

## A Study on Morbidity profile of outdoor patients attending a Primary health center in Sheopur District, Central India



### Medicine

**KEYWORDS:** Morbidity profile, Outpatients, Primary health centre, India

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### ABSTRACT

**Background:** The aim of this study was to describe the morbidity profile of patients attending the Primary Health Centre. In the absence of information on morbidity profile through community based surveys, facility based data provide a good alternative. The study objective was to describe the morbidity profile of patients attending the outpatient department of Primary Health Centre during One year.

**Methods:** This retrospective cross-sectional study was conducted for the duration of one year in a rural PHC of Sheopur, Central India. The Data were collected from the OPD registers of medical officers from July 2014 to June 2015. Patients who had come to the centre for follow up visits were excluded from the study.

**Results:** A total of 8240 episodes of illnesses were treated. Adults (>15 years) constituted about 65.10%. Overall Acute respiratory infections (21.80%) and Pyrexia of unknown origin (14.71%) were the most common illnesses followed by Diarrhoeal diseases (13.35%).

**Conclusion:** This study gives a brief description of the morbidity profile of patients attending a primary health care centre over a period of one year. This knowledge would help in planning health services to meet the patients' needs and also help in training health staff.

### INTRODUCTION

A comprehensive analysis of the epidemiological pattern of the occurrence of various diseases in a region or a health care setting, in particular, equips the physicians with the necessary information to diagnose and treat them effectively and timely. It also provides an efficient tool to the policy makers and administrators for the formulation of policies to circumvent the effect of the morbidity and mortality due to these diseases as well as reduce the overall burden of the illness in the community.<sup>[1]</sup>

India has a unique primary health care structure. The Primary Health Centre is one of the main components of the rural health system in India.<sup>[2]</sup>

The Primary health care is essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination.<sup>[3]</sup>

At present, there is one PHC covering about 30,000 (20,000 in hilly, desert, and difficult terrains) or more population. For a successful primary health care program, effective referral support to the Community Health Center (CHC) is provided, which caters to a population of 80,000–120,000. This center provides the basic specialty services in general medicine, pediatrics, surgery, obstetrics and gynecology.<sup>[4]</sup>

Studies which are reporting about morbidity patterns provide information not only about the health status of various subgroups but also help to identify the type and extent of prevailing morbidities, and this will help in setting up the priorities while reforming the health services.<sup>[5]</sup>

The study in terms of pattern of illness and seasonal variation in a defined region of health care setting is an important way to improve the quality of health services delivered to the community. It will also help the administrators in better management of scarce resources available to health sector.<sup>[6]</sup>

The present study was carried out at the PHC at Dantarda which is situated in Sheopur district of Central India.

### METHODS

#### Study design

This study was carried out retrospectively among the patients

attending the outpatient health facility of the PHC at Dantarda, with the aim of achieving the above-stated objectives.

#### Sample size and period of study

Data were collected regarding the self-reported health problems during the period of 1 year from July 2014 to June 2015 for which the patient sought treatment at the PHC. A total of 8240 visits were made by the patients to the PHC during the 1-year period. These included the visits by 3549 males and 4691 females.

#### Inclusion criteria

Newly registered out-patients between July 2014 and June 2015 were included in the study.

#### Exclusion criteria

Those outpatients who visited for follow up of acute illnesses and chronic conditions like diabetes and hyper-tension were excluded and we have also excluded the cases of the obstetrical complications from the analysis and have thus not presented them in the results because their number was negligible.

#### Statistical analysis

Analysis was done in SPSS version 17.0. Descriptive analysis was done, Patients less than fifteen years of age was considered as children, and proportions given wherever necessary. The total number of the patients suffering from the different diseases and their percentages according to the gender was calculated.

### RESULTS

**Table 1-Morbidity Profile of Patients attending Primary Health Center Dantarda, Central India (July 2014 to June 2015)**

Morbidity	Adult		Children		Total(%)
	M(%)	F(%)	M(%)	F(%)	
ARIs	502(21.35)	667(22.13)	254(21.20)	375(22.36)	1798(21.80)
Diarrhoeal Diseases	170(7.23)	306(10.15)	223(18.61)	401(23.91)	1100(13.35)
Ophthalmological Diseases	106(4.51)	132(4.38)	107(8.93)	134(7.99)	479(5.81)
PUOs	430(18.29)	515(17.09)	90(7.51)	177(10.55)	1212(14.71)
Dog Bite	108(4.59)	70(2.32)	141(11.77)	100(5.96)	419(5.08)
Lacerated Wounds & Injuries	120(5.10)	177(5.87)	62(5.17)	98(5.84)	457(5.55)

Ear Nose Throat Diseases	95(4.04)	143(4.74)	43(3.59)	64(3.82)	345(4.19)
Dermatological Diseases	172(7.32)	204(6.77)	38(3.17)	42(2.50)	456(5.53)
Diseases of Genito-urinary system	165(7.02)	202(6.70)	40(3.34)	47(2.80)	454(5.51)
Anaemia	160(6.80)	208(6.90)	64(5.34)	85(5.07)	517(6.27)
Diseases of Musculoskeletal system	103(4.38)	134(4.44)	52(4.34)	61(3.64)	350(4.25)
Diabetes Mellitus & Hypertension	64(2.72)	72(2.39)	00(0.00)	00(0.00)	136(1.65)
Tuberculosis	66(2.81)	85(2.82)	41(3.42)	53(3.16)	245(2.97)
Nervous system	54(2.30)	68(2.26)	6(0.50)	4(0.24)	132(1.60)
Illnesses due to poisoning, snake bites, scorpion stings and bites of arthropods	70(2.98)	28(0.93)	24(2.00)	18(1.07)	140(1.70)
Total	2351	3014	1198	1677	8240

[ARIs=Acute Respiratory Infections, PUOs=Pyrexia of Unknown Origin]

The total number of new patients that were treated in the outpatient department (OPD) at attending Primary Health Center during one year period was 8240. Adults constituted about 65.11% and Paediatric about 34.89%. Among Adults male constituted 43.82% and female 56.17% while in Paediatric female constituted about 58.33% and Rest were male. Overall, ARIs were the major complaints (21.80%) followed by PUOs (14.71%), diarrhoeal diseases (13.35%), and Anaemia (6.27%) (Table 1).

Among adults, ARIs were the most common (Males 21.35%, Females 22.13%) followed by PUOs (males 18.29%, females 17.09%). The five most common diseases among adult males were ARIs (21.35%), PUOs (18.29%), Dermatological Diseases (7.32%), Diarrhoeal diseases (7.23%), and Diseases of genito-urinary system (7.02%). The corresponding diseases among adult females were ARIs (22.13%), PUOs (17.09%), Diarrhoeal diseases (10.15%), Anaemia (6.90%), and Dermatological Diseases (6.77%). (Table 1)

Like adults, in paediatric cases also the most common disease reported were ARIs (Boys 21.20%, Girls 22.36%) followed by Diarrhoeal diseases (Boys 18.61%, Girls 23.91%), PUOs (Boys 7.51%, Girls 10.55%) Ophthalmological Diseases (Boys 8.93%, Girls 7.99%) and Dog bite (Boys 11.77%, Girls 5.96%) (Table 1).

The major diseases among boys and girls were ARIs, Diarrhoeal diseases, PUOs, morbidity due to ophthalmological diseases and dog bite (Table 1)

## DISCUSSION

This study outlines the health conditions that were presented to Primary Health centre during from July 2014 to June 2015. As per the findings of the present study, the large proportion of cases were above the age of 15 years which is comparable with the findings of other similar studies conducted in the past. Similar findings correspond with the study done by Arun A et al<sup>[7]</sup> and Patel MV et al.<sup>[8]</sup>

This study Revealed that the most common morbidity due to the ARIs followed by PUOs causes among adults. These findings are similar to the study done in a rural locality of Tamil Nadu<sup>[5]</sup> and in north India by Ghosh S et al in which majority of the people had illness affecting the respiratory system.<sup>[9]</sup> But Study done by Gupta A et al<sup>[10]</sup> showed that commonly diagnosed diseases were diseases of musculoskeletal system followed by acute nasopharyngitis, primary hypertension, gastrointestinal disorders, diabetes mellitus and injury among adults. Another study conducted in India found skin disorders and acute respiratory tract infections as the most common illness in their setting.<sup>[11]</sup> This discrepancy in the occurrence of various diseases could be ascribed to the variation in the host and the environmental factors in the different geographic areas.

Conversely, the non-communicable diseases (NCDs) like hypertension and diabetes were reported less in present study despite the rising trends at national level. Similar Results found to study done by Gaur B P S et al.<sup>[6]</sup>

In pediatrics' age group also, the most common illness reported was acute respiratory tract infections followed by Diarrhoeal diseases and PUOs in present study. Study done by Ansari MA et al<sup>[12]</sup> in rural areas of Aligarh among under five children and study done by Kansal S et al<sup>[13]</sup> in school going children, rural community of Uttar Pradesh reported that common morbidity was acute respiratory infections among children. But Study conducted by Gupta A et al<sup>[10]</sup> found that the most common illness in case of children was acute nasopharyngitis followed by injuries, skin infection and diarrhea.

Present study reported that the illnesses due to poisoning, snake bites, scorpion stings and bites of arthropods were the least common morbidities. Similar findings found by Gaur B P S et al.<sup>[6]</sup>

## LIMITATIONS

The present study was conducted at one primary health centre in Central India and secondary data were used for drawing inferences, hence generalization of findings needs due concern. However, number of people reported with illness to a primary level health facility is large enough and could be considered as strength of study.

## CONCLUSION

The knowledge of the morbidity profile will help in providing effective and timely treatment to the community. The study gives an outline of the morbidity profile of patients attending a Primary Health Centre over a period of one year. This knowledge would help the health care providers and administrators to plan and deliver, enhanced and high quality services as per the community need.

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