SHORT REPORT

The frequency of various diseases among patients attending Tehsil Headquarter Hospital Khwazakela, Swat

Dost Muhammad Khan[1], Naseem Asghar[2], Ishfaq Ali[3], Waqar Ali Khan[4]

Abstract

This hospital-based study was conducted in THQ (Tehsil Headquarter) Hospital Khwazakhela, district Swat in April 2018, to determine the incidence of various diseases among patients in general and the cases attended in the OPD (out patients department) in particular. One year of data was taken from April 2017 to March 2018, of all the patients who attended the THQ Hospital to check the frequency of individual diseases, month wise, gender wise, age wise as well as, case wise. Information on patients attending OPD with respiratory, gastro intestinal, urinary tract diseases and other communicable diseases were compiled. A total of 219,056 patients attended Civil Hospital Khwazakhela during that period, with an average of 18,254.66 patients per month. This comprised 104,349 (47.63%) males and 114,707 (52.36%) females. Most patients were in the age group of 15 to 59 years which comprised a total of 109,217 (49.85%) patients. In this age group 42,713 (39.10%) were males and 66,504 (60.89%) were females. A total of 77,286 patients attended OPD having respiratory, gastro intestinal, urinary tract diseases and communicable diseases. Among these patients, about 28,115 (36.37%) had respiratory diseases, 23,045 (29.81%) had gastro intestinal diseases, 18,060 (23.36%) had urinary tract diseases and 8,066 (10.43%) had other communicable diseases. Respiratory diseases were the most common in our study. The ratio of female cases was higher than males. Most of the patients were in the age group of 15-59 years. The emerging challenges for health practitioners are to prevent respiratory diseases that pose a major healthcare burden in the region.

Keywords: THQ hospital, Respiratory diseases, Gastro intestinal diseases

Introduction

Health and nutrition make important contributions to the economic development. Healthy people are more lively, energetic and effectively contribute to a country's economic growth, whereas, malnutrition, ill health and diseases are considered economic barriers.[1] Pakistan is at a major crossroad in terms of health and development. In Pakistan majority of the population resides in rural areas. Fifty five percent of the females above 15 years of age are uneducated. Life expectancy for a person is 63 years where as 36% of the population are below the age of 15 years.[2]

Pakistan is experiencing an epidemiological progress that subjects it to a two-fold weight of disease. Communicable diseases represent an excess of 50% of the weight. Diseases such as diarrhoeal, lower respiratory tract infections, measles and whooping cough account for about a third of the years of life lost. The second burden is that of chronic, noninfectious diseases.[3] Estimates indicate that about 38% of children under 5 years of age are underweight.[4] In Pakistan it is estimated that almost 5% of the total population is suffering from bronchial asthma and among them 5% belong to the paediatric age group[5]. Pakistan is the fifth-largest contributor to the maternal mortality, and 6% of the world's maternal deaths occur in Pakistan.[6] In Pakistan, owing to reproductive and maternal health issues, overall women experience greater disease than men.[7] In rural areas, the maternal mortality rate is almost double that of urban areas, which is 319 per 100,000 in rural areas and 175 per 100,000 in urban areas.[8] With the available information on the health status of the region, this paper aims to examine the frequency of disease among different groups of population and see what type of diseases are most common in the population under study.

Methods and Results

This cross sectional descriptive study was conducted in THQ Hospital Khwazakhela in April, 2018, that comprised data to frame patients' visits to THQ Hospital Khwazakhela, Swat. Data was taken from hospital records from April 2017 to March 2018. The study was conducted after taking ethical approval from the THQ Hospital Khwazakhela,

[1]Department of Statics, Abdul Wali Khan University Mardan; [2]Department of Mathematics, University of Swat; [3]Abdul Wali Khan University Mardan; 4 THQ Hospital KhwazaKhela.

Correspondence: Naseem Asghar, e-mail: nsmsghr@gmail.com

Table-1: Month wise distribution of patients.

Month	Visits	Percentage
April	17120	7.81
May	21531	9.82
June	16403	7.48
July	23230	10.60
August	20984	9.57
September	16880	7.70
October	18716	8.54
November	17080	7.79
December	16151	7.37
January	17779	8.11
February	14789	6.75
March	18393	8.39
	219056	100

Table-2: Gender wise distribution of hospital visitors.

Month	Male n (%)	Female n (%)
April	8317 (7.97)	8793 (7.66)
May	9937 (9.52)	11584 (10.09)
June	8582 (8.22)	7821 (6.81)
July	11140 (10.67)	12090 (10.53)
August	9530 (9.13)	11454 (9.98)
September	8424 (8.07)	8456 (7.37)
October	9038 (8.66)	9678 (8.43)
November	8172 (7.83)	8908 (7.76)
December	7775 (7.45)	8376 (7.30)
January	8308 (7.96)	9491 (8.27)
February	6756 (6.47)	8033 (7.00)
March	8370 (8.02)	10023 (8.73)
	104349 (100)	114707 (100)

Swat. This study used descriptive statistics in the analysis. The parameters analysed were the number and percentage of patients that had attended the hospital month wise, gender wise, age wise and case wise. All patients in the study were entered month wise, while only respiratory, gastro intestinal, urinary tract diseases and other communicable diseases were considered case wise.

Table-3: Age wise distribution of patients.

Age	Male n (%)	Female n (%)
< 1 year	7680 (7.35)	5110 (4.45)
1 to 4	16999 (16.29)	11751 (10.24)
5 to 14	21741 (20.83)	14398 (12.55)
15 to 59	42713 (40.93)	66504 (57.97)
50+	15216 (14.58)	16944 (14.77)
	104349 (100)	114707 (100)

There were a number of other diseases like vaccine preventable diseases, cardiovascular diseases, skin diseases, endocrine diseases etc., but their month wise total was less than 500, therefore excluded from the study. Since the data analysed for this study did not involve individual identifiers, consent was not specifically obtained. The daily count of each health event was obtained by summing the number of hospital admissions for each of the diseases after primary diagnosis.

There were a total of 219,056 patients registered from April 2017 to March 2018. The highest number of patients were 23,230 (10.60%) registered in July. Out of 219,056 patients, there were 104,349 (47.63%) males and 114,707 (52.36%) females. There were 109,217 (49.85%) patients in the age group 15 to 49 years in which female were 66,504 (60.89%) which makes 30.35 % of the total patients. The number of males in the age group of 15-59 years was 42,713 (39.10%) which makes 19.49% of the total patients. Patients that were less than one year of age were 12,790 (5.83%), which include 7,680 (60.04%) males and 5,110 (39.95%) females. Patients that were registered in the age group from 1 to 4 years were 28,750 (13.12%), which include 16,999 (59.12%) males and 11,751 (40.87%) females. Patients in the age group 5 to 14 years were 36,139 (16.49%) which included 21,741 (60.15%) males and 14,398 (39.84%) females. Patients of more than 50

Table-4: Case wise distribution of patients attended OPD.

Month	respiratory diseases	gastro intestinal diseases	urinary tract diseases	other communicable diseases
April	2062	1532	1610	716
May	1969	1906	1733	1067
June	1397	3748	1049	586
July	1531	4012	1738	842
August	1909	3496	1659	557
September	1774	1759	1355	554
October	2449	1821	1620	838
November	2793	1196	1179	721
December	3254	745	1414	687
January	3855	946	1849	616
February	2355	793	1340	363
March	2767	1091	1514	519
total	28115	23045	18060	8066

years of age were 32,160 (29.44%), which include 15,216 (47.31%) males and 16,944 (52.68%) females. OPD was attended by 77,286 patients who had respiratory, gastro intestinal, urinary tract diseases and other communicable diseases. Among these patients, 28,115 (36.37%) had respiratory diseases, 23,045 (29.81%) had gastro intestinal diseases, 18,060 (23.36%) had urinary tract diseases and 8,066 (10.43%) had other communicable diseases.

Discussion

Khwazakhela is a town and a tehsil that is an administrative subdivision of district Swat in Khyber Pakhtunkhwa province, Pakistan.

THQ Hospital Khwazakhela is situated in Khwazakhela, situated in upper Swat. Patients attending this hospital come from upper Swat and District Shangla. The average annual temperature of Khwazakhela remains between 11.95^{O}C to 24.29^{O}C. The coldest month of the year is January with an average temperature of 11.3 °C, whereas the hottest month in the year is July with average temperature of 34.6^{O}C.[9]

According to the Pakistan census report of 2017, the total population of Khwazakehla was 265,571 people, which include 4,807 urban and 217,544 rural populations.[10] The present study indicates that female patients outnumbered their male counterpart which is in line with the findings of Khan A who estimated that women experience a greater overall burden of disease than men.[4] It may be attributed to the few health facilities in rural areas which is also reported by.[9] Most of the patients presented were in the age group from 15 to 59 years in which females outnumbered their male counterparts. In the present study, respiratory diseases were the most common amongst the people of the locality. In this study, the respiratory diseases include asthma, chronic obstructive pulmonary diseases, TB suspects, pneumonia >5 years, pneumonia <5 years and acute upper respiratory infections.

Gastro intestinal diseases were the second most common diseases in the OPD. Gastro intestinal diseases included cirrhosis of liver, peptic ulcer diseases, worm infestation, Enteric/Typhoid fever, Diarrhoea/Dysentery >5 years, Diarrhoea/Dysentery <5 years. Urinary tract diseases include benign enlargement of prostrate, sexuality transmitted infections, nephritis/nephrosis and urinary tract infections.

Other communicable diseases included suspected malaria, suspected meningitis and fever due to other causes. There were many other diseases registered at the OPD, but the number of patients presenting with these diseases were few by comparison. We suggest an improvement in the patient's registration form so that their ages and gender can easily be checked and identification of disease gender wise and year wise can be made possible. We suggest further studies to determine the incidence of different diseases in various territories of our country for better diseases control.

Conclusion

The frequencies of different diseases are increasing steadily. Female health conditions are getting worst day by day in rural areas of Pakistan. In our study female patients outnumber in the age group of 15 years and above. Respiratory diseases are the most common diseases in the studied population. The frequency of various diseases is an indicator of societal development and the quality of healthcare available. There should be awareness programmes in every locality to disseminate information on healthcare and its improvements.

Disclaimer: None to declare.
Conflict of Interest: None to declare.
Funding Sources: None to declare.

References

1. Government of Pakistan, Ministry of FInance. Economic Survey of Pakistan 2017-18. Islamabad: The Ministry; 2018. [Online] [cited 2018 July 1]. Available from: URL: http://www.finance. gov.pk/survey/chapters_12_ Health and Nutrition. pdf.
2. Mashhadi FS, Hamid S, Roshan R, Fawad A. Healthcare in Pakistan-A system perspective. Pak Armed Forces Med J 2016; 66: 136-42.
3. World Bank. Delivering better health services to Pakistan's poor: Report No. 68258. Washington, DC: 2010.
4. Khan A. Health and nutrition. In Pakistan economic survey 2010-11. Islamabad, Pakistan: Finance Division; 2012.
5. Jabeen U, Zeeshan F, Bano I, Bari A, Rathore WA. Adherence to asthma treatment and their association with asthma control in children. J Pak Med Assoc 2018; 68: 725-8.
6. Parveen Z, Sadiq M, Abbas F, AmirudDin R. Correlates of home and hospital delivery in Pakistan. J Pak Med Assoc 2017; 67: 1166-72.
7. Hyder AA, Wali SA, Ghaffar A, Masud TI, Hill K. Measuring the burden of premature mortality in Pakistan: Use of sentinel surveillance systems. Public Health 2005; 119: 459-65.
8. Pakistan, Planning Commission. Pakistan millennium development goals report 2010: Development amidst crisis. Islamabad, Pakistan; 2010.
9. Climate: Khwazakhela - Climate-Data.org. [online] [Cited 2018 April 29]. Available from: URL:https://en.climate-data.org/location/489589/.
10. "DISTRICT AND TEHSIL LEVEL POPULATION SUMMARY WITH REGION BREAKUP: KHYBER PAKHTUNKHWA" (PDF). Pakistan Bureau of Statistics. [online] [Cited 2018 April 29]. Available from: URL: http://www.pbscensus.gov.pk/sites/default/files/bwpsr/kp/KOHAT_SUMMARY.pdf