

MUSCULOSKELETAL DISEASES (MSDS) IN THE HEALTHCARE WORKFORCE

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Abstract— Many working populations experience morbidity due to work-related musculoskeletal diseases (WMSDs). Not only can WMSDs negatively impact employees' quality of life and productivity, but they also account for almost 40% of all expenses linked to treating work-related injuries. Occupation-specific variations in WMSD conditions are thought to arise from the complex interplay between many risk variables. The health care industry is one of the least researched despite its considerable exposure to WMSDs. Much of the prior research on WMSDs among healthcare professionals was conducted only on specific groups, such as nurses, PTs, dentists, etc. So, the purpose of this research was to investigate the WMSDs experienced by five different healthcare workers in a tertiary care hospital. In order to determine who is at the greatest risk for developing WMSDs, the study analyzed the incidence of these disorders among the five categories. Every condition that hinders a person's mobility or mobility at work is addressed here. When this condition is brought on or made worse by one's job, it is referred to as a "work-related musculoskeletal disease" (MSD). Yet, there are a plethora of issues affecting the muscles, bones, and joints that may have an effect on work or be made worse by employment but for which there is no apparent causal relationship. In the medical field, these illnesses are referred to as rheumatic and musculoskeletal diseases (RMDs). We'll call them RMDs from here on out.

KEYWORDS- Doctors, dangers, and workplace stress and depression

INTRODUCTION: When it comes to short-term or temporary job incapacity, musculoskeletal disorders (MSDs) in the workplace are second only to the common cold as a major contributor. Many working populations suffer from work-related musculoskeletal diseases (WMSDs), which are recognized as a significant occupational concern associated with rising compensation and health care expenses, have been broken down into three categories based on the results of scientific studies: physical, psychosocial/organizational, and personal. Research in this area has quantified several characteristics across a spectrum of high- and low-risk professions and examined their relationships to MSD incidence and prevalence. [1] Moreover, WMSD is the priciest kind of job disability.

Together with occupational health issues, India has been fighting the usual suspects in public health: infectious illnesses, malnutrition, rapid population expansion, and a lack of resources

to treat those in need. According to estimates, MSD accounts for close to 40% of all expenditures associated with treating injuries sustained on the job in India. [2]

Those working in the health care industry are at an increased risk for WMSDs. Musculoskeletal diseases are a common complaint among those who work in the healthcare industry. [6] Almost a third of all medical absences are attributed to MSDs, according to estimates. [7] It indicates that WMSDs among healthcare professionals are underreported even in industrialized nations. [8] It is vanishingly little in emerging nations like India. Most research on WMSDs in the medical field has concentrated on doctors, dentists, physiotherapists, laboratory technologists, and nurses.

The majority of medical, dental, and nursing staff members report experiencing back, neck, shoulder, or knee pain. [2,3,4] Much of the prior research on WMSDs among healthcare professionals was conducted only on specific groups, such as nurses, PTs, dentists, etc. Five groups of medical staff at a tertiary care hospital in Chennai, India were analyzed to determine differences in WMSD prevalence and distribution. It also identified the high-risk group by assessing a variety of characteristics known to have a role in the onset of WMSDs.

Materials and Methods

Clinicians and clinician-cum-academics from the aforementioned professional backgrounds who agreed to take part in the research were included. Pure academics in the healthcare field, those with active musculoskeletal injuries, and individuals who flat-out refused to take part in the research were all left out.

In-person interviews and task analysis via observation were used. Several sorts of data were collected using a wide variety of verified and standardized questionnaires. Section-A is a broad survey asking about demographic information, health and work background, eating habits, and general lifestyle. Work-relatedness of symptoms inquiry questions are also included. In Section, we ask questions regarding the workplace and the specifics of particular activities.

An ordinal scale from 0 to 10 is used in Section, a rating scale for identifying workplace risk factors based on worker perceptions of situations and activities that may lead to work-related musculoskeletal illnesses. The Nordic Musculoskeletal Questionnaire (NMQ) is a standardized screening and surveillance tool used to identify the areas of the body affected by musculoskeletal complaints. It is included in Section of the questionnaire. In this analysis, it was utilized to classify people into high-risk categories according to specific body parts.

Descriptive statistics were computed. Participants' demographics and occupational parameters were compared using univariate analysis. Independent sample t-tests were used to compare continuous job risk factors between groups, whereas Chi-square tests were used to compare categorical or ordinal components, and odds ratios were given at a significance threshold of P 0.05.

Impact of RMDs on work

More than 120 million individuals in the EU are living with an RMD[1], making up over 30% of the disabled population.

Workers' income and health-related quality of life losses account for 65% of the estimated total cost of work-related RMDs, while productivity loss and turnover costs for employers account for 33%.

The cost of work-related MSD is estimated to be as high as 2% of the GDP in several European nations.

The significance of bone and joint health

Musculoskeletal (MSK) health refers to the condition of one's bones, muscles, and joints, all of which contribute to one's mobility, dexterity, and the ease with which one may do the physical activities of daily living. We can't maintain the health benefits of exercise and physical activity if we can't move about easily and without discomfort. As the retirement age is being raised, we all need to work for a longer period of time, making this a more pressing issue. If we take care of our muscles and joints, we can keep working, keep our money, and enter retirement in good shape so that we may make the most of our golden years.

What exactly are the musculoskeletal and rheumatic diseases?

Most people can relate to experiencing pain or stiffness due to an injury or sickness, and this is more true as people age. Bones, joints, muscles, tendons, and connective tissues are all susceptible to a broad range of disorders. Yet, occasionally the issue persists for longer than expected, at which point it is classified as a chronic rheumatic and musculoskeletal condition (RMDs). Work-related musculoskeletal disorders are those that arise from or are exacerbated by a person's occupation (work-related MSDs).

Inflammatory illnesses, aging, traumas, congenital abnormalities, and developmental disorders are only few of the potential origins. They're also linked to being overweight and not getting enough exercise. The effects on musculoskeletal health of both smoking and excessive alcohol usage are well-documented. Musculoskeletal discomfort, such as shoulder or back pain, is often labeled as such since its specific origin is unknown.

The following are examples of issues that might influence musculoskeletal health, leading to pain and dysfunction:

Osteoporosis, fragility fractures, osteomalacia, and rickets are all examples of diseases and disorders affecting the skeleton.

Conditions affecting the spine, such as chronic back discomfort or disc problems

Conditions characterized by localized or diffused pain, such as frozen shoulder, tennis elbow, or fibromyalgia Musculoskeletal injuries, such as work- or sports-related sprains and strains or high-velocity limb and spinal fractures, Scoliosis is an example of a genetic, congenital, or developmental problem that affects children. Systemic lupus erythematosus is an example of a multisystem inflammatory disease that often manifests in the musculoskeletal system.

How do RMDs affect people in terms of discomfort, exhaustion, and ability to do daily tasks? People are impacted in many ways by RMDs. The pain they create might be felt in the arms, legs, neck, or back, and although it may not always be severe, it is almost always annoying and tiring. It's possible to have worsening before, during, or after using. Joint swelling is possible, but the discomfort is typically invisible, which may be distressing for the patient and puzzling for others around them. When you're in pain, it's hard to keep doing the same things again and over.

Stiffness is common, making it difficult to start going. Disrupted sleep might make it harder to forget about aches and pains. Inflammatory diseases and sleep disturbances are two common causes of weariness. It is more challenging to ignore discomfort if the individual is experiencing stress, anxiety, or depression as a result of the pain or for other causes.

Those who have an RMD sometimes worry that their condition may deteriorate or that they will be forced to give up their employment. Musculoskeletal pain and mental health are intricately linked. Since we need to move for so many tasks, the impacts of pain are ubiquitous. Activities such as housework, working, and playing may be hampered by RMDs. These may prevent the individual from leaving the house, leading to isolation. They are detrimental to one's overall health and fitness.

Case studies on the effects of RMDs on people's employability

There is widespread impact from RMDs. We require mobility and dexterity to accomplish most of the things we do at home, at work, and for leisure. Those who suffer from RMDs on a regular basis develop strategies for coping with daily challenges, whether at home or in the office. They are efficient and diligent, doing their best to never miss a shift while also keeping their personal difficulties to themselves if they believe they can handle them. But, if the symptoms become worse, it might be difficult to continue working.

This worsening of symptoms resulting to employment loss may be avoided by early disclosure and suitable changes. Several specific instances are given below.

Tips for improving employees' musculoskeletal health on the job and keeping them employed despite RMDs

Individuals with RMDs must be given the tools to assist themselves and learn to adapt to their conditions. This requires taking a holistic approach, one that takes into account the person's wants, abilities, and limitations, as well as the advice of medical professionals. Most persons with RMDs can work in some capacity, but accommodating for the unique difficulties each person faces is essential. The benefit is twofold: keeping the employee employed is excellent for business and satisfying for the worker.

Recognizing the significance of MSK difficulties, as well as identifying the dangers and problems present, is essential for addressing MSK health in the workplace, especially for workers who may already be experiencing some MSK problem and decreasing exposure to those hazards. Essentially, this involves facilitating good nutrition, increasing physical exercise, and decreasing sedentary behaviors to improve musculoskeletal health. To assist those with RMDs in taking charge of their health, taking prompt action when issues emerge, and maintaining gainful employment. If an employee with an RMD is to stay in their position and continue contributing to the company, both they and their managers will require training on MSK health, how RMDs influence it, and strategies for overcoming obstacles.

How can we improve MSK health?

Avoiding harm is just as important as growing and keeping strong bones, muscles, and joints when it comes to MSK health. This means people should always use safe methods and practices, as well as the appropriate equipment and avoid taking any needless risks that might lead to injury.

Repetitive motions, sedentary behavior, and extended periods of standing still should be avoided.

The best way to stay healthy and fit is to exercise regularly, eat a healthy diet rich in calcium and fish oils, and never use tobacco products or drink to excess.

Recognizing that workers with RMDs may be more vulnerable to these hazards and implementing strategies to mitigate them is essential.

What kind of aid is available for those who suffer from RMD?

Preventative Measures

The sooner an issue is addressed, the less probable it is that it will result in a permanent reduction in employment. In many cases, the person may keep working once just a few minor adjustments are made. Facilitating early identification and resolution of MSK issues requires a culture that encourages and facilitates open communication about such issues as soon as they develop.

Free-flowing exchanges

- It's taboo to discuss problems with one's health, and particularly those that make it difficult to do one's job. Many employees have the false belief that their management will not back them up. When people with RMD are able to manage their symptoms, they may learn to live with it. When they reach their limit, they call in sick, yet earlier intervention in the workplace and better medical care of their RMD may have kept them there.

What their disease is, how they're feeling, how their symptoms change from day to day, how their medications are affecting them, what they find difficult and may need assistance with, what kind of support would be most helpful and how it would allow them to accomplish their work, and so on.

It's important to let workers know that management welcomes their early arrival at work, will make reasonable accommodations, and recommends they consult a doctor as soon as possible if they get unwell.

Making a few minor modifications at work

- Most workers with an RMD may keep working as long as their symptoms are accommodated for. Working within their capabilities will not increase the risk of injury or deteriorate their health over time. Involvement in meaningful work has been shown to improve both mental and physical health.

- Effective communication can help you better understand your workers' demands. Modifications of even a modest nature may be enough to get people back to work despite their illness. Workers, like everyone else, need the freedom to solve issues creatively both on and off the job. The counsel offered by the public and volunteer sectors may also aid in their problem-solving abilities.

Employees do not like to continually admitting they cannot accomplish something, thus it is important for line supervisors and coworkers to recognize and anticipate potential challenges.

Getting help early on

The sooner a worker's MSK issue is treated, the less of an influence it will have on them and their job. Despite the common belief that moving less can alleviate pain, staying active is frequently the greatest treatment option for a variety of painful conditions. Anybody experiencing ongoing pain in their musculoskeletal system (MSK) that is interfering with their daily activities at work should contact a doctor.

- If an employee's doctor gives permission for the doctor to disclose his or her findings, the employer will have a better idea of how to best assist the worker so that he or she may perform up to his or her full capacity in the workplace.

How may those who have been diagnosed with RMD get assistance?

Many people with severe RMDs and their loved ones mistakenly believe that this illness forces them to give up their careers. With the help of appropriate accommodations and understanding management, a worker with an RMD may continue working despite their condition.

Self-management and information signposting are encouraged, and personalized assistance is provided.

Modifications within reason

If the issue is having a major effect on an employee's employment, reasonable accommodations should be offered. Occupational health experts can help guide you in the right direction.

Examples of reasonable accommodations include:

- Modifications to duties and tasks, such as:
 - o performing different tasks than those required by the job description;
 - o being more flexible with regards to work procedures, roles, and responsibilities;
 - o performing a wider range of tasks;
 - o exchanging duties with coworkers;
 - o making sure all tasks have good ergonomics.

Arthritis and associated ailment symptoms are often worst in the morning, so it might be helpful to allow employees some leeway in when they start and end their workdays. More and more individuals are taking advantage of remote work opportunities like working from home because to technological advancements and an increased awareness of the need of a healthy work-life balance.

Help with transportation to and from work, time off for medical visits, and career planning or transition chances all fall under the umbrella of "support."

When circumstances change and new challenges arise in the workplace, it is important to reevaluate the employee's requirements.

Self-management

Self-management, the process of assisting workers in taking charge of their own health in the face of challenges, is an essential supplement to the assistance offered by employers and medical specialists. An important part of an employee's self-management strategy may be an explanation of what they do in the workplace that aids in the control of their condition. Being cognizant of one's general health and activity levels, developing methods for dealing with pain and fatigue, learning how to talk to loved ones and coworkers about the condition so that everyone involved gains a better grasp of its physical and psychological ramifications, and experiencing a sense of community are all part of this. To guarantee proper treatment, it's necessary to schedule appointments with medical specialists during working hours. Goal-setting to improve one's symptoms and overall quality of life is an important part of self-management.

Self-management is a skill that can be taught, and there are many face-to-face and online courses available for those with MSK issues; they are generally made available via patient organizations for those with RMDs. An employee with a chronic RMD must be given the time and resources to self-manage their illness.

Individualized assistance for maintaining employment

Helping an employee continue working while managing the effects of a permanent partial disability (RPD) and the physical challenges of a painful and restricting condition calls for a

collaborative effort on the part of the employee, the employee's healthcare team, and the employee's line manager

The nature of the employee's difficulty and the organization's resources will determine the extent to which an employer may assist them in remaining in their current position. Employer-provided assistance is one option, but employees also have access to resources from the government and non-profit organizations.

The healthcare staff's guidance is necessary to determine what work should be done and what should be avoided.

Line managers have a critical role in ensuring that advice is implemented, provided that company policy permits this. The understanding and dedication of the line managers is crucial. The employee with an RMD must have a positive outlook on their job and their ability to continue working or return to work despite their condition. Their inability to work is hindered by both physical and mental aspects of their disease, which they must manage. When a person is dealing with a painful and restricting condition, it may be difficult to do the things necessary for their job.

By open dialogue, the employee's requirements may be better understood. These are some questions that an employer may ask to better understand how to accommodate a worker who has a chronic RMD:

- What restrictions does the worker with an RMD have to deal with?
- Asking how the worker and their job are impacted by these restrictions.
- To what extent do these constraints hinder performance on certain jobs?
- How can we make changes to mitigate or get rid of these issues altogether?

Talk to the worker about any modifications that may be needed. Consult with the worker thereafter to see if any more modifications are required. Make sure your superiors and coworkers are aware of the difficulties associated with RMDs.

Conclusions

Most WMSDs were experienced by healthcare workers in the low back, however WMSDs were felt all over the body. According to the results of this research, nurses have the highest risk, while doctors have the lowest, among all the health care workers evaluated.

The findings of this research cannot be generalized because of the nonprobability sampling technique used. The self-reported nature of the questionnaire used to collect data on potential dangers in the workplace raises the possibility of bias.

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