



Socio-Demographic Profile and Morbidity Pattern of Patients in A Rural Field Practice Area of Government Medical College, Miraj, Maharashtra

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ABSTRACT

Introduction: The shifting trend of diseases from communicable to non-communicable diseases pose a dual threat in India will also add to the burden of morbidity. In view of this, the present study was conducted to assess the common morbidity pattern among the rural population of Maharashtra.

Material and methods: A cross sectional study were conducted among the rural population of field practice area of Government Medical College, Miraj, Maharashtra. The study was conducted from 1st January 2018 to 31st December 2018. Patients attending Out Patient Department (OPD) services of Rural Health Training Centre and willing to participate in the study were included. Data on the current morbidity among the patients attending OPD services was gathered by the health workers. Analysis was conducted using the percentages.

Results: It was observed that majority of patients attended the OPD services were females i.e. 54.3% and 45.7% patients were males. The most common morbidity observed among the participants was respiratory infections i.e. 29.8%. Other morbidities seen were musculoskeletal diseases in 17.3% participants, nutritional problems in 17.1% participants and non-communicable diseases in 13.6% study subjects.

Conclusion: The study revealed dual burden of communicable as well as chronic and non-communicable diseases in the rural population.

Key words: Socio-demographic profile. Morbidity

INTRODUCTION

As per WHO, health has multidimensional concepts. The spectral concept of health emphasizes that the health of an individual is not static; it is a dynamic phenomenon and a process of continuous change, subject to frequent subtle variations. A direct relationship has been observed between the health of an individual and human resources development and economic development of a nation. From the time of Alma Ata declaration to achieve "Health for All by 2000", lot of planning, effort and public expenditure had been devoted to improve

the health of the people both in rural and urban areas in India. In spite of taking many efforts, India is having a high burden of morbidity¹.

Due to industrialization and the persisting inequality in health status of different states, India currently face a "Triple burden of diseases", which are the unfinished agenda of communicable diseases, emerging non-communicable diseases related to lifestyles and emerging infectious diseases². India has experienced improvements in the nutritional status, health infrastructure, social development and control of major killer diseases. But inter-state, urban-

rural, male-female inequalities are clearly viewed as a major public health challenge in this country³. Due to such different diversities, the morbidity pattern among the population varies in different geographic areas. At the same time, the shifting trend of diseases from communicable to non-communicable diseases pose a dual threat in India will also add to the burden of morbidity⁴.

Life expectancy at birth for males and females will increase by 10 years and 11 years respectively from 2006– 2051 as per “Morbidity and health care” schedule of NSSO 60th round survey and the proportion of elderly are expected to increase at a rapid pace than younger population because of slow decline rate⁵. Whether the years added to life due to increased life expectancy also attribute to the increased burden of morbidity in our population is a concern for policy makers in India. In view of this, the present study was conducted to assess the common morbidity pattern among the rural population of Maharashtra.

MATERIAL AND METHODS

A cross sectional study was conducted among the rural population of field practice area of Government Medical College, Miraj, Maharashtra. The rural health training centre caters services to a population near about 19,550. The study was conducted from 1st January 2018 to 31st December 2018. Patients attending the Out Patient Department (OPD) of Rural Health Training Centre and willing to participate in the study were included. A written informed consent was taken from the participants. The patients who attended OPD for receiving preventive services like immunization services and antenatal care were excluded from the study. A pre-tested, pre-designed questionnaire was used to interview the participants and gather information about the socio-demographic variables by the healthcare workers. The questionnaire was developed; pilot testing was carried out and then used in the study to gather information about the participants. Data on the current morbidity among the patients attending OPD services was gathered by the health workers.

The socio-economic status of the patients was classified according to modified B.G. Prasad classification⁶. The other socio-demographic parameters were gathered from the study participants. The data was entered in the Microsoft Excel sheet and analysis was done using the Epi -info software.

RESULTS

A total number of 13,279 patients attended the OPD services for various morbidities during the period from 1st January 2018 to 31st December 2018. The

socio-demographic parameters of the study participants were depicted in Table 1.

It was observed that majority of patients attended the OPD services were females i.e. 7210 i.e. 54.3% and 6069 i.e. 45.7% patients were males. In the present study, a large number of patients i.e. 3774 (28.4%) were in the age group of 60 years and above followed by under five children i.e. 2727 (20.5%) and 2017 (15.18%) in age group from 25 to 34 years. Majority of the patients in the study belong to lower middle socio-economic status i.e. 4701 (35.4%) whereas 3280 (24.7%) patients were in middle socio-economic status, 2602 (19.6%) participants in lower socio-economic status followed by 744 (5.6%) participants in upper socio-economic status.

Table 1: Demographic variables of study population

Socio-demographic variable	Patients (%)
Gender	
Male	6069 (45.7)
Female	7210 (54.3)
Age in years	
Under 5	2727 (20.53)
5-14	1882 (14.2)
15-24	946 (7.12)
25-34	881 (6.63)
35-44	1052 (7.92)
45-59	2017 (15.2)
60 and above	3774 (28.4)
Socio-economic status	
Upper	744 (5.6)
Upper middle	1952 (14.7)
Middle	3280 (24.7)
Lower middle	4701 (35.4)
Lower	2602 (19.6)

Table 2: Disease pattern among different age groups

Morbidity	Cases (%)
Respiratory infections	29.8
Diarrhoeal diseases	5.9
Nutritional problems	16.6
Skin infections	1.3
Musculoskeletal diseases	17.3
Gynaecological and obstetric conditions	2.6
Non communicable diseases	13.6
Ocular conditions	1.4
Injury	2.4
Other conditions	8.6

As seen from table 2, the most common morbidity observed among the participants was respiratory infections in 3957 i.e. 29.8%. In the study, other morbidities seen were musculoskeletal diseases in 2295 i.e.17.3% participants, nutritional problems in 2272 i.e. 17.1% participants and non-communicable diseases in 1819 i.e. 13.6% study subjects.

Table 3: Disease pattern among different age groups

Morbidity	Age group (Years)						
	Under 5	5-14	15-24	25-34	35-44	45-59	60 & above
Respiratory infections	1034 (37.9)	987 (52.4)	453 (47.9)	184 (20.9)	238 (22.6)	290 (14.4)	771 (20.4)
Diarrhoeal diseases	431 (15.8)	119 (6.3)	33 (3.5)	28 (3.2)	49 (4.6)	21 (1.0)	102 (2.7)
Nutritional problems	892 (32.7)	543 (28.8)	137 (14.5)	216 (24.5)	32 (3.0)	14 (0.7)	438 (11.6)
Skin infections	54 (2)	21 (1.1)	39 (4.1)	14 (1.6)	7 (0.7)	23 (1.1)	14 (0.4)
Musculoskeletal diseases	49 (1.8)	86 (4.6)	57 (6.0)	113 (12.8)	284 (27)	643 (31.9)	1063 (28.2)
Gynaecological & obstetric conditions	—	—	12 (1.3)	194 (22.0)	57 (5.4)	49 (2.4)	33 (0.9)
Non communicable diseases	—	—	7 (0.7)	13 (1.5)	117 (11.1)	784 (38.9)	898 (23.8)
Ocular conditions	9 (0.3)	9 (0.5)	14 (1.5)	18 (2.0)	17 (1.6)	14 (0.7)	109 (2.9)
Injury	121 (4.4)	38 (2.0)	79 (8.3)	14 (1.6)	18 (1.7)	5 (0.2)	43 (1.1)
Other conditions	137 (5)	79 (4.1)	115 (12.2)	87 (9.9)	233 (22.1)	174 (8.6)	303 (8.0)
Total	2727	1882	946	881	1052	2017	3774

Figure in parenthesis indicate percentage.

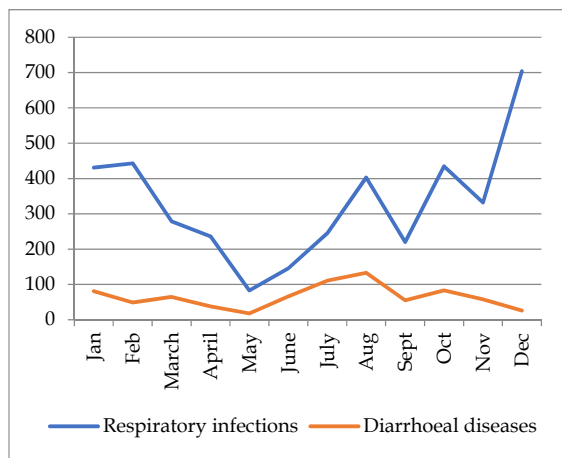


Figure 1: Trend of respiratory infections and diarrhoeal diseases in study subjects

As seen from table 2, the most common morbidity observed among the participants was respiratory infections in 3957 i.e. 29.8%. In the study, other morbidities seen were musculoskeletal diseases in 2295 i.e.17.3% participants, nutritional problems in 2272 i.e. 17.1% participants and non-communicable diseases in 1819 i.e. 13.6% study subjects. The other morbidities observed in the study were diarrhoeal diseases, gynaecological and obstetric conditions, skin diseases, injury, ocular conditions and other diseases.

The common morbidities seen in childhood were respiratory infections, nutritional problems, diarrhoeal diseases, injuries etc. In the geriatric age group, the most common morbidities observed were musculoskeletal diseases, non-communicable diseases.

Figure 1 shows the seasonal trends of respiratory infections and diarrhoeal diseases in the study participants. It was observed that the peak for respiratory tract infection was more in November and December months i.e. winter months whereas diarrhoeal

diseases peak was observed in June and July months i.e. monsoon months.

DISCUSSION

The present study was carried out to observe morbidity pattern among the participants which revealed that there were a greater number of female participants as compared to male participants. In a study carried out by Mane V et al⁷ in a study carried out at Vadodara found that male participants were more in the age group less than 15 years and older age whereas female participants outnumbered in all other age groups. The similar findings were found in the study carried out by Mane V et al⁷ and Datta A et al¹ in Tripura. Some studies found the proportion of male participants were more as compared to female participants on the contrary to our findings^{8,9}. A large number of geriatric participants contributed to the present study whereas the other study by Mane V et al⁶ revealed that 75% of the participants were in the age group from 15-59 years which is considered as economically productive age group. In a study carried out by Datta A et al¹ and Mane V et al⁶, it was found that majority of the participants were in the lower middle class and our study participants were consistent to the present study.

The present study also revealed communicable diseases to be the commonest type of morbidity, majority (29.8%) suffering from respiratory infections. Although non-communicable diseases were also not far having the proportion being 13.7% and this dual burden of diseases is similar to the national picture.^{10,11} The dual burden of communicable diseases and non-communicable diseases is seen in developing countries due to globalization and epidemiological transition¹². Similar findings were observed in the present study showing double burden of diseases. In a study carried out by Hameed S et al¹³ in Rural Karnataka showed Major morbidities of the elderly population were impaired vision

followed by hypertension and joint problems. In the present study, common morbidities seen in geriatric population were musculoskeletal diseases, non-communicable diseases and such findings were in consistent with the studies carried out by Jacob et al, Gaur et al and Padda et al^{14,15,16}.

A study conducted in Government Medical College, Chandigarh¹⁷, revealed similar seasonal variation as most cases of ARI being reported in winter, ADDs (38.89%) in the monsoon season. In the present study the findings observed were peak of respiratory tract infections was more in winter months and that of diarrhoeal diseases in winter months and similar observations were found in the study carried out by Kumari R et al¹⁸. A larger study population observed over a longer period of time would provide us a clearer picture, and such data on the seasonality of the diseases would assist in the planning and implementation of control measures.

CONCLUSION

The study revealed dual burden of communicable as well as chronic and non-communicable diseases in the rural population with females being more affected with various morbidities. Further evaluation of factors responsible for the burden of diseases is required so that preventive measures can be taken in future.

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