



Short Communication

Musculoskeletal health complaints: A growing concern that should be investigated elaborately in Bangladesh

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ABSTRACT

Evidence from the past few decades suggests that the most increases in disability-related musculoskeletal health complaints (MHC) have occurred in low-income and middle-income countries (LMICs). Past studies identified long sitting, higher commute time to the office, and traffic congestion predictors of MHC in Bangladesh. Additionally, post-acute COVID-19 patients reported MHC at a higher rate in Bangladesh. Further studies are needed to recommend exclusive initiatives from authorities to tackle the upcoming tsunami of MHC in LMICs, for example, in Bangladesh.

1. Introduction

Musculoskeletal health complaints (MHC) were thought to be the problem of high-income settings; however, recent evidence suggested that low and middle-income countries (LMICs) are becoming the epicentre of MHC by pointing South-East Asia region, with 369 million cases by the latest World Health Organization (WHO) has reported [1]. The Global Burden of Disease Study 2019 found that MHC is the leading cause of disability that affects 1.7 billion people globally [2,3]. Lower back pain (LBP) and neck pain ranked first and fourth among the leading causes of disability-adjusted life years, respectively, and older adults with neck and back pain die sooner than those without. Furthermore, MHC is also a prominent contributor to years lived with disability (YLDs) globally, with approximately 149 million YLDs, accounting for 17% worldwide [4].

The societal impact of early retirement in terms of direct healthcare costs and indirect costs (i.e., work absenteeism or productivity loss) is

enormous. Americans in 2019 spent an estimated \$380 billion on LBP and neck pain, about 17.9% of the US GDP. Australia spent the total costs across the 5 years were AUD 36.7 million per episode of care [5]. Projections manifest that the number of people with LBP is increasing even more rapidly in LMICs provinces akin to Bangladesh due to rapid globalization and urbanization that compelled the inhabitants to live sedentary lifestyles [6]. People with physically demanding jobs, physical and mental comorbidities, smokers, obese, and post-acute COVID-19 patients are at the most significant risk of reporting MHC. Disabling MHC is over-represented among people with low socioeconomic status and severed communities. In this correspondence, we described the thriving scenario of MHC and its detrimental aspects on living.

2. Perspective of Bangladesh

Bangladesh, the eighth-most densely populated nation in the world,

Abbreviations: MHC, Musculoskeletal Health Complaints; LMIC, Low and Middle-income Country; COVID-19, Coronavirus Disease 2019; LBP, Low Back Pain.

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has seen an alarming rise in MHC and related disabilities. A previous study estimated that 57.2% of MHC among bank employees work in Dhaka [1,7]. Another analysis suggested a 36.6% prevalence rate of LBP among sedentary office workers [8]. These studies revealed that the prevalence of MHC, including LBP, is significantly higher among those who work extended time at their workplace in a monotonous sitting position. Bangladesh is transforming from an agriculture-based to a service-based economy, and many populations, especially in urban settings, because we are currently living in a paradoxical time where our society has become more technophilic, forcing us to sedentary work and lifestyle. An additional burden is caused by spending extra hours in vehicles while commuting from the workplace due to extreme traffic congestion in the big cities of Bangladesh [9–11].

Surprisingly, a recent Bangladeshi case-control study suggests the prevalence of MHC among Bangladeshi COVID-19 survivors is more than double that of their healthy counterparts [1]. Similar results were reported from another analysis that compared LBP prevalence to almost double among post-acute COVID-19 patients with age and gender-matched healthy individuals [12]. These studies provided a clear concept about developing MHC with the overburden of the COVID-19 pandemic era simultaneously. Three in ten Bangladeshi adults suffer from musculoskeletal conditions that lead to a work loss of 24.4% during the last 12 months [13]. Significant disability from MHC is the highest in working age groups worldwide, especially in Bangladesh, where informal employment is common, and possibilities for job modification are limited.

3. Overall impact of MHC

MHC is characterized by a range of biophysical, psychological, and social dimensions that impair function, societal participation, and personal financial prosperity. The economic impact of MHC is cross-sectoral because it increases costs in both healthcare and social support systems. From the global perspective, the total costs of LBP were \$1.8 billion worldwide [5]. In Bangladesh, the total cost attributable to musculoskeletal health conditions in 2010 was estimated at \$147.38 million, representing about 0.13% of Bangladesh's GDP. Disability and costs attributed to MHC are projected to increase in the coming decades, particularly in LMICs provinces, where health and other systems are often fragile and not equipped to cope with this growing burden. Surprisingly, a previous study suggests that MHC were more estimated among the lower income groups (\$158.09 per month) in Bangladesh, the most disadvantaged communities affected by systemic health disparities [1]. Besides, Bangladesh's national poverty rate rose to 29.5% in 2020, forecasting an alarming consequence of MHC among the vulnerable folks in this country.

Evidence also manifests that non-communicable comorbidities and musculoskeletal health conditions frequently co-occur simultaneously, and notably, people with MHC are reported to have roughly a two-fold chance of having the chronic disease of other body systems such as heart disease, neurological disorders, gastric ulcers and endocrine disorders.

4. Conclusion and recommendations

MHC are among the most relevant health issues worldwide owing to the human suffering they impose and its increasing social and economic costs. Despite the available evidence, MHC is under-addressed in our country regarding programmatic approaches, treatment and health system response. We report here for the first time a nationally representative study on Bangladeshi sedentary workers addressing the equity issues related to age, sex and socioeconomic status. Low socioeconomic status, overweight, and sedentary lifestyles, are the factors to be targeted for interventions. Therefore, we recommend that Bangladeshi health care facilities should contribute to accurate medical content all over the zones. Bangladesh would be able to address the spark before the fire breaks out through the early surveillance of and care of MHC health

issues.

The government should raise awareness among the population about its detrimental aspects. Nationally representative surveys are warranted to inform the health system for greater attention and addressing the challenges of pain and disabilities associated with MHC. Furthermore, additional longitudinal studies are needed to estimate the impact of this group of conditions, particularly addressing related disabilities and loss of work, as MHC is rapidly becoming a burden on this nation.

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