

Original Research Article

Distribution of illness of orthopaedic outpatient department in a tertiary care teaching hospital in West Bengal: a cross sectional study

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ABSTRACT

Background: Orthopaedic Outpatient Department (OPD) is an important part of health care system. Patients coming with different illness for treatment. Distribution pattern of illness represents the area from where patients come for treatment.

Methods: Cross sectional, Observation Study. The patients who had willingly participated were enrolled on the basis of subject selection criteria. Prescriptions were collected from newly patients attending the Orthopaedics OPD. No follow up visit was done.

Results: Male patients attended more than female gender (62% vs 38%). 18-30 years age group attended OPD much than another group (32.5%). Trauma is an important contributing factor (38.5%). History of trauma was seen more in male gender group and among 18-30 years age group. Low back pain is common problem. (29.5%).

Conclusions: Low back pain is the common problem among patients attended Orthopaedic OPD. Trauma is an important contributing factor among 18-30 years age group.

Keywords: Low Back Pain, Orthopaedic OPD, Trauma

INTRODUCTION

Orthopaedic department is an important part for trauma care service in any tertiary care centre, responsible for treatment of fracture patients, soft tissue injuries in emergency basis.¹

In outpatient department (OPD) patients come with various problems like congenital deformities, musculoskeletal pain, soft tissue injuries etc. After getting emergency treatment most of the trauma patients need follow-up of their treatment through OPD basis.¹ Orthopaedic OPD plays an important role of health care system. Distribution of illness or pattern of diseases may be a useful to know the age, sex, occupation, socio-economic factors, demographic profile, racial, in patients

with bone and joint disorders.² Distribution of illness may be differed due to environmental factors also. Many literatures show that low levels of vitamin D is noted in young adults, hospital personnel, postmenopausal women, and even school children also.³ In another study it was seen that low back pain is very frequently seen in among the Information Technology Professionals.⁴

Distribution of illness is important predictor of health in that particular region from where patients generally attending the OPDs. The distribution of illness is an important factor for selection of essential drugs and planning of budget for treatment on that particular sector.^{5,6} In this study we try to find out the distribution of diseases in orthopaedic OPD. AIM To find out the distribution of illness in orthopaedic OPD.

METHODS

The study was conducted after getting permission of Institutional Ethics Committee. The patients who had willingly participated were enrolled on the basis of subject selection criteria. All the newly patients more than 18 years of age, either sex, came in Orthopaedic OPD given permission of consent included in this study. However, patients who need emergency treatment (fracture, soft tissue injuries etc) were excluded from the study. Pregnant, lactating mother, unconscious patients and patients with history of addiction were also excluded from the study.

Study area: Orthopaedics OPD, College of Medicine and JNM Hospital, Kalyani, Nadia, West Bengal. Data compilation and Statistical analysis were done in Department of Pharmacology, College of Medicine and JNM Hospital, Kalyani, Nadia, West Bengal. Study design: Cross sectional, Observation, Unicentric study. Study population: The present study was conducted on 200 newly patients who visited the orthopaedics outpatient department. Study Duration: July 2017 to September 2017

Study methodology: The cross sectional, unicentric study was conducted in the Orthopaedics OPD of a tertiary care, teaching hospital in West Bengal during from July 2017 to September 2017. Prescriptions were collected from patients attending the Orthopaedics OPD. No follow up of prescription was done. Data were collected from prescription and analysis were done after completion of 200th prescription.

The parameters included gender distribution, age of the patients, type of illness, history of any trauma was collected from prescription.

RESULTS

200 patients were included in the study and their prescriptions were analysed only once- no follow up visit was done. Analysis only done after completion of 200th prescriptions. The Gender-wise distribution of Patients have been described in Table 1.

Table 1: Gender-wise distribution of patients.

Gender	No of patients	%
Male	124	62
Female	76	38

In Table 1, it is seen that male patients (62%) attended more than female patients (38%) during that study period. Age-wise distribution of illness is described in Table 2.

Table 2 shows that majority patients came from 18-30 years age group (32.5%), and least from more than 60 years age group (9.5%). Distribution of illness or pattern

of illness of selected 200 patients are presented in Table 3.

Table 2: Age-wise distribution of patients.

Age range	No. of patients	%
18-30 Years	65	32.5
31-40 Years	39	19.5
41-50 Years	46	23
51-60 Years	31	15.5
More than 60 years	19	9.5
Total	200	

Table 3: Distribution of Illness.

Disease/symptoms	No. of patients	%
Low back pain	58	29
Cervical spondylosis	18	9
Osteoarthritis	25	12.5
Shoulder pain with restriction of movement	14	7
Clavicular fracture	2	1
Elbow pain and swelling	5	2.5
Forearm pain and swelling	12	6
Wrist joint pain and swelling	15	7.5
Colles fracture	3	1.5
Fingers pain and swelling	11	5.5
Hip joint pain	3	1.5
Lower limb pain and swelling	12	6
Foot pain and swelling	6	3
Ankle pain and swelling	8	4
Scaphoid fracture	2	1
Polyarthritis	6	3

In Table 3, it is seen that out of 200 patients low back pain is most common (29%) followed by osteoarthritis (12.5 %), spondylosis (9%). Fracture patients came rarely (1%) in OPD.

Trauma is a contributing factor for orthopaedic illness. We searched of history of trauma among patients. Distribution of patients where trauma may be a contributing factor is presented in Table 4.

Table 4: Shows distribution of patients where trauma may be a contributing factor.

	No. of Patients	%
Trauma	77	38.5
Non-trauma	123	61.5
Total	200	

Table 4 shows the incidence of trauma among 200 selected patients. It is seen that incidence of trauma as contributing factor is seen in 38.5% patients. We try to find the age-wise distribution of incidence of trauma.

Table 5 represents the age-wise distribution of incidence of trauma.

Table 5: Shows age-wise distribution of incidence of trauma.

Age range	History of trauma (total no=77)	%
18-30 Years	28	36.37
31-40 Years	15	19.48
41-50 Years	14	18.18
51-60 Years	15	19.48
More than 60 years	5	6.49
Total	77	

Table 5 shows that incidence of trauma is commonly seen in 18-30 years age group and least in more than 60 years age group. Gender-wise incidence of trauma is represented by Table 6.

Table 6: Shows gender-wise incidence of trauma.

Gender	History of trauma (total no=77)	%
Male	51	66.23
Female	26	33.77

Table 6 shows that incidence of trauma is common in male group (66.23%) than female group.

DISCUSSION

The study was conducted to evaluate the distribution of illness in Orthopaedic OPD in a tertiary care teaching hospital in West Bengal.

200 newly patients attending Orthopaedic Outpatients Department who fulfilled the selection criteries were included in this study and their prescriptions were analysed in detail.

Out of 200 patients 124 patients were male in gender (62%) and rest were female (38%) (Table 1).

It was noted that majority of patient population was from 18-20 years of age group (32.5%) least came from more than 60 years of age (Table 2).

Patients came in Orthopaedics OPD with different signs and symptoms and complains.

It is seen that majority were suffering from 'low back pain' (29%) followed by osteoarthritis (12.5%), then cervical sponylosis (9%), incidence of fracture patients also very less (1%), patients suffering from fracture may receive treatment from emergency care (Table 3).

Trauma is a contribution factor of Orthopaedic patients. Out of 200 patients 77 patients had a history of mild to severe trauma (Table 4).

Incidence of trauma is much more in 18-30 years age group (36.37%) and least in older than 60 years age group (6.49) (Table 5).

Incidence of trauma is more common in male patients (66.23%) than female patients (33.77%).

It is seen than no patients came with congenital anomaly as because we included more than 18 years patients so we missed the patients suffering from congenital anomaly.

Emergency patients, Road traffic patients, fracture patients basically attended emergency service, incidence is less in OPD.

In a study it is seen that RTA are common of 25-65 years followed by 15-24 years.⁷

In another study it is informed that RTA are common among 16-18 years age group and male are more sufferer than female.³

Above two studies correlate with our study also. In our study it is seen that incidence of trauma is common in 18-30 years age group and incidence is common in male gender.⁸⁻¹⁰

In another study regarding prevalence and pattern of Orthopaedic OPD patients mentioned that spine pain is common problems among patients attending Orthopaedic OPD.¹

In our study it is also seen that majority were suffering from low back pain and cervical spondylosis is the 3rd common problem followed by osteoarthritis 2nd.

Obviously like other study we had also few limitation. We didn't include the paediatric age group. Secondly we didn't include the emergency patients. We didn't able to include more patients in this study.

CONCLUSION

To conclude, it is seen Male patients attended more than female. Majority patients came from 18-30 years of age group. 38.5% patients had a history of trauma. Low back pain is the common problem among patients attended Orthopaedic OPD.

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Ethical approval: The study was approved by the Institutional Ethics Committee

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