



## Burden of Communicable Diseases in Medical Wards at a Teaching Hospital in Western India

### KEYWORDS

Admissions, Medical Wards, Communicable diseases, Respiratory infections, Acute febrile illness, Gastroenteritis

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**ABSTRACT** *Introduction: Admissions to medical wards comprise non-communicable and communicable diseases. The communicable or infectious diseases mainly include respiratory, gastrointestinal infections, acute undifferentiated febrile illnesses and others. The aim of this study was to analyse the prevalence of infectious diseases in the medical wards on a given day and to evaluate the most common types of infections encountered in the medical wards.*

*Materials and Methods: Case details 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 diseases. The communicable diseases were further classified into various types of infections and analysis was done.*

*Results: A total of 129 case details of patients in the medical wards on 7th Feb 2014 were analysed. Of these, 91 patients (70.5%) were found to have non-communicable diseases, whereas 38 patients (29.5%) were found to have communicable diseases. The communicable diseases were further analysed, among which respiratory infections were found to be the commonest (39.5%), followed by acute undifferentiated febrile illness (26.3%), gastrointestinal infections (18.4%), tuberculosis (8%), urinary infections (5.2%) and others (2.6%).*

*Conclusions: The point prevalence of communicable diseases in the medical wards was less than that of non-communicable diseases. Of the various communicable diseases, respiratory infections were the most common, followed by acute undifferentiated febrile illness and gastrointestinal infections.*

### Introduction

There is a changing trend of admissions to the medical wards with non-communicable diseases being the most common disorders among patients<sup>1,2,3,4</sup>. This is an indicator of urbanisation and changing demographics in many countries. Even then, a sizeable number of patients in medical wards are found to have communicable diseases in the form of respiratory infections<sup>5,6</sup>, acute febrile illnesses<sup>7,8,9</sup>, gastrointestinal<sup>5</sup> and other infections. The aim of this study was to analyse data of indoor patients in the medical wards on a given day to determine the point prevalence of communicable diseases in the medical wards and the common communicable diseases encountered.

### Materials and Methods

Indoor data was collected with reference to all patients in the medical wards on a single day (07/02/2014) at Smt. Kashibai Navale Medical College and General Hospital. This data was analysed with respect to age, gender and clinical diagnosis. Disorders in patients were grouped into communicable and non-communicable diseases. The group of patients with communicable disorders was further evaluated with respect to age, gender and types of communicable diseases.

### Results

A total of 129 indoor patient details were analysed. Of these, 38 patients (29.5%) were found to have communicable diseases, whereas 91 patients (70.5%) were found to have non-communicable disorders (Table 1, Figure 1).

The group of 38 patients with communicable disorders was further analysed. Of these, 25 patients (65.8%) were males, and 13 patients (34.2%) were females (Table 2, Figure 2). The average age of these patients was 44.2 years (12-85 years).

Of the 38 patients with communicable diseases, respiratory infections were found to be the commonest (39.5%), followed by acute undifferentiated febrile illnesses (26.3%), gastrointestinal infections (18.4%), tuberculosis (8%), urinary infections (5.2%) and others (2.6%) (Table 3, Figure 3).

### Discussion

There is a changing pattern of admissions to medical wards over a period of time. Disease profile in indoor patients now predominantly includes non-communicable diseases which have become the commonest diseases in medical wards. Communicable diseases form a smaller proportion of indoor patients. Our study intended to analyse the point prevalence of various communicable diseases among patients in the medical wards in our hospital on a single day. On analysis, we found that of the 129 patients, 38 patients (29.5%) had communicable diseases, whereas 91 patients (70.5%) had non-communicable diseases. This finding indicates predominance of non-communicable diseases in the Medical Wards and is similar to that reported in other studies<sup>1,2,3,4</sup>. This is an indicator of changing demographics and a socio-economic transition in the population.

The group of communicable disorders was further analysed. Of the 38 patients with communicable disorders, respira-

tory infections were found to be the commonest (39.5%). This is in contrast to findings in another similar study<sup>5</sup>, in which gastrointestinal infections were found to be predominant followed by respiratory infections. Our findings likely indicate improved economic status and sanitation facilities. Another similar study showed that respiratory disorders of infective aetiology are commonly encountered in medical wards<sup>6</sup>.

The next common category was that of acute undifferentiated febrile illness (AUI) (26.3%), followed by gastrointestinal infections (18.4%), tuberculosis (8%), urinary infections (5.2%) and others (2.6%). AUI is commonly encountered in medical wards. It is associated with no specific single organ involvement by history and the aetiology can vary from viral (influenza, dengue), malaria, rickettsial infections, leptospirosis or enteric fever<sup>7,8,9</sup>. A diagnostic algorithm and management guidelines for this group of patients will aid in appropriate management.

**Conclusions**

1. The point prevalence of communicable diseases in the medical wards was less than that of communicable diseases.
2. Of the various communicable diseases, respiratory infections were the most common, followed by acute undifferentiated febrile illness and gastrointestinal infections.

**Table 1: Categories of diseases (129 patients)**

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

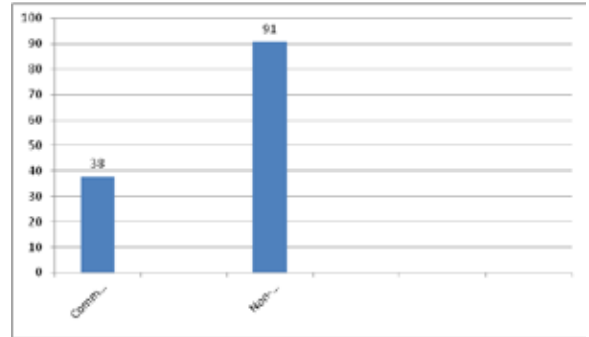
**Table 2: Gender distribution of patients with communicable diseases (38 patients)**

MALE	25	65.8%
FEMALE	13	34.2%

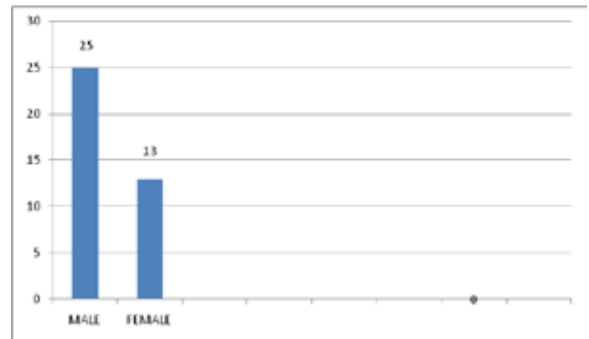
**Table 3: Types of communicable diseases (38 patients)**

RESPIRATORY	15	39.5%
ACUTE FEBRILE ILLNESS	10	26.3%
GASTROINTESTINAL	7	18.4%
TUBERCULOSIS	3	8.0%
URINARY	2	5.2%
OTHERS	1	2.6%

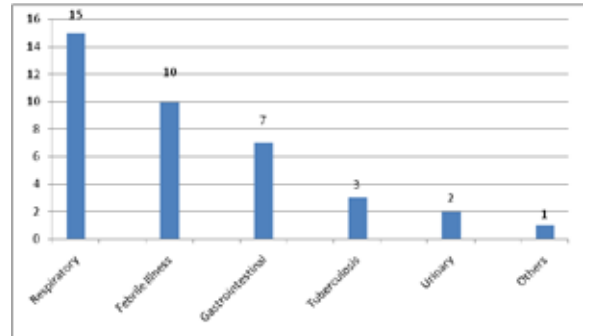
**Figure 1: MEDICINE WARD PATIENTS: 129**



**Figure 2: GENDER DISTRIBUTION OF INDOOR PATIENTS WITH COMMUNICABLE DISEASES (38 PATIENTS)**



**Figure 3: TYPES OF COMMUNICABLE DISEASES (38 PATIENTS).**



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