### Chapter 4

#### **HEALTH**

# **4.0 Introduction**

The survey collected data on health and health related issues. This information was collected from section D of the questionnaire and was asked to all persons in the household. Mothers or guardians responded for children under the age of 10. Illnesses in this survey were self-reported and not necessarily diagnosed by a medical practitioner.

### 4.1.1 Incidence of sickness

Table 4.1 shows that about 26 percent of the interviewed population reported an illness or injury in the 14 days preceding the survey. In terms of sex of household head, there is a higher proportion of people who reported being sick or injured in female-headed households relative to male-headed households. Almost 30 percent of people in female-headed households reported as being sick while only one in every four persons in male-headed households was sick or injured 14 days prior to the survey. Morbidity is also higher among rural than among urban population, at about 27 and 16 percent respectively. On a regional level, the central region reported the highest incidence of illness/injury at about 28 percent, followed by the southern region at about 25 percent, and then the northern region at about 24 percent. It may also be noted from the table below that there is no specific pattern in terms of sickness or injury across per capita expenditure quintiles. The highest rate has been reported in the fourth quintile while the lowest has been reported in the lowest quintile.

There is substantial variation across the districts. Some districts reported low percentage, e.g. Blantyre city that reported 13 percent, and Mzuzu City at 17 percent, as compared to 50 percent for Balaka, and 38 percent for Ntcheu.

# 4.1.2 Major types of illnesses

Malaria is the major type of illness in Malawi, accounting for about 39 percent of the reported cases in the two weeks preceding the survey. Respiratory problems are the second highest reported diseases at 24 percent. The incidence of malaria was close for males and female. As table 4.1 below shows, there is no specific pattern displayed in terms of type of sickness across per capita expenditure quintiles.

Table 4.1 Proportion of persons reporting illness/ injury and percentage distribution of the some selected diseases by background characteristics, Malawi 2005

		Type of Illness reported							
Background characteristics	Proportion ill/ injured	Fever/ Malaria	Diarrhea/ stomach ache	Upper/ Lower Respiratory	Headache	Asthma & other diseases	Total		
Malawi	26.1	39.2	16.0	24.0	12.7	8.1	100		
Sex of household head	20.1	33. <u>E</u>	10.0	24.0	12.7	0.1	100		
Male	25.3	39.4	16.6	24.0	12.2	7.9	100		
Female	30.0	38.5	13.6	24.1	14.7	9.2	100		
Place of residence	30.0	30.3	13.0	24.1	14.7	9.2	100		
Urban	16.1	47.4	13.9	19.9	11.0	7.7	100		
Rural	27.3	38.6	16.2	24.3	12.8	8.2	100		
Per capita expenditure quintile		30.0	10.2	24.3	12.0	0.2	100		
	21.9	36.3	17.7	23.2	14.3	8.4	100		
1st 2nd	21.9 25.9	38.5	16.3	23.2 24.7	14.3	6.4 7.9	100		
3rd	27.9	39.7	16.2	22.6	13.1	8.3	100		
4th	30.3	38.7	15.4	25.6	12.0	8.3	100		
5th	30.3 25.7	43.7	13.4	23.5			100		
Northern Region	23.8		16.3	23.5 <b>34.5</b>	11.2 11.7	7.7 <b>5.2</b>			
_		32.3					100		
Chitipa	20.5	31.5	23.6	17.4	17.3	10.2	100		
Karonga	19.4	42.2	15.0	22.8	7.7	12.3	100		
Nkhata Bay	19.3	35.4	7.3	45.0	10.5	1.7	100		
Rumphi	26.0	31.9	11.2	44.4	11.0	1.4	100		
Mzimba	29.2	28.1	18.8	36.9	12.5	3.8	100		
Mzuzu City	15.1	43.2	9.5	32.1	8.5	6.7	100		
Central Region	27.7	40.9	15.5	25.8	11.5	6.3	100		
Kasungu	23.3	36.0	13.4	24.5	7.5	18.6	100		
Nkhotakota	18.6	48.8	13.3	28.0	6.6	3.4	100		
Ntchisi	30.9	31.5	14.7	43.3	2.0	8.5	100		
Dowa	35.2	34.9	18.1	32.6	10.4	4.0	100		
Salima	18.5	41.4	15.9	23.9	13.8	5.1	100		
Lilongwe Rural	33.5	45.1	17.0	24.4	10.8	2.8	100		
Lilongwe City	17.2	41.1	15.0	22.9	13.1	7.9	100		
Mchinji	22.5	34.2	20.5	32.6	7.0	5.7	100		
Dedza	29.6	42.7	13.5	23.2	16.0	4.6	100		
Ntcheu	38.2	45.2	13.0	16.8	19.9	5.1	100		
Southern Region	25.1	39.4	16.4	19.2	14.2	10.9	100		
Mangochi	23.0	30.4	21.0	16.9	14.4	17.2	100		
Machinga	34.6	22.5	15.7	37.5	16.8	7.4	100		
Zomba Rural	17.1	43.1	12.7	10.5	11.2	22.4	100		
Zomba Municipality	25.5	38.6	15.1	30.7	7.1	8.5	100		
Chiradzulu	20.6	39.4	15.2	23.6	15.5	6.3	100		
Blantyre Rural	36.8	48.9	12.8	19.5	13.7	5.2	100		
Blantyre City	13.3	60.2	13.3	8.9	10.0	7.5	100		
Mwanza	23.4	45.0	23.3	12.7	14.6	4.4	100		
Thyolo	16.5	56.0	15.0	14.7	7.3	7.0	100		
Mulanje	28.1	23.5	12.1	14.6	17.4	32.4	100		
Phalombe	21.3	17.5	18.7	40.3	8.8	14.7	100		
Chikwawa	26.3	53.2	16.4	11.1	15.9	3.4	100		
Nsanje	36.5	37.8	21.6	10.3	25.0	5.3	100		
Balaka	50.1	32.7	12.8	26.6	11.0	16.9	100		

Table 4.1 shows that high percentage of sickness does not necessarily go together with high percentage of malaria.

Lower respiratory diseases, including Tuberculosis, which accounted for about 24 percent of the reported illnesses, follow malaria. Diarrhea and injuries are other major causes of morbidity.

#### 4.2 Incidence of chronic illness

The overall prevalence of reported chronic illness in Malawi is about 9 percent. Table 4.2 below reveals that there are more cases of chronic illness reported in rural areas, 9 percent, than in urban areas, 6 percent. The incidence of chronic illness is higher in female headed-households at 11 percent but lower in male-headed households at 9 percent. In terms of per capita expenditure quintiles, there is no specific pattern being followed. However, it may be noted that the fourth quintile has the highest proportion of people with chronic illness followed by the highest, third, second and then finally the lowest quintile

At regional level, the northern region has the least proportion of people suffering from chronic illness at three percent. The central region is the highest at 10 percent while the south is just slightly below the center tagged at 9 percent. In terms of districts, Blantyre city has the highest proportion of people reporting chronic illness at 23 percent followed by Ntchisi at 22 percent. On the other hand, Nkhata-bay had the lowest incidence of chronic illness at .77 percent.

The most frequently reported chronic illness was Arthritis/Rheumatism, almost 33 percent of the population had reported suffering from it. The second major type of chronic illness was asthma with 30 percent suffering from this illness.

Urban areas have reported asthma as the main type of chronic illness affecting many people. In terms of expenditure quintiles, most of the quintiles have reported arthritis as the most frequent chronic illness except for the highest quintile that has reported asthma as the most frequent chronic illness.

Across the regions of the country, the northern region and the southern region have both reported that most of the chronically ill persons are asthmatic. The north has registered about 38 percent; the south has registered 37 percent incidences of asthma among those chronically ill, while central region registered 23 percent.

Table 4.2 Proportion chronically ill and distribution of chronic illness reported by background characteristics, Malawi 2005

		Type of chronic illness reported					
Background	cound Proportion Chronic Malaria/ Arthritis/						
characteristics	chronically ill	malaria/ fever	ТВ	Asthma	Arthritis/ rheumatism	Pneumonia	Total
Malawi	8.9	24.4	5.9	29.8	32.8	7.1	100
Sex of household head							
Male	8.6	25.4	5.4	29.7	32.0	7.4	100
Female	10.6	20.6	7.9	29.9	35.9	5.8	100
Place of residence							
Urban	6.5	10.4	6.2	52.0	22.3	9.1	100
Rural	9.2	25.9	5.9	27.5	33.9	6.9	100
Per capita expenditure	quintiles						
1st	7.2	16.7	7.1	28.4	41.0	6.9	100
2nd	8.3	26.5	4.4	30.0	33.0	6.1	100
3rd	9.2	26.1	6.4	26.6	31.8	9.1	100
4th	10.7	28.8	5.5	27.4	31.5	6.8	100
5th	9.8	23.2	6.3	36.8	27.2	6.6	100
Northern Region	3.1	12.6	8.0	37.7	31.7	9.9	100
Chitipa	4.2	18.2	-	62.9	2.1	16.8	100
Karonga	2.5	29.9	13.4	52.2	4.5	=	100
Nkhata Bay	0.8	4.0	60.0	36.0	-	-	100
Rumphi	2.3	2.1	-	23.2	60.0	14.7	100
Mzimba	3.8	12.4	5.9	21.1	48.9	11.8	100
Mzuzu City	3.3	6.8	4.5	80.2	4.5	4.0	100
Central Region	10.4	26.3	6.7	22.9	36.1	7.9	100
Kasungu	8.8	23.1	9.9	24.0	38.9	4.2	100
Nkhotakota	5.4	29.7	2.6	60.3	2.2	5.2	100
Ntchisi	22.2	38.4	17.1	6.8	23.1	14.7	100
Dowa	12.4	53.2	6.6	10.8	20.3	9.1	100
Salima	7.6	13.8	2.0	44.5	35.8	3.9	100
Lilongwe Rural	11.9	27.0	6.0	14.3	44.8	7.8	100
Lilongwe City	7.9	9.8	6.5	39.7	32.0	12.0	100
Mchinji	6.0	43.9	3.6	26.9	18.8	6.7	100
Dedza	6.8	13.6	6.9	20.1	55.8	3.6	100
Ntcheu	18.0	16.7	4.3	25.7	45.0	8.3	100
Southern Re gion	9.0	23.5	4.8	36.5	29.3	5.9	100
Mangochi	15.3	32.7	3.1	24.6	36.1	3.5	100
Machinga	8.2	3.3	2.5	27.4	55.1	11.6	100
Zomba Rural	13.1	14.0	0.6	35.4	43.0	7.0	100
Zomba Municipality	15.2	17.1	5.8	50.0	17.1	10.0	100
Chiradzulu	3.0	8.5	7.5	13.2	61.3	9.4	100
Blantyre Rural	23.5	40.3	9.8	26.3	19.3	4.3	100
Blantyre City	4.2	8.2	6.3	74.3	8.2	3.0	100
Mwanza	4.5	43.7	1.9	46.8	7.6	-	100
Thyolo	3.6	0.6	15.6	65.9	14.0	3.9	100
Mulanje	9.5	34.5	3.4	29.6	29.6	2.8	100
Phalombe	9.3	36.0	1.4	50.2	12.4	-	100
Chikwawa	3.2	17.4	7.8	53.1	7.1	14.6	100
Nsanje	8.8	23.7	1.3	17.3	39.9	17.8	100
Balaka	8.9	20.5	12.1	55.2	12.1	-	100

## 4.3 Mortality

Section AC of the questionnaire collected data on deaths in the household. Specifically, the survey asked if over the past two years, any member of the household died including infants. Table 4.3 below presents the proportion of households reporting deaths in the two years preceding the survey. The results show that 14 percent of the households reported at least one death in the two years before the survey. More rural households experienced deaths, compared to urban households, 15 and 11 percent respectively. There are large differences in terms of number of deaths between male and femaleheaded households. As the table below reveals, about 21 percent of female-headed households reported experiencing death of a household member while only 12 percent of male-headed households experienced such an invent. In terms of per capita expenditure quintiles, the proportion of households reporting deaths is lower in the lower quintile and is rising as quintiles rise but then there is also a fall in the highest quintile.

The proportion of households reporting death of a household member is higher in the northern region then the central region and lastly in the southern region at 16, 15 and 13 percent respectively. At district level, Nsanje, Mzimba and Kasungu have reported more incidences of deaths that are above twenty percent. On the other hand, Karonga has reported the least incidences of deaths at 5 percent.

The distribution of deaths by age shows that there are more reported deaths within the age group 25-49. About 38 percent of the reported deaths are in this age group and is followed by those 50 years and over. The least reported deaths are in the age group 15-24 registering only 10 percent of all the deaths reported.

Table 4.3 Proportion of households that experienced death of a household member during the last 2 years and age at death by households' background characteristics-Malawi 2005

2 years and a	ge at death by households' background characteristics-Malawi 2005  Proportion of Age groups at death						
	households that				Age gr	oups at death	
Background	experienced death of a						
characteristics	member	0-4	5-14	15 - 24	25 - 49	50 and above	Total
Malawi	14.4	16.67	11.3	9.7	37.6	24.8	100
Place of residence							
Urban	10.6	4.42	6.8	13.0	56.5	19.3	100
Rural	14.9	18.1	11.8	9.3	35.5	25.4	100
Sex of household hea	ıd						
Male	12.8	25.6	13.9	11.1	31.3	18.0	100
Female	21.2	3.5	7.4	7.6	46.8	34.7	100
Per capita expenditure	e quintile						
1 <sup>st</sup>	13.4	10.2	9.5	10.0	41.7	28.6	100
2nd	14.9	21.5	15.6	8.3	32.1	22.5	100
3rd	15.3	16.9	10.4	12.5	36.8	23.5	100
4 <sup>th</sup>	15.0	17.3	12.2	9.2	36.0	25.5	100
5 <sup>th</sup>	13.7	17.5	8.9	8.1	41.6	24.0	100
Northern Region	15.8	17.1	11.6	6.3	32.3	32.7	100
Chitipa	15.6	-	3.8	11.5	26.9	57.7	100
Karonga	5.0	30.0	10.0	10.0	30.0	20.0	100
Nkhata Bay	10.3	-	5.3	10.5	63.2	21.1	100
Rumphi	15.9	29.2	12.5	4.2	33.3	20.8	100
Mzimba	23.0	20.3	14.5	4.3	27.5	33.3	100
Mzuzu City	11.1	4.8	14.3	14.3	47.6	19.0	100
Central Region	15.3	14.7	14.3	10.0	31.2	29.9	100
Kasungu	22.1	18.7	13.3	13.3	29.3	25.3	100
Nkhotakota	9.1	14.3	28.6	-	14.3	42.9	100
Ntchisi	12.4	5.3	10.5	5.3	36.8	42.1	100
Dowa	17.6	7.5	15.0	15.0	30.0	32.5	100
Salima	10.0	16.7	8.3	8.3	33.3	33.3	100
Lilongwe Rural	14.6	15.4	16.7	7.7	24.4	35.9	100
Lilongwe City	11.3	7.5	7.5	12.5	50.0	22.5	100
Mchinji	20.0	4.6	13.6	9.1	50.0	22.7	100
Dedza	13.9	24.4	14.6	7.3	26.8	26.8	100
Ntcheu	16.9	11.8	11.8	11.8	39.2	25.5	100
Southern Region		17.9		10.2	43.2	19.6	100
Mangochi	16.9	23.7	13.2	9.2	34.2	19.7	100
Machinga	15.7	21.7		10.9	21.7	32.6	100
Zomba Rural	9.8	10.3	6.9	6.9	55.2	20.7	100
Zomba Municipality	7.8	6.7	13.3	-	60.0	20.0	100
Chiradzulu	10.4	-	20.0	-	66.7	13.3	100
Blantyre Rural	9.8	11.8	-	17.6	52.9	17.6	100
Blantyre City	10.1	-	3.0	15.2	66.7	15.2	100
Mwanza	10.0	21.1	21.1	5.3	36.8	15.8	100
Thyolo	15.1	23.4	4.3	10.6	44.7	17.0	100
Mulanje	16.0	24.2	8.1	12.9	38.7	16.1	100
Phalombe	7.7	57.1	7.1	7.1	21.4	7.1	100
Chikwawa	15.1	28.8	9.6	5.8	36.5	19.2	100
Nsanje	23.8	10.5	7.9	13.2	47.4	21.1	100
,							
Balaka	14.6	20.0	6.7	13.3	33.3	26.7	100

### 4.4.1 Women who gave birth

Section D of the questionnaire, gathered information on whether a woman aged 12-49 gave birth over the past 24 months. As table 4.4 below reveals, about one in every three women gave birth over this period. The proportion is higher in male-headed households at 36 compared to female-headed households at 21. The proportion of rural women who gave birth over the past 24 months is higher than in urban areas at 34 and 23 percent respectively. In terms of per capita expenditure quintiles, the highest quintile has the lowest proportion of women who gave birth relative to the other quintiles. Actually, the lowest quintile has the highest proportion at 35 percent. All the regions have registered a similar rate whereby one in every three women of the age group 12-49 gave birth in the past 24 months prior to the survey. In terms of district specific rates, Phalombe and Machinga are the districts that have registered the highest rates of above 40 while Nkhotakota and Lilongwe city have the least proportion of women who gave birth over the past twenty-four months.

## 4.4.2 Assistance during delivery

During the survey information on the type of assistance the above women received during delivery was collected. Table 4.4 below shows that the assistance given varied according to the individuals' background. At national level, a nurse assisted 43 percent of women who delivered over the stated period. TBAs are the second highest source of assistance during delivery as reported by 21 percent of the women while friends and/or relatives also cutter 20 percent of assistance during delivery. It may also be noted that Mzuzu city has registered the highest proportion of women who, during delivery, were assisted by a doctor.

Table 4.4 Proportion of women age 12-49 who gave birth in the past 24 months prior to the survey and distribution of who assisted during delivery by background characteristics – Malawi 2005

	Who assisted during delivery								
	•	Doctor					-		
Background	Proportion	or clinical				Friend or			
characteristics	gave birth	Officer	Nurse	Midwife	TBA	relative	Self	Other	Total
Malawi	32.7	8.0	42.8	7.2	20.7	19.9	1.3	0.1	100
Sex of household	head								
Male	35.9	8.1	43.1	7.4	20.9	19.2	1.2	0.1	100
Female	21.1	7.2	41.2	5.9	19.3	24.1	1.9	0.4	100
Place of residence									
Urban	22.9	17.7	54.1	13.0	11.0	4.2	0	0	100
Rural	34.2	7.1	41.7	6.6	21.6	21.5	1.4	0.1	100
Per capita expendi	ture quintile								
1st	35.3	5.4	40.0	-	21.0	23.0	1.4	0.1	100
2nd	34.9	7.6	39.9	6.8	19.8	24.1	1.8	0	100
3rd	33.5	6.7	41.1	6.0	23.8	21.2	1.2	0.1	100
4 <sup>th</sup>	34.7	8.1	44.8		22.5	16.7	1.3	0.1	100
5th	26.3	12.9	49.0		15.6	14.0	8.0	0.1	100
Northern Region	33.3	9.6	50.9	-	12.8	18.1	2.7	0	100
Chitipa	27.3	1.2	60.7		15.5	13.1	8.3	0	100
Karonga	31.8	4.5	31.5	5.6	1.1	57.3	0	0	100
Nkhata Bay	30.6	0	80.4		16.3	0	0	0	100
Rumphi	37.0	3.6	29.8	42.9	4.8	15.5	3.6	0	100
Mzimba	37.0	10.0	50.6		19.0	14.7	3.5	0	100
Mzuzu City	28.5	43.6	53.2		1.1	2.1	0	0	100
Central Region	32.4	9.9	34.4		27.8	20.1	1.1	0.2	100
Kasungu	35.1	10.6	24.5		31.0	29.2	0.5	0	100
Nkhotakota	20.1	3.4	56.9		12.1	12.1	1.7	0	100
Ntchisi	34.6	0	42.9	_	49.0	7.1	0	0	100
Dowa	33.6	8.8	30.2		33.2	20.0	2.0	0.5	100
Salima	31.6	1.3	39.0		11.7	36.4	0	0	100
Lilongwe Rural	34.2	4.5	38.4	_	34.7	14.3	0.3	0.3	100
Lilongwe City	20.8	13.4	37.0		23.5	5.9	0	0	100
Mchinji	34.6	33.0	9.3		33.0	22.7	2.1	0	100
Dedza	37.7	15.0	32.7		26.6	20.1	0.9	0	100
Ntcheu	37.7	4.7	48.4		10.2	30.2	3.7	0.5	100
Southern Region	33.0	5.9	48.4		16.2	20.2	1.1	0.1	100
Mangochi	37.1	4.4	42.3		13.3	35.8	0.7	0	100
Machinga	41.8	1.5	42.1	7.7	16.9	28.7	3.1	0	100
Zomba Rural	36.5	4.9	37.5		9.8	19.6	0.5	0	100
Zomba Municipality	29.1	17.4	72.8		2.2	4.3	0	0	100
Chiradzulu	29.3	3.6	33.7		16.9	19.3	1.2	0	100
Blantyre Rural	31.6	6.4	66.7		11.5	11.5	3.8	0	100
Blantyre City	22.7	14.4	66.7		3.8	3.0	0	0	100
Mwanza	32.0	5.7	51.7	_	28.7	13.8	0	0	100
Thyolo	31.0	3.1	63.4		20.5	8.1	0	0	100
Mulanje	27.8	0	50.3	_	20.7	17.9	0	0	100
Phalombe	43.1	0	45.4	_	33.0	21.6	0	0	100
Chikwawa	33.3	1.1	51.1	4.3	15.1	28.5	0	0	100
Nsanje	29.9	36.0	24.0		6.0	27.0	5.0	0	100
Balaka	34.5	3.4	41.6	3.4	28.1	19.1	3.4	1.1	100

### 4.5 Nutritional status of children

The survey collected information on height and weight for all children aged 6-59 months. Through this analysis, child's stunting, wasting and underweight are assessed. The results (as in table 4.7 below) show that 43 percent of the children were stunted. At national level, out of the stunted children 18 percent were in a severe situation. Similarly, 22 percent of children were found to be underweight i.e. their weight was not really what was expected of their age and 7 percent of the children who were underweight were in a severe group. Wasting on the other hand, showed that only about 5 percent were found to be wasted while one percent of that was in a severe wasted situation.

On the place of residence the results show that the rural areas had high percentages of stunted, underweight and wasted children. Central region had the highest proportion of children in the stunted 48 percent, severe stunted 20 percent underweight 24 percent, severe underweight 8 percent, wasted 4 percent and severe underweight one percent while the northern region reported lowest proportions in some of these cases.

Table 4.5 Prevalence of Stunting, Underweight and Wasting among children aged 6 to 59 months according to background characteristics. Malawi- 2005

Background characteristics	Stunted (-2 SD)	Severe Stunted (-3 SD)	Underweight (-2 SD)	Severe underweight ( -3 SD)	Wasted (-2 SD)	Severe Wasted (-3 SD)
Malawi	43.2	17.8	22.2	7.4	4.6	1.3
Sex of child		17.0		7.7	4.0	1.0
Male	45.7	19.9	23.4	8.0	4.9	1.2
Female	40.5	15.4	20.6	6.6	4.4	1.4
Place of residence	+0.0	10.4	20.0	0.0	7.7	1.7
Urban	41.0	12.5	20.4	6.6	4.8	1.2
Rural	43.2	18.2	22.2	7.4	4.7	1.3
Mothers Education	43.2	10.2	22.2	7.4	4.7	1.5
None	44.7	19.4	22.5	7.7	4.5	1.5
Primary	44.7	19.4	24.3	8.1	3.2	0.3
Secondary +	50.4	18.3	24.3 22.4	6.8	3.2 4.5	0.6
<u> </u>		10.3	22.4	0.0	4.5	0.0
Per capita expenditure	43.5	20.4	22.3	7.2	5.5	1.8
1st 2nd	43.5 42.8	20.4 18.6	22.3 22.2	7.2 8.0	5.5 4.7	1.8
3rd	47.6 44.8	21.7	24.8 24.3	6.9	5.5	1.5 1.0
4th 5th	44.8 40.6	18.1 16.7	24.3 22	8.9 6.4	2.6 3.6	1.0 0.9
Northern Region	38.1	16.7	19.8	5.8	5.6	1.9
Chitipa	26.2	9.7	15.6	3.9	6.8	1.7
Karonga	32.1	19.8	20.1	6.9	7.6	3.4
Nkhata Bay	54.4	20.3	29.1	9.7	5.1	2.0
Rumphi	41.9	20.9	15.2	3.6	4.3	1.1
Mzimba	39.6	15.9	18.4	5.1	5.4	1.6
Mzuzu City	34.7	14.7	24.1	6.9	3.1	1.0
Central Region	47.8	20.1	24.3	8.4	4	1.1
Kasungu	54.9	21.7	28	12.4	2.1	0.4
Nkhotakota	29.6	4.1	15.1	5.0	3.6	0.9
Ntchisi	49.1	21.1	20.6	5.3	0.8	0.0
Dowa	45.3	13.3	18.8	5.9	2.2	0.9
Salima	20.8	8.3	11.6	2.7	2.3	0.0
Lilongwe Rural	58.9	28.7	28.9	10.5	3.8	1.3
Lilongwe City	42.6	16.1	21.1	6.9	2.4	0.6
Mchinji	62.1	31.0	25.2	8.1	1.1	0.0
Dedza	38.3	17.9	29.1	7.7	9.6	2.2
Ntcheu	48.5	20.5	24.1	9.9	7.1	3.1
Southern Region	39.7	15.5	20.4	6.7	5.1	1.3
Mangochi	41.4	16.8	21.8	7.3	6.2	1.4
Machinga	35.7	13.6	22.9	4.1	5.6	0.8
Zomba Rural	42.5	20.4	23.6	8.9	3.2	0.5
Zomba Municipality	33.0	11.4	18.2	5.8	11.1	2.0
Chiradzulu	43.5	20	21.7	5.4	1.1	0.0
Blantyre Rural	45.7	19.8	19.5	6.0	1.1	0.0
Blantyre City	42.6	8.1	19.1	6.4	6.5	1.8
Mwanza	50.7	25.4	27.9	12.3	6.3	3.8
Thyolo	33.1	13.1	14.3	7.1	8.2	3.5
Mulanje	46.0	18.0	21.2	8.3	1.8	0.6
Phalombe	37.0	13.6	25.4	9.7	3.2	1.1
Chikwawa	39.2	13.1	17.3	3.3	4.0	0.0
Nsanje	28.3	12.1	16.8	6.2	5.6	0.9
Balaka	35.4	12.2	15.4	2.9	6.7	1.0

## 4.6 Nutritional and under five clinic programmes

The survey sought to establish the extent to which the under five clinics and the nutritional programs are used in the country. The information was obtained by asking the question on whether a child participated in the Nutritional and the Under-five Clinic programs.

Table 4.6 shows the proportion of children that participated in the nutritional programme. The results show that children from all backgrounds participated in the program. The results further indicate that their different backgrounds had little effect on the outcomes; neither did the place of residence, sex, education of the mother and expenditure quintiles had any effect as to what extent the participation is. However, at district level Mchinji and Nsanje had the highest proportions of children who participated in the program recording 13 percent and 12 percent respectively. On the other hand Nkhata Bay showed that no one participated in the nutritional programs.

Nevertheless, the results have shown that the individuals' different backgrounds had a big impact on the proportions of those who attended the Under-five Clinics. For example, age of the child influenced the proportion of those who participated. As seen from the table there were high proportions of children participating in the program at the age of 5-9 (89 percent) and 10-14 (90 percent) while as the age advanced the proportions of those participating decreased up to 23 percent at the age of 55-59 months.

At regional level, the north reported highest proportion of children who participated (68.0 percent) followed by the south (66 percent) and finally the Centre (53 percent), while at district level, Mwanza reported the highest proportion (89.8 percent) as compared to Mchinji which reported the lowest; 29 percent.

Table 4.6 Proportion of children aged 6-59 months participating in a nutrition program or under-five clinic according to background characteristics. Malawi- 2005

Background characteristics	Nutrition Program	Under-five clinic
Malawi	3.2	61.2
Place of residence		
Urban	2.7	58.4
Rural	3.3	61.5
Sex of child		
Male	3.0	62.0
Female	3.4	60.4
Child age in months		
6-9	2.9	88.6
10 – 14	5.1	89.9
15 – 19	3.2	86.2
20 – 24	3.4	83.7
25 – 29	4.1	74.7
30 - 34	3.5	59.4
35 – 39	2.8	52.9
40 – 44	2.7	41.4
45 – 49	3.1	35.2
50 – 54	2.2	23.7
55 – 59	1.4	22.6
Mother's Education		
None	2.9	61.2
Primary	4.6	63.9
Secondary and above	3.3	63.6
Household per capita expend		
1 <sup>st</sup>	3.9	56.2
2 <sup>nd</sup>	3.0	62.9
3 <sup>rd</sup>	1.9	63.7
4 <sup>th</sup>	3.6	68.3
5 <sup>th</sup>	3.4	69.5
Northern Region	4.0	68.0
Chitipa	3.1	72.4
Karonga	2.9	59.6
Nkhata Bay	.0	65.0
Rumphi	.7	78.0
Mzimba Rural	6.9	64.4
Mzuzu City	6.0	75.0
Central Region	4.1	53.0
Kasungu	1.6	50.5
Nkhotakota	4.6	50.3
Ntchisi	2.2	63.2
Dowa	2.6	68.0
Salima	.8	43.7
Lilongwe Rural	.6 7.0	40.0
Lilongwe Kurai Lilongwe City	1.8	37.3
Mchinji	12.5	28.6
Dedza	2.5	70.9
Ntcheu	5.8	73.1
Southern Region	2.3	65.8
Mangochi	<b>2.3</b> 2.2	53.5
Machinga	2.5	64.8
Zomba Rural	3.4	76.7
Zomba Municipality	.0	68.6
Chiradzulu	.0 .7	49.0
Blantyre Rural	2.9	62.3
Blantyre City	3.6	62.8
Mwanza	3.6 2.9	89.8
Thyolo	2.9 1.5	63.1
	1.5 1.2	69.4
Mulanje Phalombe	1.2 .7	
		52.6
Chikwawa	.6 12.0	78.0
Nsanje	12.0	86.7
Balaka	2.8	69.0

#### 4.7 Use of bed nets

During the survey the information on whether the members of households use bed nets was collected. The idea was to check on whether at some point in the year people are able to use bed nets to protect themselves and especially the children under the age of five from malaria.

The results in table 4.7 below show that 38 percent of households in the country have at least a member who sleeps under a bed net to protect against mosquitoes at some time during the year. The proportion is higher in urban areas at 47 percent relative to rural areas at 37 percent. More male-headed households (42 percent) have at least a member who sleeps under a bed net compared to female-headed households (27 percent). There is a clear positive relationship between level of education and use of bed nets. Likewise, table 4.7 below shows that higher per capita expenditure quintiles go together with higher proportion of households where at least a member sleeps under a bed net. Of the three regions of the country, the southern region has the highest proportion (40 percent) of households where at least a member sleeps under a bed followed by the northern region (39 percent) and finally the central region at 36 percent.

Looking at households where there is a child under the age of five, 87 percent of such houses reported that all such children sleep under a bed net. The proportion is even higher for urban households at 92 percent compared to rural households at 87 percent. More male-headed households (88 percent) have also reported having all their under five children sleeping under a bed net compared to 82 percent of female-headed households. There is also a clear positive relationship between education level of the household head and the proportion of households where all children under the age of five sleep under a bed net. Of the three regions of the country, the northern region has reported the highest proportion of households where children under the age of five sleep under a mosquito net (91 percent) followed by the southern region at 89 percent and then the central region at 84 percent.

Other than households where all children under the age of five sleep under a bed net, it is equally important to note that districts such as Balaka, Ntcheu and Mulanje have reported high proportions (more than 10 percent) of households where children of this age group are not at all sleeping under a mosquito bed net.

Table 4.7 Proportion of households with at least a member sleeping under a bed net and proportion of households with children under the age of five who sleep under a bed net. Malawi, 2005

Malawi         38.2         87.4         7.7         5.0           Place of residence         Urban         47.2         91.8         5.4         2.8           Rural         37.0         86.7         8.0         5.3           Sex of household head           Male         41.7         88.2         7.6         4.3           Female         26.5         81.7         8.2         10.0           Education level of household head	Total 100 100 100 100 100 100
characteristics         under bed net         Yes for all         some         children           Malawi         38.2         87.4         7.7         5.0           Place of residence           Urban         47.2         91.8         5.4         2.8           Rural         37.0         86.7         8.0         5.3           Sex of household head           Male         41.7         88.2         7.6         4.3           Female         26.5         81.7         8.2         10.0           Education level of household head	100 100 100 100 100
Malawi         38.2         87.4         7.7         5.0           Place of residence         Urban         47.2         91.8         5.4         2.8           Rural         37.0         86.7         8.0         5.3           Sex of household head           Male         41.7         88.2         7.6         4.3           Female         26.5         81.7         8.2         10.0           Education level of household head	100 100 100 100 100
Place of residence           Urban         47.2         91.8         5.4         2.8           Rural         37.0         86.7         8.0         5.3           Sex of household head           Male         41.7         88.2         7.6         4.3           Female         26.5         81.7         8.2         10.0           Education level of household head         10.0	100 100 100 100
Place of residence           Urban         47.2         91.8         5.4         2.8           Rural         37.0         86.7         8.0         5.3           Sex of household head           Male         41.7         88.2         7.6         4.3           Female         26.5         81.7         8.2         10.0           Education level of household head	100 100 100 100
Urban       47.2       91.8       5.4       2.8         Rural       37.0       86.7       8.0       5.3         Sex of household head         Male       41.7       88.2       7.6       4.3         Female       26.5       81.7       8.2       10.0         Education level of household head	100 100 100
Rural     37.0     86.7     8.0     5.3       Sex of household head       Male     41.7     88.2     7.6     4.3       Female     26.5     81.7     8.2     10.0       Education level of household head	100 100 100
Sex of household head           Male         41.7         88.2         7.6         4.3           Female         26.5         81.7         8.2         10.0           Education level of household head	100 100
Male       41.7       88.2       7.6       4.3         Female       26.5       81.7       8.2       10.0         Education level of household head	100
Female 26.5 81.7 8.2 10.0 Education level of household head	100
Education level of household head	
	100
Pre-school/nursery 24.8 81.9 10.4 7.6	100
1	100
,	100
Junior Secondary     53.0     91.9     5.7     2.4       Senior Secondary     62.0     90.6     6.6     2.8	100
	100
University 82.6 100.0 0.0 0.0	100
Training College 90.5 90.2 9.8 0.0	100
Per capita expenditure quintiles	
1 <sup>st</sup> 29.4 85.3 9.1 5.6	100
2 <sup>nd</sup> 32.0 83.7 10.2 6.1	100
3 <sup>rd</sup> 36.7 88.8 6.9 4.4	100
4 <sup>th</sup> 41.2 88.9 6.3 4.8	100
5th 51.5 89.6 6.2 4.2	100
Northern Region 39.2 91.0 5.3 3.6	100
Chitipa 27.5 91.8 0.0 8.2	100
Karonga 67.6 96.8 3.2 0.0	100
Nkhata Bay 45.4 89.2 5.4 5.4	100
Rumphi 29.8 94.4 1.9 3.7	100
Mzimba 29.2 83.3 11.1 5.6	100
Mzuzu City 44.2 100.0 0.0 0.0	100
Central Region 36.1 84.4 10.7 4.9	100
Kasungu 31.8 87.2 5.5 7.3	100
Nkhotakota 69.2 93.9 4.1 2.0	100
Ntchisi 27.1 84.8 6.5 8.7	100
Dowa 28.3 94.8 1.7 3.5	100
Salima 35.4 22.6 71.7 5.7	100
Lilongwe Rural 29.1 79.7 12.7 7.6	100
Lilongwe City 47.9 93.2 5.3 1.5	100
Mchinji   47.9   93.2   5.3   1.5	100
· ·	
Dedza     27.9     89.1     5.0     5.9       Ntcheu     29.0     83.0     8.5     8.5	100
	100
Southern Region 39.9 88.9 5.7 5.3	100
Mangochi 49.9 94.1 4.4 1.5	100
Machinga 61.3 92.0 2.8 5.2	100
Zomba Rural 35.9 88.2 8.4 3.4	100
Zomba Municipality 68.3 95.3 0.9 3.7	100
Chiradzulu 17.5 81.8 3.0 15.2	100
Blantyre Rural 38.3 83.6 9.1 7.3	100
Blantyre City 43.5 87.2 8.0 4.8	100
Mwanza 17.9 95.8 4.2 0.0	100
Thyolo 25.0 88.5 6.4 5.1	100
Mulanje 29.4 70.1 16.5 13.4	100
Phalombe 39.6 87.3 7.3 5.5	100
Chikwawa 49.5 96.9 1.3 1.9	100
Nsanje 50.0 86.1 7.6 6.3	100
Balaka 47.1 77.4 7.1 15.5	100