Original Article

Clinical Presentation of Painful Musculoskeletal Conditions at Community Level

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Abstract

Background: This study was done in the community level to investigate the frequency of clinical manifestations of painful musculoskeletal conditions that present to the primary care physicians and to see the variations of musculoskeletal diseases in relations to age, gender and occupation. **Methods:** This was a cross-sectional study. People with painful musculoskeletal conditions included and data were collected once. 107 patients with pain and musculoskeletal complaints were included in this study. **Results:** Majority (44.85%) presented with back pain. The commonest type of disease was degenerative (51.40%).15 cases (14.02%) of musculoskeletal pain were of inflammatory type. Peak age at presentation of musculoskeletal diseases was 40-49 years, which included 23.36% of total participants. 57.94% of the patients with musculoskeletal diseases were females. Among people of all occupations housewives constituted 52.33%. **Conclusions:** Low back pain is found as the commonest painful musculoskeletal problem encountered by the primary care physicians. Neck and shoulder pains are the next common problems. Housewives are the most vulnerable to musculoskeletal problems. A considerable number of inflammatory musculoskeletal diseases are also present at primary care level.

Key words: Pain; Musculoskeletal; Rheumatic diseases; Primary care.

INTRODUCTION

Musculoskeletal (MSK) problems are very common causes of disability within the community[1]. Majority of Musculoskeletal conditions are seen at the level of general practitioner[1]. Although we have some ideas about Musculoskeletal diseases at tertiary level, enough knowledge still lacks at the community level[2]. Approximately a quarter of patients attending a general and outpatient clinic have musculoskeletal system-related complaints[3].

GP doctors frequently face difficulties because; they do not possess the required attitude, skills and knowledge to asses clinically such (Musculoskeletal) patients. These diseases are neglected by everyone[4-7]. Hence, knowledge of the patterns of manifestations is a crucial need for their early diagnosis, accurate treatment and initiation of preventive measures.

MSK diseases increase with age[8]. Nearly three in 10 of those over 75 years, are in chronic pain due to arthritis[9]. Moreover, females (57.1%) are more prone to musculoskeletal diseases than males (42.9%)[10]. Determination of variations in the presentations of musculoskeletal symptoms along with risk group allocation in the context of our community is important for better management.

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The main objectives of this study is to sought out the clinical presentations of various painful musculoskeletal conditions at community level, to make an assumption about the bulk of inflammatory conditions and serious diseases so as to emphasize on their diagnosis and management.

METHODS AND MATERIALS

This was a cross sectional study. Data were collected at Anowara Upazilla Health Complex (A primary health care centre) Chittagong. The outpatient department of the health complex deals with average 300 to 350 patients per day. Patients of all ages and both gender complaining of musculoskeletal pain were included. Those with non-musculoskeletal pain were excluded. Patients unwilling to participate were also excluded. Prior to the data collection, announcement was made for patients with pain to attend the health complex for treatment by specialist team. History of the patients, attending the out-patient department of a primary health complex was taken. There were lots of patients in outpatient department with complaints other than pain. From total 411 patients, those with musculoskeletal complaints were screened out. Then they were thoroughly examined clinically to detect the sites of pain, types of diseases before data collection. Patients with pain from non-musculoskeletal origin were excluded. Finally, 107 patients were selected for study. A semi-structured questionnaire was filled by the researchers. Data were collected from the history, the examination findings and after necessary investigations.

RESULTS

From 107 patients, 62 (57.94%) were females and 45 (43.06%) were males. 45.79% patients presented with back pain. Other common presentations were knee pain (22.4%) & neck pain (12.14%), (Table 1). Commonest age group of the patients with musculoskeletal symptoms was 40-49 years (23.36%) and 50-59years 22.42% (Table 3). 80 (74 %) patients had musculoskeletal disease of mechanical category. Fifteen patients (14.02%) had of inflammatory type 0f musculoskeletal diseases (Table 2). 52.34% patients were housewives who presented with musculoskeletal symptoms. From 107 patients, 50 patients (45.79%) came with back pain, of which 49 (98%) presented with Low Back Pain (LBP) and one (2%) with Upper back pain. Most common age group in LBP patients was 50-59, which comprised 23.53%. Other age groups at risk are 40-49 yrs (20.40%), 30-39 yrs (20.40%), 20-29 yrs (14.28%) (Table 4). 53.06% LBP patients were housewives. Of 107 musculoskeletal pain patients, 2nd most common (22.4%) manifestation was knee pain. 75% of all knee pain patients were females and 25% were males. Most common age group suffered from knee pain was 40-59 (59.09%),

Table 1: Clinical presentation of musculoskeletal diseases.

Clinical presentations	N	%	Female (%)	Male (%)
Low back pain	49	46	15	31
Knee pain	24	22	17	06
Neck pain	13	12	02	10
Ankle or foot pain	09	08	03	07
Shoulder pain	08	07	07	02
Pain in whole body	08	O7	00	07
Elbow pain	04	03	01	03
Pain in wrist or hand	05	05	02	03
Calf pain	03	03	00	03
Upper back pain	01	01	00	01

Table 2 : Clinical varieties of musculoskeletal diseases.

Patterns	Number	Percentage
Mechanical	80	74
Soft tissue rheumatism	12	11
Inflammatory	15	14
Others	09	09

Table 3 : Age and Gender Distribution of Patients with Musculoskeletal Diseases.

Age	No.	%	Male (M)	Female (F)
<19	2	1.9	0.9%	0.9%
20-29	15	14.0	1.9%	12.1%
30-39	21	19.6	5.6%	14.0%
40-49	25	23.4	7.5%	15.9%
50-59	24	22.4	11.2%	11.2%
60-69	15	14.0	5.6%	8.4%
70-79	4	3.7	0.9%	2.8%
>80	1	0.9	0	0.9%

Table 4 : Common Occupations of Patients with musculoskeletal Diseases.

Occupation	No. of case	Percentage
Farmer	12	11.2
Businessman	5	4.7
Office worker	12	11.2
Housewife	56	52.3
Day labourer	4	3.7
Others	18	16.8

DISCUSSION

Hundred seven (107) patients with MSK complaints were included in the study. The most prevalent presentation was back pain, prevailing in 46.72% of all patients. In another study, back pain prevalence was found in 30-40% of the adults[11]. Our result is almost consistent with that. Another study shows back pain in 59% subjects[12]. The 2nd commonest MSK diseases manifestation was knee pain which comprises 22.41%. This value is to some extent higher than rate, which is 10-15% found in a study abroad[11].

Females were more sufferers from MSK diseases than males which are also found in almost all other studies. 66.35% were females where as 33.64% were males in our result, that is nearly similar with a survey result (Showing 57.1% females & 42.90% males) [10]. Studies showed that women with joint pain (i.e. O.A) have high level of free estrogen and the estrogen may be chondrodestructive[13,14]. This might be the reason why women suffer more.

This study also proved that, MSK diseases increase with age and are found most common (23.36%) in 40-49 age group and second most common (22.42%) in 50-59 age group[8]. This higher incidence may be due to presence of degenerative diseases and osteoporosis which are age related[15].

Most (52.33%) of the MSK patients were housewives and farmers who suffered principally from back pain (33.06%, 18.36% respectively) and knee pain (63.64%, 9.09% respectively). This might be due to prolonged knee bending and forward stooping position related to their household activities. MSK diseases were much less common (3.73%) in day labourers.

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CONCLUSION

MSK diseases represent to primary care physicians in various forms. Low back pain is found as the commonest problem for the villagers particularly, housewives. A considerable number inflammatory MSK diseases are also present which needs the attention of the specialists. Moreover, study with larger sample size or multicentre (At many Upazillas) studies are required in future for a better picture.

DISCLOSURE

All the authors declared no competing interest.

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