MORBIDITY PROFILE OF OUTPATIENTS ATTENDING AN URBAN HEALTH CENTRE IN A DISTRICT OF HARYANA

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ABSTRACT

BACKGROUND

Knowledge on distribution and burden of diseases in a community is essential for planning of public health services. In the absence of information on morbidity profile through community based surveys, record based data provide a good alternative.

OBJECTIVES

To study the morbidity profile of patients attending the Urban Health and Training Centre (UHTC) as per age, sex and in different season of the year.

MATERIALS AND METHOD

Data for 12 months from 1 Jan 2015 to 31 Dec 2015 was collected from the OPD registers of the consultant medical officer of UHTC. The patients were grouped into age groups of ≤5 years, 5-9 years, 10-19 years, 20-45 years, 46-65 years and >65 years. SPSS-20.0 was used for statistical analysis. Statistical test used are percentages and proportions.

RESULTS

A total of 3311 OPD attendees were included in the study (1526 males and 1785 females). The case rate was highest (37.8%) for 20-45 years' age group. Among communicable diseases, Upper Respiratory Tract Infections (URTI) (31.1%) and gastrointestinal problems (13.6%) had maximum burden. Musculoskeletal pains (20.8%) and hypertension (7.9%) were the most reported diseases among non-communicable diseases. Still the most common morbidity amongst the under five children is URTI (63.7%) followed by gastrointestinal problems (15.9%). Females outnumbered males in most of the diseases. Most of the diseases were observed more in winter season.

CONCLUSION

The knowledge of the morbidity profile will help in providing effective and timely treatment to the community. It will also help public health planners to provide enhanced and high quality services to the community.

KEYWORDS

Morbidity Profile, Communicable Diseases, Non-Communicable Diseases, Seasonal Variation, Urban Health and Training Centre.

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INTRODUCTION

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. It is an integral part both of the country's health system and of the overall social and economic development of the community.¹

A comprehensive analysis of morbidity pattern and seasonal variation of diseases in a region or a health care setting provides an efficient tool for the health planners for the formulation of policies. It also helps administrators in efficient use of scarce resources available.

A constant watch on the changing pattern of the diseases provides us an opportunity for timely intervention as well as to monitor the progress of the ongoing disease control programs and helps in optimizing the allocation of the limited resources.²

Non-communicable diseases are increasing worldwide due to rapidly changing lifestyle. The gap between communicable and non-communicable diseases has reduced drastically causing double burden of disease in developing countries such as India.

In addition, the knowledge of the burden of diseases will also help in providing effective and timely treatment to the community. It will also help public health planners provide enhanced quality of services to the community.³

More than 36 million people die annually from NCDs (63% of global deaths) including more than 14 million people

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who die too young between the ages of 30 and 70. Low and middle income countries already bear 86% of the burden of these premature deaths.⁴

Non-Communicable Diseases (NCDs) account for nearly half of all deaths in India. Projection estimates have shown that unless interventions are made, burden due to NCDs will increase substantially. NCDs account for 43% of the DALYs.⁵

In spite of the declining mortality and changing morbidity pattern, India still has the “unfinished agenda” of combating the traditional infectious diseases that continue to contribute to a heavy disease burden and take a sizeable toll.⁶

Keeping this in mind, the present study aims at studying morbidity pattern and seasonal variation of OPD patients of an Urban Health and Training Centre (UHTC) under Department of Community Medicine, Maharaja Agrasen Medical College, Agroha.

OBJECTIVE

To study the morbidity profile of patients attending the Urban Health and Training Centre (UHTC) as per age, sex and in different season of the year.

METHODOLOGY

This study was carried out retrospectively among the patients attending the OPD of the UHTC at Hisar, under the Dept. of Community Medicine, MAMC, Agroha, Hisar, Haryana. The data was collected regarding the self-reported health problems during the period of 1 year from Jan 2015 to Dec 2015, for which the patients sought treatment at the UHTC, Hisar. The data was collected from the OPD registers of the consultant medical officer of UHTC. It was then classified into communicable, non-communicable diseases and others. The patients were grouped into age groups of ≤5 years, 6-9 years, 10-19 years, 20-45 years, 46-65 years and >65 years. All the patients who visited UHTC, Hisar, during the study period were included in the study. Incomplete entries were not included in the study. Analysis was done in SPSS version 20.0. Percentages and proportions tests are used for analysis.

RESULTS

The majority of patients coming to UHTC belong to the age group 20-45 years (1251, i.e. 37.8%) (Table 1). Female (53.9%) patients outnumbered males (46.1%) (Table 2). Communicable diseases (51.1%) were more commonly reported than the non-communicable diseases (34.1%) and other diseases (14.8%) (Table 2).

Age Groups (Years)	Frequency	Percentages
≤ 5	157	4.7
6-9	127	3.8
10-19	329	9.9
20-45	1251	37.8
46-65	1121	33.9
>65	326	9.9
Total	3311	100.0

Table 1: Age Wise Distribution of Patients

Gender	Disease Categories			Total n (%) (%)**
	Communi- cable Diseases n (%) (%)**	Non- Communi- cable Diseases n (%) (%)**	Others n (%) (%)**	
Male	839 (49.6) (55.0)	533 (47.2) (34.9)	154 (31.5) (10.1)	1526 (46.1) (100)
Female	853 (50.4) (47.8)	597 (52.8) (33.4)	335 (68.5) (18.8)	1785 (53.9) (100)
Total	1692 (100) (51.1)	1130 (100) (34.1)	489 (100) (14.8)	3311 (100) (100)

Table 2: Gender Wise Distribution of Patients

*Column percentages ** row percentages

The most common reported communicable disease was URTI (31.1%) followed by gastrointestinal problems (13.6%) and fungal infection (5.6%).

Among non-communicable diseases, the list was topped by musculoskeletal pains (20.8%) followed by hypertension (7.9%), trauma (2.8%), diabetes mellitus (2.1%) and psychiatric problems (0.5%).

Still the most common morbidity amongst the under five children is URTI (63.7%) followed by GIT problems (15.9%).

Fig. 1

Fig. 2: Age Wise Proportionate Distribution of Diseases

Fig. 3

Fig. 4

In the age group 46-65 years and >65 years, musculoskeletal pains become the most common morbidity. Musculoskeletal pain, hypertension and diabetes show a rising trend with the increasing age whereas upper respiratory tract infections remain the most common disease amongst under five children. Patients reporting with injuries were more common in the adolescent age group.

The seasonal trend of four most common communicable diseases (Fig. 3) revealed an increase in the number of cases suffering from URTI during winters, peaking in the month of December. Fungal infection cases peaked in July.

URTI was the most common morbidity amongst patients up to the age of 45 years (Fig. 2). In the patient of age group 46-65 and >65 years, musculoskeletal pains become the most common morbidity presented to OPD of UHTC at Hisar.

Musculoskeletal pain shows seasonal variation among the non-communicable diseases (Fig. 4) was also noted with musculoskeletal pains peaking during winters.

DISCUSSION

The study confirms that our health systems are stressed with a dual burden of disease with communicable diseases (51.1%) contributing more than that of non-communicable diseases (34.1%).

Among communicable diseases, URTI (31.1%) contributed the most followed by gastrointestinal problems (13.6%) and fungal infections (5.6%). This corresponds with the findings of other studies done by Yadav V.⁷, M K Sharma,⁸ Abhishek,⁹ Lamichhane,¹⁰ and Sharma et al¹¹ and contradicts the finding in an earlier study done by Kumari et al.²

Higher proportion of musculoskeletal pain (20.8%) followed by hypertension (7.9%) among non-communicable diseases have been found in this study and this is similar to other studies done by Yadav V.⁷, Jyvasjarvi S.¹², Dharmaratne S.¹³, Sharma MK.¹¹, Gupta A.¹⁴, Shankar R.¹⁵ and Lai MS.¹⁶ However, a study in Lucknow shows hypertension to be the major non-communicable disease followed by anaemia.⁹

Seasonal variation shows that maximum burden of OPD patients occurred during winters followed by summers. Similar results were shown by study done by Yadav V.⁷ in Pune and in Chandigarh by Sharma MK.¹¹ However, the results differ from the study done by Kumari R.² in Kanpur, which revealed higher OPD burden during Monsoons.

As expected maximum cases of URTI and fever were reported during winters. The similar findings were shown by Yadav V.⁷, Sharma MK.¹¹, Gupta A.¹⁴, Shankar R.¹⁵, Lai MS.¹⁶ and Shailesh Sutariya.¹⁷ in their studies.

Attempt to find the seasonal variation of non-communicable diseases showed musculoskeletal pains during winter, which is as per expectation as muscle spasms are more during winters. The similar findings were also shown in study done by Abhishek et al⁹ in Lucknow.

Hypertension showed double peak during winters and summers. Peaking of hypertension during winters was seen in a study done at Lucknow,⁹ while peaking during summers had occurred in a study at Kanpur.²

Trauma cases peaked during Aug-Sep and Nov-Dec, a finding consistent with the study done by Kumari R in Kanpur.² Almost all the non-communicable diseases except injuries were more common in females, a finding consistent with other studies done by M.K. Sharma,⁸ Abhishek,⁹ and Kumari R.² Among communicable diseases, all diseases were more common in females except URTI and eye and ear infections.

The increased occurrence of injuries and eye and ear infections in male may be most probably due to greater engagement in outdoor activities as compared to females.

LIMITATIONS

The present study was conducted at one urban health centre in Haryana and hence it cannot be generalised. Though the health profile was stratified by age and sex, it was not possible to classify on socioeconomic structure.

STRENGTH

However, number of episodes of illnesses included in the study is large and is strength of the study.

CONCLUSION AND RECOMMENDATIONS

This study gives a brief description of the health profile of patients attending an urban health centre over a period of one year. This knowledge would help in planning health services to meet the patient's needs and also help in training health staff. Many diseases have seasonal variation and the burden of these diseases can be reduced by steps taken by the health planners and manager beforehand and through implementation of surveillance programs.

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