

Are Construction Laborers aware of Musculoskeletal Disorders in Nepal?

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Musculoskeletal disorders (MSDs) are a major concern worldwide, affecting millions of people. Work-related musculoskeletal disorders (WRMSDs) are a leading cause of disability and are extremely expensive to treat. WRMSDs have a significant impact on morbidity and mortality globally. Low back and neck pain has been ranked as the leading cause of disability in Nepal, with prevalence increasing from 16.9% in 2005 to 2016, affecting approximately 2.35 million people with MSDs (1). We need to take action to address this issue and find effective solutions to prevent and treat WRMSDs. According to the Nepal Labor Force Survey (2017/18) and Economic Survey (2018/19), approximately 13.8% of the Nepalese population is employed in the construction sector. Unfortunately, low back pain (LBP) is a prevalent condition worldwide and a leading cause of disability. However, it is concerning that LBP is one of Nepal's least prioritized non-communicable diseases. LBP affects up to 80% of people, causing severe pain and disability [2]. The construction industry in Nepal is currently experiencing notable economic and environmental transformations, much like many other developing countries around the world. Laborers dominate the industry due to the nature of the work, and it faces challenges in ensuring the well-being of its workforce. Working conditions, safety, and fair employment practices require attention for overall progress in the industry. The situation of laborers in Nepal varies based on different resources, and there is a prevalent need for improvements in working conditions, safety, and fair employment practices.

Key Messages

- *Construction laborers lack awareness of musculoskeletal disorders.*
- *It is necessary to equip laborers with knowledge about MSDs to overcome health issues.*

It is concerning that construction laborers in Nepal lack full awareness of musculoskeletal disorders (MSDs) and the significant risks associated with them. Given the physically demanding nature of their work, which often involves heavy lifting, repetitive motions, and awkward postures, it is not surprising that MSDs are common among construction workers. However, the lack of awareness among laborers about these specific health issues and preventive measures is unacceptable. This is primarily due to limited information about occupational health and safety. It is imperative to increase awareness of MSDs and promote preventive measures such as proper lifting techniques, ergonomic practices, and access to personal protective equipment to improve the health and well-being of construction laborers in Nepal.

Challenges of Construction Laborers in Nepal

According to the Labor Act 2017(2074) the MSD scenario of construction workers in Nepal presents various challenges and considerations [3]

- **Occupational hazards:** Construction workers in Nepal are exposed to various occupational hazards, including falls from heights, accidents involving heavy machinery, and exposure to hazardous materials such as cement, dust, asbestos, and chemicals used in construction.
- **Safety standard:** Despite efforts to improve safety standards, enforcement can be inconsistent, leading to inadequate safety measures on construction sites. Lack of access to personal protective equipment (PPE) and training further exacerbates worker risks.
- **Physical Health:** The physically demanding nature of construction work can lead to musculoskeletal injuries, strains, and fatigue among workers. Long hours of manual labor in challenging conditions contribute to overall physical strain and health issues.

- **Mental Health:** Construction workers may face stress and mental health challenges related to job insecurity, low wages, and the transient nature of employment in the industry. Limited access to mental health support services exacerbates these issues.
- **Access to Healthcare:** Many construction workers in Nepal may lack access to adequate healthcare services due to financial constraints, remote work locations, and limited health infrastructure in rural areas where many construction projects are located.
- **Infectious Diseases:** Construction workers are at risk of contracting infectious diseases due to exposure to unsanitary working conditions and close contact with coworkers.

Addressing these health challenges requires a multifaceted approach involving government regulation, employer responsibility, community support, and advocacy for improved working conditions and access to healthcare services for construction workers in Nepal.

What awareness should be given to laborers about MSD?

It is imperative to equip laborers with knowledge about MSDs (Musculoskeletal Disorders); enabling them to proactively prevent and identify early signs and symptoms. The following information is key to safeguarding their long-term health and well-being [4,5,6,7]

- **Definition:** MSDs are injuries or disorders that affect the muscles, nerves, tendons, ligaments, and joints. They are caused or aggravated by work-related tasks and activities.
- **Common Types:** MSDs have different types such as back pain, strains, sprains, tendonitis, carpal tunnel syndrome, and repetitive strain injuries (RSIs).
- **Risk Factors:** Identifying risk factors that contribute to MSDs, such as repetitive motions, awkward postures, heavy lifting, forceful exertions, prolonged sitting or standing, vibration, and inadequate rest breaks, is essential.
- **Symptoms:** Early signs and symptoms of MSDs, such as pain, stiffness, swelling, numbness, tingling, weakness, and reduced range of motion in affected body parts, should be recognized.
- **Prevention Techniques:** Strategies to prevent MSDs include using proper lifting techniques, ergonomic workstation setup, assistive devices or tools, adopting a telemedicine platform in case of urgent medical support, taking regular breaks, practicing good posture, and participating in stretching or strengthening exercises.
- **Reporting Procedures:** Knowing how to report symptoms or injuries related to MSDs to supervisors or employers and seeking prompt medical attention when necessary is crucial.
- **Training and Education:** Participating in training programs and workshops provided by employers or health and safety organizations to increase awareness of MSDs and learn preventive measures is important.
- **Workplace Policies:** Understanding workplace policies and procedures related to ergonomics, health and safety regulations, and injury prevention measures is necessary.
- **Self-Care:** Practicing self-care techniques, such as maintaining a healthy lifestyle, staying physically active, managing stress, and seeking medical advice for any persistent or worsening symptoms, is recommended.

By providing laborers with this information, employers can empower them to take proactive measures to protect their health and well-being and reduce the risk of developing MSDs in the workplace.

How can telemedicine help Laborers to reduce MSD?

Telemedicine is the practice of utilizing telecommunication technology to remotely diagnose, consult, treat, and monitor patients with utmost efficiency. Telemedicine can aid laborers in reducing musculoskeletal disorders (MSD) by providing remote access to healthcare professionals who can offer guidance, diagnosis, and treatment

for musculoskeletal issues [8]. The following preventive measures have been explained from existing studies [8,9,10]

- Construction laborers can benefit from remote consultations with healthcare providers via telemedicine platforms to discuss musculoskeletal concerns such as back pain, awkward postures, strains, and sprains. These consultations can offer timely advice on self-care strategies and ergonomic adjustments, and if needed, recommendations for further evaluation or treatment.
- Telemedicine provides early intervention for musculoskeletal issues by allowing laborers to seek medical advice as soon as symptoms occur, enabling early identification and treatment of MSDs.
- Telemedicine is capable of detecting potential risk factors and alerting laborers in advance by collecting real-time data.
- Telemedicine provides accessible healthcare for construction laborers who face obstacles to in-person care due to long work hours, remote job sites, or limited access to healthcare facilities. Laborers can access telemedicine services from their devices, eliminating the need for travel and time off from work.
- Telemedicine platforms have the potential to make a significant impact by delivering educational resources and training materials to construction laborers. These resources can provide them with crucial information on proper lifting techniques, ergonomic practices, virtual therapy sessions, and injury prevention strategies. By empowering workers with the knowledge and skills to prevent MSDs, telemedicine can be a game-changer in improving occupational health and safety in the long run.

Key Messages

- *Telemedicine can improve healthcare accessibility, delivery, and awareness through remote consultations and worksite assessments.*

Overall, telemedicine plays a crucial role in reducing MSDs among construction workers by offering remote consultations, early intervention, accessibility, education, and worksite assessments to promote musculoskeletal health and prevent injuries.

Conclusion:

It is a fact that laborer awareness in Nepal is severely lacking when it comes to their rights, workplace safety, and MSD issues. Numerous laborers, particularly those in remote or marginalized communities, are unaware of their rights under labor laws or lack access to information and resources to advocate for themselves effectively. This lack of awareness can leave them extremely vulnerable to exploitation, unsafe working conditions, and unfair treatment by their employers.

- *The views expressed are those of the authors.*

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