The spectrum of orthopedic cases in a tertiary care centre: A month’s review

Dr. Saktthi Sellayee, Dr. Ganesan G Ram, Dr. B Raghavendran and Dr. Faraz Syed Ahmed

Abstract
Patient population and pathology distribution in Orthopaedic Out Patient Department [OPD] has a notable significance between the male and female population. We aimed to study the common problems that bring patients to the OPD. A prospective study was done in our institution for one month. All patients who came to the OPD were included. Patients admitted in other departments for orthopaedic reference were excluded. A total of 9733 patients were taken into our study. The majority was formed by the female population and most in the 4th decade of their living. Though fractures were significantly dominating our orthopaedic practice we were able to see a steady population that complained of myalgia which was different from the arthritic pain. Habitual OP visiting for temporary symptomatic relief of pain what a general attitude observed amongst the female population. The men, however, came to the OPD only with utmost necessity when their daily activities of living was being hindered.

Keywords: Spectrum of orthopedic cases in a tertiary care centre

Introduction
“Diseases desperate grown, By desperate appliance are relieved, Or not at all” was recited by Cladius to Hamlet as an advice that a disease left untreated cannot be treated at all; in William Shakespeare’s play - Hamlet [1]. Orthopedics is a specialisation in Surgery that presents with a spectrum of pathological conditions that hinder greatly with an individuals daily living. The prevalence of diseases and the socioeconomic burden it produces in this part of the world cannot be ignored. However amidst the stigma that a common man has over the concept of hospitalisation and surgery; the concern to get appropriate medical attention still remains so. In addition to that surgeons also face many limitations while treating patients [2,3].

Methods and materials
The aim of our study was to understand the common orthopaedic conditions present in an around our urban area and the burden born by the individual and the society during the course of its treatment.
This was a prospective study done in our institution during the time period of June 2018-July 2018. Ethical committee clearance was obtained for our study. All patients who presented to the Out Patient Department were noted for a period of 30 days. Our tertiary Care centre has a super speciality OPD which specialises in Pediatric, Hand, Rheumatology, Arthroplasty, Spine Surgery, Arthroscopy and Trauma. Each day is specific for one sub speciality. Inclusion criteria was all patients who consulted the OPD from 8am to 4pm everyday and referral cases from other departments OPDs. Exclusion criteria was patients with poly trauma presenting directly to the Accident and Emergency Department and patients admitted under other departments with reference to the orthopaedic OPD. Details such as the age, gender, occupation of the patients and number of visits were taken into account. Diagnosis of the patient and the outcomes were also noted. All patients were initially examined by the junior residents who takes history and elicits clinical findings. The junior resident then further investigates with plain radiographs and blood reports. It is after the completion of this basic examination with clinical and radiological findings when the patient is seen by the senior
consultant for advise on further treatment protocol. A note was also made on how many patients were advised for admission and how many advised admission but deferred further management.

**Results**

We observed more female patients than males in our study. A total of 9733 patients had visited the Out Patient Department. 4285 were males (2345 new visits and 1940 follow ups) and 5448 were females (2462 new visits and 2986 follow ups) (Figure 1). A significant majority of the patients were in their 4th decade of living (Figure 2). The orthopaedic conditions varied form degenerative conditions like arthritis of the various joints to acute traumatic injuries. (Figure 3). The follow up visits by some chronic patients predominantly were the post operative arthroplasties and fracture stabilisations. It was observed that the patients who visited for pain management developed and addiction to the temporary symptomatic pain relief and kept frequenting the OPD on a regular basis.

**Discussion**

Motorization has been rapidly developing in India. With the increasing evidence of Road Traffic Accidents the number of traumatic fractures have been unfortunately increasing at a steady pace [4, 5]. This is one end of the main orthopaedic injury concern. In the other spectrum the complications of osteoporosis has been creating awareness to elderly low velocity traumas. Many patients who present to the out patient department consider the hospital stay, post operative pain and the economics behind surgery along with the immobilisation period; and are thus forced to overlook the surgeons suggestions to undergo surgery. The superstitions that revolve around surgeons and their surgeries has also influenced many such patients to opt for native splinting as opposed to surgical correction of traumatic injuries to the long bones. Many of these patients have an uneventful healing however a significant percentage of these patients present with complication such as non union, deformity due to malunion, loss of function, infection, CRPS etc. Ironically the very reason they deferred surgery has become the main reason they came back for surgical correction. Many elderly individuals suffer from arthritic changes in the shoulder, hip and knee. These patients tend to opt for conservative management. The temporary relief of pain excitements them to overuse NSAIDs and subsequently become addicted to it without realising the long term side effects to bear in future. We have observed that a significant percent of the patients tend to become regular visitors only for the symptomatic pain relief. Thus it is paramount to understand the pain severity and intelligent prescription of analgesics should be made [6, 7]. Most of the female population who are homemakers fall under the age group of 40-60. They all suffer from co morbidities like diabetes mellitus and hypertension. These patients visit the general medicine OPD regularly for Free OHAs and Anti hypertensive medications. Whilst hospital visit they tend to take a detour to the orthopaedic OPD with vague compliants of generalised myalgia. This has lead to further evaluation of the aetiologies of generalised myalgia. The concerns of muscle pain have been prevalent amongst many physicians as there is a significant population of patients who present with these pathologies [8, 9]. Another significant cluster of OPD visitors are attenders of In patients who want to consult for pain of the muscles and joints. All patients operated for acute traumatic fractures tend to follow up regularly till they are symptomatically relieved. Once they are able to return to work, we lose them for follow up and the travel and leave of absence from work in order to consult us is troublesome for the patients. Only when a complication presents or a re-fracture happens do these patients come back again [10]. The disadvantage we faced was loss of follow up data in the form of clinical and radiological pictures. Pediatric deformities and Peripheral nerve injury patients are more surgeon co operative as they follow up religiously with the treating doctor. Their patience and will power is profound [11]. In general, though fractures are considered the bread and butter of orthopedics other pathological condition like myalgia and arthritis are equally common [12].

**Conclusion**

We observed that the male patients who presented to us came with a more serious pathology and they were presented only when the condition needed medical attention. They tend to overlook their pain for fear of medical expenditure and subsequent hospitalisation that could cost them weeks of loss of pay. The female patients however came only for temporary pain relief and did not cooperate for further evaluation of disease or management. The most common pathology being myalgic raises concerns and warrants further studies to analyse the cause and clinical relation.

**Figure Legends**

**Fig 1:** Gender Distribution of the Orthopaedic OPD patients for 1 month

**Fig 2:** Age distribution of the OPD patients
Fig 3: Distribution of orthopaedic disease and no. of patients

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