



Statistical Report No 25: 2014

# Health Statistics Report - 2010



Bureau of Statistics P.O. Box 455 Maseru 100 Lesotho Tel: +266 22 326 393/ 22 323 852 Fax: +266 22 310 177 E-mail: psd@bos.gov.ls Website: www.bos.gov.ls Mission: To coordinate the National Statistical System (NSS) and produce accurate, timely and reliable culturally relevant and internationally comparable statistical data for evidence-based planning, decision making, research, policy, program formulation and monitoring and evaluation to satisfy the needs of users and producers.

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# LIST OF ACRONYMS

Acquired Immunodeficiency Syndrome
Bureau of Statistics
Christian Health Association of Lesotho
Government of Lesotho
Human Immunodeficiency Virus
Health Planning and Statistics Unit
Health Service Area
Ministry of Health
Sexually Transmitted Infection
Tuberculosis
Upper Respiratory Tract Infections

#### **1.0 INTRODUCTION**

## 1.1 Background

The Health Statistics is analyzed based on information collected from planning unit of the Ministry of Health (MoH). The data utilized in this report was extracted from the 2010 Annual Health Statistical Tables compiled by the Health Planning and Statistics Unit (HPSU). The data covers the following aspects relating to health: inpatients and outpatients morbidity, maternal and other health related issues. The year 2010 health statistics report is the tenth health descriptive report produced by the Bureau of Statistics (BOS).

#### **1.2 Data Coverage**

The data used in this report is collected from the 19 Health Service Areas (HSAs), of which eleven (11) belong to the Government of Lesotho (GoL) and the other eight (8) belong to Christian Health Association of Lesotho (CHAL). The following are the Health Service Areas which belong to GoL: Botha-Bothe, Berea, Machabeng, Mafeteng, Mokhotlong, Motebang, Ntšekhe, Queen II, Quthing, Makoanyane and Mohlomi. Those that belong to CHAL include Maluti, Mamohau, Paray, Scott, Seboche, St James, St. Joseph's, and Tebellong hospitals.

### **1.3 Data Limitations**

In 2010, not all health facilities which were operating in the past years were still functioning. For instance, Semonkong hospital had not been operating in recent years while facilities within its jurisdiction continued functioning being accountable to Queen II HSA. This is a major reason for none availability of health data for this hospital in this report. Also, there is some missing data for the number of discharges for Mohlomi hospital.

#### 1.4 Methodology

The absolute numbers and percentages were used in tables and graphs to describe persons with various types of diseases. Proportions have been computed and used to show occurrence of different diseases in geographical areas by sex and age of the patients.

#### 2.0 Health Personnel

The health personnel were considered to be men and women working in the provision of health services, whether as individual practitioners or employees of health institutions and programs. This covered those who were either professionally trained or not, and whether or not were subject to public regulation. (Discursive Dictionary of Health Care, 1976). Analysis is made for the availability of resources and their allocation to the respective HSAs.

Table 1.0 presents the estimated catchment population and health staff by district. The district with the highest number of catchment population was Maseru (453,606) while Qacha's Nek had the lowest number (69,254). Maseru also had the highest number of staff with 74 doctors, 347 nursing assistants and 185 professional nurses. The table further shows that Mohale's Hoek and Quthing districts had the lowest number of doctors represented by 4 for each. The data indicates that the districts of Mafeteng had the lowest number of nursing assistants and professional nurses with 19 and 31 respectively.

District	Catchment Population	Doctors	Nursing Assistant	Professional Nurses
Botha-Bothe	106,764	7	58	53
Leribe	294,214	9	44	67
Berea	253,769	13	60	87
Maseru	453,606	74	347	185
Mafeteng	185,964	8	19	31
Mohale's Hoek	173,325	4	37	36
Quthing	121,207	4	29	30
Qacha's Nek	69,254	7	38	39
Mokhotlong	100,872	5	27	31
Thaba-Tseka	132,890	7	42	68
Grand Total	1,891,865	138	701	627

 Table 1.0: Distribution of Doctors and Nurses by Districts, 2010

#### **2.1 Inpatients**

An inpatient is a health care recipient who is admitted to the health care facility and stays in that health facility overnight or for an indeterminate time, usually several days or weeks (en.wikipedia.org). This section focusses on the inpatient admissions by hospital, sex and age-group.

#### **2.1.1 Inpatient Admissions by Hospital**

The number of inpatient admissions varies from one hospital to another as presented in Table 2.0. The table illustrates the number and percentage distribution of inpatient admissions by hospital. The results show that Queen II and Maluti hospitals recorded the largest proportions of inpatients estimated at 34.9 and 11.6 percent respectively. On the other hand, St James recorded the least proportion of inpatients with 1.0 percent followed by Makoanyane with 0.8 as the second least.

Hospital	Number	Percent
Botha- Bothe	1,104	3.1
Berea	1,093	3.1
Machabeng	776	2.2
Mafeteng	2,334	6.6
Makoanyane	292	0.8
Maluti	4,103	11.6
Mamohau	673	1.9
Mokhotlong	1,194	3.4
Motebang	2,342	6.6
Ntsekhe	1,751	5.0
Paray	1,154	3.3
Queen II	12,315	34.9
Mohlomi	533	1.5
Quthing	928	2.6
Scott	1,511	4.3
Seboche	982	2.8
St. Joseph	1,261	3.6
St. James	350	1.0
Tebellong	574	1.6
Grand Total	35,270	100.0

 Table 2.0: Number and Percentage Distribution of Inpatient Admissions by Hospital, 2010

#### 2.1.2 Inpatient Admissions by Sex and Hospital

A gender based disaggregation of the population of interest is essential in the field of population studies to permit formulation of policies and planning priorities of the country to become much clearer with such data. Sex is an important indicator in population statistics in determining how many males and females were admitted in different hospitals in the country for planning purposes. Hence, Figure 1.0 shows that in 2010, there were more females admitted in health centres than males with 51.8 and 48.2 percent respectively.



Figure 1.0: Percentage Distribution of Inpatients by Sex, 2010

Also, Table 3.0 portrays the number and percentage distribution of inpatient admissions by sex and hospital. The results from the table show that more females (18,275) were admitted into health facilities than their male counterparts (16,995). As the table depicts, there was a higher proportion of inpatient admissions in Queen II (35.6 percent males and 34.3 females) and Maluti with 10.1 percent males and 13.1 females. Makoanyane had the least proportion of inpatient admissions with 1.1 percent males and 0.5 females followed by Tebellong as the second least with the same percent of males and females estimated at 1.0 percent.

	Num	ber	Percent	
Hospital	Males	Females	Males	Females
Botha-Bothe	556	548	3.3	3.0
Berea	471	622	2.8	3.4
Machabeng	341	435	2.0	2.4
Mafeteng	1,201	1,133	7.1	6.2
Makoanyane	192	100	1.1	0.5
Maluti	1,709	2,394	10.1	13.1
Mamohau	337	336	2.0	1.8
Mokhotlong	570	624	3.4	3.4
Motebang	1,086	1,256	6.4	6.9
Ntsekhe	824	927	4.8	5.1
Paray	634	520	3.7	2.8
Queen II	6,048	6,267	35.6	34.3
Mohlomi	309	224	1.8	1.2
Quthing	449	479	2.6	2.6
Scott	689	822	4.1	4.5
Seboche	505	477	3.0	2.6
St Joseph	622	639	3.7	3.5
Tebellong	167	183	1.0	1.0
St James	285	289	1.7	1.6
Grand Total	16,995	18,275	100.0	100.0

Table 3.0: Number and Percentage Distribution of Inpatient Admissions by Sex and Hospital, 2010

#### 2.1.3 Inpatient Admissions by Age Group and Sex

Age is one of the most important demographic variables used in population statistics to determine age categories of people in relation to social services. Thus, it is used almost universally in statistical and administrative data collections relating to people. As a result, Table 4.0 presents the percentage distribution of inpatient admissions by age group and sex. The table demonstrates that, males aged 0 to 4 years constituted the highest percentage of inpatient admissions with 18.3 percent followed by age-group 65 and above with 10.7 percent. Males aged 55 to 59 years and 60 to 64 years constituted the smallest percentage of 3.4 percent each.

However, in the case of females, the results presented a different pattern altogether, showing the highest percentage of inpatients in the age-group 25 to 29 years estimated at 13.0 percent followed by those aged 0 to 4 years constituting 12.9 percent. The age-group that reported the smallest percentage of female inpatients was 10 to 14 years with 2.2 percent followed by 60 to 64 years with 3.1 percent. The category of "Unspecified adults and children" represented the inpatients who did not indicate their ages and males recorded the highest percentage as opposed to females.

Age-Group	Males	Females
Unspecified Adults	2.8	1.8
Unspecified Children	0.1	0.0
0-4	18.3	12.9
5-9	5.1	3.2
10-14	4.1	2.2
15-19	4.9	4.8
20-24	7.1	11.2
25-29	9.0	13.0
30-34	9.8	11.5
35-39	7.2	7.7
40-44	5.2	5.5
45-49	4.5	4.4
50-54	4.4	3.9
55-59	3.4	3.4
60-64	3.4	3.1
65+	10.7	11.3
Total	100.0	100.0

Table: 4.0: Percentage Distribution of Inpatient Admissions by Age Group and Sex, 2010

#### 2.2 Top Ten Causes of Adult Admissions

The top ten causes of sickness among males and females adult that lead to admissions into hospitals are presented by age and sex in this section. This type of data provides an important benchmark for health policy direction because it highlights the diseases which are worth targeting in terms of government's interventions.

#### **2.2.1 Male Adult Admissions**

Males were admitted in different hospitals within the country due to various illnesses but the top ten causes of male adult admissions were reported as; AIDS, Pulmonary Tuberculosis, Meningitis, Pneumonia, Heart failure, Head injury, Diarrhea, Dehydration, HIV Positive and Diabetes Mellitus. Table 5.0 presents the percentage distribution of the top ten causes of admission of adult males by age group. The table shows that the highest percentage of admissions was in the age group 65 and above represented by 37.0 percent of males who suffered heart failure, followed by 31.1 and 25.5 percent in the same age-group due to Diabetes Mellitus and Dehydration respectively. The least percentage of male admissions was in the age-group 13 to 14 years estimated at 0.6 percent due to Meningitis. As indicated by the 2010 health statistics data, male adults were mostly admitted at older ages as compared to those in younger ages.

Top Ten diseases	Unspecified age	13- 14	15- 19	20- 24	25- 29	30- 34	35- 39	40- 44	45- 49	50- 54	55- 59	60- 64	65+	All Ages
AIDS	4.1	0.7	0.9	2.3	14.7	19.5	17.7	14.0	9.0	8.0	3.9	2.5	2.5	100.0
Pulmonary TB	6.0	0.0	0.6	1.2	9.6	15.9	13.5	12.0	8.1	9.3	7.2	8.4	8.4	100.0
Meningitis	2.3	0.6	4.7	8.1	12.8	18.6	12.2	9.3	8.7	9.9	4.7	4.1	4.1	100.0
Pneumonia	5.5	1.8	1.2	4.8	13.3	17.6	12.7	7.3	5.5	6.7	6.7	5.5	11.5	100.0
Heart failure	8.2	0.0	0.0	5.5	2.7	4.1	4.1	4.1	1.4	6.8	13.7	12.3	37.0	100.0
Head injury	30.9	1.5	10.3	2.9	10.3	16.2	7.4	5.9	4.4	1.5	5.9	0.0	2.9	100.0
Diarrhea	3.8	1.9	1.9	7.7	11.5	9.6	17.3	15.4	11.5	5.8	1.9	3.8	7.7	100.0
Dehydration	6.4	0.0	0.0	0.0	0.0	14.9	6.4	2.1	12.8	10.6	4.3	17.0	25.5	100.0
HIV Positive	0.0	4.4	0.0	2.2	11.1	24.4	20.0	4.4	11.1	13.3	2.2	4.4	2.2	100.0
Diabetes Mellitus	4.4	2.2	0.0	0.0	0.0	4.4	2.2	4.4	20.0	15.6	6.7	8.9	31.1	100.0

 Table 5.0: Percentage Distribution of Top Ten Causes of Admission of Male Adults by Age Group, 2010

#### 2.2.2 Female Adult Admissions

Females on the other hand were also admitted to different hospitals and the top ten causes of female adult admissions were reported as; AIDS, Pulmonary Tuberculosis, Meningitis, Pneumonia, Stroke, Diarrhea and Gastroenteritis, Other forms of Anemia, Diabetes mellitus, Heart failure, HIV positive. Table 6.0 presents the percentage distribution of top ten causes of female adult admissions by age-group. It shows that Stroke was the main cause of female adult admissions in the age-group 65 and above with 51.8 percent. It was followed by Heart failure estimated at 41.2 percent and Diabetes Mellitus constituting 38.5 in the same age-group. The smallest percentage of adult female admissions was in the age-group 13 to 14 years due to AIDS at 0.5 percent followed by HIV positive and Pneumonia with 1.5 each.

Generally, as was the case on male adult admissions, adults were commonly admitted to different hospitals within Lesotho at older ages as opposed to younger ages irrespective of sex.

	Unspecified	13-	15-	20-	25-	30-	35-	40-	45-	50-	55-	60-		A11
Top Ten Diseases	age	14	19	24	29	34	39	44	49	54	59	64	65+	Ages
AIDS	3.9	0.5	2.1	10.1	16.6	15.8	17.7	10.9	7.0	1.8	4.7	2.3	1.8	100.0
Pulmonary Tuberculosis	4.5	0.0	1.7	9.6	21.3	16.9	17.4	9.0	3.4	5.6	2.2	0.6	7.9	100.0
Meningitis	7.1	0.0	3.2	8.4	19.4	18.7	11.6	8.4	5.8	5.8	6.5	0.6	4.5	100.0
Pneumonia	5.1	1.5	3.7	5.1	16.2	22.1	8.8	9.6	8.1	5.1	4.4	1.5	8.8	100.0
Stroke Diarrhea and	3.5	0.0	0.0	0.0	2.6	1.8	7.0	4.4	4.4	7.0	9.6	7.9	51.8	100.0
Gastroenteritis Other forms of	8.7	0.0	1.1	13.0	12.0	15.2	10.9	12.0	9.8	7.6	5.4	2.2	2.2	100.0
Anemia	1.2	0.0	4.7	9.3	16.3	27.9	9.3	12.8	8.1	4.7	1.2	2.3	2.3	100.0
Diabetes mellitus	3.8	0.0	1.3	1.3	1.3	3.8	1.3	6.4	9.0	7.7	9.0	16.7	38.5	100.0
Heart failure	4.4	0.0	4.4	5.9	7.4	5.9	7.4	5.9	1.5	5.9	5.9	4.4	41.2	100.0
HIV positive	0.0	1.5	1.5	12.3	12.3	9.2	26.2	15.4	7.7	3.1	6.2	4.6	0.0	100.0

Table 6.0: Percentage Distribution of Top Ten Causes of Admission of Female Adults by Age Group, 2010

#### **2.3 Children Admissions**

Like adults, children were also admitted to hospitals due to a variety of illnesses. Percentage distribution of children admissions by age is presented in Figure 2.0. The figure shows that children aged less than one year constituted a higher proportion of inpatient admissions constituting 34.0 percent followed by those aged one year with 18.0 percent. Children aged eleven and twelve constituted the least percentage estimated at 2.8 and 3.1 percent respectively. This therefore indicates that, children at younger ages were mostly admitted to hospitals as compared to those at older ages.



Figure 2.0: Percentage Distribution of Children Admissions by Age, 2010

Figure 3.0 illustrates the percentage distribution of children admissions by sex. According to the figure, male children were mostly admitted into health care facilities with 57.8 percent than female children at 42.2 percent.

Figure 3.0: Percentage Distribution of Children Admissions by Sex, 2010



#### 2.4. Top Ten Causes of Children Admissions

The top ten causes of children admissions were reported as; Pneumonia, Diarrhea and Gastroenteritis, Unspecified protein-energy, AIDS (Human Immunodeficiency Virus

disease), Measles, URTI (Upper Respiratory Tract Infection), Burn and corrosion, Convulsions not elsewhere classified, Dehydration and Epilepsy.

Figure 4.0 displays the percentage distribution of top ten causes of children admissions. It depicts that the largest percentage of children constituted 31.1 percent of inpatients admissions due to Pneumonia. This was followed by Diarrhea and Gastroenteritis, and then Unspecified protein-energy estimated at 16.5 and 12.7 percent respectively. Epilepsy constituted the smallest percentage of children admissions with 3.7 percent.



Figure 4.0: Percentage Distribution of Top Ten causes of Children Admissions, 2010

#### **2.5 OUTPATIENTS**

This section covers outpatients' morbidity by month. Table 7.0 below indicates the number and percentage distribution of outpatients' morbidity. It shows that the highest proportion of outpatients was in August than any other months accounting for 10.8 percent followed by September with 9.6 percent. The least proportion of outpatients was observed in May estimated at 6.7 percent.

# **2.6 ADULT DISCHARGES**

This section provides information on adult patients who were discharged from various hospitals in 2010 by months, sex and age-groups.

# 2.6.1 Discharges by Months

Figure 5.0 shows the percentage distribution of discharged patients by month. According to the figure, March recorded the largest proportion of discharges constituting 9.7 percent, followed by April with 9.2. On the other hand, June and August were the months with the least proportion of discharges represented by 7.8 and 7.6 percent respectively. They were followed by the months of January and July with the same figure of 7.9 percent.



Figure 5.0: Percentage Distribution of Adult Discharges by Months, 2010

Table 7.0: Number and Percentage Distribution of Outpatients' Morbidity by Month, 2010						
Month	Number	Percent				
January	18,422	8.0				
February	19,253	8.4				
March	20,623	8.9				
April	19,849	8.6				
May	15,512	6.7				
June	15,822	6.9				
July	18,534	8.0				
August	24,801	10.8				
September	22,158	9.6				
October	18,944	8.2				
November	19,300	8.4				
December	17,352	7.5				
Grand Total	230,570	100.0				

# 2.6.2 Discharges by Sex and Outcome

Figure 6.0 shows percentage distribution of adult patients who were discharged by sex and outcome. The figure portrays that the highest percentage of male adults were selfdischarged with a percentage of 70.9. This was followed by male adults who were referred /transferred and those who died with 53.1 and 52.1 percent respectively. The discharged category had the least proportion of male adults in that year constituting 43.5 percent. On the other hand, the highest percentage on female adults was observed on the discharged category accounting for 56.5 percent, followed by those who died and referred/transferred with 47.9 and 46.9 percent respectively. Unlike male adults, self-discharged females showed the smallest percentage of 29.1 percent.



Figure 6.0: Percentage Distribution of Adult Discharges by Sex and Outcome, 2010

## 2.6.3 Discharges by Age Group and Outcome

Table 8.0 presents percentage distribution of adult patients discharged by age group and outcome. Data from the table illustrates that over 70 percent of adult patients were discharged for all age groups. It also shows that most patients died between the ages of 35 to 64 years. According to this table, self-discharged patients seem to have the least percentage of discharges with 0.5 percent in age group 55 years and above.

Age group	Died	Discharged	Referred/ Transferred	Self- discharged	Total
13-14	5.9	87.1	5.9	1.0	100.0
15-19	5.6	88.6	3.9	1.8	100.0
20-24	7.8	86.7	2.9	2.6	100.0
25-29	13.0	82.4	2.8	1.8	100.0
30-34	16.9	78.6	3.0	1.4	100.0
35-39	20.0	75.7	3.3	1.1	100.0
40-44	20.5	75.5	2.7	1.3	100.0
45-49	19.5	76.0	3.4	1.1	100.0
50-54	20.6	75.4	3.3	0.7	100.0
55-59	19.5	76.8	3.2	0.5	100.0
60-64	19.1	77.5	3.0	0.5	100.0
65+	14.8	81.3	3.4	0.5	100.0

Table 8:0 Percentage Distribution of Adults Discharges by Age Group and Outcome, 2010

Figure 7.0 displays percentage distribution of discharged adult patients by sex. It shows that in 2010, more female adult patients were discharged with 51.9 percent than male adult patients with 48.1.



Figure: 7.0: Percentage Distribution of Discharged Adult Patients by Sex, 2010

# 3.0 Summary

In general, Maseru had the highest number of health personnel across all categories of professional stuff. Queen II had the highest number of inpatients which recorded 34.9 percent of admissions regarding all HSAs. Data also shows that more females were admitted into health facilities than males. Makoanyane hospital had the least inpatient admissions for both sexes. The results further indicate that the male inpatients had the highest proportions in the age group 0 to 4 years while female inpatients had the highest proportion in the age group 25 to 29 years.

According to the results, Stroke was the main cause of female adult admissions in the age group 65 and above with 51.8 percent while the main cause for male adult admission in the same age group was Heart failure represented by 37.0 percent. The results further reveal that in 2010 most children were admitted into health care facilities due to Pneumonia.

Among all months, March seems to be a leading month which had more discharges in 2010 while August had the largest proportion of outpatients' morbidity. The results also indicate that more (70.9 percent) male adult inpatients were self-discharged in 2010 while on the other hand more (56.5 percent) female adult inpatients were discharged.