

TMSS Medical College Journal (TMCJ)

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Address of Correspondence

Editor-in-Chief, TMSS Medical College Journal, TMSS Medical College
 Rangpur Road, Thengamara, Bogura, Bangladesh.
 Phone: 051-61830, 01775-316617
 e-mail: editortmcjournal@gmail.com, Web: www.tmcjournal.org, www.tmssmedicalcollege.com

Original Article**Disease pattern in the Department of Physical Medicine and Rehabilitation at TMSS Medical College and Rafatullah Community Hospital**Mahmud^{1*} FRA, Mandal MA²

1. Dr. Ferdousur Rahman Al-Mahmud, Associate Professor, Department of Physical Medicine and Rehabilitation, TMSS Medical College, Bogura.
2. Dr. Muhammad Alamgir Mandal, Associate Professor, Department of Physical Medicine, and Rehabilitation, TMSS Medical College, Bogura.

Corresponding Author*Abstract**

Background: Physical Medicine and Rehabilitation focuses on the restoration of health and function and reintegration of the patient into the community, providing outdoor & indoor services.

Objective: The purpose of the study was to explore the disease pattern of patients attending the department of Physical Medicine and Rehabilitation in a tertiary care hospital.

Materials and Methods: This is a record review study carried out at the department of Physical Medicine and Rehabilitation in TMSS Medical College Hospital, Bogura for the period of one year from 1st February 2023 to 31st January 2024.

Results: Total three thousand eight hundred sixty (n = 3860) patient's record were analyzed, of which 1590 were male and 2270 were female. Maximum (27.9%) patients belong to 51-60 years of age. Maximum patients (89.40%) were come from Bogura district. Regarding disease pattern, 37.2% were suffering from OA Knee, 1.1% stroke, cervical spondylosis 4.6%, lumbar spondylosis 32.4%, Bell's palsy 0.6%, soft tissue rheumatism 17.2% rheumatoid arthritis 2.5%, seronegative Spondyloarthopathy 0.6%, CP 0.2% .

Conclusion: A uniform data system should be constructed for the evaluation of Medical rehabilitation in Bangladesh.

Key words: Clinical Profile, Physical medicine, Tertiary hospital

Introduction

Contrasting with some medical specialties, rehabilitation medicine is not restricted to a single organ system. The objective of the rehabilitation physician is to refurbish handicapped persons to the fullest achievable physical, mental, social, and economic freedom. Therefore, the person must be assessed in relation not only to the disease but also to the way the disease affects and is affected by the person's family and social milieu, vocational tasks, interests, hopes and dreams, financial state.¹ The field of Physical Medicine and Rehabilitation emphasizes on the restitution of health and function and repossession of the patient into the society.^{2,3} Despite the deficiency of information, Osteoarthritis of the knees, nonspecific

low back pain, lumbar spondylosis, fibromyalgia, and soft tissue rheumatism are reported as the most frequent rheumatic illnesses in Bangladesh. More study is required because there is currently scarce information available to accurately label the epidemiology of rheumatic diseases in our country.⁴ Physical Medicine & Rehabilitation Department, TMSS Medical College & Rafatullah Community Hospital provides services to the patients with musculoskeletal disorders and neurological problems. This department provides multidisciplinary inclusive treatment along with other departments to the patients due to road traffic accidents, spinal cord injury, stroke, musculoskeletal condition like arthritis, low back pain, neck pain, ICU & burn rehabilitation etc.

Materials and Methods

This was a review of the records at Physical Medicine and Rehabilitation department of TMSS Medical College Hospital over a period of one year from February 2023 to January 2024. The subjects were enlisted on an individual basis who was attended TMSS Medical College & Rafatullah Community Hospital during that period. Data were analyzed using Microsoft excel and statistical package for social sciences (SPSS) Version 23. Means and standard deviation were used for continuous variables and simple proportions were used for categorical data.

Results

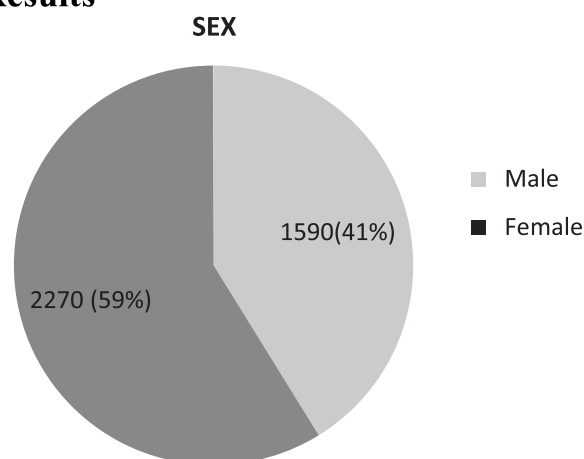


Figure-1: Sex distribution of the patients (n: 3860)

Total number of patients was 3860. Among them 1590(41.2%) were male and 2270(58.8%) were female (Figure-1).

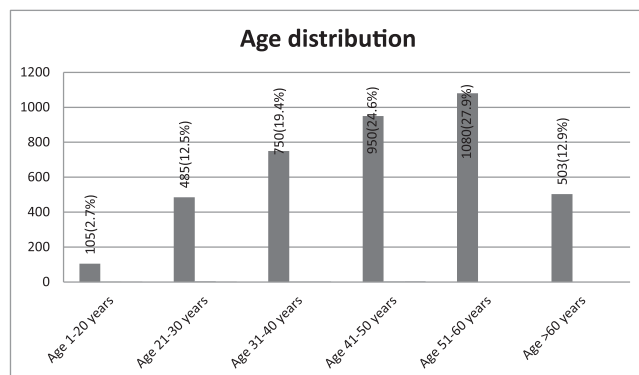


Figure-2: Age distribution of the patients (n: 3860)

2.7% of patients were under 20 years of age, about 84.4% of patients belong to 3rd, 4th, 5th & 6th decades, 12.9% were above 60 years of age (Figure -2).

Distribution

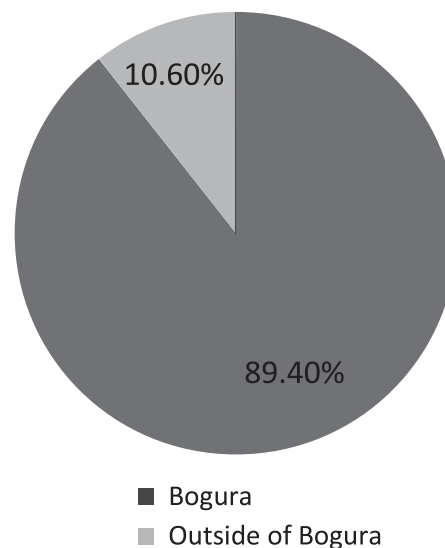


Figure-3: Catchment area of the patients (n: 3860)

Maximum of the patients 89.4% were from Bogura District. Rests of the patient were outside of Bogura District. (Figure -3)

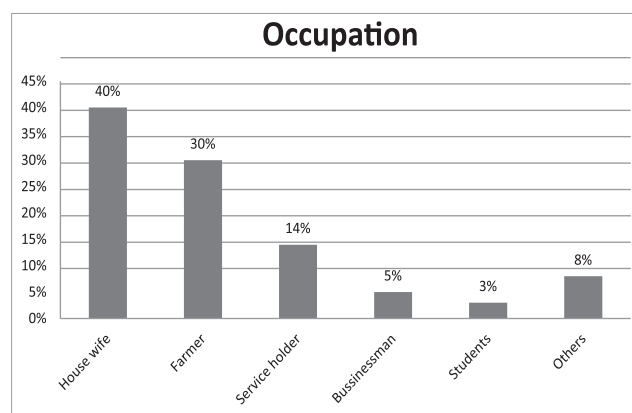


Figure-4: Occupations of the patient (n: 3860)

Among the total number of patients, majority were housewives (40%) followed by Farmer (30%), Service holder (14%), Businessman (5%), Student (3%) and others (8%) of the patients. (Figure -4)

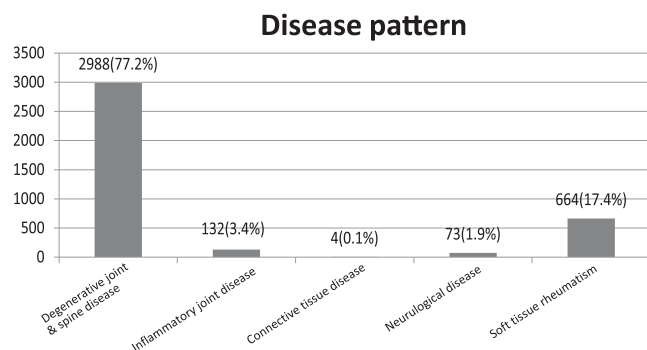


Figure-5: Disease pattern of the patient (n: 3860)

Regarding disease pattern, degenerative joint & spine disease 2988 (77.2%), inflammatory joint disease 132(3.4%), connective tissue disease 4(0.1%), neurological disease 73(1.9%) and soft tissue rheumatism 664(17.4%) attending outpatient department of Physical Medicine and Rehabilitation, TMC & RCH, Bogura (Figure-5).

Table-I: Disease profile of the patients

Disease pattern		Number	%
Degenerative joint & spine disease	Osteoarthritis knee	1436	37.2
	Lumber spondylosis	1251	32.4
	Cervical spondylosis	177	4.6
	Prolapsed lumber vertebral disc	124	3.2
Inflammatory joint disease	Rheumatoid arthritis	97	2.5
	Ankylosing spondylitis	15	0.4
	Psoriatic arthritis	08	0.2
	Gout	12	0.3
Connective tissue disease	Systemic lupus erythematosus	04	0.1
Neurological disease	Stroke	42	1.1
	Bell's palsy	23	0.6
	Cerebral palsy	08	0.2
Soft tissue rheumatism	Fibromyalgia	108	2.8
	Tendinitis	556	14.4

Regarding disease profile, 37.2% were suffering from OA knee, 1.1% stroke, cervical spondylosis 4.6%, lumbar spondylosis 32.4%, soft tissue rheumatism 17.2%, rheumatoid arthritis 2.5%, seronegative Spondyloarthopathy 0.6%, Bell's palsy 0.6% and others 3.8% attending outpatient department of Physical Medicine and Rehabilitation, TMC & RCH, Bogura. (Table-I)

Discussion

In this study it has been tried to find out the age, sex, occupation, residency and disease pattern of the patients attending the dept. of Physical Medicine & Rehabilitation, TMC & RCH. In this study, 41.2% of patients were male and 58.8% were female. A cross sectional study at community level for detection of painful musculoskeletal disorders by MandalMA, et. al. showed that musculoskeletal complaints are foremost in females.⁵ Moniruzzaman M in RpmCH showed 55.1% were female patients.⁶ This female numerousness may be due to hormonal & household work related. Occupation of patients were housewives (40%) followed by Farmer (30%), Service holder (14%), Businessman (5%) and others (8%) of the patients. Mandal MAet. al.⁵ found housewives were 38% and Nessa J et. al. were 37.3% housewife, 16.3% farmer, 15.1% service holder in their studies.⁷ 2.7% of patients were under 20 years of age, 12.5% were 21-30 years, 19.4% were 31-40 years, 24.6% were 41-50 years, 27.9% were 51-60 years and 12.9% were above 60 years of age.

Mandal MAet. al.⁵ showed most (25.14%) were between 31-40 years, MoniruzzamanM et. al.⁶ also found 49.9% were in 41-50 years age. In this study majority of patients had 37.2% were suffering from OA knee, 32.4% lumber spondylosis, cervical spondylosis 4.6%, soft tissue rheumatism 17.2%, Bell's palsy 0.6% rheumatoid arthritis 2.5%, seronegative Spondyloarthopathy 0.4% and others 5.1%. Mandal MA et. al. showed that majority of patients (42.24%) had back pain.⁵ Study performed by

Rahman MM et. al. at CMCH,⁸ Nessa J et. al. at Shaheed Suhrawardy MCH⁷ and Moniruzzaman M at RpMCH⁶ found highest level of back pain in their study respectively. Hasan SA et. al. documented non-specific low back pain (59.95%) as most common disease in his study.⁹

This study also shows 3.5% of patients were rheumatological, 77.4% were degenerative joint & spine disease and others condition. Moniruzzaman M et. al. showed 24.86% in rheumatological, 7.34% in mechanical, 12.99% neurological, 8.47% were pediatric patients.¹⁰ In TMSS Medical College Hospital the referral system & interaction among different departments is improving gradually & importance of Physical Medicine & Rehabilitation department is being appreciated. This is one of the key reason for growing number of rheumatological cases in PM&R outpatient department. From the above discussion, it is clearly demonstrated that the findings of the study performed in Physical Medicine department of TMC & RCH is consistent with the findings of different institutes of Bangladesh.

The total numbers of patients attending Physical Medicine Department have been rising day by day. Most of the patients coming to this department from different areas of North Bengal. Moreover, referred patients are also seen from departments of TMC & RCH especially Medicine, Neurology, Pediatrics, Nephrology, Orthopedics, Surgery, Urology, Cardiology and Gynecology department. These patients came and had follow up treatment & Physical therapy management to prevent contracture, disability, handicap and improve quality of life. This study is done in one tertiary care hospital of Bangladesh in a small population and it may not reflect the total scenario of patients getting treatment from Physical Medicine & Rehabilitation department.

Conclusion

A uniform data system (UDS) for medical rehabilitation is maintained in USA and published annually. No such system exists in Bangladesh. A

uniform data system should be constructed for Medical rehabilitation in Bangladesh. A large scale multi-centered study should be performed in this country. This study suggested middle aged male should be screened non-inflammatory cause in due cases and in case of female patients, rheumatic disease should be exclude first considering inflammatory arthritis. Soft tissue rheumatism are common in both male and female patients, therefore, proper counselling should be directed. Relatively rare disease like cervical rib syndrome and SLE could be measured whenever suitable.

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