



Point Prevalence and Pattern of Diseases in Medical Wards at a Teaching Hospital in Western India

KEYWORDS

Admissions, Medical Wards, Communicable diseases, Non-communicable diseases

Dr. Neeta P. Pradhan

Associate Professor, Department of Medicine, Smt. Kashibai Navale Medical College & General Hospital, Narhe, Off Pune-Mumbai Bypass, Ambegaon, Pune

Dr. Shreepad M Bhat

Professor and HOD, Department of Medicine, Smt. Kashibai Navale Medical College & General Hospital, Narhe, Off Pune-Mumbai Bypass, Ambegaon, Pune

ABSTRACT *Introduction: The profile and pattern of admissions to medical wards has significantly changed over time with a higher proportion of non-communicable diseases than communicable diseases. The aim of this study was to study the point prevalence of various diseases on a given day in the medical wards and to analyse the most common group of medical disorders encountered among indoor patients.*

Materials and Methods: Case records of patients in the medical wards on a given day at Smt. Kashibai Navale Medical College and General Hospital were analysed with reference to age, gender, and clinical diagnosis. They were grouped into two broad categories of non-communicable and communicable disorders and further analysis was carried out.

Results: A total of 129 case records of patients in the medical wards on 7th Feb 2014 were analysed. 91 patients (70.5%) were found to have non-communicable diseases, whereas 38 patients (29.5%) were found to have communicable diseases. The non-communicable diseases were further analysed, among which neurological disorders were the commonest (27.4%), followed by gastrointestinal (19.8%), cardiovascular (18.7%), haematological (15.4%), endocrine (11%) respiratory (3.3%) and others (4.4%).

Conclusions: Non-communicable diseases were the commonest causes of admissions to the medical wards. Of these, neurological disorders were the most prevalent. Among neurological disorders, stroke/cerebrovascular insufficiency was the commonest cause for admissions to the medical wards.

Introduction

Admissions to medical wards include a whole spectrum of diseases ranging from non-communicable to communicable disorders. Over the years, with urbanization and changing demographics, non-communicable diseases have become the commonest reasons for admissions to the medical wards^{1,2,3,4,5,6}. Neurological endocrine and cardiovascular disorders are predominant among the non-communicable diseases^{1,7}, whereas gastrointestinal and respiratory diseases predominate among the communicable diseases⁸. This study was aimed at analysis of data of indoor patients in medical wards on a given day to determine the point prevalence and the pattern of common diseases in the medical wards.

Materials and Methods

Admission data of all patients in the medical wards on a given day (07/02/2014) at Smt. Kashibai Navale Medical College and General Hospital, Pune were analysed with reference to age, gender and clinical diagnosis. Average patient age was calculated. Clinical disorders were categorised into non-communicable and communicable disorders. The group of patients with non-communicable disorders was further evaluated to determine common causes of non-communicable disorders. Neurological disorders, which were the commonest, were further classified according to aetiology.

Results

A total of 129 patient admission details in the medical wards were analysed. Of these, 80 patients (62%) were males, and 49 patients (38%) were females (Table 1, Figure 1). The average age of indoor patients was 46.6 years (12-90 years).

Of these, 91 patients (70.5%) were found to have non-communicable diseases, whereas 38 patients (29.5%) had communicable disorders (Table 2, Figure 2).

The non-communicable disorders, which were predominant, were further analysed. Of these, neurological disorders were the commonest (27.4%), followed by gastrointestinal (19.8%), cardiovascular (18.7%), hematological (15.4%), endocrine (11%), respiratory (3%) and others (4%) (Table 3, Figure 3).

Among neurological disorders, stroke/cerebrovascular insufficiency was the most frequent cause (48%), followed by epilepsy (32%) and chronic degenerative disorders (20%) (Table 4, Figure 4).

Discussion

Profile and pattern of admissions to medical wards has significantly changed. With urbanisation and changing lifestyle, disease profile in indoor patients has undergone significant change and non-communicable diseases have become the commonest diseases in medical wards. Our study aimed at analysing the point prevalence and pattern of various diseases among patients in the medical wards in our hospital on a given day. We found that in our hospital, of the 129 patients, 91 patients (70.5%) had non-communicable diseases, whereas 38 patients (29.5%) had communicable diseases. This indicates predominance of non-communicable diseases in the medical wards and this finding is similar to that reported in other studies^{1,2,3,4,5,6}. This is reflective of changing demographics and a socioeconomic transition. The predominance of non-communicable diseases underscores the importance of primary prevention to reduce the burden of these diseases.

The category of non-communicable disorders was further analysed. Of the 91 patients with non-communicable disorders, we found that neurological disorders were the commonest (27.4%). Similar results were noted in other studies^{1,7}. Following neurological disorders, the other common non-neurological disorders were gastrointestinal (19.8%), cardiovascular (18.7%), haematological (15.4%), endocrine (11%), respiratory (3%) and others (4%). The neurological disorders were predominantly due to stroke/cerebrovascular insufficiency. Primary preventive measures for neurological disorders plus measures aimed at appropriate treatment of risk factors like diabetes, hypertension, cardiac disease, dyslipidaemia will be helpful in reducing disease burden due to neurological disorders.

Conclusions

1. Non-communicable diseases were the commonest causes of admissions to the medical wards.
2. Of these, neurological disorders were the most prevalent.
3. Among neurological disorders, stroke/cerebrovascular insufficiency was the commonest cause for admissions to the medical wards.

Table 1: Gender Distribution (129 patients)

MALE	80	62%
FEMALE	49	38%

Table 2: Categories of diseases (129 patients)

NON-COMMUNICABLE DISEASES	91	70.5%
COMMUNICABLE DISEASES	38	29.5%

Table 3: Non-communicable diseases (91 patients)

NEUROLOGICAL	25	27.4%
GASTROINTESTINAL	18	19.8%
CARDIOVASCULAR	17	18.7%
HEMATOLOGICAL	14	15.4%
ENDOCRINE	10	11.0%
RESPIRATORY	3	3.3%
OTHERS	4	4.4%

Table 4: Neurological Disorders (25 patients)

STROKE /CEREBROVASCULAR INSUFFICIENCY	12	48%
EPILEPSY	8	32%
CHRONIC NEUROLOGICAL DISORDERS	5	20%

Figure 1: GENDER DISTRIBUTION OF INDOOR PATIENTS (129)

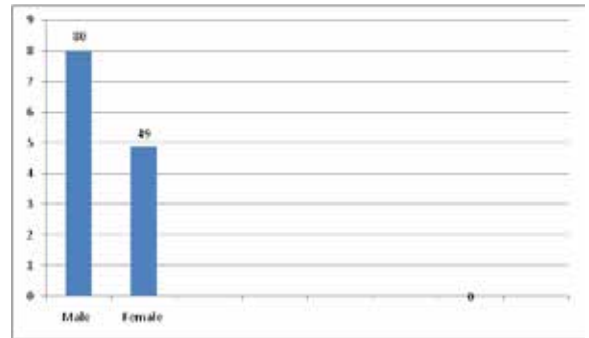


Figure 2: DISEASE CATEGORIES AMONG PATIENTS (129 PATIENTS)

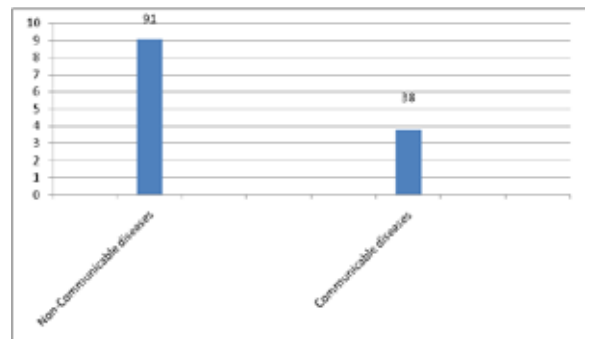


Figure 3: NON-COMMUNICABLE DISEASES: (91 PATIENTS)

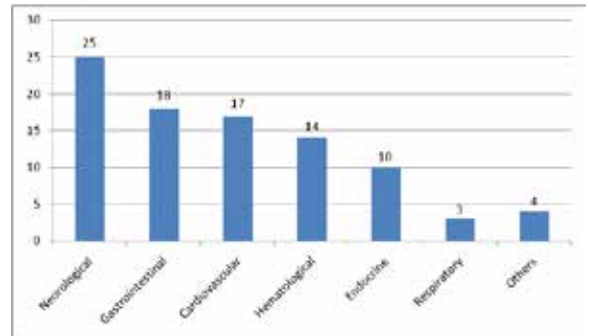
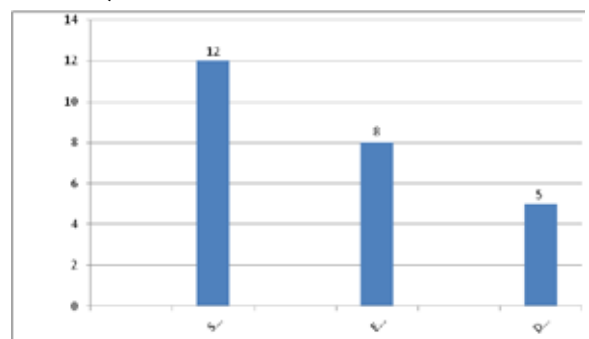


Figure 4: TYPES OF NEUROLOGICAL DISORDERS (25 PATIENTS)



REFERENCE

1. Ezeala-Adikaibe B, Aneke E, Orjoke C, Ezeala-Adikaibe N, Mbadiwe N, Chime P, Okafor U. Pattern of medical admissions at Enugu state university of science and technology teaching hospital: a 5 year review. *Ann MedHealthSciRes* 2014 May; 4(3): 426-31. | 2. Boutayeb A. The doubleburden of communicable and non-communicable diseases in developing countries. *Trans R Soc Trop Med Hyg* 2006 Mar; 100(3):191-9. | 3. Ogunmola OJ, Oladosu OY. Pattern and outcome of admissions in the medical wards of a tertiary healthcenter in a rural community of EkitiState, Nigeria. *Ann Afr Med* 2014 Oct-Dec; 13(4): 195-203. | 4. Okunola OO, Akintunde AA, Akinwusi PO. Some emerging issues in medical admission pattern in the tropics. *Niger J ClinPract* 2012 Jan- Mar; 15(1): 51-4. | 5. Odenigbo CU, Oguejiofor OC. Pattern of medical admissions at the Federal Medical Center, Asaba-a two year review. *Niger J ClinPract* 2009 Dec; 12(4): 395-7. | 6. Ike SO. The pattern of admissions into the medical wards of the University of Nigeria Teaching Hospital, Enugu (2). *Niger J ClinPract* 2008 Sep; 11(3): 185-92. | 7. Philip-Ephraim EE, Eyong KI, Chinenye S, William UE, Ephraim RP. The burden of inpatient neurologic disease in a tropical African hospital. *Can J NeuroSci* 2013 Jul; 40(4): 576-9. | 8. Haitham M. El Bingawi, Motaz B. Hussein, Mohamed Y. Bakheet. Characteristics of Patients Admitted to Medical Ward of a Referral Hospital in a Developing Country. *IJSBAR* 2014 Vol 14 No. 1: 86-92.