

“Morbidity Profile of Patients Attending Field Practice Area of a Tertiary Care Hospital in Chandigarh City”

Dr. Munesh Kumar Sharma¹, Dr. Neeraj Gour², Dr. Meenakshi Chaudhary³, Dr. N K Goel^{4*}, Dr. Dinesh Kumar Walia⁵¹Professor Dept of Community Medicine GMCH sector-32, Chandigarh, India²Professor Dept of Community Medicine SHKM Govt. Medical College, Mewat, Haryana, India³Post Graduate Resident Dept of Pathology Index Medical College & Hospital, Indore, Madhya Pradesh, India⁴Professor & Head Dept of Community Medicine GMCH sector-32, Chandigarh, India⁵Professor cum Statistician Dept of Community Medicine GMCH sector-32, Chandigarh, IndiaDOI: [10.36347/sjams.2021.v09i03.029](https://doi.org/10.36347/sjams.2021.v09i03.029)

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*Corresponding author: Dr. N K Goel

Abstract

Original Research Article

Background: To improve the health care system, the situational analysis is the first step so as to lay down the premises. By studying the age, gender and seasonal trends we can find out the areas of thrust. Such studies are regularly required to be conducted to improve the patient care at the place of one's working. **Methods:** The study was conducted at field practice area of Community Medicine, Government Medical College by utilizing registers maintained by Medical Officers and frequently judged for their accuracy and completeness by In-charge. **Results:** From July 2015 to June 2019, 35788 visits (9832; 27.5% summer, 15493; 43.3% monsoon and 10463; 29.2% winter) by the patients were made at Rural Health Training Centre (RHTC), Palsora. The proportion of patients aged less than 10 years, 10-19 years, 20-59 years and 60 years and above was 25.9%, 11.3%, 51.7% and 11.1%. The percentage morbidity in decreasing frequency was URTI 28.6, Fever 16.7, Body aches 11.7, Diarrhoea 7.2, Hypertension 5.3, Diabetes 4.9, Dermatitis 4.6, and Injury 3.3. **Conclusion:** A significantly higher number of cases were reported during monsoon season and female patients predominated little in number on their male counterparts.

Keywords: Morbidity; RHTC; Gender.

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BACKGROUND

Communicable and non-communicable diseases both are highly prevalent in countries like India. Over the years India has witnessed up & downs of different diseases trends and now we are gradually passing through the phase of epidemiological transition. Epidemiological distribution of diseases carries public health importance for its prevention and control. There are discrete epidemiological patterns for all communicable and non-communicable diseases. Continuous surveillance on morbidity & mortality indicators from all walks of health care may provide epidemiological evidences which in turn help in planning of health care and resource allocations. A study from Varanasi (2006) have assessed the morbidity patterns of patients visited their rural OPD [1], similarly an epidemiological study was also conducted at Ahmedabad to assess morbidity pattern among the elderly population [2]. In a bid to improve the health care system, the situational analysis is the first step so as to lay down the effective policies & programs. By

studying the age, gender and seasonal trends we can find out the areas of thrust. Such studies are regularly required to be conducted to improve the patient care at the place of one's working. On the same lines present study was planned with the aim to assess the morbidity profile at field practice area of a tertiary care hospital in Chandigarh.

MATERIAL & METHOD

Study type: Descriptive, cross sectional, secondary data based study

Study location: Rural Health & Training Centre of Govt. Medical College Hospital Sector- 32, Chandigarh.

Study Population: Patients visited OPD of Rural Health & Training Centre (RHTC) of Govt. Medical College Hospital Sector- 32, Chandigarh.

Study duration: from July 2015 to June 2019.

Study sample: All the patients visited OPD of Rural Health & Training Centre of Govt. Medical College Hospital Sector- 32, Chandigarh were included in study sample.

Sampling calculation: No method was adopted for sampling calculation as it was a secondary data based study by referring records and registers maintained at RHTC.

Sampling technique: Records of all patients visited the OPD of RHTC was analysed without adopting any technical method of either randomised or non-randomised sampling.

Participant recruitment criteria: as it was a secondary data based study based on already maintained records no as such criteria was adopted for participant recruitment.

Data collection: data was retrieved from patient's records and register maintained at RHTC of GMCH-32 Chandigarh.

Data quality & accuracy: data so collected from records was double checked for verification, accuracy, and completeness. Missed or incomplete data was not taken in final analysis of data.

Bias & errors: as it was a secondary data based study which includes no active selection of study subjects so chances of Random error and selection bias was very less. Though there was a possibility of measurement bias but same was tried to keep it at minimum by double checking of data, training of all

concerned research staff, data cleaning & data mining etc.

Data processing and analysis: data so retrieved was entered in suitable statistical software and analysed using appropriate statistical tests, measuring scales, tables, charts & diagrams.

RESULTS

Present study was conducted using the secondary data of patients maintained at RHTC of GMCH-32 Chandigarh. It was found that out of total patients visited during the study period maximum morbidity in terms of patient load was observed during monsoon season (43.3%) followed by winter & summer season (Table - 1).

Out all 35788 patients, majority (51.7%) were found in the age group of 20-59 years of age followed by children less than 10 years of age (25.9%) (Table-2).

As far as age & gender wise distribution of patients is concerned female patients (58.46%) has outnumbered the male's patients (41.53%). Majority of male & female patients were in the age group of 20-59 years (42% & 58.56%) followed by less than 10 years of age (32.48% & 21.93%). ($P < 0.001$) (Table- 3).

Majority of patients were diagnosed with morbidity of Upper Respiratory tract infections (URTI) (28.7%) followed by fever (16.7%) & body aches (11.7%). Non communicable diseases like hypertension & diabetes was diagnosed among 5.3% and 4.9% of patients respectively (Table-4).

Table-1: seasonal distribution of patients visited RHTC

Season	No. of patients	% of Total
Summer	9832	27.5
Monsoon	15493	43.3
Winter	10463	29.2
All Seasons	35788	100

Table-2: Age wise distribution of patients visited RHTC

Age (years)	No. of Patients	% of Total
Less than 10	9269	25.9
10-19	4044	11.3
20-59	18502	51.7
60 and above	3972	11.1
Total	35788	100

Table-3: Age & gender wise distribution of patients visited RHTC

Age(years)	Male n(%)	Female n(%)	Total
Less than 10	4680 (31.48)	4589(21.93)	9269
10-19	2032(13.66)	2012(9.61)	4044
20-59	6249(42.03)	12253(58.56)	18502
60 and above	1903(12.80)	2069(9.88)	3972
Total	14865(41.53)	20923 (58.46)	35788 (100)
Chi.Sq: 940.40 P value: 0.000004 (<0.001)			

Table-4: Morbidity wise distribution of patients visited RHTC

Morbidity	Total No.	% of Total
URTI	10271	28.7
Fever	5977	16.7
Body aches	4187	11.7
Diarrhoea	2577	7.2
Hypertension	1897	5.3
Diabetes	1754	4.9
Dermatitis	1646	4.6
Injury	1181	3.3
Arthritis	1109	3.1
Boils	895	2.5
Anaemia	859	2.4
Scabies	752	2.1
Others	2684	7.4
Total	35788	100

DISCUSSION

Present study was conducted using the secondary data of patients maintained at RHTC of GMCH-32 Chandigarh. It was found that out of total patients visited during the study period maximum morbidity in terms of patient load was observed during monsoon season. This may be attributed to a well-known fact about monsoon season that water is logged in the cities especially in ones where poor drainage and sewerage system in place. This logging of water provides favourable conditions for the breeding of different disease vectors including flies & mosquitos. Mathur SM *et al.* found diseases of GIT (gastro intestinal tract) showed an upward trend from May and this pattern lasts till August. Peak for respiratory illness is seen from Nov to Feb. Malaria was more prevalent in Nov to Feb and more or less same was found for S.O.M. (suppurative otitis media). Incidence of eye diseases also rises in the summer months i.e. May to August. Nutritional diseases are more prevalent during May to September and then in December and January, skin diseases and urinary tract infections does not show much variation except that scabies which constitute major problem of skin diseases has a higher incidence during summer months [3].

Majority of registered patients were found in the age group of 20-59 years of age. Mathur SM *et al.* found in their study that patients up to 5 years of age contributed 21.61% of total patients and that between 5-15 years 24.52% and this whole pattern was almost conforming to Indian demography i.e. more of young generation, dependent and vulnerable group [3].

Present study found that numbers of patients were bit more in female category than males whereas Mathur *et al.* found vice versa distribution of patients in comparison to present study. They found number of patients were little more in male category than females. This distribution may be attributed to different topography, demography, sampling design, documentation error & random errors [3].

Majority of patients were diagnosed with morbidity of Upper Respiratory tract infections (URTI) followed by fever & body aches. A study by Kansal S *et al.* on morbidity found more or less same pattern in rural community of Eastern U.P. they found Respiratory diseases (18%) as leading morbidity among the patients followed by, Fever (15.4%), GIT diseases (11.4%), Bones and joints problems (11.4%), Skin diseases (6.95%), Eye (4.3%), and Nutritional deficiency diseases (6.8%) respectively [1].

In an another epidemiological study of the morbidity pattern among the elderly population in Ahmedabad they had maximum problem of Locomotor system (48.6%) followed by Respiratory (20.2%), Diabetes (10.6%), Hearing (17.9%), Skin problems (3.7%), Vision problems(42.7%), Hypertension(34.4.%) and 3.7% had Psychosocial problems thereof [2].

In a study, “The magnitude of Global problem of Diarrheal diseases revealed that the incidence of Diarrhea (2.6 episode/child per year) was virtually the same as that estimated in 1982. While the global mortality estimate was lower (3.3.million deaths/year) [4, 5].

Hospital based study based on secondary data were some of the limitations of this study. This study can just show the trend of morbidity among patients visited in defined study duration at particular health facility. Findings cannot be extrapolated as prevalence as it was not a community based study in general population.

CONCLUSION

It was a descriptive secondary data based study which showed communicable diseases still add in to predominant burden of morbidities at any health facility. More studies may be conducted in same direction to generate evidences which may eventually

be helpful for facility based planning and priority based resource allocation.

REFERENCES

1. Sangeeta Kansal, Alok Kumar IJ Singh, Mahapatra SC. A study on Morbidity pattern in Rural community of Easter UP. Indian Journal of preventive and social medicine 2008;39(3&4):184-8.
2. Rajshree Bhatt, Minal S Gadhvi, Sonaliya KH, Anand Solanki. An epidemiological study of the morbidity pattern among the elderly population in Ahmadabad. National Journal of community medicine. 2011;2(2):235-6.
3. Mathur SM, Mandarwal D, Chahar BK, Singh S. Morbidity Pattern in Rural Area of Jaipur District (Rajasthan). J Res Med Den Sci. 2014;2(4):79-85.
4. Bern C, RJ Martin, T. de Zoysa, RI Glass. The magnitude of Global problem of Diarrhoeal diseases. Bulletin of WHO. 1992;70:705-14.
5. Snyder, Micheal Merson. Reviewing active surveillance data the magnitude of Global problem of acute Diarrheal diseases. Bulletin of WHO. 1982;60(4):605-13.