

Original Research Article

A cross sectional study on morbidity pattern in two primary health centers of Bishnupur District, Manipur

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Received: 16 October 2023

Accepted: 23 November 2023

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ABSTRACT

Background: PHCs and PHSCs are the grass-root level of the health care system of India which deals directly with the majority of the population as they live in rural areas and have no access to proper health care systems. This study was conducted due to the scarcity of studies and limited health care services amongst people in rural populations of Manipur to determine the morbidity pattern of patients attending OPD in 2 PHCs of Bishnupur District under RHTC, RIMS, Imphal, Manipur for the year 2021.

Methods: A cross-sectional study based on previous records was conducted from 1 January to 31 December 2021 among the newly registered outpatients attending the OPD of Oinam and Leimapokpam PHCs in Bishnupur District. Secondary data from the two PHCs were collected. Data analysis was done by using SPSS software version 21.

Results: The study found that almost half (46.4%) of patients attending OPD are 15-49 years followed by <15 years (38.7%). Out of total morbidity, respiratory diseases (24.8%) followed by GIT (15.9%), OBG, skin diseases and NCD constitute major morbidity among the study population.

Conclusions: The study gives an outline of the morbidity pattern of patients attending OPD in two PHCs of the Bishnupur district in one year which could help healthcare providers and administrators to plan, practice and deliver quality services as per community needs.

Keywords: PHC, PHSC, Morbidity, Rural area

INTRODUCTION

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. The concept of primary health care came into the limelight in 1978 following an international conference in Alma-Ata, USSR. Primary health care is made available to the population through a network of Primary Health Centres and sub-centres and Doctors,

ANM, ASHA and Anganwadi workers who reach out to villagers at the grassroots level. Primary health care is based on 4 principles namely equitable distribution, community participation, inter-sectoral co-ordination and appropriate technology.¹

India has a unique primary healthcare structure. The primary health centre (PHC) is one of the main components of the rural health system in India. A typical Primary Health Centre caters to a population of 30,000 in plain areas with 4-6 inpatient beds. It is the first port of call for people residing in rural areas to a qualified doctor in the public sector. It acts as a referral unit for 6 sub-

centres so there is a wide spectrum of patients attending the outpatient department of a PHC.

A thorough knowledge of the distribution and magnitude of health problems is essential for understanding the burden of various diseases at the grass-root level.² Bishnupur district is a part of Manipur state. It is about 27 km from the city of Imphal and is surrounded by Thoubal district on the east, Imphal west on the north and Churachandpur on the south. The National Highway 150 connects Imphal with Bishnupur. The literacy rate of Bishnupur is 75% and the total area of 530 square km with a population of 23,7399.³ According to the Department of Health and Family Welfare, Government of Manipur, there are 81 PHCs in Manipur of which 7 are in Bishnupur namely Oinam, Leimapokpam, Ningthoukhong, Kumbi, Kwakta, Karang and Thanga PHC.

The study is based on two PHCs i.e., Oinam and Leimapokpam which are under the Rural Health Training Centre, Bishnupur of Regional Institute of Medical Sciences. PHC Oinam is under the Nambol block and covers around 8815 population. There are 6 Sub-centres under Oinam PHC namely Leimaram, Irengbam, Keinou, Ngaikhong Khunou and Ngaikhong Khullen. Working staff under PHC Oinam includes 5 Medical officers, 2 pharmacists, 3 supervisors, 3 staff nurses, 1 microscopist and 2 ANM.

Leimapokpam PHCs is located under the Nambol block and covers a population of about 20,772. Sub-centers under PHC Leimapokpam are Ishok PHSC, Pukhrabam PHSC and Kha-sanjenbam PHSC. Working staff- 4 Medical officers, 7 Staff nurses, 6 FHW, 3 pharmacists, 1 Lab technician, 1 microscopist and 4 ANM. PHCs and PHSCs are the grass-root level of the health care system of India which deals directly with the majority of the population as they live in rural areas and have no access to proper health care systems. This study was conducted due to the scarcity of studies and limited health care services amongst people in rural populations of Manipur. Therefore, this study was conducted to understand common health problems in these rural PHCs and the utilization of services.

METHODS

Study design, location and duration

Current study is a cross-sectional descriptive study based on previous records conducted at Oinam and Leimapokpam PHCs of Bishnupur District, Manipur from 7 July 2022 to 21 July 2022.

Inclusion criteria

Newly registered outpatients attending the OPD of Oinam and Leimapokpam PHCs from 1 January to 31 December 2021 were included.

Exclusion criteria

Outpatients who visited for follow-up of acute illnesses and patients with serious illnesses attended for emergency cases were excluded.

Sample size calculation and sampling method

Not done as we intend to cover all the patients who presented during the year 2021 and convenience sampling was used to select the participants.

Operational definition

Patients less than 15 years of age were considered as children, 15-49 years as women in the reproductive age group, 50-59 years as middle-aged people, and 60 years and above as geriatric.

Data collection

Patient details and diagnoses provided by medical officers were collected from the OPD registers. Information like age, sex, residence, new or old case and principal diagnosis were extracted. Diagnoses were classified into different systemic diseases.

Statistical analysis

Data were entered after checking for consistency and completeness. Data compilation and analysis were done by using the software SPSS 21 version. Descriptive statistics like frequency and percentages were used. Verbal consent was also obtained from the Medical Officer i/c of both PHCs. Privacy and confidentiality of the participants were maintained by encrypting passwords for all collected data and it was accessible only to the investigators.

RESULTS

A total of 10133 patients were registered in the two PHCs during the whole year of 2021. The (Figure 1) shows new episodes of illnesses treated in OPD from 1 January to 31 December 2021 in two PHCs. PHC Leimapokpam constituted more than half of the patients (62.9%) as compared to the PHC Oinam which represents the remaining 37.1% of the patients. The (Figure 2) shows age-wise distribution of the participants. Patients in the age group of children (0-14) constitute 38.7%, women in the reproductive age group were 46.4%, Middle-aged people in the age group of 50-59 years old were 6.7% and 8.2% of the patients registered in the two PHCs were geriatric people. The (Figure 3) shows that an almost equal proportion of patients represent the male and female gender among the study participants.

The (Figure 4) shows the monthly distribution of patients based on their attendance in the two PHCs. The proportion of patients attending in January and from July

to August was higher as compared to the rest of the months.

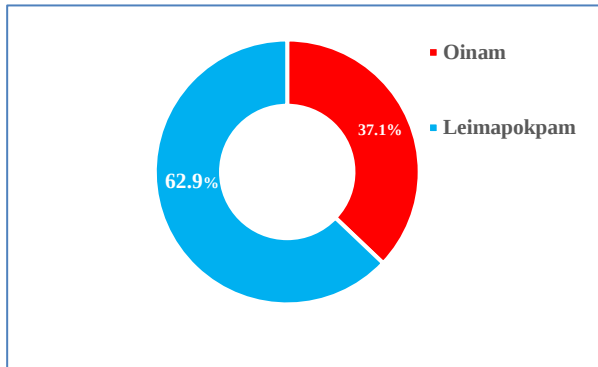


Figure 1: Distribution of participants by PHC (n=10130).

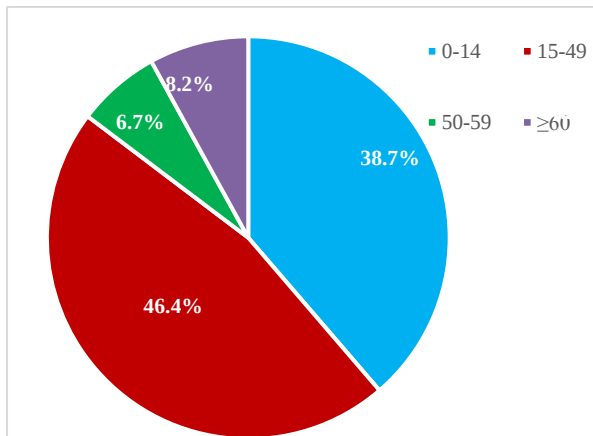


Figure 2: Distribution of participants by age (years) (n=10130).

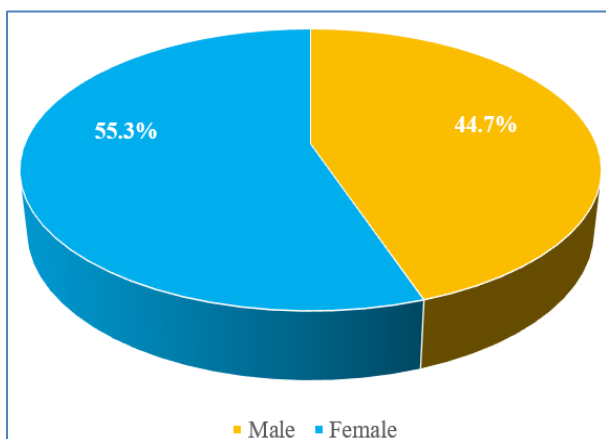


Figure 3: Distribution of participants by sex (n=10130)

The lowest number of patient registration was observed in June which was 2.8% of the total patient registration. The (Figure 5) shows the morbidity pattern of two PHCs. Respiratory diseases (24.8%) were the most common illness encountered by the patients followed by

gastrointestinal diseases (15.9%), obstetrics, gynaecological related illness (10.5%) and skin diseases (8.8%). Patients with Dental problems had the least number of OPD attendees.

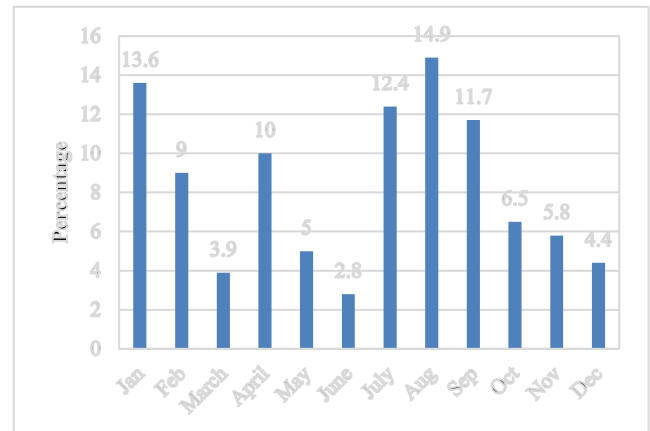


Figure 4: Distribution of participants by month of OPD registration (n=10130).

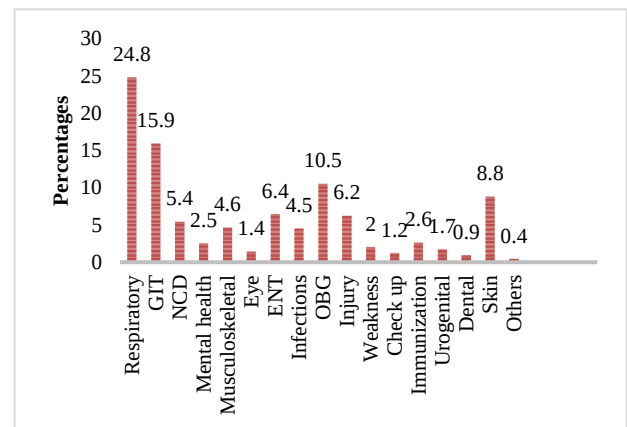


Figure 5: Distribution of participants by morbidity pattern in two PHCs combined (n=10130).

DISCUSSION

The current study highlights morbidity patterns in two PHCs of Bishnupur district under RHTC of RIMS, Imphal, Manipur. This study found that almost half (46.4%) of patients attending OPD belong to 15-49 years followed by children less than 15 years (38.7%). A study by Sangeeta et al in RHTC under BHU, Varanasi found out that the majority of morbidity occurs in the age group of more than 45 years old.⁵ This difference could be ascribed to behavioural, geographical and environmental variations between these two areas. Out of total morbidity, respiratory diseases (24.8%) followed by GIT (15.9%), OBG, skin diseases and NCD constitute major morbidity among the study population. A similar result was found in a study by Sangeeta et al in BHU, Varanasi and Aarti et al in rural PHC in Puducherry in 2014 with respiratory diseases being common morbidity among the study population.^{2,5} However, the NCD overall burden

(5.4%) is less in our study population despite the rising trend of NCD at the national level which could be ascribed to healthier lifestyle behaviour in Bishnupur a rural area.

Seasonal variations showed maximum burden in the rainy season with a maximum in August (14.9%) and lesser during the winter season comparable to Sangeeta et al study in BHU, Varanasi in 2006.⁵ However, there are other studies in other parts of India where morbidity is higher in winter season as observed in a study conducted by Mathur et al in a Rural health training center in Jaipur, Rajasthan.^{6,7} This could be explained by the difference in climate and other environmental factors between these two areas. In our study, we also found out that 55.3% of patients attending OPD are females comparable to Sangeeta et al study in BHU, Varanasi and Gurjeet K⁴ study in 2016 in PHCs of Firozepur district in Punjab.⁵ The findings of these studies shows that females have better health-seeking behaviour compared to their male counterparts.

Strengths and limitations

The strengths of our study lie in the fact that this study is the first study of its kind in Bishnupur District and also large number of data were collected from registers. The limitations of our study are that it was conducted in only two PHCs and secondary data were used for drawing inferences hence generalization of findings needs due concern. The study also did not explore the causes of observed patterns.

CONCLUSION

The study gives an outline of the morbidity pattern of patients attending OPD in two PHCs of Bishnupur district in one year. Respiratory diseases and gastrointestinal diseases were the most common form of illness prevalent throughout the year and morbidity pattern was most commonly seen among the children under 15 years of age group.

Recommendations

For the prevention and control of various diseases especially respiratory and gastrointestinal diseases, more emphasis should be given to personal hygiene,

environmental sanitation, provision of safe water and health education. Opportunities to see children especially those under 5 years of age should not be missed when they come with their mother for ANC. Reasons for seasonal variations of diseases should be explored and it is highly recommended that long-term study with wider coverage will act as a perfect tool for health planners to plan better strategies

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Singh KS, Laisram MS, Thangjam G, Singh TG. A cross sectional study on morbidity pattern in two primary health centers of Bishnupur District, Manipur. *Int J Community Med Public Health* 2023;10:4907-10.