A Cross Cut Survey on Musculoskeletal Disorders among Farmers in Selected Areas of Northern Part of Bangladesh

Abstract

Bangladesh is a land of agriculture; majority of the people reside in rural area and engage in agricultural activities. Keeping them fit is a prime issue because they are contributing in our economy. This study was conducted to assess musculoskeletal disorders among farmers in selected areas of northern part of Bangladesh. First of all history was taken followed by physical examination and radiological evidence from conveniently selected 89 farmers. Verbal consent was taken from village head/community head to avoid odd situation and confirmation of the study subject as a farmer. Average age of the respondents was 38.13±7.93 years. More than half of the respondents (59%) completed primary education. Most of the respondents (77.30%) earned ≤10000 BDT monthly. About 67.40% respondents worked in the field 5-8 hours per day. About two-third of the respondents (69%) worked in farming activity for 10-15 years. About 61.80% farmers suffered some form of musculoskeletal problem and 38.20% did not have musculoskeletal problem. Lower back pain was common (43.8%) followed by neck pain (9%), foot pain (3.4%) and knee pain (5.6%). It is concluded from the findings that high prevalence of musculoskeletal problem was seen among farmers which is alarming indeed. Further depth study can be conducted to get precise result.

Keywords: Musculoskeletal Disorders; Farmers; Northern Part of Bangladesh

Introduction

Farming is a physically effortful task which has various health risks and musculoskeletal disorders/discomfort being some of the most common [1]. Farmers are playing vital role in our national economy because they are providing food for us. So their health status should be prioritized issue for us. But we often observe that they show ignorance about health issue and seek treatment from traditional healer. Actually musculoskeletal problems are mechanical in origin and solution of those problems should be mechanical as well. The extent of the musculoskeletal disorder (MSD) problem is not well understood among Canadian farmers, and little too is known about their epidemiology [2] Due to lack of up-to-date data same scenario is observing in our country. Though systematic review identified the prevalence of MSDs by body region in farmers and established that low back pain was the most common MSD, followed by upper and then lower extremity MSDs [3]. Reported trends suggest that the prevalence of MSDs in farmers is greater than in non-farmer populations [3]. This is why current study was an attempt to explore the present scenario of musculoskeletal condition of farmers in northern part of our country.

Materials and Method

This was a cross sectional survey like study conducted among 89 farmers at conveniently selected villages in Chapainawabgonj district in Bangladesh. Their main occupation was farming and usually worked in field. As a physiotherapist I had the scope to deal lot of patients with musculoskeletal problem in day to day practice and many of them were farmers. From that point of view I visited some villages and collected data from farmers. First of all history was taken followed by physical examination and radiological evidence. Verbal consent was taken from village head/community head to avoid odd situation and confirmation of the study subject as a farmer. Then verbal consent was taken before initiation of interview. Assurance was given about confidentiality of information and freedom to withdraw any stage of interview.

Results

Average age of the respondents was 38.13±7.93 years. About 43.8% of the study subjects belonged to 31-38 years followed by 22.5% from 47-55 years, 16.9% from 23-30 years and 16.9% from 39-46 years. (Table 1).

Table 1: Age group distribution of the respondents (n=89).

<table>
<thead>
<tr>
<th>Age group in years</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean ±SD</td>
<td>38.13 ± 7.93</td>
<td></td>
</tr>
<tr>
<td>23-30</td>
<td>15</td>
<td>16.9</td>
</tr>
<tr>
<td>31-38</td>
<td>39</td>
<td>43.8</td>
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<tr>
<td>39-46</td>
<td>15</td>
<td>16.9</td>
</tr>
<tr>
<td>47-55</td>
<td>20</td>
<td>22.5</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>
More than half of the respondents (59%) completed primary education followed by illiterate (29%) and below SSC (12%) (Figure 1).

Most of the respondents (77.30%) earned ≤10000 BDT monthly whereas 21.70% had monthly income 10001-20000 BDT and only 1% had monthly family income >20000 BDT (Figure 2).

About 67.40% respondents worked in the field 5-8 hours per day and 29.20% did work 9-12 hours per day as well as only 3.40% worked >12 hours per day (Figure 3).

About two-third of the respondents (69%) worked in farming activity for 10-15 years followed by 17% for <10 years and 14% for >15 years (Figure 4).

About 61.80% farmers suffered some form of musculoskeletal problem and 38.20% did not have musculoskeletal problem (Figure 5).

Lower back pain was common (43.8%) followed by neck pain (9%), foot pain (3.4%) and knee pain (5.6%) (Table 2).
proper posture training can be an easy way to reduce burden [2]. So it is urgent to care musculoskeletal issues of farmers. the low back followed by the upper and then lower extremities. Study and showed that most common MSD site in farmers was lower back pain, neck pain, knee pain and foot pain was observing by taking clustering sample from different part of the country.

**Conclusion**

Very high prevalence of musculoskeletal problem including back pain, neck pain, knee pain and foot pain was observing among farmers. Involvement of Physiotherapists in rural health setting can reduce this high prevalence of MSDs.

**Conflict of Interest**

None.

**Acknowledgement**

None.

**References**


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**Citation**:


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**Table 2**: Region affected (n=89).

<table>
<thead>
<tr>
<th>Region</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower back</td>
<td>39</td>
<td>43.8%</td>
</tr>
<tr>
<td>Neck pain</td>
<td>8</td>
<td>9.0%</td>
</tr>
<tr>
<td>Foot pain</td>
<td>3</td>
<td>3.4%</td>
</tr>
<tr>
<td>Knee pain</td>
<td>5</td>
<td>5.6%</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>61.8%</td>
</tr>
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