you will see here have diseases in their bodies... but there is not enough money for the treatment of these diseases...”

This situation exposes a harsh reality where economic survival outweighs health concerns, leaving female rice mill workers trapped in a cycle of deteriorating well-being. The physical strain of their labor, coupled with long working hours and exposure to harmful conditions, leads to severe health complications yet their financial insecurity prevents them from seeking proper medical care.

Fragile Position of Authority on Female Workers' Health Issues

This study found that there is no government or any other external system to monitor the working environment of rice mills. The absence of a labor union helps establish the mill owners' monopoly over the entire rice husking process. Defining women as “unskilled” labor, women are always given a subordinate position. Women are told to remain grateful for having work and a wage. There is no organized authority to bargain for the wages of women for equity. Lack of government control and monitoring creates a dark area of uncontrolled and even unknown legal working zones where governmental rule of labor law does not work properly.

The role of factory and mill authorities in addressing health-related issues faced by female workers in the study area is largely negligible. Women, primarily driven by economic necessity and the need to escape poverty, enter the labor force in substantial numbers. However, deeply entrenched patriarchal norms that regard women as “unskilled” laborers significantly impede their ability to secure health protection in the workplace. Within this context, both awareness and implementation of Occupational Health and Safety (OHS) principles remain severely limited. There is an evident absence of systematic training programs and accessible healthcare services for female workers. The historical lack of OHS practice has established a precedent that the current management continues to follow, resulting in the persistent neglect of health and safety concerns. Consequently, the physical well-being of women workers remains at considerable risk due to institutional inertia and ongoing structural indifference.

Neglected Health and Unsafe Conditions

Physical problems caused by the workplace in many cases pose a serious threat to women, even damaging their ability to earn money. Rehana (68) worked for a long time in a rice mill where she worked continuously for 7/8 hours. She found out after a while that her body was unfit to do these things because of her asthma problem and spinal cord damage. She was forced to quit her job on the advice of her doctor. She did not get any help even after informing the authorities about the cause of her problems. In the rice mill where (Chatal) the female workers usually work, many fall ill or faint in the scorching sun. According to the female workers, there is no immediate treatment. The lack of immediate medical assistance for workers who faint or fall ill, coupled with the failure to provide basic protective gear, demonstrates a complete disregard for worker welfare.

A Rice Mill female worker gave an overview of the authorities' stance in the event of a worker's illness when she stated that they do not have any financial support or immediate medical treatment. However, if there is a big accident or if someone is in a critical condition, if all the workers together apply for financial assistance, then some may help, but the amount of money that is given is very small. Mala (age:45) said,

“All of us together appealed to the Mahajan to give us a cap to protect us from the sun... they assured us that they would provide us with a cap... But for two months, there was no response... So, now that we're wearing fabric on our heads, what else can we do? A headache also starts at one stage due to keeping this cloth tied on the head for a long time.”

The rice mill authorities' inaction also reveals their vulnerability in maintaining labor standards. Their inability

to provide basic preventive measures raises questions about whether they lack proper oversight, financial investment, or simply the willingness to prioritize worker health. This reflects a deeper systemic failure in labor management, where female workers, essential to the industry, are treated as expendable rather than valued contributors deserving of safe working conditions. Without systemic intervention, the ongoing neglect of occupational safety will persist, perpetuating a cycle in which female workers of rice mills remain vulnerable while authorities fail to uphold their responsibilities. Enforcing workplace safety regulations, ensuring authority's accountability, and incorporating workers' health needs into industry policies are crucial steps toward preventing long-term harm.

Systemic Negligence of the Authority

The main target of authorities in some workplaces are only to maximize their profit. There is no monitoring of whether there is domination or a health risk. There is no monitoring of how female workers are treated and whether their health is being protected. According to a male worker, Lutfor (age: 42) at a rice mill,

“Everyone comes here to work to earn money, and no one will think about others without seeing their good. If someone gets sick, she is given leave, and on that day, there will be no more wages. No one is there to see the problem. Here, the moneylenders only monitor how much paddy is coming from the Chatal, and according to that, the wages are distributed. But apart from this, there is no separate arrangement for giving any training on the job or other physical ailments.”

The economic structure within rice mills prioritizes productivity over female workers well-being, leading to a system where illness results in immediate wage loss rather than support or accommodation. *Mahajon* (moneylenders), fixated solely on paddy production and wage distribution, neglect fundamental workplace safety, exacerbating health risks for laborers. These exploitative dynamics force workers to endure hazardous conditions without intervention, reinforcing a cycle where occupational health concerns remain unaddressed, and accountability is entirely absent.

Gendered Injustice in Workplace Health and Monitoring

Women face various forms of discrimination in the workplace, where it is very difficult for them to sustain themselves, and they can't cope with poverty if their health security is not guaranteed.

Biological differences became the base for discrimination: The practice of deducting wages for menstrual-related leave reflects a fundamental disregard for women's health needs, reinforcing a structure where their bodies are treated as liabilities rather than realities that require accommodation. According to Nargis (pseudonym),

“If someone takes a leave in the middle of work because of her menstrual period, then her salary is deducted on that day. Are they made by hand? It's not her fault, right? No one can protest against them, because everyone comes here to earn money if they turn marked while protesting! Then they will lose their job...”

The inability to protest against such injustices due to fear of job loss further exposes the power imbalance between workers and employers. Women are forced into silence, knowing that any attempt to demand fair treatment could result in unemployment, exacerbating their financial insecurity.

Despite the existence of a National Occupational Health and Safety (OHS) Policy, its implementation remains conspicuously absent in the study area. Female workers, many of whom are compelled to work under hazardous conditions in pursuit of financial stability, continue to face significant health risks. The lack of enforcement mechanisms renders their future in such workplaces increasingly precarious. These women are frequently afflicted by physical ailments directly related to their occupational environment, yet institutional accountability is notably lacking. The role of workplace authorities in safeguarding their well-being remains largely invisible, contributing to a persistent cycle of neglect and vulnerability.

Need for hygiene and privacy turns to burden: Women require safe and hygienic washrooms in regular days

and also in the time of period. But men do not require such things, as men in rice mills need not to be confined only within the mill territory. Again, men can take rest anywhere and any time when they feel it as required. For privacy maintenance, it is not possible for women. So while, the existing environment of the rice mill industry is not harmful for men, it is dangerous for women's health. According to a male worker from mill named Abdul (Pseudonym)

"There is no separate washroom in the mill for women. A narrow space with two or three rings and a slab covered with sacks is used as a toilet. Though, we do not have any problem with these but, women usually do not go there unless it is very urgent."

This dynamic not only perpetuates gender-based oppression but also discourages collective action, ensuring that exploitative practices remain unchallenged. The absence of workplace policies that acknowledge menstrual health as a legitimate concern underscores a broader failure in labor rights and gender equity. Proper monitoring mechanisms, such as paid sick leave, designated rest areas, and employer accountability, are essential to addressing these disparities. Without intervention, female workers will continue to endure discrimination, forced endurance, and economic vulnerability, reinforcing a cycle where their health and dignity are systematically ignored.

DISCUSSION AND RECOMMENDATIONS

Female workers of various rice mills in the study area are unaware of OHS, as are the authorities, and OHS is not implemented. Most popular reason for unawareness is lack of institutional education. Some female worker even not aware of safe working environment. And some '*mahajan*' think how can it be the owner's responsibility to ensure safety of the workers. The owners of small informal and age-old rice mills are not aware of labor law. Previously there was a patron client relationship among the mill owner and the workers. So, the owners used to bear some responsibility of the happenings of the workers. With the course of social change formalist mode of production has eradicated that previous patron client relationship and has disconnected informal relationship in workplace. On the other hand, our society has not adapted complete capitalist rules and regulations, so, labor law, labor union are not work in this sector. So, in this changing circumstance lack of education lead to lack of awareness that plays vital role here. Female workers have various physical and psychological issues. Female workers in the study area face workplace discrimination and health issues due to a lack of proper training and healthcare. They often struggle to assert their rights and are unaware of the authorities' support for their rights and safety, that is, they are not aware of OHS policies. High work pressure and a lack of time for medical consultations lead to women using painkillers without consulting a doctor. In the study area, women in Spice Factories suffer from common physical problems like asthma and shortness of breath due to long-term exposure to spice powders without proper protection. The authority of factories and mills are inadequate in addressing these health problems due to patriarchal thinking and limited OHS-related knowledge. Despite the national OHS policy, women continue to face workplace discrimination, poverty, and health risks.

Research showed that, there are no governmental monitoring for OHS issues. Rice mills have to take environmental certificate to prove that they are not hostile to the environment but they need not to prove that weather they have worker friendly environment or not. This is a structural barrier in the rice mill sector of Bangladesh. This structural barrier hinders the development of healthy and gender- sensitive working environment in one of the largest informal labor-intensive industries of Bangladesh. Study findings suggest that concrete monitoring, systematic evaluations of OHS indicators by authorities can improve the work environment and ensure workplace safety for women. Incorporating ILO standards, implementing evidence-based policy and its targeted interventions, creating customized training programs, establishing community-based safety committees, and conducting participatory assessments are the way to remove the blind spot from the sector.

To reduce the vulnerability of women working in rice mills, it is necessary to establish an OHS policy. The wage discrimination between men and women needs to be eradicated. Proper resting place for women in mill is mandatory especially on menstrual periods and for pregnant women. There should be no delay in providing wages from the miller. Safe and hygienic sanitation systems for both male and female workers have to be

made mandatory in every husking mill. Overall, the patriarchal domination needs to be reduced to make rice mills safe for women. It needs to be obligatory to assign a female supervisor or mentor to consider women's problems in the workplace. Verbal abuse along with sexual abuse and harassment need to be addressed in a proper way and rice mill owners need to maintain it strictly. Finally, an autonomous monitoring authority should be established to regularly monitor the working environment of the rice mills. The government should make the labor law strict and make mandatory ILO certificates for the rice mill owner and should ensure that any kind of violation of the law can cancel the permit for establishing a rice mill.

CONCLUSION

Although occupational health and safety (OHS) is a crucial factor in determining both personal well-being and overall socioeconomic growth, formal OHS discourse has mostly ignored the role of women in Bangladesh's rice-milling industry. Often labeled as "unskilled," female employees lack the institutional support and knowledge needed to assert their legal rights at work or obtain health and safety services. Due to the structural barrier and a lack of OHS knowledge, factory and mill authority usually fall short in providing safe working conditions, proper training, and protective gear. As a result, many women suffer from long-term respiratory and musculoskeletal issues, which are made worse by self-medicating with painkillers. Poverty and discrimination at work also increase these health concerns. Additionally, chronic respiratory issues are exacerbated by exposure to respirable dust in rice and spice mills, and these hazards are made worse by the inconsistent implementation of the National OHS Policy 2013, caused by a lack of coordination among stakeholders, inadequate monitoring systems, patriarchal decision-making and more specifically structural barriers. OHS principles are still primarily theoretical, and neither local authorities nor employees have the necessary institutional support, awareness, or training to put the law into effect. Women workers are excluded from meaningful participation in safety governance, lack access to gender-appropriate personal protective equipment, and have limited options for asserting their rights. These gendered aspects of risk and vulnerability are specifically ignored. A multi-stakeholder approach that incorporates a gender-sensitive OHS framework into practice and policy is necessary to close this gap. The creation of inclusive safety committees that give women a role in decision-making, mandatory provision of suitable protective equipment, and worker education should be the top priorities of future initiatives. Bangladesh can only guarantee safer, healthier workplaces and protect the fundamental rights of this vulnerable population by bridging the gap between statutory OHS requirements and the lived realities of female mill workers.

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