# Health and Morbidity Status Survey- 2012 

## December 2013



Bangladesh Bureau of Statistics
Statistics and Informatics Division
Ministry of Planning
Government of the People's Republic of Bangladesh

## Cover design:

Mr. Md. Alamgir Hossain, Statistical Officer, Census Wing, BBS.
Cover Picture: Courtesy by straitstimes.com

## Compose and Format:

Mr. Md, Emdadul Haque, Deputy Director, Demography and Health Wing, BBS
Mr Md, Rafiqul Islam, Computer Operator, Census Wing, BBS.

## Published by:

Bangladesh Bureau of Statistics
December 2013

For further information: Please visit
www.bbs.gov.bd
Contact: dg@bbs.gov.bd

This book or any portion thereof cannot be copied, microfilmed or reproduced for any commercial purpose.
Data therein can however be used and published with acknowledgement of the source.


Air Vice Marshal (Rtd.) A K Khandker

Minister<br>Ministry of Planning<br>Government of the People’s Republic<br>of Bangladesh

I am delighted to know that Bangladesh Bureau of Statistics (BBS) has successfully completed the Health and Morbidity Status Survey (HMSS) 2012 which covered morbidity, treatment, maternal health and some other health related issues. Our democratic government is committed to ensure health for all and has endorsed highest priority for the improvement of the health situation of the citizen.

It is observed that non-communicable diseases like diabetes, heart disease, high blood pressure, cancer, arthritis are increasing in Bangladesh and these are becoming a great threat for sound health while communicable diseases like diarrhoea, dysentery, typhoid and malaria are under control.

I hope, the report will be a milestone and valuable document for users to work on the public health development process and the BBS will undertake such type of important surveys on a regular interval. It is worth mentioning that Bangladesh has shown overwhelming performances reducing high rates of maternal and child mortality and integrating post-natal care in rural areas providing health facilities at the local levels and reducing treatment costs under the government health care policy. The report will be useful for designing the country's health care policy more effectively and will help to achieve the goal of 'Health for All'. The report will also be helpful to the makers \& researchers who need health information frequently on different aspects to support policy undertaking and development.

I would like to express my thanks to Mr. Md. Nojibur Rahman, Secretary, Statistics and Informatics Division (SID), Ministry of Planning and Mr. Golam Mostafa Kamal, Director General, BBS for their active guidance and assistance in conducting the survey and bringing out this publication in time.


## Secretary

Statistics and Informatics Division Ministry of Planning
Government of the People's Republic
of Bangladesh

## FOREWORD

Health is a basic need of every individual and access to effective health care services is a fundamental right of every citizen of Bangladesh. In this context, Bangladesh Bureau of Statistics (BBS) has conducted Health and Morbidity Status Survey (HMSS) 2012 emphasizing some of the extended variables as demanded by the stakeholders. Therefore, the data on morbidity has become the most useful information to undertake preventive measures for achieving health and quality of lives where the entire population of the country could get better access to health facility.

It may be noted that this report covers a wide spectrum of maternal health, morbidity pattern and health seeking behaviour at different ages, coverage of vaccination, injury/accident and some other important issues on health. These indicators may serve as a reference guide to users for effective policy measures on health and morbidity. It will also help us to identify the areas where interventions are necessary to improve the reproductive health of women, combating HIV/AIDS and other diseases.

I hope the results of this survey will provide valuable inputs in addressing health issues properly and will facilitate in achieving some goals of MDGs. Findings of the survey by socio-demographic variables such as sex, age, and prevalence of morbidity, maternal health, types of birth attendant, antenatal care would be helpful in formulating policies for better health care services.

I express my sincere appreciation to Mr. Golam Mostafa Kamal, Director General of BBS and his colleagues for their endeavours in completion of this report successfully. My special thanks are also extended to the members of the Technical Committee headed by Professor Dr. Barkaat-e-Khuda of Dhaka University for their support and guidance in finalizing the report.


Director General Bangladesh Bureau of Statistics Dhaka

Bangladesh Bureau of Statistics (BBS) conducted the 'Health and Morbidity Status Survey (HMSS)' in 2012. The report provides selected health indicators on morbidity, treatment \& cost thereof, maternal health, vaccination and vitamin A coverage, impairments, accidents \& injuries, use of tobacco and intoxicating substance etc. The indicators will be useful for monitoring and evaluating the progress of Health, Population \& Nutrition Sector Development Programme (HPNSDP) and other interventions in the health sector.

BBS has been conducting the Health and Demographic Survey (HDS) since 1994. With the recommendation of the Technical Committee, the survey (HDS) has been renamed as Health and Morbidity Status Survey (HMSS) 2012. I firmly believe that considering the importance of the survey, it should be conducted on a regular interval.

The HMSS 2012 has been conducted with the Medium Term Budgetary Framework (MTBF) of the government and collected detailed information on health and morbidity.

I like to express my gratitude to the chairman of the Technical Committee, Professor Dr. Barkaat-eKhuda and other members for their contribution in analytical development of the report. I am grateful to the reviewers namely Ms. Tahmina Begum, Consultant, World Bank and Dr. Nurul Alam, Scientist, icddr,b who have provided valuable inputs for the enrichment of the report. I would like to extend my sincere thanks to Mr. Jafor Ahamed Khan, Director, Mr. Abdullah Harun Pasha, Ex-Director, Demography and Health Wing, Mr. Abul Kalam Azad, Local Consultant, Mr. Md. Emdadul Haque, Focal Point Officer \& Deputy Director and all other officials of BBS who contributed actively by involving themselves in various parts of the survey and make the survey successful.

Suggestions and comments for further improvement of the report are most welcome.

## ACKNOWLEDGEMENT

Health and Morbidity Status Survey (HMSS) has covered wide range of topics in the areas of population, health and demography. The survey has collected detail information on morbidity, treatment and treatment expenditure, health behavior, maternal and child health care, impairment, injury, accident and on tobacco/ intoxicating substance use. It has also collected information of knowledge on HIV/AIDS and TT.

I would like to express my profound regard and deep sense of gratitude to the Secretary, Statistics and Informatics Division and Director General, Bangladesh Bureau of Statistics who suggested numerous improvements to the survey completion. Their experience of various backgrounds, interest in and knowledge of the subject, helped to shape the text and codes into its final form.

I am also grateful to Mr. Jafor Ahmed Khan, Director, Mr. Abdullah Harun Pasha, former Director, BBS, Mr. Abul Kamal Azad, Consultant and the members of the working group for their various efforts to complete the survey.

I am indebted to the members of Technical Committee for providing technical inputs in finalizing questionnaire, methodology and the report. I would like to remember the contribution of the distinguished reviewers Dr. Nurul Alam, scientist, icddr,b, Ms. Tahmina Begum, consultant, World Bank and Mr. Ruhul Amin, former Deputy Director of BBS for their great contribution to enrich the draft report. I would like to offer special thanks to Mrs. Aziza Parvin, Director, Computer Wing and Mr. Karamat Ullah, Senior Programmer along his team for capturing data and also special thanks to Mr. Tahidul Islam, Deputy Director for his laborious effort to data cleaning and providing tables according to tabulation plan and thanks to S.M Anwar Husain, Statistical Investigator for Data Processing. Special thanks are due to Mrs. Jahan Afroja Begum, Statistical Officer, Mr. Md. Feroj-Evna-Yusuf, Statistical Officer, Mrs. Syeda Marufa Shaki, Statistical Officer, Mr. Lutfor Rahman, Assistant Statistical Officer, Mr. Munirul Islam, Assistant Statistical Officer, and other staff of the wing who worked hard in data editing, coding, preparing draft report. Finally I would like to thank all supervising officers especially the Regional Statistical Officers who worked hard during data collection to ensure data quality and also thanks to the Upazila Statistical Officers and other staff of BBS who worked as data collectors.

We tried our best to make the report user friendly. Any comments or suggestions for further improvement in the next round of the survey will be appreciated.
Md. Emdadul Haque

Deputy Director
\&
Focal Point Officer
Health and Morbidity Status Survey-2012

## Contents

MESSAGE ..... iii
FOREWORD .....
PREFACE ..... vii
ACKNOWLEDGEMENT ..... ix
LIST of ACRONYMS ..... xviii
CONCEPTS AND DEFINITIONS ..... xix
KEY FINDINGS ..... xxi
EXECUTIVE SUMMARY ..... xxv
CHAPTER-1 ..... 1
INTRODUCTION ..... 1
1.1 Background ..... 1
1.2 Rationale ..... 1
1.3 Objectives ..... 2
CHAPTER-2 ..... 3
METHODOLOGY ..... 3
2.1 Sample design ..... 3
2.2 Scope and coverage ..... 3
2.3 Questionnaire ..... 4
2.4 Enumerators, supervisor and trainers ..... 4
2.5 Supervision and quality control ..... 4
2.6 Data collection ..... 5
2.7 Data entry, processing and validation ..... 5
2.8 Data analysis and report writing ..... 5
2.9 Limitations ..... 5
CHAPTER-3 ..... 7
HOUSEHOLD AND POPULATION CHARACTERISTICS ..... 7
3.1 Age sex composition ..... 7
3.2 Average size of households ..... 9
3.3 Selected characteristics of households ..... 10
3.4 Current marital status: ..... 11
3.5 Level of education ..... 12
3.6 Preventive measures adopted against mosquito ..... 12
CHAPTER-4 ..... 13
MORBIDITY ..... 13
4.1 Introduction ..... 13
4.2 Counting of morbidity ..... 14
4.3 Morbidity of all ages ..... 14
4.4 Co-morbidity ..... 16
4.5 Morbidity over the years ..... 18
4.6 Prevalence of measles ..... 18
4.7 Prevalence of diarrhoea and dysentery ..... 19
4.8 Selected morbidities ..... 22
4.9 Morbidity by age group ..... 25
4.10 Infant ( $<1$ year) morbidity ..... 26
4.11 Child (under 2 years) morbidity ..... 27
4.12 Under five child (<5 years) morbidity ..... 27
4.13 Adolescent (10-19) morbidity ..... 30
4.14 Reproductive age (15-49 year) morbidity ..... 32
4.15 Working age (15-64 years) morbidity ..... 33
4.16 Elderly (64+ years) morbidity ..... 35
CHAPTER-5 ..... 37
TREATMENT STATUS ..... 37
5.1 Population reported morbidity ..... 37
5.2 Source of treatment ..... 40
5.3 Reasons for not seeking treatment ..... 41
5.4 Treatment cost. ..... 42
5.5 Morbidity consequences ..... 43
CHAPTER-6 ..... 47
MATERNAL HEALTH CARE ..... 47
6.1 Type of delivery ..... 47
6.2 Assistance during delivery ..... 48
6.3 Places of delivery ..... 49
6.4 Ante-natal care ..... 50
6.5 Post-natal care ..... 51
6.6 Average expenditure for ANC, PNC and delivery care ..... 52
6.7 TT coverage ..... 53
CHAPTER-7 ..... 55
VACCINATION AND VITAMIN-A COVERAGE. ..... 55
7.1 Vaccination of children. ..... 55
7.2 Coverage of vitamin-A capsule ..... 58
CHAPTER-8 ..... 59
KNOWLEDGE REGARDING HIV/AIDS, TT VACCINE \& NID ..... 59
8.1 Knowledge of HIV/AIDS ..... 59
8.2 Knowledge of prevention of HIV/AIDS ..... 60
8.3 Knowledge of TT doses ..... 61
8.4 Knowledge about NID ..... 61
CHAPTER-9 ..... 63
USE OF TOBACCO AND ABUSE OF INTOXICATING SUBSTANCE ..... 63
9.1 Tobacco users and intoxicating substance abuser (15+year) ..... 63
9.2 Age of initiation for tobacco users and intoxicating substance abuser ..... 66
9.3 Tobacco users by Division ..... 66
9.4 Average expenditure per day for using tobacco and intoxicating substance abuse ..... 67
CHAPTER-10 ..... 69
IMPAIRMENTS AND ACCIDENTS/ INJURY ..... 69
10.1 Impaired persons ..... 69
10.2 Rate of receiving care ..... 70
10.3 Average expenditure ..... 71
10.4 Injured persons ..... 72
10.5 Rate of receiving care of injured persons ..... 73
10.6 Average expenditure of treatment due to accident ..... 73
REFERENCES ..... 75
APPENDICES ..... 76
APPENDIX-A: STATISTICAL TABLES ..... 76
APPENDIX-B: COMPARISONS WITH OTHER SOURCES ..... 94
APPENDIX-C: TECHNICAL COMMITTEE ..... 96
APPENDIX-D: WORKING COMMITTEE ..... 97
APPENDIX-E: PERSONS INVOLVED ..... 98
APPENDIX-F: QUESTIONNAIRE ..... 99

## List of Table

Table 3.1: Percentage distribution of population by sex, age group and sex ratio ..... 08
Table 3.2: Distribution of population by age, residence, sex and division ..... 08
Table 3.3: Average size of households by division and residence ..... 09
Table 3.4: Percentage distribution of households by selected characteristics and residence ..... 10
Table 3.5: Current marital status of population by different age group ..... 11
Table 3.6: Level of education of population 5 years and above by sex and residence ..... 12
Table 3.7: Distribution of population by preventive measures taken against mosquitoes, sex and residence ..... 12
Table 4.3.1: Proportion and prevalence of morbidity of all ages from top 20 diseases by sex ..... 14
Table 4.3.2: Proportion of morbidity of selected diseases by asset quintile ..... 15
Table 4.3.3: Proportion of morbidity by division ..... 16
Table 4.4 Prevalence of co-morbidity per 1000 population by residence and sex, December, 2011- February 2012 ..... 17
Table 4.5 Comparison of proportion and prevalence of morbidity per 1000 population over the years ..... 18
Table 4.6: Prevalence of measles per 1000 population by age, sex and residence ..... 19
Table 4.7.1: Prevalence of diarrhoea and dysentery by sources of drinking water, excreta disposal facilities and residence, December, 2011- February 2012. ..... 20
Table 4.7.2: Prevalence of diarrhea and dysentery per 1000 population by sources of drinking water, excreta disposal facilities and age group, December, 2011- February 2012. ..... 21
Table 4.7.3 Prevalence of diarrhoea and dysentery per 1000 population by education and sex December, 2011- February 2012 ..... 22
Table 4.8.1: Proportion and prevalence of morbidity per 1000 population of the selected diseases by residence, December, 2011- February 2012 ..... 23
Table 4.8.2: Proportion and prevalence of morbidity per 1000 population by selected diseases by sex, December, 2011- February 2012 ..... 24
Table 5.1.1 Proportion of population reported morbidity by sex, age group and residence. ..... 37
Table 5.1.2 Rate of receiving treatment by age, sex and residence ..... 38
Table 5.1.3: Proportion of treatments received by type of treatment facility and sex. ..... 38
Table 5.1.4: Proportion of morbidity for which treatment received by type of health facility during last 90 days of the survey ..... 39
Table 5.1.5: Proportion of persons reported morbidity of different asset quintile received treatment from different health facility ..... 40
Table 5.2: Proportion of treatments received by source of treatment and sex. ..... 40
Table 5.3.1: Proportion of persons reported illness and not seeking treatment by reasons and sex. ..... 41
Table 5.3.2: Proportion of persons reported illness and not seeking treatment by reasons and asset quintile ..... 41
Table 5.4 Average expenditure per treatment by different types of services and types of health facilities ..... 42
Table 5.5.1: Percent of the persons reported illness needed to be hospitalized for illness, December, 2011- February 2012 ..... 43
Table 5.5.4: Average work days lost due to illness by morbidity, December, 2011- February 2012 ..... 45
Table 5.5.5: Average work days lost due to morbidity by activities and sex, December, 2011- February 2012 ..... 45
Table 6.2.1: Percentage distribution of birth attendants during delivery ..... 48
Table 6.2.2 Proportion of ever married women aged 15-49 year by birth attendant and maternal age group during last 1 year of the survey ..... 48
Table 6.2.3 Proportion of ever married women aged 15-49 year by birth attendant and asset quintile during last 1 year of the survey ..... 48
Table 6.3.1: Places of delivery by area of residence of married women aged 15-49 years ..... 49
Table 6.3.2: Proportion of ever married women aged 15-49 year asset quintile and place of delivery ..... 49
Table 6.4.2: Proportion of ever married women aged 15-49 years who gave birth during one year preceding the survey visited doctor for ANC by different asset quintile ..... 50
Table 6.5.2: Proportion of ever married women aged 15-49 year giving birth during one year preceding the survey visited for PNC by different asset quintile ..... 51
Table 6.5.3: Proportion of women aged 15-49 year giving birth during one year preceding the survey by birth attendant and birth order. ..... 52
Table 6.6.1: Average expenditure for ANC, PNC and delivery care. ..... 52
Table 6.6.2: Average expenditure for ANC, PNC, Normal and Caesarean delivery by type of delivery places ..... 53
Table 6.7 Percentage distribution of ever married women aged 15-49 year who received TT during their last pregnancy by residence ..... 53
Table 7.1.1: Children of 12-23 months who received specific vaccines by sex and residence ..... 55
Table 7.1.4: Children aged 12-23 months not covered with vaccination by reasons and division ..... 57
Table 7.2: Children aged 06-59 months who received vitamin-A capsule in the last NID by sex, residence and division ..... 58
Table 8.1.1: Knowledge of population aged 15-24 years on HIV/ AIDS by learning source by sex and residence (Multiple responses) ..... 59
Table 8.1.2: Knowledge of population aged 15-24 years on transmission mode of HIV/AIDS by sex and residence ..... 60
Table 8.2: $\quad$ Population aged 15-24 years by having the knowledge of prevention of HIV/AIDS, sex and residence ..... 60
Table 8.3: Percentage distribution of mothers with children 00-59 months having knowledge about TT doses for reproductive age by residence. ..... 61
Table 8.4: Percentage distribution of mothers with children 00-59 months having knowledge about NID for vaccination by division and residence ..... 61
Table 9.1.1: Rate of tobacco (smoking and smokeless) users and intoxicating substance abuser (15+ years) by sex and residence ..... 63
Table 9.1.3: Percentage distribution of smokers, smokeless tobacco users and intoxicating substance abusers by level of education ..... 65
Table 9.2: Proportion of Smokers, Smokeless Tobacco users and intoxicating substance abusers by age of initiation and by sex (\%) ..... 66
Table 9.3: Tobacco (smoking + smokeless) users by division and sex (\%). ..... 66
Table 9.4: Average expenditure per day for using tobacco and narcotics by sex. ..... 67
Table 10.1.1: Prevalence of physically or mentally impaired persons by sex, residence and division ..... 69
Table 10.1.2: Prevalence of impaired persons by type of difficulties, sex and residence ..... 70
Table 10.2: Rate of receiving care of impaired persons from any provider by residence and type of difficulty for last 3 months ..... 70
Table 10.3: Average expenditure of treatment recipients by types of impairment ..... 71
Table 10.4.1 Prevalence of injured persons per 1000 population by types of injury and sex ..... 72
Table 10.4.2: Prevalence of injured person by place of accident and residence ..... 72
Table 10.5.1: Rate of receiving care of injured persons by type of treatment providers, sex and residence ..... 73
Table 10.6.1: Average expenditure per treatment recipient due to accident by sex and residence, December, 2011-February 2012 ..... 73
Table 10.6.2: Average expenditure per treatment recipient due to accident by sex and injury, December, 2011-February 2012 ..... 74
Table P-1: Percentage distribution of population by age group and sex (Barisal Division) ..... 76
Table P-2: Percentage distribution of population by age group, sex (Chittagong Division) ..... 76
Table P-3: $\quad$ Percentage distribution of population by age group and sex (Dhaka Division) ..... 77
Table P-4: Percentage distribution of population by age group and sex (Khulna Division) ..... 77
Table P-5: Percentage distribution of population by age group and sex (Rajshahi Division) ..... 78
Table P-6: Percentage distribution of population by age group and sex (Sylhet Division). ..... 78
Table I-1: $\quad$ Nature of accident by sex and residence (\%) ..... 79
Table I-2: Type of transport/vehicles by which the accident occurred (\%). ..... 79
Table M-1 Proportion (\%) and prevalence of morbidity per 1000 population by sex and selected age groups ..... 80
Table M-2: Proportion (\%) and prevalence (Per 1000 population) of morbidity from communicable and non- communicable diseases by sex ..... 80
Table M-4: Proportion and prevalence of infant ( $<1$ year) morbidity per 1000 population from the selected diseases. ..... 81
Table M-5: Proportion and prevalence of child ( $<2$ year) morbidity per 1000 population by sex from the selected diseases ..... 82
Table M-6: Proportion and prevalence of morbidity per 1000 under five ( $<5$ year) children from the selected diseases by sex. ..... 83
Table M-7: Proportion and prevalence of morbidity per 1000 population of the adolescents (10-19 year) from the selected diseases by sex. ..... 85
Table M-8: Proportion and prevalence of morbidity from the selected diseases of women of reproductive age (15-49 year) ..... 87
Table M-9: Proportion (\%) and prevalence of morbidity of per 1000 working age (15-64 year) population from the selected diseases by sex ..... 89
Table M-10: Proportion (\%) and prevalence of morbidity per 1000 population of the elderly persons (64+year) from the selected diseases by sex. ..... 91
Table V-1: Percentage of children age 12-23 months fully immunized by sex, residence and division ..... 93
Table V-2: Percentage of children age 12-23 months who received specific vaccines by division. 93Table V-3: Percentage of children age 12-23 months who received specific vaccines by sex anddivision93
Table C-1: Female population 15 years and above by marital status and age group ..... 94
Table C-2: Comparison of prevalence of morbidity per 1000 population between HMSS/2012 and HDS/2000 ..... 94
Table C-3: Prevalence of morbidity per 1000 children (<2 year) from selected diseases ..... 95
Table C-4: Mothers received TT during last pregnancy. ..... 95
Table C-5: Assistance by doctor during delivery ..... 95
Table C-6: Knowledge about mode transmission of HIV/AIDS of population aged 15-24 years ..... 95
Table C-7: Antenatal care received by the pregnant women ..... 95

## List of Figures

Fig 4.9.1: Prevalence of morbidity per 1000 population by age group and sex, December, 2011- February 2012 ..... 25
Fig 4.9.2: Prevalence of morbidity per 1000 population by age group and residence, December, 2011- February 2012 ..... 25
Fig 4.10: Prevalence of morbidity per 1000 infants by sex, December, 2011- February 2012. ..... 26
Fig $4.11 \quad$ Prevalence of morbidity (top 10 diseases) per 1000 children (under 2 Years) by sex, December, 2011- February 2012 ..... 27
Fig 4.12.1 Prevalence of morbidity (top 10 diseases) per 1000 under five children by sex, December, 2011- February 2012 ..... 28
Fig 4.12.2 Prevalence of morbidity (top 10 diseases) per 1000 under five children by residence, December, 2011- February 2012 ..... 29
Fig 4.13.1 Prevalence of morbidity (top 10 diseases) per 1000 adolescents ( $10-19$ years) by sex, December, 2011- February 2012 ..... 30
Fig 4.13.2 Prevalence of morbidity (top 10 diseases) per 1000 adolescents (10-19 years) by residence, December, 2011- February 2012. ..... 31
Fig 4.14: Prevalence of morbidity (top 10 diseases) per 1000 females of reproductive ages (15-49 year) by residence, December, 2011- February 2012. ..... 32
Fig 4.15.1 Prevalence of morbidity (top 10 diseases) per 1000 working age population (15-64 years) by sex, December, 2011- February 2012 ..... 33
Fig 4.15.2 Prevalence of morbidity (top 10 diseases) per 1000 working age population (15-64 years) by sex and residence, December, 2011- February 2012. ..... 34
Fig 4.16.1 Prevalence of morbidity (top 10 diseases) per 1000 elderly population (64+ years) by sex, December, 2011- February 2012 ..... 35
Fig 4.16.2: Prevalence of morbidity (top 10 diseases) per 1000 elderly population (64+ years) by residence, December, 2011- February 2012 ..... 36
Fig 5.5.3: Days needed to cure from morbid condition of top 10 diseases by sex, December, 2011- February 2012 ..... 44
Fig 6.1: $\quad$ Percentage distribution of type of delivery by area of residence during last one year of the survey ..... 47
Figure 6.4.1: Visit for ante-natal care and by types of delivery ..... 50
Figure 6.5.1: Visit for post-natal care by types delivery ..... 51
Fig 7.1.2: $\quad$ Children of 12-23 months who received all vaccines by divisions and residence (\%). ..... 56
Fig 7.1.3: Children of 12-23 months received all vaccines by divisions and sex (\%). ..... 57

## LIST of ACRONYMS

| AIDS | $:$ | Acquired Immune Deficiency Syndrome |
| :--- | :---: | :--- |
| ARI | $:$ | Acute Respiratory Infection |
| BBS | $:$ | Bangladesh Bureau of Statistics |
| BDHS | $:$ | Bangladesh Demography and Health Survey |
| CDC | $:$ | Communicable Disease Control |
| DECO | $:$ | Data Entry Control Operator |
| EPI | $:$ | Extended Programme for Immunization |
| ESP | $:$ | Essential Service Package |
| FYP | $:$ | Five Year Plan |
| FUO | $:$ | Fever with Unknown Origin |
| GOB | $:$ | Government of Bangladesh |
| HDS | $:$ | Health and Demographic Survey |
| HH | $:$ | Household |
| HIV | $:$ | Human Immune Virus |
| HMSS | $:$ | Health and Morbidity Status Survey |
| HNPSP | $:$ | Health, Nutrition and Population Sector Programme |
| HPN | $:$ | Heatth, Population and Nutrition |
| HPNSDP | $:$ | Health, Population and Nutrition Sector Development Programme |
| HPSP | $:$ | Health and Population Sector Programme |
| IMPS | $:$ | Integrated Multi Purpose Sample |
| JSA | $:$ | Junior Statistical Assistant |
| MDG | $:$ | Millennium Development Goal |
| MoH \& FW | $:$ | Ministry of Health and Family Welfare |
| MTBF | $:$ | Mid Term Budgetary Framework |
| NGO | $:$ | Non-Government Organization |
| NID | $:$ | National Immunization Day |
| NIPORT | $:$ | National Institute of Population Research \& Training |
| NIPSOM | $:$ | National Institute of Preventive and Social Medicine |
| NSO | $:$ | National Statistical Organization |
| PSU | $:$ | Primary Sampling Unit |
| SA | $:$ | Statistical Assistant |
| SI | $:$ | Statistical Investigator |
| SMA | $:$ | Statistical Metropolitan Area |
| SVRS | $:$ | Sample Vital Registration System |
| SWAp | $:$ | Sector-wide Approach |
| TC | $:$ | Technical Committee |
| TT | $:$ | Tetanus Toxoid |
| USO | $:$ | Upazila Statistical Officer |
|  |  |  |

## CONCEPTS AND DEFINITIONS

## Household:

A household is defined as a single person or group of persons related or unrelated to living together and taking food from the same kitchen.

## Household Head:

The member of the household who is responsible for managing the family and is recognized by the members of the household to be their head.

## Primary Sampling Unit (PSU):

The initial area defined and selected for enumeration is called the first stage sample or primary sampling unit. For IMPS design the mauza was selected as a PSU for rural and the mahallah for urban areas.

## Prevalence:

Prevalence is defined as the number of affected persons present in the population at a specific time divided by the number of persons in the population at that time.

## Period Prevalence:

Period prevalence is defined as how many people have had the disease at any time during a certain period. In this report prevalence refers to period prevalence.

## Period Prevalence of morbidity per 1000 :

(No. of cases of a disease at any time during a certain period in the population /No. of persons in the population at that specified time) $\times 1000$

## Proportion:

A part considered in relation to the whole.

## Penta :

Combination of vaccines namely DPT= Diphtheria, Pertussis and Tetanus, Hep B= Hepatitis B, Hib= Haemophilus Influenzae type b.

## Comorbidity:

The existence of two or more diseases or conditions in the same individual at the same time.

## KEY FINDINGS

## A. Population and Household Characteristics

Preventive measures adopted against mosquito among population

| Use of bed net | $96.2 \%$ |
| :--- | ---: |
| Use of coil and others | $3.2 \%$ |
| Use of Nothing | $0.6 \%$ |

Average bed room space per HH

| National | 178 sq feet |
| :--- | ---: |
| Rural | 181 sq feet |
| Urban | 168 sq feet |

## HHs taken loan for different item

| Food item | $19 \%$ |
| :--- | :--- |
| Non- food item | $28 \%$ |

HHs from the nearest health facilities

| Within 1 km | $12.1 \%$ |
| :--- | :--- |
| 1 to 4 km | $73.0 \%$ |

B. Morbidity

Ranking according to prevalence of morbidity per 1000 population

| Disease | Rank | Prevalence |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  |  | Total | Male | Female |
| Fever (FUO) | 1 | 52.5 | 50.9 | 54.2 |
| Arthritis | 2 | 14.0 | 10.9 | 17.1 |
| Peptic Ulcer | 3 | 13.4 | 12.1 | 14.8 |
| High Blood Pressure | 4 | 12.4 | 10.5 | 14.4 |
| Dysentery | 5 | 8.3 | 9.1 | 7.5 |
| Diabetes | 6 | 7.8 | 7.7 | 8.0 |
| Diarrhoea | 7 | 6.6 | 6.4 | 6.7 |
| Acute respiratory infection | 8 | 4.9 | 5.4 | 4.3 |
| Skin Disease | 9 | 4.3 | 4.4 | 4.2 |
| Conjunctivitis | 10 | 4.2 | 3.3 | 5.0 |

## Prevalence of morbidity per 1000 infants ( $<1$ year)

| Acute respiratory infection (ARI) | 72 |
| :--- | :---: |
| Diarrhoea | 35 |
| Measles | 22 |

Prevalence of morbidity per 1000 children (<2 years)

| ARI | 62 |
| :--- | :--- |
| Diarrhoea | 44 |
| Measles | 16 |

Prevalence of morbidity per 1000 children (<5 years)

| ARI | 40 |
| :--- | :---: |
| Diarrhoea | 29 |
| Measles | 10 |

Prevalence of morbidity per 1000 elderly population (64+ years)

| Arthritis | 77 |
| :--- | :---: |
| High blood pressure | 52 |
| Diabetes | 36 |

## Treatments received by types of treatment facility

| Government | $22.0 \%$ |
| :--- | ---: |
| Private | $68.9 \%$ |
| NGO | $1.7 \%$ |
| Abroad | $0.2 \%$ |
| Others | $7.3 \%$ |

C. Maternal Health

Types of delivery

| Normal | $83.6 \%$ |
| :--- | :--- |
| Caesarean | $16.4 \%$ |

## Types of birth attendants

| Doctor/ Nurse | $31.5 \%$ |
| :--- | :--- |
| Others | $68.5 \%$ |

## Places of delivery

| Health care facility | $31.4 \%$ |
| :--- | :--- |
| Home | $68.6 \%$ |

## Ante natal care

| No consultation with doctor | $21 \%$ |
| :--- | ---: |
| More than 4 times consultation with doctor | $22 \%$ |
| Average expenditure for Ante-natal care | Tk. 1187 |

## Post natal care

| No consultation with doctor | $39 \%$ |
| :--- | ---: |
| Mothers with caesarean delivery consulted more than 4 times | $14 \%$ |
| Mothers with normal delivery consulted more than 4 times | $8 \%$ |
| Average expenditure for Post-natal care | Tk. 1017 |

D. Coverage of vaccination by doses among children (12-23 months)

| BCG | $88 \%$ |
| :--- | :--- |
| Measles | $79 \%$ |
| All vaccines | $70 \%$ |

## Coverage of vaccination among children (12-23 months)

| Highest in Rajshahi Division | $81 \%$ |
| :--- | :--- |
| Lowest in Sylhet Division | $61 \%$ |

## E. Tobacco users among population aged 15 years and above

| Total | $33.5 \%$ |
| :--- | :--- |
| Smoking | $19.8 \%$ |
| Smokeless tobacco | $16.8 \%$ |

## Distribution of tobacco (smoking + smokeless) users by Division

Highest in Sylhet Division 44.8\%
Lowest in Rajshahi Division
28.9\%

Average expenditure per day per capita for using tobacco and intoxicating substance

| Sex | Per day average expenditure (Tk) |  |  |  |
| :--- | ---: | ---: | ---: | :---: |
|  | smoking | intoxicating substance | smokeless tobacco |  |
| Male | 16.27 | 34.57 | 5.56 |  |
| Female | 8.48 | 11.87 | 4.47 |  |
| Total | 15.76 | 31.05 | 4.90 |  |

F. Knowledge of population aged 15 - $\mathbf{2 4}$ regarding HIV/AIDS

Sources of learning about HIV/AIDS (Multiple responses)

| Television | $61 \%$ |
| :--- | :--- |
| Educational Institution | $22 \%$ |
| Radio | $21 \%$ |
| Billboard/poster | $13 \%$ |
| Relatives/ Friends | $17 \%$ |

Don't know about

| Mode of transmission of HIV/AIDS | $13 \%$ |
| :--- | :--- |
| Preventive measures of HIV/AIDS | $17 \%$ |

Prevalence of impaired persons per 1000 population

| Total | 7.2 |
| :--- | :---: |
| Highest in Barisal Division | 8.7 |
| Lowest in Rangpur Division | 3.3 |

## G. Injury/accident

Prevalence of injured persons per 1000 population

| Total | 7.0 |
| :--- | :---: |
| Male | 9.3 |
| Female | 4.6 |
| Prevalence of severe burn per 1000 population |  |
| Male | 0.2 |
| Female | 0.3 |

## EXECUTIVE SUMMARY

## Introduction

The survey on Health and Morbidity Status was conducted by Bangladesh Bureau of Statistics (BBS) in 2012 under the development programme of Medium Term Budgetary Framework (MTBF). Initially the name of the survey was Health and Demographic Survey. Considering the subject matters of the survey, members of the technical committee proposed to rename it. Henceforth, the competent authority agreed to rename it as Health and Morbidity Status Survey (HMSS) 2012.

The survey has collected detailed information on morbidity, treatment and treatment expenditures, health behaviour, maternal and child health care, use of tobacco/intoxicating substance, impairment, and injury/accident. It has also collected information about the conception on HIV/AIDS and TT. The findings of the survey will be helpful to monitor the progress of various initiatives implemented by Government for achieving the targets of MDGs in health sector.

## Survey period \& sample size

The survey was conducted throughout the country since $26^{\text {th }}$ February, 2012 and continued up to $06^{\text {th }}$ March, 2012 using IMPS design of BBS. IMPS design was comprised of 1000 Primary Sampling Units (PSUs) of which 640 were in the rural and 360 were in the urban areas. Each PSU comprised around 250 households .Thirty households were selected from each of the PSU following systematic random sampling technique. Thus a total number of 30,000 HHs were covered in the survey where 19200 were from rural and 10800 from urban areas.

## Findings

Morbidity status:
The prevalence of overall morbidity per 1000 population of all ages during last 90 days of the survey in 2012 was 186 and in 2000 it was 188. That is, overall morbidity remains almost same from 2000 to 2012.

In 2012, the prevalence of morbidity per 1000 population of the age group $15-29$ year was 96.1 and it was the lowest among different age groups. Males were more morbid compared to females from infant to the age of 14 . After the age of 14 , females were more morbid than males. Morbidity declined from infant to age group 15-29 and after that it increased with the increase of ages for both sexes. For all the age groups, morbidity among urban people was more compared to rural people.

According to prevalence, fever (FUO) was highest in ranking and its prevalence per 1000 population was 52.2. There was an increasing trend in non-communicable diseases like arthritis, diabetes, high blood pressure, heart diseases, cancer etc. over the years. In 2000, the prevalence of arthritis, diabetes, heart disease and cancer per 1000 population was $4.7,2.7,1.6$ and 0.4 and those in 2012 was 14.0, $7.8,3.3$ and 0.6 respectively.

Arthritis was $2^{\text {nd }}$ in ranking and its prevalence per 1000 population was $14.0 .3^{\text {rd }}, 4^{\text {th }}$ and $5^{\text {th }}$ highest prevalence per 1000 population belonged to peptic ulcer, high blood pressure and dysentery respectively. Prevalence of high blood pressure in urban areas (20.2) was almost double compared to that in rural area (10.1). Diabetes in urban area (15.6) also occurred almost double than that in rural area (7.8). Prevalence of asthma \& heart disease was also higher in urban areas compared to rural areas. The prevalence of diarrhoea per 1000 population decreased from 14.0 in 1994 to 6.6 in 2012.

Proportion of most of the diseases was higher among persons with lowest asset quintile and usually it had a decreasing trend among the people with upper asset quintiles. The opposite scenario existed for non-communicable diseases like diabetes, high blood pressure and cancer. The proportion of diabetes was $41.9 \%$ among persons of the highest asset quintile and in the lowest asset quintile it was $10.3 \%$. Proportion of high blood pressure and cancer among persons of highest asset quintile was $32.4 \%$ and $32.6 \%$ respectively.

Prevalence of co-morbidity per 1000 population was 52.3 . It was higher in urban areas (60.8) compared to that of rural areas (49.7). In all age group except 80 and above co-morbidity was higher in urban areas compared to rural areas. Overall co-morbidity existed more in female compared to male in both urban and rural areas.

Prevalence of measles among 1000 infants ( $<1$ year) was 22 where it was 27.6 among males and 16.2 among females. It is remarkable that as the minimum age of receiving the vaccine of measles is 9 month., prevalence was very high among the infants.

In under five child ( $<5$ years) age group, all the 10 top diseases had higher prevalence in male compared to female. Prevalence of fever per 1000 children under 5 years was 59.1 followed by acute respiratory infection, diarrhoea, dysentery and measles with the prevalence of39.8, 28.5, 14.0, 9.7 respectively.

In reproductive age group of women, fever (FUO) was highest with prevalence of 56.4 per 1000 where $2^{\text {nd }}, 3^{\text {rd }}$ and $4^{\text {th }}$ highest prevalence belonged to peptic ulcer, high blood pressure and arthritis with prevalence of $15.0,13.1$ and 12.7 respectively.

In the working age group (15-64 year), fever (FUO) had the highest prevalence with 55.9 per 1000 of where peptic ulcer, arthritis and high blood pressure had the $2^{\text {nd }}, 3^{\text {rd }}$ and $4^{\text {th }}$ highest prevalence with 18.7, 15.8 and 15.8 respectively.

Arthritis, high blood pressure, diabetes and cataract had the prevalence 76.9, 52.1, 36.4 and 31.1 respectively per 1000 elderly population (64+ year). Prevalence of tuberculosis was 3.4 (where it was 5.5 in male and 1.2 in female). Prevalence of both high blood pressure and diabetes were higher in male compared to those in female. But prevalence of arthritis per 1000 population was higher in females (91.0) than that in males (63.7).

## Treatment status

For the last 90 days of the survey, about $69 \%$ treatments were received from private institute and 22\% from govt. institute. About $62 \%$ treatments from doctor and $3.6 \%$ from homeopathic doctor. More than $20 \%$ treatments were received from pharmacy/dispensary worker/compounder and others. Average expenditure per treatment recipient for all visits for 3 months in the Govt. health facilities was Tk. 1047 whereas it was Tk. 1057 in private health facilities, Tk. 727 in NGO and Tk. 5944 in health facilities in abroad. Rate of hospitalization for females was lower compared to males in both rural and urban areas.

## Maternal health care

About $83.6 \%$ deliveries were normal and $16.4 \%$ were caesarean among the women aged 15-49 year who gave birth during the last one year of the survey. In rural areas, $87.4 \%$ deliveries were normal and $12.6 \%$ were caesarean. In urban areas about one-third (30.7\%) deliveries were caesarean. About $69 \%$ deliveries of ever married women aged 15-49 year during last 1 year of the survey occurred at home. In the rural areas home deliveries were about $74 \%$ and these were about $50 \%$ in urban areas. About $14 \%$ deliveries were in Govt. hospital, $15 \%$ were in private hospital and $2 \%$ were in NGO health care centre.

About 21.2\% deliveries of ever married women aged 15-49 year during the last one year of survey were attended by doctors, $10.3 \%$ by nurse, $36.2 \%$ by trained midwives and $3.3 \%$ by health workers, $14.0 \%$ by untrained midwives and $15.0 \%$ by others.

For more than $80 \%$ deliveries of ever married women aged 15-49 during last 1 year of the survey living in lowest and $2^{\text {nd }}$ lowest asset quintile, were taking place at home. About $50 \%$ deliveries of the mothers of the same age living in highest asset quintile happened in health care institutes.

It is observed that there was a negative correlation between birth order and birth attendants as doctor or nurse. With the higher birth order there was a trend of attending more untrained birth attendants during deliveries.

In all three stages ante-natal, delivery and post-natal care cost in urban area was higher than that in rural area. Average expenditure for ante-natal care was Tk. 1187 whereas it was Tk. 1021 in rural area and Tk. 1814 in urban area. Average expenditure for delivery care in case of cesarean Tk. 13032 and in case of normal delivery the cost was Tk.1251. The expenditure for caesarian delivery in rural area was Tk. 12535 and Tk. 13804 in urban area. For normal delivery the average expenditure in rural area was Tk. 1097 while in urban area it was Tk. 1982. On an average post-natal care in rural area was Tk. 889 and in urban area it was Tk. 1503.

## Use of tobacco

About $33.5 \%$ population ( $15+$ year) used tobacco where $44.3 \%$ were male and $23 \%$ were female. More people in rural area (35.3\%) used tobacco than people in urban areas (27.8\%). Rate of smokers was $19.8 \%$ and the rate of smokeless tobacco (tobacco leaf, zarda, gull) users was $16.8 \%$. More male were engaged in smoking and in abusing intoxicating substance. Rate of smoking, smokeless tobacco and intoxicating substance abusing was higher in rural compared to urban area. Smokeless tobacco users were more among females (20.2\%) compared to male users (13.4\%).

## Knowledge of HIV/AIDS

Most of the people aged 15-24 years knew about HIV/AIDS through Television (61\%). Only 17\% people of that age knew about preventive measures of HIV/AIDS.

## Coverage of vaccination

Coverage of all vaccines among children of 12-23 months was $70 \%$ where BCG was $88 \%$. Vaccination coverage was highest in Rajshahi division (81\%) and lowest in Sylhet division (61\%) in 2012.

## Impaired persons

Prevalence of impaired persons per 1000 population was 7.2 and it was 7.3 in rural and 6.8 in urban areas. Male were more impaired compared to females in both national and in rural areas but in urban areas females were more impaired than males. Prevalence of impaired persons per 1000 population was the highest in Barisal division (8.7) while it was the lowest in Rangpur division (3.3).

## Injury/ Accident

Prevalence of injured persons per 1000 population for 3 months preceding to the survey was 7.0 whereas prevalence of male injured was 9.3 and that of female was 4.6. Prevalence of severe type of injury/wound per 1000 was 1.2 where it was 1.8 for male and 0.6 for female and the proportion of severe type of injured/wounded persons among the all injured persons was $17 \%$. Other than burn, in all types of injury males were more injured than females.

## CHAPTER-1 INTRODUCTION

### 1.1 Background

Bangladesh Bureau of Statistics (BBS) has conducted the Health and Demographic Survey under a development project entitled "Health and Demographic Survey" (HDS) from 1994 to 1998. The survey collected detailed information on fertility, mortality, morbidity, disability, treatment and treatment expenditure, contraceptive prevalence, health behavior, perception and practices of maternal and child health care. From the findings of the surveys, BBS has published 25 reports and 15 monographs and also developed a database on health and demographic information. But due to financial constraint the project activities were discontinued after 1998. After two year's gap, in the year 2000, a Health and Demographic Survey was conducted to fulfill the demand of Ministry of Health and Family Welfare (MOH \& FW). The objectives of the "HDS-2000" were to provide relevant information for effective implementation of the Essential Service Package (ESP) of the MOH \& FW. With introduction and development of Health, Nutrition and Population Sector Programme (HNPSP), it was also decided that the future HDS would include some more indicators related to HNPSP. After 2000, no such survey was conducted. Initially, the name of the survey was Health and Demographic Survey-2012. With the recommendation of technical committee, the competent authority has renamed it as Health and Morbidity Status Survey-2012 and the report as Health and morbidity Status Report-2012.

### 1.2 Rationale

Government of Bangladesh has given the highest priority to achieve the goals of Millennium Development Goal (MDG) and pursuing a series of programme and policies to reduce infant and under 5 children mortality, maternal mortality, ensure safe delivery and so on. The government's policy document entitled "Unlocking the Potential" National Strategy for Accelerated Poverty Reduction has also given priority for improvement of health through increased investment in health sector in the light of MDG.

Bangladesh has been implementing sector-wide approach (SWAp) in the Health, Population and Nutrition (HPN) sector since 1998. The first SWAp the HPSP was implemented during 1998-2003 while the second programme (HNPSP) was implemented during 2003 to 2011. The third SWAp started in July 2011. The framework of HPNSDP (2011-2016) is set against the broader perspective of the GOB's commitments (Constitution, MDGs, Vision 2021, the proposed National Health Policy and the National Population Policy, National Food and Nutrition Policy) and other programmes and the Sixth Five Year Plan ( $6^{\text {th }}$ FYP) of GOB.

In order to provide the health services to the people properly, detailed information on health and demographic situation of the country needs to be collected on a regular basis particularly data on morbidity, impairment, maternal health, use of tobacco and injury/accidents are urgently needed to make appropriate policies for achieving the targets of HPNSDP and MDG.

Bangladesh Bureau of Statistics, the National Statistical Organization (NSO) of the government is the appropriate organization for collecting, compiling and disseminating statistics on health and demographic aspects of the population. In order to update the findings of the previous surveys, Health and Morbidity Status Survey-2012 has been conducted from the Mid Term Budgetary Framework (MTBF) of the Government budget and collected detailed information on morbidity, treatment, treatment expenditure, maternal health, vaccination \& vitamin-A coverage, use of tobacco and intoxicating substance, knowledge regarding HIV/AIDS at the disaggregated level.

The survey is continuous in nature and must be continued periodically to develop and update a database that could provide indicators to monitor and evaluate the progress of the latest development of HPNSDP and MDG. The survey will also facilitate to undertake appropriate policy measures by the government to reduce morbidity and to improve maternal health with the objective of Health for all by the year 2016.

The survey results will provide the current scenario of health status which will evaluate the exact development activities of the government interventions undertaken under the HPNSDP.

### 1.3 Objectives

The main objective of the survey is to monitor the progress of the various initiatives taken by the Government of Bangladesh to reach the health related MDG's by producing data on health and demographic indicators.

The specific objectives of the survey are:

- To show current morbidity and health status specially for infants, adolescents, youths, reproductive ages and elderly persons;
- $\quad$ To develop a database on health situation in the country regarding the burden of diseases;
- $\quad$ To know about tobacco \& intoxicating substance use and also about injury/accident.


## CHAPTER-2 <br> METHODOLOGY

### 2.1 Sample design

Bangladesh Bureau of Statistics (BBS) has developed an Integrated Multi-Purpose Sample (IMPS) design to conduct various demographic and socio-economic surveys based on Population and Housing Census 2001. This survey has been conducted throughout the country using IMPS design of BBS. IMPS design comprised of 1000 Primary Sampling Unit (PSU) of which 640 are in the rural areas and 360 in the urban areas. Each PSU comprises around 250 households is updated on a regular basis under Sample Vital Registration System (SVRS) programme.

### 2.2 Scope and coverage

For Health and Morbidity Status Survey-2012 (HMSS-12), thirty households (HHs) were selected for enumeration from each PSU through systematic random sampling method and 10 more households were kept reserve in each PSU to replace of households which were found absent or abolished during survey period. Thus a total number of $30,000 \mathrm{HHs}$ were covered in the survey where 19200 were from rural areas and 10800 from urban areas. Using the data of the Population Census-2011, projected households for the survey period (March, 2012) is estimated. With this estimated households and sample household sampling weights are calculated for rural, urban and divisions. Accordingly rural, urban and division level estimates are produced.

## Distribution of $\mathbf{1 0 0 0}$ PSUs and sample HHs by division and residence were as follows.

| Division | PSU in IMPS and HMSS-12 |  | Sample HHs |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | National | Rural | Urban | National | Rural | Urban |
| Barisal | 80 | 55 | 25 | 2400 | 1650 | 750 |
| Chittagong | 179 | 116 | 63 | 5370 | 3480 | 1890 |
| Dhaka | 289 | 172 | 117 | 8670 | 5160 | 3510 |
| Khulna | 146 | 89 | 57 | 4380 | 2670 | 1710 |
| Rajshahi | 134 | 88 | 46 | 4020 | 2640 | 1380 |
| Rangpur | 117 | 82 | 35 | 3510 | 2460 | 1050 |
| Sylhet | 55 | 38 | 17 | 1650 | 1140 | 510 |
| Total | $\mathbf{1 0 0 0}$ | $\mathbf{6 4 0}$ | $\mathbf{3 6 0}$ | $\mathbf{3 0 0 0 0}$ | $\mathbf{1 9 2 0 0}$ | $\mathbf{1 0 8 0 0}$ |

## Estimation of sampling weight by division and residence

| Division | Total HHs in 2012 |  |  | Sample HHs in 2012 |  |  | Sampling weight |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | National | Rural | Urban | National | Rural | Urban | National | Rural | Urban |
| Barisal | 1947842 | 1627255 | 320587 | 2400 | 1650 | 750 | 811.6 | 986.2 | 427.4 |
| Chittagong | 5995126 | 4468317 | 1526809 | 5370 | 3480 | 1890 | 1116.4 | 1284.0 | 807.8 |
| Dhaka | 11637406 | 7726380 | 3911026 | 8670 | 5160 | 3510 | 1342.3 | 1497.4 | 1114.3 |
| Khulna | 3936135 | 3215280 | 720855 | 4380 | 2670 | 1710 | 898.7 | 1204.2 | 421.6 |
| Rajshahi | 4757590 | 3905531 | 852059 | 4020 | 2640 | 1380 | 1183.5 | 1479.4 | 617.4 |
| Rangpur | 4045170 | 3508029 | 537141 | 3510 | 2460 | 1050 | 1152.5 | 1426.0 | 511.6 |
| Sylhet | 1906623 | 1606131 | 30049 | 1650 | 1140 | 510 | 1155.5 | 1408.9 | 589.2 |
| Total | $\mathbf{3 4 2 2 5 8 9}$ | $\mathbf{2 6 0 5 6 9 2 3}$ | $\mathbf{8 1 6 8 9 6 9}$ | $\mathbf{3 0 0 0 0}$ | $\mathbf{1 9 2 0 0}$ | $\mathbf{1 0 8 0 0}$ | $\mathbf{1 1 4 0 . 9}$ | $\mathbf{1 3 5 7 . 1}$ | $\mathbf{7 5 6 . 4}$ |

The last HDS conducted in 2000 had some differences with the current one held in 2012. HDS-2000 was conducted in 372 PSUs of the IMPS of that time where 252 were from rural and 120 were from urban areas. The data collection period was from $24^{\text {th }}$ August to $2^{\text {nd }}$ September 2000 . So the reference period (previous 90 days) for morbidity of chronic illness covered the rainy season and for acute illnesses the reference period was the last 14 days. The questionnaire was divided into four schedules. Information of schedules 2,3,4 regarding disability, occurrence of birth, occurrence of death were collected from around 250 HHs in each PSU and schedule -1 regarding population and household characteristic, current fertility, morbidity was conducted in 30 sample households in each PSU. The total households covered in HDS- 2000 for morbidity were 11219 and in HMSS-2012 total 30000 households were covered for all sections of the questionnaire.

### 2.3 Questionnaire

The questionnaire consists of four sections and each section comprises sub-sections. In section one demographic characteristics of the household members like vaccination of children, knowledge of TT injection, impairments, injury, tobacco and knowledge of HIV/AIDS were included with eight subsections. Section two consists of Socio-economic characteristics of household with eighteen questions. Section three comprises of seven subsections with information regarding health condition of members of the household during 90 days preceding of the survey. Section four covers with the information related to maternal health care. The questionnaire used for the survey is presented at appendix-F

### 2.4 Enumerators, supervisor and trainers

Experienced BBS staff was engaged as enumerators for the survey. Deputy Directors /Regional Statistical Officers/Statistical Officers/Programmers/ Upazila Statistical Officers were appointed as trainers of the enumerators as well as supervisors of a district. The training of the trainers was held during 21-01-2012 to 25-01-2012 at the headquarters from a group of master trainers consisted of the high officials from Ministry of Health and Family Welfare (NIPSOM, NIPORT, EPI Programme) and BBS. After receiving training, the trainers provided training to the enumerators (USO/SI/SA/JSA/DECO) for each enumeration area at district headquarters during 17-02-2012 to 21-02-2012. During training at each level it strictly followed practices of interview directly at the household through field visit.

### 2.5 Supervision and quality control

Strong supervision and control measures were taken during the field work of the survey to ensure quality of enumeration. To supervise the works of every district one supervisor was engaged. The required numbers of 64 supervisors were selected from the experienced and efficient officers of Bangladesh Bureau of Statistics both from headquarters and field level. Moreover, senior officers like Directors, Focal Point Officer from the HQ of BBS visited and supervised the data collection and the Regional Statistical Officers were also responsible for ensuring quality of data in their respective regions.

### 2.6 Data collection

The data were collected through direct interview method. Only the selected 30 households of each PSU were interviewed by the enumerators. The enumerators collected information from the head of the household, eligible, responsible member, selected male or female persons of the respective sections. Field operation of the survey was carried out throughout the country during $26^{\text {th }}$ February to $06^{\text {th }}$ March 2012. The reference period for morbidity, injury/accident, physically or mentally impairment was the last 90 days. As the reference period covers only winter season, morbidity data are dominated with winter season related morbidity.

### 2.7 Data entry, processing and validation

All the filled in questionnaires received at the head quarter were edited and coded. Data processing work was completed by Computer Wing using Customized Software (CSpro), SPSS, STATA. The survey questionnaires is a long type questionnaire, consisted of interlinked four sections and twelve sub-sections which needed to cross inter relational consistency checking. A comprehensive data entry programme with necessary validity check was developed and tested for data entry by the computer wing of BBS. A batch of well-trained and experienced data entry operators were engaged to capture data into computer. The entered data were edited manually from the filled in questionnaire and also by a computer edit programme and made error free and consistent for cross-classification. Necessary tabulations were produced and inter-table consistency was verified.

### 2.8 Data analysis and report writing

A draft tabulation plan was prepared and developed through several meetings with a Technical Working Group, chaired by Deputy Director General of BBS .The members of this group were all Directors and senior level resource persons of BBS. Prior to survey and after getting the data, tables were generated accordingly. After receiving the final tables, data were properly analyzed and a draft survey report was produced before the Technical Committee (TC). The formation of the Technical Committee is annexed at Annexure-C.

### 2.9 Limitations

The data were collected during Feb-26 to March-6 of 2012 using the reference period of previous 90 days from the day of interview. As the reference period covers only winter season, morbidity data are dominated by illnesses related to cold. Since the disease pattern varies from season to season over the year, to overcome the effect of seasonal variation it is needed to conduct the survey through the whole year like Household Income and Expenditure Survey. Interviewers had no medical knowledge to identify the morbidity properly, but there was an effort to overcome it by incorporating some supplementary questions in the questionnaire. For making estimates of mortality due to accident is not successful as it is a rare event and the sample size is not enough to be representative. Mothers not getting TT during last pregnancy do not mean that they are at risk, because some of them might have completed TT dose before their last pregnancy and this information is not covered in this questionnaire. Options in some questions (for example, purpose of loan, source of micro credit, nature of accidents, types of transport by which accidents occurred) were not sufficient to cover most of the probable answers and as a result, big figures came in the option 'others'. To collect data on smoking and intoxicating substance abusing as the sensitive issues, some special arrangements needed to be adopted and in front of other family members the data might be underestimated. As the prevalence of intoxicating abusers is very low, the sample size should be larger.

## CHAPTER-3 HOUSEHOLD AND POPULATION CHARACTERISTICS

Only dwelling households were interviewed in the survey. A household was defined as a person or a group of persons or a family living in a house and taking food cooked together. A household might occupy more than one house or more than one household might reside in a house.

All the usual members of a dwelling household were eligible in this survey. The members who were not absent from the household for more than six months for various purposes were treated as members of the household. Relatives, residential tutors, housekeepers stayed for more than six months in a household were also treated as members of the household.

Head of the household, or spouse of the head of the household or relevant person of the household for specific issue were the respondents of the survey. If the relevant person was unreachable after several visits then the alternative respondents were the household head or the member who knew better.

In this chapter age sex composition of the population, distribution of respondents, distribution of households with some selected characteristics, distribution of population with level of education, marital status, preventive measures adopted against mosquito are presented.

### 3.1 Age sex composition

Size of population, its growth and age-sex structure have manifold socio-economic and demographic implications. Current age- sex structure observed in any population is the result of past trends in fertility, mortality and migration. On the other hand, age-sex composition and socio-economic variables have significant effect on fertility, mortality, nuptiality. The current age structure of Bangladesh population is young; i.e. about 32.5 percent of population is under age 15. In this section, average size of households as well as some selected characteristics of households has been provided.

Table 3.1: Percentage distribution of population by sex, age group and sex ratio.

| Age group (in year) | Total (\%) | Male (\%) | Female (\%) | Sex ratio |
| :---: | :---: | :---: | :---: | :---: |
| $00-04$ | 9.1 | 9.3 | 9.0 | 103.3 |
| $05-09$ | 11.4 | 11.5 | 11.3 | 101.3 |
| $10-14$ | 12.0 | 12.4 | 11.6 | 107.4 |
| $15-19$ | 10.0 | 10.9 | 9.2 | 117.7 |
| $20-24$ | 9.0 | 8.6 | 9.3 | 92.9 |
| $25-29$ | 8.0 | 7.5 | 8.6 | 86.6 |
| $30-34$ | 6.8 | 6.2 | 7.4 | 83.3 |
| $35-39$ | 6.6 | 6.0 | 7.1 | 83.7 |
| $40-44$ | 6.2 | 6.0 | 6.3 | 96.1 |
| $45-49$ | 5.2 | 5.6 | 4.7 | 117.9 |
| $50-54$ | 4.8 | 4.6 | 5.0 | 92.4 |
| $55-59$ | 3.6 | 3.8 | 3.4 | 112.3 |
| $60-64$ | 2.5 | 2.7 | 2.4 | 113.3 |
| $65-69$ | 1.8 | 1.9 | 1.7 | 10.5 |
| $70-74$ | 1.4 | 1.5 | 1.4 | 108.0 |
| $75-79$ | 0.8 | 0.9 | 0.7 | 82.8 |
| $80 \&$ more | 0.9 | 0.8 | 1.0 | $\mathbf{9 9 . 0}$ |
|  | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{9 9 . 7}$ |
| Total | $\mathbf{1 3 7 7 3 7}$ | $\mathbf{6 8 7 7 9}$ |  |  |
| Number of population |  |  |  |  |

In the table 3.2, population of the survey are distributed by age group, sex, residence and by division. Such background information is helpful to interpret the findings and understand the results presented later.

Table 3.2: Distribution of population by age, residence, sex and division

| Age in <br> year | National |  |  | Rural |  |  |  |  | Urban |
| :--- | ---: | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| $<1$ | 2403 | 1220 | 1183 | 1613 | 799 | 814 | 790 | 421 | 369 |
| $01-04$ | 9910 | 5040 | 4870 | 6681 | 3389 | 3292 | 3229 | 1651 | 1578 |
| $05-09$ | 15425 | 7773 | 7652 | 10474 | 5261 | 5213 | 4951 | 2512 | 2439 |
| $10-14$ | 16337 | 8422 | 7915 | 11011 | 5733 | 5278 | 5326 | 2689 | 2637 |
| $15-19$ | 13857 | 7436 | 6421 | 9008 | 4958 | 4050 | 4849 | 2478 | 2371 |
| $20-24$ | 12392 | 5961 | 6431 | 7930 | 3889 | 4041 | 4462 | 2072 | 2390 |
| $25-29$ | 11184 | 5169 | 6015 | 6940 | 3236 | 3704 | 4244 | 1933 | 2311 |
| $30-34$ | 9458 | 4294 | 5164 | 5872 | 2618 | 3254 | 3586 | 1676 | 1910 |
| $35-39$ | 9206 | 4183 | 5023 | 5689 | 2578 | 3111 | 3517 | 1605 | 1912 |
| $40-44$ | 8611 | 4237 | 4374 | 5379 | 2607 | 2772 | 3232 | 1630 | 1602 |
| $45-49$ | 7196 | 3907 | 3289 | 4501 | 2415 | 2086 | 2695 | 1492 | 1203 |
| $50-54$ | 6618 | 3202 | 3416 | 4268 | 2005 | 2263 | 2350 | 1197 | 1153 |
| $55-59$ | 4961 | 2640 | 2321 | 3288 | 1721 | 1567 | 1673 | 919 | 754 |
| $60-64$ | 3524 | 1881 | 1643 | 2291 | 1203 | 1088 | 1233 | 678 | 555 |
| $65-69$ | 2429 | 1273 | 1156 | 1636 | 860 | 776 | 793 | 413 | 380 |
| $70-74$ | 1920 | 993 | 927 | 1318 | 680 | 638 | 602 | 313 | 289 |
| $75-79$ | 1090 | 586 | 504 | 765 | 431 | 334 | 325 | 155 | 170 |
| $80 \&$ more | 1216 | 562 | 654 | 840 | 402 | 438 | 376 | 160 | 216 |

## Division

| Barisal | 11365 | 5724 | 5641 | 7902 | 3988 | 3914 | 3463 | 1736 | 1727 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Chittagong | 27337 | 13568 | 13769 | 18186 | 9047 | 9139 | 9151 | 4521 | 4630 |
| Dhaka | 39439 | 19540 | 19899 | 23834 | 11802 | 12032 | 15605 | 7738 | 7867 |
| Khulna | 18558 | 9368 | 9190 | 11495 | 5842 | 5653 | 7063 | 3526 | 3537 |
| Rajshahi | 16825 | 8409 | 8416 | 10980 | 5495 | 5485 | 5845 | 2914 | 2931 |
| Rangpur | 15402 | 7802 | 7600 | 10857 | 5529 | 5328 | 4545 | 2273 | 2272 |
| Sylhet | 8811 | 4368 | 4443 | 6250 | 3082 | 3168 | 2561 | 1286 | 1275 |
| Total | $\mathbf{1 3 7 7 3 7}$ | $\mathbf{6 8 7 7 9}$ | $\mathbf{6 8 9 5 8}$ | $\mathbf{8 9 5 0 4}$ | $\mathbf{4 4 7 8 5}$ | $\mathbf{4 4 7 1 9}$ | $\mathbf{4 8 2 3 3}$ | $\mathbf{2 3 9 9 4}$ | $\mathbf{2 4 2 3 9}$ |

### 3.2 Average size of households

The table 3.3 presents the average size of HH calculated from Population and Housing Census 2011 and this survey. In this survey, the average size of HH is 4.6 and it is 4.7 in rural and 4.5 in urban areas. The corresponding HH size in population census, 2011 is 4.4, 4.4 and 4.3 respectively. Average HH size is highest in Sylhet (5.4) and lowest in Rajshahi (4.2).

Table 3.3: Average size of households by division and residence

| Division | Average size of households |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | National | Rural | Urban | Source |
|  | 4.8 | 4.8 | 4.6 | HMSS-2012 |
| Chittagong | 4.5 | 4.5 | 4.4 | Population Census-2011 |
|  | 5.1 | 5.2 | 4.8 | HMSS-2012 |
| Dhaka | 5.0 | 5.1 | 4.9 | Population Census-2011 |
|  | 4.6 | 4.6 | 4.5 | HMSS-2012 |
| Khulna | 4.3 | 4.4 | 4.2 | Population Census-2011 |
| Rajshahi | 4.3 | 4.3 | 4.1 | HMSS-2012 |
|  | 4.2 | 4.2 | 4.1 | Population Census-2011 |
| Rangpur | 4.2 | 4.2 | 4.2 | HMSS-2012 |
|  | 4.1 | 4.1 | 4.1 | HMSS-2012 |
| Sylhet | 4.4 | 4.4 | 4.3 | Population Census-2011 |

### 3.3 Selected characteristics of households

Some selected characteristics of households found in the survey are presented in the table 3.4. According to this survey, average bed room space per household was 178 square feet. In the rural area it was 181 and in the urban area it was 168 square feet.

More than $22 \%$ HHs fully consumed their vegetables grown up at their own premises, $6.8 \% \mathrm{HHs}$ consumed these partially, $0.2 \% \mathrm{HHs}$ sold these and $48.9 \% \mathrm{HHs}$ did not grow vegetables in their premises.

More than $19 \%$ HHs had loan for food item and about $28 \%$ HHs borrowed loan for non-food items during the last 3 months of the survey. More than $15 \%$ HHs received any financial or food assistance from safety net programmes of the government during last one year of the survey.

For nonfood items, about $14 \%$ HHs received loan for agriculture, about $8 \%$ for treatment followed by construction or repairing house (7.5\%). Among the HHs which had micro credit, 20.1\% got from Grameen Bank, 18.4\% from ASA, 10.9\% from BRAC, 4.8\% from Govt. organization and 45.8\% from others.

About $12 \% \mathrm{HHs}$ had the health facility within 1 kilometer and $73 \% \mathrm{HHs}$ had health facilities within 1 to 4 km and about $4 \% \mathrm{HHs}$ had no health facility within 8 km .

Table 3.4: Percentage distribution of households by selected characteristics and residence

| Selected characteristics | National | Rural | Urban |
| :--- | :---: | :---: | :---: |
| Residential facilities |  |  |  |
| Avg. bed room space (sq. ft) | 178 | 181 | 168 |
| Avg. residents ( per bed room) | 2.4 | 2.4 | 2.2 |
| Avg. no. of rooms ( per household) | 2.5 | 2.4 | 2.6 |
| Avg. no. of bed rooms (per household) | 1.9 | 1.9 | 2.0 |
| Use of vegetables grown in own premises |  |  | 11.0 |
| Fully consumed | 22.3 | 25.8 | 1.8 |
| Partially consumed | 6.8 | 8.4 | 0.2 |
| Fully sold | 0.2 | 0.2 | 24.7 |
| Others | 21.8 | 20.8 | 13.3 |
| Not applicable | 48.9 | 21.2 | 21.6 |
| Received loan for <br> food items (last 3 months) | 19.4 | 29.8 | 7.3 |
| Received loan for non- <br> food items (last 3 months) | 27.9 | 17.9 |  |
| Received any govt. financial/food assistance <br> under safety net programme (last 1 year) | 15.4 |  |  |

Loan/ assistance
Purpose of loan (non-food items) (last 3 months)

| Treatment | 7.9 | 7.9 | 7.8 |
| :--- | :---: | :---: | :---: |
| Education | 4.5 | 4.7 | 4.1 |
| Construction or repairing house | 7.5 | 7.8 | 6.5 |
| Social festival/programme | 2.7 | 2.6 | 2.8 |
| Agriculture | 14.4 | 17.0 | 7.7 |
| Others | 63.0 | 60.0 | 73.1 |
| Source of micro credit |  |  | 4.6 |
| Govt. organization | 4.8 | 4.9 | 13.4 |
| Grameen Bank | 20.1 | 7.2 |  |
| BRAC | 10.9 | 21.8 | 21.0 |
| ASA | 18.4 | 53.8 |  |
| Others | 45.8 | 17.9 |  |
| Distance from HHs to nearest health care centres | 43.7 | 14.4 |  |
| $<1$ kilometer | 12.1 | 11.3 | 76.4 |
| 01 to 04 km | 73.0 | 72.0 | 0.3 |
| $05-08$ km | 11.2 | 12.2 | 0.9 |
| 09 km and more | 3.7 | 4.6 |  |

### 3.4 Current marital status:

Table 3.5 shows that $34 \%$ of the population aged 10 and above were never married, about $60 \%$ were currently married and about $6 \%$ were widowed/separated/ divorced. In the age group of 10-14, currently married were $0.7 \%$, never married were $99.1 \%$ and among $15-19$ age group $13.5 \%$ were currently married and $85.9 \%$ were never married. Percentage of widowed persons increased with the increase of the age.

Table 3.5: Current marital status of population by different age group.

| Age group <br> (In year) | Marital Status ( In Percentage) |  |  |  |  |  | Total | Number of <br> population |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Never <br> married | Currently <br> married | Widowed | Divorced | Separated |  |  |  |  |
| $10-14$ | 99.1 | 0.7 | 0.2 | 0.0 | 0.0 | 100 | 16337 |  |
| $15-19$ | 85.9 | 13.5 | 0.3 | 0.3 | 0.0 | 100 | 13857 |  |
| $20-24$ | 47.0 | 51.7 | 0.4 | 0.7 | 0.1 | 100 | 12392 |  |
| $25-29$ | 18.8 | 79.4 | 0.7 | 0.9 | 0.3 | 100 | 11184 |  |
| $30-34$ | 5.9 | 91.8 | 1.2 | 0.8 | 0.3 | 100 | 9458 |  |
| $35-39$ | 1.8 | 95.2 | 2.0 | 0.7 | 0.3 | 100 | 9206 |  |
| $40-44$ | 1.2 | 93.9 | 3.7 | 0.8 | 0.4 | 100 | 8611 |  |
| $45-49$ | 1.0 | 92.1 | 5.9 | 0.6 | 0.4 | 100 | 7196 |  |
| $50-54$ | 0.8 | 87.2 | 11.0 | 0.6 | 0.5 | 100 | 6618 |  |
| $55-59$ | 0.9 | 81.7 | 16.3 | 0.6 | 0.5 | 100 | 4961 |  |
| $60-64$ | 0.8 | 75.2 | 22.9 | 0.7 | 0.4 | 100 | 3524 |  |
| $65-69$ | 0.9 | 67.7 | 30.7 | 0.3 | 0.4 | 100 | 2429 |  |
| $70-74$ | 1.1 | 60.9 | 37.2 | 0.4 | 0.4 | 100 | 1920 |  |
| $75-79$ | 0.9 | 56.5 | 42.2 | 0.1 | 0.2 | 100 | 1090 |  |
| $80 \&$ more | 1.5 | 41.7 | 56.2 | 0.2 | 0.4 | 100 | 1216 |  |
| Total | $\mathbf{3 4 . 0}$ | 59.6 | 5.6 | $\mathbf{0 . 5}$ | $\mathbf{0 . 2}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 9 9 9 9}$ |  |

### 3.5 Level of education

According to table 3.6, about $29 \%$ male of the age of 5 years and above had not passed any class of school and among female it was about $35 \%$. It is seen in the table that up to class 9 , male and female were almost same. But among male about $9 \%$ and among female about $7 \%$ completed SSC. This difference (3.3\%) between male and female increased more in higher education.

Table 3.6: Level of education of population 5 years and above by sex and residence

|  | Class passed |  |  |  |  |  |  | National |  | Rural |  | Urban |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female |  |  |  |  |  |  |  |
| No schooling | 28.5 | 35.4 | 31.0 | 38.1 | 20.4 | 26.5 |  |  |  |  |  |  |  |
| Primary incomplete (I-IV) | 22.1 | 20.2 | 23.0 | 20.9 | 19.1 | 17.8 |  |  |  |  |  |  |  |
| Primary complete (V) | 12.6 | 12.2 | 13.1 | 12.5 | 11.0 | 11.2 |  |  |  |  |  |  |  |
| Junior <br> (VI-VII) | Secondary incomplete | 8.2 | 8.9 | 8.5 | 9.2 | 8.6 |  |  |  |  |  |  |  |
| Jr. Secondary complete (VIII) | 5.5 | 6.1 | 5.4 | 5.7 | 6.0 | 7.2 |  |  |  |  |  |  |  |
| Secondary incomplete (IX) | 6.8 | 6.9 | 6.5 | 6.4 | 7.7 | 8.5 |  |  |  |  |  |  |  |
| Secondary complete (X) | 9.3 | 6.8 | 8.2 | 5.3 | 13.2 | 11.5 |  |  |  |  |  |  |  |
| Higher <br> (XII+) | Secondary and above | 6.6 | 3.3 | 4.2 | 1.8 | 14.5 |  |  |  |  |  |  |  |
| Others | 0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 |  |  |  |  |  |  |  |

### 3.6 Preventive measures adopted against mosquito

From the table 3.7 it is seen that $96.2 \%$ population used bed nets to protect themselves against mosquito, another $2.9 \%$ use mosquito coil and $0.6 \%$ population did not adopt any preventive measure against mosquito.

Table 3.7: Distribution of population by preventive measures taken against mosquitoes, sex and residence


## CHAPTER-4 MORBIDITY

### 4.1 Introduction

The data on any acute, chronic or simple morbid conditions are collected interviewing the household members. Thirty one diseases were selected to ask and few major symptoms of respective diseases were put in the questionnaire to be confirmed about the diseases if the respondents could not show the prescription done by any medical doctor. Beyond these 31 diseases there was an option of other diseases. The reference period for this part was the previous 90 days of data collection. As the data collection period was 26 February to 6 March, 2012 the reference period covers only winter season and as a result morbidity due to cold dominated over the common diseases. So the period prevalence of morbidity of this report does not represent the general scenario of the whole year. In this report the prevalence is used as period prevalence and the period prevalence means how many people have had the disease at any time during a certain period (in this survey the period was December, 2011 to February, 2012).

Data on morbidity have been displayed in tables and also shown in graphs for selected age and risk groups such as infant and child, women of reproductive age, young, adults and the elderly people. After capturing data it is found that prevalence of diseases marked as others is very high. Then revisiting the filled in questionnaires manually it was observed that fever was reported with a very high frequency in the option of the diseases 'other'. Then the fever was recoded and found with highest prevalence. Some other diseases like heart disease also recoded from the other option. As the fever was stated according to the respondents' knowledge, no other symptoms were mentioned, it was mentioned as fever (FUO- fever with unknown origin).

During the reference period all different morbidities of person were recorded in the questionnaire. If more than one morbid person during the reference period were found in a household then extra questionnaires for this part needed to be filled in.

Names of thirty one diseases that were asked for morbidity during the reference period and were verified with some specific symptoms are: Measles, Dysentery, Goitre, Epilepsy, Rabies, Chicken pox, Conjunctivitis, Night blindness, Cataract, Arthritis, Tuberculosis, Malaria, Kala-azar, Peptic ulcer, Hepatitis-b, Diabetes, High Blood Pressure, Urinary Tract Infection, Sexually Transmitted Diseases, Arsenic affected diseases, Tetanus, Pregnant Related Complications, Newborn Complications, Acute Respiratory Infection, Mumps, Whooping Cough, Diphtheria, Infection in ears, Skin Disease, Cancer/ Malignancy and Diarrhoea. The experts emphasized on knowing the prevalence of the above mentioned diseases and included in the questionnaire. Prevalence of other important diseases were calculated by recoding them as all other diseases happened during the reference period were recorded in the option "other morbidity".

### 4.2 Counting of morbidity

Reports of more than one disease were marked and tabulated as multiple responses. When the reported diagnosis/disease was only one, it was recorded as single response. More than one disease recorded for a person in the reference period was considered as co-morbidity. At best three diseases during reference period were recorded for a person.

### 4.3 Morbidity of all ages

In the table 4.3, proportion and prevalence of morbidity of all ages for top 20 diseases are described. Prevalence of fever (FUO) per 1000 population was 52.5 which highest in ranking and its proportion were $28.3 \%$. Arthritis was $2^{\text {nd }}$ in ranking and its prevalence per 1000 was $14.0 \&$ proportion $7.5 \% .3^{\text {rd }}$, $4^{\text {th }}$ and $5^{\text {th }}$ highest prevalence per 1000 belonged to peptic ulcer, high blood pressure and dysentery respectively.

Table 4.3.1: Proportion and prevalence of morbidity of all ages from top 20 diseases by sex

| Selected diseases |  | Proportional morbidity (\%) |  | Prevalence of morbidity (Per 1000) |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Rank | Total | Male | Female | Total | Male | Female |
| Fever (FUO) | 1 | 28.3 | 29.2 | 27.6 | 52.5 | 50.9 | 54.2 |
| Arthritis | 2 | 7.5 | 6.3 | 8.7 | 14.0 | 10.9 | 17.1 |
| Peptic Ulcer | 3 | 7.3 | 7.0 | 7.5 | 13.4 | 12.1 | 14.8 |
| High blood Pressure | 4 | 6.7 | 6.0 | 7.3 | 12.4 | 10.5 | 14.4 |
| Dysentery | 5 | 4.5 | 5.2 | 3.8 | 8.3 | 9.1 | 7.5 |
| Diabetes | 6 | 4.2 | 4.4 | 4.1 | 7.8 | 7.7 | 8.0 |
| Diarrhoea | 7 | 3.5 | 3.7 | 3.4 | 6.6 | 6.4 | 6.7 |
| Acute respiratory Infection | 8 | 2.6 | 3.1 | 2.2 | 4.9 | 5.4 | 4.3 |
| Skin Disease | 9 | 2.3 | 2.5 | 2.1 | 4.3 | 4.4 | 4.2 |
| Conjunctivitis | 10 | 2.2 | 1.9 | 2.6 | 4.2 | 3.3 | 5.0 |
| Asthma | 11 | 2.1 | 2.4 | 1.8 | 3.9 | 4.2 | 3.6 |
| Heart disease | 12 | 1.8 | 2.0 | 1.7 | 3.3 | 3.4 | 3.2 |
| Cataract | 13 | 1.8 | 1.7 | 1.9 | 3.3 | 3.0 | 3.7 |
| Hepatitis-b | 14 | 1.5 | 1.9 | 1.2 | 2.8 | 3.4 | 2.3 |
| Measles | 15 | 1.4 | 1.4 | 1.4 | 2.6 | 2.4 | 2.8 |
| Whooping cough | 16 | 1.4 | 1.8 | 1.0 | 2.5 | 3.1 | 2.0 |
| Influenza | 17 | 1.2 | 1.3 | 1.0 | 2.2 | 2.3 | 2.0 |
| Urinary Tract Infection | 18 | 1.0 | 0.9 | 1.1 | 1.9 | 1.5 | 2.3 |
| Migraine | 20 | 1.0 | 0.7 | 1.2 | 1.8 | 1.3 | 2.3 |
|  | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 8 6}$ | $\mathbf{1 7 4}$ | $\mathbf{1 9 7}$ |  |

Proportion of most of the diseases was higher among persons with lowest asset quintile and usually it had a decreasing trend among the people with upper asset quintiles as is found in table 4.3.2. The opposite scenario existed for non-communicable diseases like diabetes, high blood pressure and cancer. The proportion of diabetes was $41.9 \%$ among persons of the highest asset quintile and in the lowest asset quintile it was $10.3 \%$. Proportion of high blood pressure and cancer among persons of highest asset quintile was $32.4 \%$ and $32.6 \%$ respectively.

Table 4.3.2: Proportion of morbidity of selected diseases by asset quintile

| Morbidity | Asset quintile (\%) |  |  |  |  |  | Number of morbidity |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Lowest | Second | Middle | Forth | Highest | Total |  |
| Measles | 23.9 | 20.4 | 21.7 | 23.8 | 10.2 | 100 | 361 |
| Dysentery | 29.4 | 24.4 | 16.8 | 17.2 | 12.2 | 100 | 1137 |
| Goitre | 22.4 | 20.7 | 25.7 | 20.8 | 10.4 | 100 | 114 |
| Epilepsy | 23.0 | 26.0 | 17.2 | 16.2 | 17.6 | 100 | 95 |
| Rabies | 24.2 | 24.3 | 19.1 | 19.9 | 12.5 | 100 | 38 |
| Chicken pox | 30.9 | 22.7 | 19.4 | 15.6 | 11.5 | 100 | 194 |
| Night blindness | 38.5 | 19.3 | 18.0 | 15.5 | 8.8 | 100 | 148 |
| Arthritis | 32.4 | 19.3 | 17.9 | 17.1 | 13.2 | 100 | 1923 |
| Tuberculosis | 28.0 | 23.2 | 17.1 | 19.4 | 12.3 | 100 | 132 |
| Malaria | 36.9 | 20.8 | 18.2 | 17.4 | 6.7 | 100 | 194 |
| Kala-azar | 29.3 | 22.4 | 21.9 | 21.3 | 5.1 | 100 | 159 |
| Peptic Ulcer | 31.9 | 21.4 | 17.3 | 17.5 | 11.9 | 100 | 1829 |
| Hepatitis-b | 32.5 | 21.3 | 16.2 | 21.1 | 9.0 | 100 | 387 |
| Diabetes | 10.3 | 8.7 | 12.2 | 26.9 | 41.9 | 100 | 1222 |
| High blood Pressure | 20.0 | 13.0 | 13.7 | 20.9 | 32.4 | 100 | 1896 |
| Urinary tract infection | 26.1 | 19.2 | 20.6 | 16.4 | 17.7 | 100 | 260 |
| Tetanus | 29.1 | 18.8 | 2.8 | 18.6 | 30.7 | 100 | 31 |
| New born problem | 11.6 | 31.0 | 22.2 | 22.9 | 12.2 | 100 | 15 |
| Acute respiratory infection | 28.8 | 22.3 | 17.5 | 18.3 | 13.1 | 100 | 657 |
| Mumps | 28.2 | 15.6 | 28.0 | 9.3 | 19.0 | 100 | 64 |
| Whooping cough | 35.5 | 22.2 | 16.6 | 13.8 | 11.8 | 100 | 366 |
| Diphtheria | 19.1 | 36.7 | 35.7 | 0.0 | 8.6 | 100 | 10 |
| Skin disease | 24.4 | 20.4 | 20.6 | 20.0 | 14.5 | 100 | 573 |
| Cancer/Malignancy | 15.8 | 14.9 | 15.7 | 21.1 | 32.6 | 100 | 90 |
| Diarrhoea | 30.5 | 21.7 | 17.9 | 16.4 | 13.5 | 100 | 910 |
| Fever | 13.9 | 23.8 | 25.7 | 18.7 | 17.7 | 100 | 7285 |
| Asthma | 19.4 | 20.6 | 21.5 | 16.8 | 21.7 | 100 | 547 |
| Heart disease | 12.0 | 20.5 | 22.1 | 24.9 | 20.5 | 100 | 478 |
| Kidney disease | 17.7 | 20.1 | 24.1 | 17.6 | 20.5 | 100 | 118 |
| Typhoid | 17.7 | 25.8 | 25.5 | 16.2 | 14.8 | 100 | 186 |
| Migraine | 15.1 | 21.6 | 23.8 | 23.1 | 16.4 | 100 | 256 |
| Tumour | 15.8 | 20.2 | 29.1 | 23.2 | 11.6 | 100 | 143 |
| Paralysis | 19.4 | 27.1 | 21.1 | 14.5 | 17.9 | 100 | 108 |
| Low Blood Pressure | 16.8 | 24.6 | 29.0 | 15.5 | 14.0 | 100 | 106 |
| Hernia | 15.1 | 26.3 | 29.0 | 12.4 | 17.2 | 100 | 34 |
| Influenza | 14.4 | 30.5 | 23.2 | 16.1 | 15.8 | 100 | 292 |
| Back pain | 20.6 | 27.3 | 20.0 | 18.8 | 13.2 | 100 | 157 |
| Gallbladder stone | 20.4 | 37.0 | 13.5 | 17.2 | 11.9 | 100 | 34 |
| Stroke | 19.5 | 15.4 | 13.1 | 24.0 | 27.9 | 100 | 30 |
| Appendicitis | 15.6 | 21.2 | 33.7 | 15.4 | 14.1 | 100 | 59 |
| Mental Disorder | 25.8 | 17.6 | 16.8 | 19.8 | 19.9 | 100 | 35 |
| Hepatic/Liver Diseases | 25.2 | 36.4 | 15.0 | 16.1 | 7.3 | 100 | 20 |
| Oedema | 13.5 | 35.7 | 21.7 | 21.7 | 7.4 | 100 | 30 |
| Abscess | 10.0 | 48.5 | 7.7 | 24.7 | 9.1 | 100 | 19 |
| Abdominal pain | 23.3 | 24.4 | 25.7 | 15.9 | 10.7 | 100 | 141 |
| Tonsils | 18.8 | 30.4 | 17.2 | 19.3 | 14.3 | 100 | 44 |
| Total morbidity | 21.7 | 21.5 | 20.3 | 18.7 | 17.8 | 100 | 25924 |

In the table 4.3.3, it is seen that among the total morbidity, $34.7 \%$ were in Dhaka division which was highest and in Sylhet it was lowest (4.8\%). In Dhaka, Rangpur and Sylhet division male were reported more morbidity compared to female.

Table 4.3.3: Proportion of morbidity by division

|  | Division | Proportion of morbidity (\%) |  |
| :--- | :---: | ---: | ---: |
|  | Total | Male | Female |
| Barisal | 4.9 | 4.4 | 5.4 |
| Chittagong | 14.0 | 13.9 | 14.1 |
| Dhaka | 34.7 | 34.8 | 34.7 |
| Khulna | 15.1 | 14.7 | 15.5 |
| Rajshahi | 12.5 | 12.5 | 12.5 |
| Rangpur | 13.8 | 14.6 | 13.2 |
| Sylhet | 4.8 | 5.2 | 4.5 |
| Total | 100 | 100 | 100 |

### 4.4 Co-morbidity

From the table 4.4 it is observed that prevalence of co-morbidity per 1000 population was 52.3 . It was higher in urban areas (60.8) compared to that of rural areas (49.7). In all age group except 80 and above co-morbidity was higher in urban areas compared to rural areas. Overall co-morbidity existed more in female compared to male in both urban and rural areas. The table also shows that comorbidity was high among the infants, and then it decreased up to age 14. After that co-morbidity again increased with the increase of age up to age of 79 . In the rural areas up to the age of 19 , comorbidity was higher among male compared to female, then up to the age of 54 co-morbidity in female was higher compared to male. In the urban areas, from the age of 10 to 59, co-morbidity in female existed more compared to male.

Table 4.4 Prevalence of co-morbidity per 1000 population by residence and sex, December, 2011- February 2012


### 4.5 Morbidity over the years

Comparison of proportion and prevalence of morbidity over the years are shown in table 4.5. There is an increasing trend in non-communicable diseases like arthritis, diabetes, high blood pressure, heart diseases, cancer etc. over the years. In 2000, the prevalence of arthritis, diabetes, heart disease and cancer per 1000 population was $4.7,2.7,1.6$ and 0.4 and those in 2012 was $14.0,7.8,3.3$ and 0.6 respectively.

Prevalence of diarrhoea and anemia per 1000 population decreased from 14.0 in 1994 to 6.6 in 2012. Prevalence of tuberculosis per 1000 population was same in 1994 and 2012 but in 2000 it was 0.9 . Prevalence of whooping cough and measles was also found higher in 2012 compared to 2000.

Table 4.5 Comparison of proportion and prevalence of morbidity per 1000 population over the years

| Selected diseases | Proportional morbidity <br> (Per 1000 population) |  |  | Prevalence of morbidity |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | HDS-1994 | HDS 2000 | HMSS 2012 | HDS 1994 | HDS 2000 | HMSS 2012 |
| Diarrhoea | 7.7 | 5.0 | 3.5 | 14.0 | 9.4 | 6.6 |
| Goitre | 0.1 | 0.1 | 0.5 | 0.2 | 0.2 | 0.8 |
| Anemia | 1.8 | 1.3 | 0.2 | 3.3 | 2.4 | 0.3 |
| Kala-azar | 0.3 | 0.1 | 0.6 | 0.4 | 0.3 | 1.2 |
| Measles | 0.5 | 0.7 | 1.4 | 0.9 | 1.3 | 2.6 |
| Pneumonia | 0.6 | 1.3 | 0.0 | 1.1 | 2.4 | 0.1 |
| Tetanus | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 |
| Tuberculosis | 0.6 | 0.5 | 0.6 | 1.0 | 0.9 | 1.0 |
| Diphtheria | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| Whooping cough | 0.5 | 0.2 | 1.4 | 1.0 | 0.3 | 2.5 |
| Arthritis | - | 2.5 | 7.5 | - | 4.7 | 14.0 |
| Cancer | - | 0.2 | 0.4 | - | 0.4 | 0.6 |
| Diabetes | - | 1.4 | 4.2 | - | 2.7 | 7.8 |
| Heart Disease | - | 0.9 | 1.8 | - | 1.6 | 3.3 |

### 4.6 Prevalence of measles

In the table 4.6, the prevalence of measles in different ages is shown. It is remarkable that the prevalence of measles among 1000 infants ( $<1$ year) was 22 where it was 27.6 among male and 16.2 among female. i.e. before reaching the age of getting the vaccine of measles prevalence was very high as the minimum age of taking the vaccine of measles was 9 month. It might be the one of the causes of increasing the prevalence of measles. People of all ages also suffer from measles.

Table 4.6: Prevalence of measles per 1000 population by age, sex and residence.

| Age group <br> (In year) | National |  |  |  | Rural |  |  |  |  |  |  |  | Urban |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: |
|  |  | Total | Male | Female | Total | Male | Female | Total | Male | Female |  |  |  |
| 01 | 22.0 | 27.6 | 16.2 | 19.5 | 25.6 | 13.5 | 30.8 | 34.2 | 26.7 |  |  |  |  |
| $01-04$ | 6.7 | 6.3 | 7.1 | 6.4 | 5.6 | 7.3 | 7.6 | 8.8 | 6.4 |  |  |  |  |
| $05-09$ | 3.8 | 3.7 | 4.0 | 3.8 | 4.1 | 3.6 | 3.9 | 2.3 | 5.5 |  |  |  |  |
| $10-14$ | 1.4 | 1.2 | 1.5 | 1.5 | 1.3 | 1.6 | 1.0 | 0.9 | 1.1 |  |  |  |  |
| $15-19$ | 1.2 | 0.8 | 1.6 | 0.8 | 0.4 | 1.3 | 2.4 | 2.3 | 2.4 |  |  |  |  |
| $20-24$ | 1.1 | 1.6 | 0.6 | 1.2 | 1.6 | 0.7 | 0.8 | 1.4 | 0.3 |  |  |  |  |
| $25-29$ | 1.2 | 0.0 | 2.3 | 1.1 | 0.0 | 2.0 | 1.6 | 0.0 | 2.9 |  |  |  |  |
| $30-34$ | 2.2 | 2.1 | 2.3 | 2.2 | 2.6 | 1.9 | 2.3 | 0.7 | 3.8 |  |  |  |  |
| $35-39$ | 2.1 | 1.0 | 2.9 | 2.1 | 0.9 | 3.2 | 1.8 | 1.4 | 2.2 |  |  |  |  |
| $40-44$ | 1.9 | 1.9 | 1.8 | 2.0 | 2.5 | 1.6 | 1.5 | 0.4 | 2.5 |  |  |  |  |
| $45-49$ | 2.2 | 1.2 | 3.3 | 2.1 | 0.9 | 3.5 | 2.4 | 2.2 | 2.7 |  |  |  |  |
| $50-54$ | 1.2 | 1.2 | 1.2 | 1.2 | 1.1 | 1.3 | 1.0 | 1.6 | 0.5 |  |  |  |  |
| $55-59$ | 2.6 | 2.3 | 2.9 | 2.8 | 2.3 | 3.5 | 1.6 | 2.3 | 0.8 |  |  |  |  |
| $60-64$ | 2.3 | 1.8 | 2.9 | 2.7 | 2.4 | 3.0 | 1.2 | 0.0 | 2.6 |  |  |  |  |
| $65-69$ | 1.4 | 1.4 | 1.4 | 1.1 | 0.8 | 1.4 | 2.5 | 3.4 | 1.5 |  |  |  |  |
| $70-74$ | 1.3 | 0.0 | 2.8 | 1.7 | 0.0 | 3.5 | 0.0 | 0.0 | 0.0 |  |  |  |  |
| $75-79$ | 2.6 | 1.8 | 3.5 | 1.4 | 0.0 | 3.3 | 7.4 | 10.9 | 4.2 |  |  |  |  |
| $80 \&$ more | 2.3 | 5.0 | 0.0 | 2.6 | 5.4 | 0.0 | 1.5 | 3.6 | 0.0 |  |  |  |  |
|  | Total | 2.6 | 2.4 | 2.8 | 2.6 | 2.4 | 2.7 | 2.8 | 2.6 | 3.0 |  |  |  |

### 4.7 Prevalence of diarrhoea and dysentery

Table 4.7.1 deals with prevalence of diarrhoea by sources of drinking water and excreta disposal facilities. Most diarrhoea and dysentery occurred among those who used non-water sealed toilet and also used pond/ river/ ditch/canal water for drinking and in that situation prevalence of this disease was 27 per 1000 population. In the rural areas, prevalence of diarrhoea and dysentery was highest for them who used non-water sealed toilet and use river/ ditch/ canal water (57) and for rural areas the highest prevalence was for them who used katcha (non sanitary) toilet and used pond water (29). Here 0 represents non availability of data. In the cross tabulations of excreta disposal facilities and source of drinking water, some cells of the table had very rare event.

Table 4.7.1: Prevalence of diarrhoea and dysentery by sources of drinking water, excreta disposal facilities and residence, December, 2011- February 2012
(Per 1000 population)

| Source of drinking water | Excreta disposal facilities |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sanitary (water sealed) | Sanitary(nonwater sealed) | Katcha (non sanitary | Open field |  |
| National |  |  |  |  |  |
| Tap | 10 | 12 | 9 | 15 | 10 |
| Tube well/deep tube well | 14 | 15 | 17 | 19 | 15 |
| Well/masonry well | 5 | 0 | 15 | 15 | 11 |
| Pond | 16 | 27 | 17 | 0 | 20 |
| River/ditch/canal | 0 | 27 | 17 | 22 | 18 |
| others | 5 | 0 | 0 | 0 | 2 |
| Total | al 13 | 15 | 17 | 18 | 15 |
| Rural |  |  |  |  |  |
| Tap | 10 | 2 | 12 | 20 | 8 |
| Tube well/deep tube well | 15 | 15 | 17 | 18 | 16 |
| Well/masonry well | 6 | 0 | 15 | 15 | 12 |
| Pond | 16 | 30 | 16 | 0 | 20 |
| River/ditch/canal | 0 | 57 | 18 | 22 | 19 |
| others | 8 | 0 | 0 | 0 | 3 |
| Total | 14 | 15 | 17 | 18 | 16 |
| Urban |  |  |  |  |  |
| Tap | 9 | 15 | 7 | 9 | 11 |
| Tube well/deep tube well | 12 | 12 | 13 | 23 | 12 |
| Pond | 22 | 7 | 29 | 0 | 14 |
| Total | al 11 | 12 | 13 | 20 | 12 |

The table 4.7.2 reveals that among the different age group from 0 to 14 , highest prevalence of diarrhoea and dysentery happened in the age group 5-9 years who used non-water sealed toilet and use river/ditch/canal water (1000). For the age group 0-4 the prevalence was 329 for using non-water sealed toilet and drinking pond water. The highest prevalence of diarrhoea and dysentery for the age group $10-14$ was 146 for those who had no toilet facility and used tube well water.

Table 4.7.2: Prevalence of diarrhea and dysentery per 1000 population by sources of drinking water, excreta disposal facilities and age group, December, 2011- February 2012

| Source of drinking water | Excreta disposal facilities |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sanitary(wat er sealed) | Sanitary (nonwater sealed) | Katcha (non sanitary | Open field |  |
| Age 0-4 years |  |  |  |  |  |
| Tap | 118 | 136 | 94 | 255 | 122 |
| Tube well/deep tube well | 158 | 157 | 179 | 178 | 166 |
| Well/masonry well | 48 | 0 | 186 | 134 | 115 |
| Pond | 262 | 329 | 208 | 0 | 279 |
| River/ditch/canal | 0 | 204 | 166 | 263 | 189 |
| others | 82 | 0 | 0 | 0 | 28 |
| Total | 153 | 155 | 178 | 178 | 163 |
| Age 5-9 years |  |  |  |  |  |
| Tap | 104 | 113 | 79 | 128 | 105 |
| Tube well/deep tube well | 135 | 128 | 134 | 133 | 132 |
| Well/masonry well | 46 | 0 | 130 | 121 | 104 |
| Pond | 197 | 229 | 129 | 0 | 192 |
| River/ditch/canal | 0 | 1000 | 117 | 132 | 127 |
| others | 43 | 0 | 0 | 0 | 20 |
| Total | 131 | 127 | 133 | 131 | 130 |
| Age 10-14 years |  |  |  |  |  |
| Tap | 90 | 117 | 76 | 128 | 96 |
| Tube well/deep tube well | 127 | 118 | 129 | 146 | 126 |
| Well/masonry well | 82 | 0 | 112 | 101 | 95 |
| Pond | 174 | 176 | 114 | 0 | 162 |
| River/ditch/canal | 0 | 239 | 128 | 263 | 159 |
| others | 60 | 0 | 0 | 0 | 20 |
| Total | 122 | 118 | 128 | 145 | 124 |

From the table 4.7.3, it is observed that prevalence (23.2) of diarrhoea and dysentery per 1000 population was highest among no schooling people and it was higher in male (25.1) compared to female (21.5). Lowest prevalence (6.4) of diarrhoea and dysentery per 1000 population was among the people with Higher Secondary and above.

Table 4.7.3 Prevalence of diarrhoea and dysentery per 1000 population by education and sex December, 2011- February 2012

| Level of education | Total | Male | Female |
| :--- | :---: | :---: | :---: |
| No schooling (0) | 23.2 | 25.1 | 21.5 |
| Primary incomplete (I-IV) | 10.0 | 10.7 | 9.2 |
| Primary complete (V) | 11.4 | 12.1 | 10.6 |
| Secondary incomplete (VI-IX) | 28.3 | 28.1 | 28.5 |
| Secondary complete (X) | 9.1 | 11.4 | 6.0 |
| Higher Secondary and above (XII+) | 6.4 | 6.4 | 6.2 |
| Others |  | 15.4 | 21.1 |
|  | Total | $\mathbf{1 4 . 9}$ | $\mathbf{1 5 . 5}$ |

### 4.8 Selected morbidities

In the table 4.8.1, proportion and prevalence of morbidity per 1000 population of the selected diseases by residence are shown. Arthritis, peptic ulcer and high blood pressure had prevalences of 14.8, 14.2 and 10.1 per 1000 population respectively in rural areas. But in urban areas, prevalence of high blood pressure was 20.2 and that of diabetes was15.6 per 1000 population. Prevalence of high blood pressure in urban areas was almost double of that in rural area. Diabetes in urban area also occurred almost three times higher than that in rural area. Prevalences of asthma \& heart disease were also higher in urban areas compared to rural areas.

Table 4.8.1: Proportion and prevalence of morbidity per 1000 population of the selected diseases by residence, December, 2011- February 2012

| Selected Diseases | Proportional morbidity |  |  | Prevalence of morbidity (per 1000 population) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | National | Rural | Urban | National | Rural | Urban |
| Arthritis | 7.5 | 8.2 | 5.6 | 14.0 | 14.8 | 11.2 |
| Peptic Ulcer | 7.2 | 7.8 | 4.5 | 13.5 | 14.2 | 11.0 |
| High blood Pressure | 6.7 | 5.5 | 10.2 | 12.4 | 10.1 | 20.2 |
| Dysentery | 4.5 | 5.0 | 2.9 | 8.3 | 9.1 | 5.8 |
| Diabetes | 4.2 | 3.0 | 7.8 | 7.8 | 5.5 | 15.6 |
| Diarrhoea | 3.5 | 3.7 | 3.0 | 6.6 | 6.7 | 6.0 |
| Acute respiratory Infection | 2.6 | 2.8 | 2.0 | 4.9 | 5.1 | 4.0 |
| Skin Disease | 2.3 | 2.4 | 2.1 | 4.3 | 4.3 | 4.2 |
| Conjunctivitis | 2.2 | 2.4 | 1.8 | 4.2 | 4.3 | 3.7 |
| Asthma | 2.1 | 2.0 | 2.5 | 3.9 | 3.6 | 4.9 |
| Heart disease | 1.8 | 1.7 | 2.1 | 3.3 | 3.1 | 4.2 |
| Cataract | 1.8 | 1.8 | 1.7 | 3.3 | 3.3 | 3.3 |
| Hepatitis-b | 1.5 | 1.6 | 1.4 | 2.8 | 2.9 | 2.7 |
| Measles | 1.4 | 1.4 | 1.4 | 2.6 | 2.6 | 2.8 |
| Whooping cough | 1.4 | 1.4 | 1.2 | 2.5 | 2.6 | 2.3 |
| Urinary Tract Infection | 1.0 | 1.1 | 0.9 | 1.9 | 1.9 | 1.7 |
| Pregnancy related | 0.9 | 0.9 | 0.9 | 1.7 | 1.6 | 1.8 |
| Ear infection | 0.8 | 0.9 | 0.7 | 1.5 | 1.6 | 1.3 |
| Malaria | 0.8 | 0.9 | 0.5 | 1.5 | 1.6 | 0.9 |
| Chicken pox | 0.8 | 0.8 | 0.7 | 1.4 | 1.4 | 1.4 |
| Typhoid | 0.7 | 0.7 | 0.7 | 1.4 | 1.3 | 1.5 |
| Kala-azar | 0.6 | 0.7 | 0.5 | 1.2 | 1.2 | 1.0 |
| Night blindness | 0.6 | 0.7 | 0.4 | 1.1 | 1.2 | 0.8 |
| Tuberculosis | 0.6 | 0.6 | 0.4 | 1.0 | 1.1 | 0.7 |
| Goitre | 0.5 | 0.5 | 0.3 | 0.8 | 0.9 | 0.5 |
| Epilepsy | 0.4 | 0.4 | 0.2 | 0.7 | 0.8 | 0.5 |
| Cancer/Malignancy | 0.4 | 0.4 | 0.3 | 0.6 | 0.6 | 0.7 |
| Mumps | 0.2 | 0.2 | 0.3 | 0.5 | 0.4 | 0.6 |
| Arsenic | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.5 |
| Rabies | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 |
| Tetanus | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.3 |
| New born problem | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 |
| diphtheria | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 |
| Pneumonia | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 |
| Total Morbidity | 100 | 100 | 100 | 186 | 181 | 199 |

In the table 4.8.2, Proportion and prevalence of morbidity per 1000 population by selected diseases are shown by sex. Among male, prevalence of arthritis, peptic ulcer and high blood pressure per 1000 population were $10.9,12.1$ and 10.5 respectively whereas among female prevalences of these three diseases were $17.1,14.8$ and 14.4 respectively during the last 90 days of the survey. Prevalence of heart disease per 1000 population was 3.3 and it was more prevalent in male compared to female.

Table 4.8.2: Proportion and prevalence of morbidity per 1000 population by selected diseases by sex, December, 2011- February 2012

| Selected Diseases | Proportional morbidity (\%) |  |  | Prevalence of morbidity (per 1000 population) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female |
| Arthritis | 7.5 | 6.3 | 8.7 | 14.0 | 10.9 | 17.1 |
| Peptic Ulcer | 7.3 | 7.0 | 7.5 | 13.4 | 12.1 | 14.8 |
| High blood Pressure | 6.7 | 6.0 | 7.3 | 12.4 | 10.5 | 14.4 |
| Dysentery | 4.5 | 5.2 | 3.8 | 8.3 | 9.1 | 7.5 |
| Diabetes | 4.2 | 4.4 | 4.1 | 7.8 | 7.7 | 8.0 |
| Diarrhoea | 3.5 | 3.7 | 3.4 | 6.6 | 6.4 | 6.7 |
| Acute respiratory Infection | 2.6 | 3.1 | 2.2 | 4.9 | 5.4 | 4.3 |
| Skin Disease | 2.3 | 2.5 | 2.1 | 4.3 | 4.4 | 4.2 |
| Conjunctivitis | 2.2 | 1.9 | 2.6 | 4.2 | 3.3 | 5.0 |
| Asthma | 2.1 | 2.4 | 1.8 | 3.9 | 4.2 | 3.6 |
| Heart disease | 1.8 | 2.0 | 1.7 | 3.3 | 3.4 | 3.2 |
| Cataract | 1.8 | 1.7 | 1.9 | 3.3 | 3.0 | 3.7 |
| Hepatitis-b | 1.5 | 1.9 | 1.2 | 2.8 | 3.4 | 2.3 |
| Measles | 1.4 | 1.4 | 1.4 | 2.6 | 2.4 | 2.8 |
| Whooping cough | 1.4 | 1.8 | 1.0 | 2.5 | 3.1 | 2.0 |
| Influenza | 1.2 | 1.3 | 1.0 | 2.2 | 2.3 | 2.0 |
| Urinary Tract Infection | 1.0 | 0.9 | 1.1 | 1.9 | 1.5 | 2.3 |
| Malaria | 0.8 | 0.9 | 0.7 | 1.5 | 1.6 | 1.3 |
| Chicken pox | 0.8 | 1.0 | 0.6 | 1.4 | 1.7 | 1.1 |
| Typhoid | 0.7 | 0.7 | 0.7 | 1.4 | 1.3 | 1.5 |
| Kala-azar | 0.6 | 0.6 | 0.6 | 1.2 | 1.1 | 1.2 |
| Night blindness | 0.6 | 0.7 | 0.5 | 1.1 | 1.2 | 1.1 |
| Tuberculosis | 0.6 | 0.7 | 0.4 | 1.0 | 1.3 | 0.8 |
| Goitre | 0.5 | 0.4 | 0.5 | 0.8 | 0.8 | 0.9 |
| Cancer/Malignancy | 0.4 | 0.3 | 0.4 | 0.6 | 0.6 | 0.7 |
| Mumps | 0.2 | 0.2 | 0.3 | 0.5 | 0.4 | 0.5 |
| Rabies | 0.1 | 0.2 | 0.1 | 0.3 | 0.3 | 0.2 |
| Tetanus | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 |
| Diphtheria | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 |
| Total | 100 | 100 | 100 | 186 | 174 | 197 |

### 4.9 Morbidity by age group

Fig 4.9.1 shows the prevalence of morbidity per 1000 population during the last 90 days of the survey by sex and selected age groups. Among the aged group (60+) the prevalence of morbidity was 476.3 per 1000 population. The lowest prevalence of morbidity was 96.1 and it belonged to age group (1529). Male was more morbid compared to female from infant to the age of 14 . After the age of 14 , females were more morbid than male. Morbidity declined from infant to age group (15-29) and after that it increased with the increase of ages for both sexes.
From the Fig 4.9.2 it is seen that for all the age groups, morbidity among urban people were more compared to rural people.

Fig 4.9.1: Prevalence of morbidity per 1000 population by age group and sex, December, 2011February 2012


Fig 4.9.2: Prevalence of morbidity per 1000 population by age group and residence, December, 2011- February 2012


### 4.10 Infant (<1 year) morbidity

Prevalence of morbidity (top 10 diseases) per 1000 infants by sex is shown in fig 4.10. Acute respiratory infection, fever, diarrhoea, measles occurred more with the prevalence per 1000 infants (<1year) 71.8, 62.3, 34.8 and 22.0 respectively during the last 90 days of the survey. Male infants had higher prevalence of measles compared to female infants. Among the top 10 diseases for this age group fever, newborn problem and conjunctivitis were less in female and the rest 7 diseases like acute respiratory infection, diarrhoea, measles, skin disease, influenza, whooping cough, hepatitis-b occurred more in male compared to female.

Fig 4.10: Prevalence of morbidity per 1000 infants by sex, December, 2011- February 2012


### 4.11 Child (under 2 years) morbidity

In the fig 4.11, prevalence of morbidity (top 10 diseases) per 1000 children (under 2 Years) has been described by sex. After fever (FUO), Acute respiratory infection (ARI) had the highest prevalence (62.1) per 1000 children of age less than 2 years. Among them male child's prevalence of ARI was higher (67.1) than that of female child (56.8). Next higher prevalence for this age group belonged to diarrhoea with 43.8 where prevalence per 1000 in male was 43.0 and that in female was 44.6.

Fig 4.11 Prevalence of morbidity (top 10 diseases) per 1000 children (under 2 Years) by sex, December, 2011- February 2012


### 4.12 Under five child (<5 years) morbidity

According to Fig 4.12.1, in this age group, all the 10 top diseases had higher prevalence in male compared to female. Prevalence of fever per 1000 children under 5 years was 59.1 followed by acute respiratory infection, diarrhoea, dysentery, measles with the prevalence 39.8, 28.5, 14.0, 9.7 respectively.

Fig 4.12.1 Prevalence of morbidity (top 10 diseases) per 1000 under five children by sex, December, 2011- February 2012


Figure 4.12 .2 shows the prevalence of morbidity (top 10 diseases) per 1000 under five children by residence. Acute respiratory infection, diarrhoea occurred more with the prevalence of 39.8 and 28.5 respectively per 1000 children under five ( $<5$ years). Fever (FUO), measles were more prevalent in urban areas compared to rural areas. Diarrhoea, skin disease, influenza had almost same prevalence in both urban and rural areas.

Fig 4.12.2 Prevalence of morbidity (top 10 diseases) per 1000 under five children by residence, December, 2011- February 2012


### 4.13 Adolescent (10-19) morbidity

Prevalence of morbidity (top 10 diseases) per 1000 adolescents by sex is described in figure 4.13.1. Fever's (FUO) prevalence was 27.0 per 1000 adolescents (10-19). Dysentery had the prevalence of 4.9 which was the $2^{\text {nd }}$ highest in this age group and next higher prevalence belong to skin disease with 3.9.

Fig 4.13.1 Prevalence of morbidity (top 10 diseases) per 1000 adolescents (10-19 years) by sex, December, 2011- February 2012


According to the figure 4.13 .2 below dysentery, hepatitis-b, diarrhoea, arthritis, malaria, peptic ulcer happened more in rural areas compared to urban areas in this age group (10-19 years).

Fig 4.13.2 Prevalence of morbidity (top 10 diseases) per 1000 adolescents (10-19 years) by residence, December, 2011- February 2012


### 4.14 Reproductive age (15-49 year) morbidity

According to figure 4.14, in reproductive age group of women, Fever (FUO) was highest with prevalence of 56.4 per 1000 where $2^{\text {nd }}$, $3^{\text {rd }}$ and $4^{\text {th }}$ highest prevalence belonged to peptic ulcer, high blood pressure and arthritis with prevalence of 15.0, 13.1 and 12.7 respectively. Diabetes, high blood pressure and fever had higher prevalence in urban areas compared to those in rural areas.

Fig 4.14: Prevalence of morbidity (top 10 diseases) per 1000 females of reproductive ages (1549 year) by residence, December, 2011- February 2012


### 4.15 Working age (15-64 years) morbidity

Figure 4.15 .1 shows the prevalence of morbidity (top 10 diseases) per 1000 working age population by sex. Fever (FUO) had the highest prevalence with 55.9 per 1000 of the working age group (15-64), where peptic ulcer, arthritis and high blood pressure had the $2^{\text {nd }}, 3^{\text {rd }}$ and $4^{\text {th }}$ highest prevalence with 18.7, 15.8 and 15.8 per 1000 respectively. Prevalence of fever (FUO), peptic ulcer, arthritis, high blood pressure, diabetes, diarrhoea and conjunctivitis was higher in female compared to male.

Fig 4.15.1 Prevalence of morbidity (top 10 diseases) per 1000 working age population (15-64 years) by sex, December, 2011- February 2012


According to fig. 4.15.2 prevalence of diabetes, high blood pressure and fever were more in urban areas compared to rural areas.

Fig 4.15.2 Prevalence of morbidity (top 10 diseases) per 1000 working age population (15-64 years) by sex and residence, December, 2011- February 2012


### 4.16 Elderly (64+ years) morbidity

In the figure 4.16.1, prevalence of morbidity (top 10 diseases) per 1000 elderly population is shown by sex. Fever (FUO) had the highest prevalence with 106.40 per 1000 of elderly persons (64+). Arthritis, high blood pressure, diabetes and cataract were the $2^{\text {nd }}, 3^{\text {rd }}, 4^{\text {th }}$ and $5^{\text {th }}$ with the prevalence 76.9, 52.1, 36.4 and 31.1 per 1000 elderly population respectively. Prevalence of tuberculosis was 3.4 (where it was 5.5 in male and 1.2 in female). Prevalence of both high blood pressure and diabetes were higher in male compared to those in female. But prevalence of arthritis was higher in female (91.0) than that of male (63.7).

Fig 4.16.1 Prevalence of morbidity (top 10 diseases) per 1000 elderly population (64+ years) by sex, December, 2011- February 2012


According to figure 4.16.2, arthritis, peptic ulcer, cataract, conjunctivitis, dysentery and whooping cough occurred more among elderly people in rural areas compared to urban areas but people of urban areas suffered more in high blood pressure, diabetes and asthma compared to people of rural area.

Fig 4.16.2: Prevalence of morbidity (top 10 diseases) per 1000 elderly population (64+ years) by residence, December, 2011- February 2012


## CHAPTER-5 <br> TREATMENT STATUS

Health behavior and consequences of morbidity are described in this chapter. For each person at best three illnesses happened during the 90 days preceding the survey were recorded to know the treatment status. For each morbidity, at best four different treatment facilities and in each treatment facility at best three different sources of receiving treatment were allowed to record. If the sick person was unable to respond then the person who could reply was interviewed. Treatment facilities were categorized as government, private, NGO, abroad, self and others. In this case, treatment from pharmacy/ dispensary had a chance to be counted as private health facility.

### 5.1 Population reported morbidity

The table 5.1.1 reveals that the highest proportion of morbidity was more than $8 \%$ in the age group 40 to 54 years and $2^{\text {nd }}$ highest morbidity was more than $7 \%$ in the age group 01-04, 35-39 and 55-59 years. Up to ages of 19 years, males were reported with more morbidity compared to female. From the age 20-54, morbidity in female was more compared to male. After the age of 55 years, again morbidity in male prevailed more compared to female. In the age group 0 to 14 years morbidity was higher among rural people compared to that of urban people. From the age 35 to 64 years, morbidity in urban areas was higher than rural areas.

Table 5.1.1 Proportion of population reported morbidity by sex, age group and residence

| Age <br> (In years) | National |  |  |  |  | Rural |  |  | Urban |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |  |
| $<1$ | 2.5 | 2.8 | 2.2 | 2.5 | 2.8 | 2.3 | 2.3 | 2.9 | 1.8 |  |
| $01-04$ | 7.1 | 8.5 | 5.9 | 7.4 | 8.7 | 6.2 | 6.3 | 7.9 | 5.0 |  |
| $05-09$ | 5.4 | 6.3 | 4.6 | 5.5 | 6.4 | 4.6 | 5.2 | 6.0 | 4.5 |  |
| $10-14$ | 4.3 | 5.0 | 3.8 | 4.5 | 5.2 | 3.8 | 3.9 | 4.3 | 3.6 |  |
| $15-19$ | 4.3 | 4.9 | 3.7 | 4.2 | 5.0 | 3.4 | 4.5 | 4.6 | 4.4 |  |
| $20-24$ | 4.3 | 3.5 | 5.0 | 4.3 | 3.6 | 4.9 | 4.3 | 3.3 | 5.1 |  |
| $25-29$ | 5.5 | 3.7 | 7.0 | 5.3 | 3.5 | 7.0 | 5.8 | 4.6 | 6.9 |  |
| $30-34$ | 6.5 | 4.9 | 8.0 | 6.7 | 5.0 | 8.2 | 6.0 | 4.4 | 7.3 |  |
| $35-39$ | 7.9 | 6.1 | 9.4 | 7.6 | 5.7 | 9.3 | 8.7 | 7.3 | 9.9 |  |
| $40-44$ | 8.3 | 7.2 | 9.3 | 8.1 | 7.1 | 9.1 | 8.9 | 7.4 | 10.1 |  |
| $45-49$ | 8.4 | 8.3 | 8.6 | 8.3 | 8.2 | 8.4 | 8.8 | 8.5 | 9.1 |  |
| $50-54$ | 8.9 | 8.4 | 9.3 | 8.6 | 8.0 | 9.1 | 9.9 | 9.7 | 10.1 |  |
| $55-59$ | 7.6 | 8.2 | 7.1 | 7.6 | 8.2 | 7.1 | 7.7 | 8.4 | 7.1 |  |
| $60-64$ | 5.8 | 6.8 | 4.9 | 5.7 | 6.6 | 4.8 | 6.0 | 7.2 | 5.0 |  |
| $65-69$ | 4.3 | 5.0 | 3.7 | 4.5 | 5.3 | 3.8 | 3.9 | 4.3 | 3.5 |  |
| $70-74$ | 3.9 | 4.4 | 3.5 | 3.9 | 4.3 | 3.5 | 3.8 | 4.5 | 3.2 |  |
| $75-79$ | 2.4 | 2.9 | 2.1 | 2.6 | 3.0 | 2.3 | 2.0 | 2.6 | 1.5 |  |
| $80 \&$ more | 2.7 | 3.2 | 2.2 | 2.9 | 3.5 | 2.3 | 2.1 | 2.3 | 1.9 |  |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |  |
| Number | of | $\mathbf{1 8 5 9}$ | $\mathbf{8 6 8 8}$ | $\mathbf{9 9 1 0}$ | $\mathbf{1 1 8 2 7}$ | 5588 | $\mathbf{6 2 3 9}$ | $\mathbf{6 7 7 1}$ | $\mathbf{3 1 0 0}$ | $\mathbf{3 6 7 1}$ |
| persons |  |  |  |  |  |  |  |  |  |  |
| reported <br> morbidity |  |  |  |  |  |  |  |  |  |  |

Table 5.1.2 shows the distribution of population reported morbidity who received treatment. Among population reported morbidity for the last 90 days of the survey, 71.9 \% received treatment. In urban areas, the percentage was little higher (72.5\%) than that of rural ( $71.7 \%$ ) areas. The rate of receiving treatment among male was higher than that of female in both rural and urban areas. The rate of receiving treatment decreased with the increase of age from 00 to 29 years.

Table 5.1.2 Rate of receiving treatment by age, sex and residence
(In Percentage)

| Age group <br> (In years) | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $0-04$ | 81.8 | 80.8 | 83.1 | 82.2 | 81.5 | 83.2 | 80.4 | 78.7 | 82.6 |
| $05-09$ | 77.0 | 76.2 | 78.1 | 77.0 | 75.7 | 78.6 | 77.2 | 77.9 | 76.4 |
| $10-14$ | 73.5 | 73.0 | 74.2 | 73.7 | 72.1 | 75.7 | 73.1 | 76.4 | 69.6 |
| $15-19$ | 70.9 | 70.1 | 71.9 | 71.6 | 70.3 | 73.2 | 69.1 | 69.3 | 68.9 |
| $20-24$ | 70.7 | 70.1 | 71.0 | 70.1 | 69.5 | 70.5 | 72.3 | 72.4 | 72.3 |
| $25-29$ | 68.7 | 71.3 | 67.4 | 68.0 | 71.6 | 66.4 | 70.7 | 70.7 | 70.7 |
| $30-34$ | 70.7 | 71.6 | 70.2 | 70.6 | 70.4 | 70.7 | 71.1 | 75.7 | 68.7 |
| $35-39$ | 69.1 | 70.7 | 68.1 | 69.2 | 73.2 | 67.0 | 68.7 | 64.4 | 71.4 |
| $40-44$ | 70.9 | 70.7 | 71.1 | 69.6 | 69.4 | 69.7 | 74.6 | 74.7 | 74.6 |
| $45-49$ | 71.7 | 71.4 | 72.0 | 71.4 | 70.1 | 72.5 | 72.7 | 75.3 | 70.7 |
| $50-54$ | 73.5 | 75.3 | 72.2 | 73.5 | 75.0 | 72.3 | 73.7 | 75.9 | 71.9 |
| $55-59$ | 69.5 | 70.3 | 68.6 | 69.4 | 69.7 | 69.1 | 69.6 | 72.1 | 67.2 |
| $60-64$ | 69.6 | 69.0 | 70.4 | 68.9 | 68.9 | 68.9 | 71.6 | 69.2 | 74.4 |
| $65-69$ | 69.8 | 70.9 | 68.5 | 69.8 | 71.0 | 68.3 | 70.0 | 70.9 | 69.0 |
| $70-74$ | 67.8 | 69.0 | 66.4 | 67.3 | 68.1 | 66.4 | 69.3 | 71.7 | 66.4 |
| $75-79$ | 66.7 | 66.9 | 66.4 | 66.9 | 66.6 | 67.3 | 65.8 | 68.2 | 62.3 |
| $80 \&$ more | 69.0 | 69.7 | 68.1 | 68.0 | 69.2 | 66.3 | 73.4 | 72.4 | 74.4 |
| Total | 71.9 | 72.4 | 71.5 | 71.7 | 72.1 | 71.3 | 72.5 | 73.2 | 71.8 |

Proportion of treatments received by treatment facility and sex are shown in table 5.1.3. About $69 \%$ treatments were received from private institute and $22 \%$ from govt. institute. More female go to private and NGO for treatment compared to male. From Govt. institute and from abroad more male received treatment compared to female.

Table 5.1.3: Proportion of treatments received by type of treatment facility and sex

| Types of treatment facility | Total | Male | (In percentage) |
| :--- | ---: | ---: | ---: |
| Government | 22.0 | 23.0 | 21.2 |
| Private | 68.9 | 67.7 | 69.9 |
| NGO | 1.7 | 1.6 | 1.7 |
| Abroad | 0.2 | 0.3 | 0.2 |
| Others (Religious, traditional etc) | 7.3 | 7.5 | 7.1 |

According to table 5.1.4 about 70\% treatments were received from private health facilities, about 27\% were from govt. health facilities and about $3 \%$ were from NGO health facilities. Most of the morbidities were treated in the private health facilities. More than $50 \%$ treatments of rabies, tuberculosis, tetanus, new born problem, hormonal problem, tumour, stroke, bronchitis were done in government health facilities.

Table 5.1.4: Proportion of morbidity for which treatment received by type of health facility during last $\mathbf{9 0}$ days of the survey.


Most treatments were received from private health facilities for persons of all economic status according to the data in the table 5.1.5. About $75 \%$ of people of highest asset quintile received treatment from private health facilities, $22 \%$ of that group received treatment in the govt. health facilities and the rest $3 \%$ from NGO health facilities.

Table 5.1.5: Proportion of persons reported morbidity of different asset quintile received treatment from different health facility
(In percentage)

| Health facility | Asset quintile |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Lowest | Second | Middle | Forth | Highest | Total |
| Government | 27 | 26 | 29 | 29 | 22 | 27 |
| Private | 69 | 71 | 68 | 68 | 75 | 70 |
| NGO | 3 | 3 | 3 | 3 | 3 | 3 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |

### 5.2 Source of treatment

In the table 5.2, proportion of treatments received during last 90 days is presented by source of treatment and sex. Among the treatments received, about $62 \%$ are from doctor, $3.6 \%$ are from homeopathic doctor. More than $20 \%$ treatments are taken from Pharmacy/Dispensary worker/Compounder and others.

Table 5.2: Proportion of treatments received by source of treatment and sex

| Sources of treatment | Total | Male | (In percentage) |
| :--- | ---: | ---: | ---: |
| Doctor | 61.8 | 61.4 | 62.2 |
| Health Worker (Govt.) | 5.4 | 5.2 | 5.5 |
| Paramedics/Medical Technologist | 3.8 | 3.8 | 3.9 |
| Health worker(NGO) | 2.0 | 1.8 | 2.2 |
| Homeopathic Doctor | 3.6 | 3.6 | 3.7 |
| Kabirazi/Unani/Ayurbedic | 1.8 | 2.1 | 1.5 |
| Religious/Traditional | 1.0 | 1.0 | 1.1 |
| Pharmacy/Dispensary worker/Compounder/ Family <br> treatment/ Self treatment/ Others | 20.6 | 21.2 | 20.0 |
| Total | 100 | 100 | 100 |

### 5.3 Reasons for not seeking treatment

Proportion of persons reported illness without seeking treatment is shown in table 5.3.1 by reasons and sex. Among those who did not seek treatment, $38 \%$ were for lack of money (about $39 \%$ are female and $37 \%$ are male), about $20 \%$ were for not getting medical personnel in hospital and $3^{\text {rd }}$ highest cause for not taking treatment was that considering disease not serious and its percentage was 14.5\%.

Table 5.3.1: Proportion of persons reported illness and not seeking treatment by reasons and sex
(In Percentage)

| Reasons for not taking treatment | Total | Male | Female |
| :--- | :---: | :---: | :---: |
| Lack of money | 38.0 | 37.1 | 38.8 |
| Lack of companion | 2.0 | 1.8 | 2.2 |
| Disease was not serious | 14.5 | 15.0 | 14.2 |
| Disease was tolerable | 8.7 | 9.5 | 8.0 |
| Not curable | 1.7 | 1.6 | 1.8 |
| Not availability of female doctor | 0.5 | 0.1 | 0.7 |
| Inconvenience of transport | 8.5 | 8.9 | 8.1 |
| Far distance of treatment centre | 2.2 | 1.5 | 2.7 |
| Long waiting time for treatment | 0.7 | 0.2 | 1.1 |
| Often absence of medical personnel in hospital | 19.9 | 21.1 | 19.0 |
| Negligence of doctors' for diagnosis | 0.1 | 0.0 | 0.1 |
| Medicine not available | 2.5 | 2.4 | 2.5 |
| Others | 0.9 | 0.9 | 0.9 |
|  | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ |

The table 5.3.2 shows that among the persons reported illness but did not seek treatment, $28 \%$ were from lowest asset quintile, $24 \%, 20 \%, 14 \%$ and $15 \%$ were from $2^{\text {nd }}$, middle, fourth and highest asset quintile respectively. Those who did not seek treatment for lack of money, $41 \%$ were in lowest quintile, $23 \%$ were in $2^{\text {nd }}$ lowest quintile.

### 5.3.2: Proportion of persons reported illness and not seeking treatment by reasons and asset quintile

(In Percentage)

| Reasons for not seeking treatment | Asset quintile |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | ---: |
|  | Lowest | Second | Middle | Forth | Highest | Total |
| Diseases was not serious | 20 | 22 | 21 | 15 | 21 | 100 |
| Disease was tolerable | 27 | 25 | 18 | 15 | 15 | 100 |
| Far distance of treatment centre | 34 | 14 | 19 | 16 | 17 | 100 |
| Lack of money | 41 | 23 | 15 | 10 | 11 | 100 |
| Wait for long time | 13 | 59 | 9 | 8 | 12 | 100 |
| Often absence of medical personnel in | 18 | 24 | 24 | 18 | 17 | 100 |
| hospital |  |  |  |  |  |  |
| Negligence of doctors for diagnosis | 34 | 0 | 66 | 0 | 0 | 100 |
| Lack of companion | 15 | 19 | 30 | 11 | 25 | 100 |
| Medicine not available. | 16 | 26 | 29 | 8 | 21 | 100 |
| Not availability of female doctor | 34 | 36 | 19 | 0 | 11 | 100 |
| Not curable | 19 | 35 | 13 | 18 | 16 | 100 |
| Inconvenience of transport | 16 | 26 | 27 | 18 | 14 | 100 |
| Others | 29 | 12 | 26 | 16 | 18 | 100 |
|  | $\mathbf{2 8}$ | $\mathbf{2 4}$ | $\mathbf{2 0}$ | $\mathbf{1 4}$ | $\mathbf{1 5}$ | $\mathbf{1 0 0}$ |

### 5.4 Treatment cost

Table 5.4 reveals that for the last 90 days of the survey, average expenditure per treatment recipient for all visits in the Govt. health facilities was Tk. 1047 whereas it was Tk. 1057 in private health facilities, Tk. 727 in NGO and Tk. 5944 in health facilities in abroad. In all types of facilities medicine cost is the highest portion of expenditure. In Govt. facilities the average medicine cost is Tk. 568 and it is Tk. 515 in private, Tk. 410 in NGO health facilities and Tk. 1388 in abroad. Number of total treatment recipients in a specific type of health facilities is the denominator and the total expenditure in the respective facilities for all the treatment received is the numerator for calculating the average expenditure per treatment recipient of the respective type of facilities. For calculating the average expenditure for different type of services of a specific type of health facility, total expenditure for the specific services in the specific type of health facility is used as the numerator and the number of total treatment recipients in the respective type of facility is used as the denominator number is ignored as there was no scope in the questionnaire to separate the cost according to visit. Rather in this calculation total cost of all visits of a specific type of services in a health facility for the previous 90 days of the survey for the recipient was recorded.

Table 5.4 Average expenditure per treatment by different types of services and types of health facilities

| Types of services | Government | Private | NGO | Abroad |
| :--- | ---: | ---: | ---: | ---: |
| Medicine | 568 | 515 | 410 | 1388 |
| Doctor's fee | 32 | 73 | 48 | 141 |
| Pathological test | 133 | 159 | 99 | 840 |
| Surgical cost | 91 | 106 | 37 | 728 |
| Hospital/clinic rent \& other | 59 | 80 | 30 | 1741 |
| Exp. for patient's attendant | 71 | 51 | 40 | 617 |
| Transport cost | 93 | 73 | 63 | 488 |
|  | $\mathbf{1 0 4 7}$ | $\mathbf{1 0 5 7}$ | $\mathbf{7 2 7}$ | $\mathbf{5 9 4 4}$ |

### 5.5 Morbidity consequences

According to table 5.5.1, among the persons reported illness for the last 90 days of the survey, $1.6 \%$ needed to be hospitalized where $3.1 \%$ were male and only $0.1 \%$ were female. Rate of hospitalization for female was lower compared to male in both rural and urban areas. Here 0 represents data less than 0.1

Table 5.5.1: Percent of the persons reported illness needed to be hospitalized for illness, December, 2011- February 2012

| Residence | Morbid persons hospitalized (\%) |  |  |
| :--- | :---: | :---: | :---: |
|  | Total | Male | Female |
| Rural | 1.5 | 2.9 | 0.1 |
| Urban | 1.9 | 3.9 | 0.0 |
| National | $\mathbf{1 . 6}$ | $\mathbf{3 . 1}$ | $\mathbf{0 . 1}$ |

On an average 8.5 days needed to stay in hospital due to illness among the hospitalized people during last 90 days of the survey. The average days in hospital were 8.5 for male and 9.0 for female. In the urban areas, duration of staying in hospital for female was almost double (17.9 days) than that for male (8.8 days).

### 5.5.2: Average days in hospital for hospitalized people suffering from illness

| Residence | Average days in hospital |  |  |
| :--- | :---: | :---: | :---: |
|  | Total | Male | Female |
| Rural | 8.4 | 8.4 | 7.7 |
| Urban | 8.9 | 8.8 | 17.9 |
| National | $\mathbf{8 . 5}$ | $\mathbf{8 . 5}$ | $\mathbf{9 . 0}$ |

Figure 5.5.3.deals with days needed to cure from morbid condition of top 10 diseases by sex. If respondent was cured during the last 90 days of the survey, then he or she was asked how many days were needed to be cured from the specific illness. Highest average days to cure from disease were 63.8 for tuberculosis. ${ }^{\text {nd }}$ highest days needed for being cured were 43.6 for cancer/malignancy. To be cured from tuberculosis, male needed 73.3days and female needed 52.3 days. Again to be cured from cancer/malignancy, male needed 29.4 days and female needed 54.0 days.

Fig 5.5.3: Days needed to cure from morbid condition of top 10 diseases by sex, December, 2011February 2012


In the table 5.5.4, average work days lost due to illness in the previous 90 days of the survey are described. Tuberculosis, Upper back pain and Hepatitis-b caused average days lost 18.8, 15.0 \& 12.9 respectively. For the upper back pain, female lost almost double days (16.5) compared to male (8.4).

Table 5.5.4: Average work days lost due to illness by morbidity, December, 2011- February 2012

| Diseases | Average work days lost |  |  |
| :---: | :---: | :---: | :---: |
|  | Total | Male | Female |
| Tuberculosis | 18.8 | 19.1 | 18.2 |
| Upper Back pain | 15.0 | 8.4 | 16.5 |
| Hepatitis-b | 12.9 | 14.2 | 11.1 |
| Cancer/Malignancy | 11.7 | 9.6 | 13.3 |
| Mumps | 10.1 | 12.3 | 8.3 |
| Kala-azar | 9.7 | 8.9 | 10.3 |
| Peptic Ulcer | 9.7 | 9.9 | 9.5 |
| Urinary Tract Infection | 7.8 | 9.2 | 6.9 |
| Malaria | 7.5 | 7.3 | 7.7 |
| Rabies | 7.4 | 9.6 | 3.0 |
| Goitre | 7.3 | 7.8 | 6.9 |
| Transmitted Diseases | 6.3 | 6.4 | 6.2 |
| Fever (FUO) | 6.3 | 6.8 | 5.8 |
| Measles | 5.8 | 5.4 | 6.2 |
| Cataract | 5.8 | 6.0 | 5.5 |
| High blood Pressure | 5.2 | 4.7 | 5.5 |
| Chicken pox | 5.1 | 5.7 | 4.3 |
| Night blindness | 4.8 | 4.7 | 4.9 |
| Influenza | 4.7 | 4.7 | 4.7 |
| Whooping cough | 4.6 | 4.6 | 4.5 |
| Nasal polyps | 4.5 | 4.8 | 4.2 |
| Epilepsy | 4.5 | 5.6 | 3.4 |
| Mental Disorder | 4.5 | 4.0 | 5.0 |
| Gynecology Problem | 4.5 | n. a | 4.5 |
| Neck pain | 4.4 | 3.8 | 4.9 |
| Thalassemia | 4.3 | 4.0 | 7.0 |
| Conjunctivitis | 4.2 | 4.6 | 3.9 |

Table 5.5 .5 shows the average work days lost due to morbidity for the last 90 days of the survey by activities. Highest working days lost due to morbidity in taxi/tempo driving activities and it was 14.0 days. Agriculture, daily wage, business activities hampered on an average of 11.3, 11.1\& 10.6 days respectively.

Table 5.5.5: Average work days lost due to morbidity by activities and sex, December, 2011February 2012

| Type of Activities |  | Average work days lost |  |
| :--- | ---: | ---: | ---: |
|  | Total | Male | Female |
| Household work | 9.9 | 8.8 | 10.0 |
| Agriculture | 11.3 | 11.4 | 10.2 |
| Daily wage | 11.1 | 11.2 | 10.3 |
| Van/Rickshaw drive | 9.3 | 9.5 | 8.4 |
| Taxi/Tempo drive | 14.0 | 16.0 | 6.6 |
| Absent in garments | 8.6 | 8.3 | 8.9 |
| Absent in industry/Factory | 9.9 | 10.2 | 9.0 |
| In service | 10.6 | 10.1 | 11.9 |
| Business | 10.6 | 11.0 | 9.2 |
| Employment | 10.2 | 10.1 | 10.8 |
| Others | 9.3 | 9.5 | 9.1 |
|  | $\mathbf{1 0 . 2}$ | $\mathbf{1 0 . 6}$ | $\mathbf{9 . 9}$ |

## CHAPTER-6 <br> MATERNAL HEALTH CARE

Ever married women aged 15-49 years who gave birth during last 1 year of the survey were eligible for the information regarding places of birth, birth attendants, type of delivery, delivery cost, ante natal, post natal care, TT injection during pregnancy etc.

### 6.1 Type of delivery

Fig 6.1 shows that about $83.6 \%$ deliveries were normal and $16.4 \%$ were caesarean among the women aged 15-49 years who gave birth during the last one year of the survey. In rural areas, $87.4 \%$ deliveries were normal and $12.6 \%$ deliveries were caesarean. In urban areas about one-third (30.7\%) deliveries were caesarean.

Fig 6.1: Percentage distribution of type of delivery by area of residence during last one year of the survey.


### 6.2 Assistance during delivery

Table 6.2.1 describes that about 21.2\% deliveries were attended by doctors, $10.3 \%$ by nurses, $36.2 \%$ by trained midwives and, $14.0 \%$ deliveries were with untrained midwives and $15.0 \%$ were with others.

Table 6.2.1: Percentage distribution of birth attendants during delivery.

|  | Doctor | Nurse | Trained <br> midwife | Health <br> Worker | Untrained <br> midwife | Others |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Rural | 18.1 | 8.4 | 38.4 | 3.3 | 15.9 | 16.0 |
| Urban | 32.8 | 17.6 | 27.9 | 3.5 | 6.7 | 11.5 |
| National | 21.2 | $\mathbf{1 0 . 3}$ | 36.2 | 3.3 | $\mathbf{1 4 . 0}$ | $\mathbf{1 5 . 0}$ |

In the table 6.2.2 it is seen that among ever married women aged from 15 to 29 year, proportion of birth attendants as doctor were increasing than with the increase of age of mothers up to age of 44 year, the proportion of birth attendant as doctor decreased.

Table 6.2.2 Proportion of ever married women aged 15-49 year by birth attendant and maternal age group during last 1 year of the survey

| $\begin{gathered} \text { Age } \\ \text { group } \\ \text { (In year) } \end{gathered}$ | Type of birth attendants |  |  |  |  |  |  | Number of Women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Doctor | Trained midwife | Nurse | Health worker | Untrained midwife | Others | Total |  |
| 15-19 | 21.6 | 33.3 | 12.9 | 4.8 | 13.2 | 14.2 | 100 | 176 |
| 20-24 | 21.7 | 35.4 | 12.3 | 3.6 | 12.9 | 14.2 | 100 | 802 |
| 25-29 | 22.7 | 36.0 | 10.2 | 2.5 | 14.2 | 14.5 | 100 | 663 |
| 30-34 | 20.2 | 39.6 | 9.0 | 2.9 | 13.0 | 15.4 | 100 | 338 |
| 35-39 | 16.9 | 35.8 | 7.3 | 4.6 | 18.0 | 17.4 | 100 | 181 |
| 40-44 | 16.1 | 36.9 | 6.9 | 1.3 | 18.5 | 20.2 | 100 | 132 |
| 45-49 | 24.0 | 37.3 | 5.0 | 6.8 | 12.7 | 14.2 | 100 | 98 |
| Total | 21.2 | 36.2 | 10.3 | 3.3 | 14.0 | 15.0 | 100 | 2390 |

From the table 6.2.3 it is seen that doctor as birth attendant was among $38.8 \%$ of the women of highest asset quintile and $13.3 \%$ and $6.8 \%$ of the lowest and $2^{\text {nd }}$ lowest quintile respectively.

Table 6.2.3 Proportion of ever married women aged 15-49 year by birth attendant and asset quintile during last 1 year of the survey

| Asset Quintile | Type of birth attendants |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Doctor | Trained midwife | Nurse | Health worker | Untrained midwife | Others |  |
| Lowest | 13.3 | 26.0 | 13.4 | 11.7 | 27.9 | 24.1 | 21.5 |
| Second | 6.8 | 16.8 | 14.7 | 16.6 | 23.0 | 24.8 | 16.5 |
| Middle | 18.7 | 22.6 | 18.2 | 31.1 | 20.6 | 19.3 | 20.8 |
| Forth | 22.5 | 17.2 | 21.0 | 17.0 | 16.6 | 14.4 | 18.2 |
| Highest | 38.8 | 17.4 | 32.8 | 23.6 | 11.9 | 17.5 | 23.0 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| No of ever married women aged 15-49 year | 544 | 835 | 273 | 84 | 310 | 344 | 2390 |

### 6.3 Places of delivery

In the table 6.3.1, it is seen that one year preceding the survey about $69 \%$ deliveries occurred at home. In the rural areas home deliveries were higher ( $74 \%$ ) and these were lower ( $50 \%$ ) in urban areas. About 14\% deliveries were in Govt. hospital, $15 \%$ were in private hospital and $2 \%$ were in NGO health care centre.

Table 6.3.1: Places of delivery by area of residence of married women aged 15-49 years.
(In Percentage)

| Places of delivery | National | Rural | Urban | No of ever married women <br> aged 15-49 |
| :--- | ---: | ---: | ---: | :---: |
| Govt. hospital/health centre | 14.2 | 12.2 | 22.1 | 374 |
| NGO health centre | 2.2 | 1.8 | 3.5 | 57 |
| Private hospital/health centre | 15.0 | 12.5 | 24.6 | 385 |
| Home | 68.6 | 73.5 | 49.8 | 1574 |
| Total | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{2 3 9 0}$ |

From the table 6.3.2, it is clear that for more than $80 \%$ deliveries of ever married women aged 15-49 years living in lowest and $2^{\text {nd }}$ lowest asset quintile, were taking place at home. Only $50 \%$ deliveries of the mothers of same age living in highest asset quintile happened in health care institutes i. e. other than home.

Table 6.3.2: Proportion of ever married women aged 15-49 year asset quintile and place of delivery

| Asset quintile | Delivery places |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Govt. hospital / <br> health centre | N.G.O <br> health centre | Private hospital/health <br> centre | Home |  |
| Lowest | 9.2 | 2.7 | 7.4 | 80.7 | 100 |
| Second | 9.2 | 2.4 | 7.6 | 80.9 | 100 |
| Middle | 14.6 | 0.9 | 12.9 | 71.7 | 100 |
| Forth | 18.1 | 1.5 | 17.6 | 62.8 | 100 |
| Highest | 19.3 | 3.2 | 27.4 | 50.2 | 100 |
|  | Total | $\mathbf{1 4 . 3}$ | $\mathbf{2 . 2}$ | $\mathbf{1 5 . 0}$ | $\mathbf{6 8 . 6}$ |

### 6.4 Ante-natal care

According to Figure 6.4.1 about 21\% of ever married women aged 15-49 who gave birth during one year preceding the survey did not consult doctor for ante-natal care. More than 4 visits for ante-natal care were made by $22 \%$ mothers. About $49 \%$ mothers with caesarean delivery visit more than 4 times for ante-natal care and $17 \%$ mothers with normal delivery consulted more than 4 times.

Figure 6.4.1: Visit for ante-natal care and by types of delivery


In the table 6.4.2, it is clear that frequency of visits for ante natal care were more among ever married women aged 15-49 who gave birth during one year preceding the survey of upper quintile asset. More than 4 visits were done by $10.8 \%$ mothers of lowest quintile and $16.3 \%$ by mothers of $2^{\text {nd }}$ quintile, $18.4 \%$ by mothers of middle quintile, $26.7 \%$ by mothers of fourth quintile and $37.2 \%$ by mothers of highest quintile.

Table 6.4.2: Proportion of ever married women aged 15-49 years who gave birth during one year preceding the survey visited doctor for ANC by different asset quintile

| Asset quintile | Frequency to visits |  |  |  |  |  |
| :--- | :---: | ---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | Total |  |  |  |
| Lowest | 32.3 | 12.9 | 29.1 | 14.9 | 10.8 | 100 |
| Second | 26.0 | 13.0 | 24.0 | 20.7 | 16.3 | 100 |
| Middle | 22.7 | 13.3 | 27.8 | 17.9 | 18.4 | 100 |
| Forth | 12.2 | 12.4 | 23.7 | 24.9 | 26.7 | 100 |
| Highest | 12.3 | 8.4 | 19.3 | 22.8 | 37.2 | 100 |
|  | Total | $\mathbf{2 1 . 0}$ | $\mathbf{1 1 . 9}$ | $\mathbf{2 4 . 7}$ | $\mathbf{2 0 . 1}$ | $\mathbf{2 2 . 3}$ |

### 6.5 Post-natal care

According to figure 6.5.1, about 43\% ever married women aged 15-49 giving birth with normal and about $20 \%$ women of that age group with caesarean delivery during last one year of the survey did not go for post-natal care consultation. Single visit for postnatal care was made more in case of normal delivery. Frequency of visits to doctor for postnatal care was higher in case of caesarean delivery (14.2\%) compared to normal delivery (7.8\%).

Figure6.5.1: Visit for post-natal care by types delivery


According to table 6.5.2 more than four visits to doctor to consult for post natal care was lowest among ever married women aged 15-49 of lowest asset quintile giving birth during one year preceding the survey and it was highest among those of highest asset quintile.

Table 6.5.2: Proportion of ever married women aged 15-49 year giving birth during one year preceding the survey visited for PNC by different asset quintile

| Asset <br> quintile | 0 | Frequency to visit |  |  |  |  |  | Total |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: |
|  | 0 | 2 | 3 | $4+$ |  |  |  |  |
|  | 46.3 | 17.4 | 23.9 | 6.5 | 5.8 | 100 |  |  |
|  | 46.6 | 19.7 | 16.7 | 9.7 | 7.3 | 100 |  |  |
|  | 40.2 | 20.9 | 19.8 | 10.8 | 8.3 | 100 |  |  |
|  | 29.3 | 21.0 | 27.0 | 13.6 | 9.1 | 100 |  |  |
|  | 32.4 | 16.0 | 26.4 | 12.1 | 13.0 | 100 |  |  |
|  | $\mathbf{3 8 . 8}$ | $\mathbf{1 8 . 9}$ | $\mathbf{2 3 . 0}$ | $\mathbf{1 0 . 5}$ | $\mathbf{8 . 8}$ | $\mathbf{1 0 0}$ |  |  |

In the table 6.5.3, it is observed that there is a negative correlation between birth order and birth attendants as doctor or nurse. With the higher birth order there was a trend of more untrained birth attendants.

Table 6.5.3: Proportion of women aged 15-49 year giving birth during one year preceding the survey by birth attendant and birth order

| Birth attendant | Birth Order |  |  |  |  |  |  |  | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
|  | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ and above |  |  |  |
| Doctor | 26.3 | 22.2 | 17.6 | 14.4 | 12.5 | 14.4 | 21.2 |  |  |
| Trained midwife | 32.4 | 34.5 | 42.4 | 40.3 | 47.6 | 31.6 | 36.2 |  |  |
| Nurse | 13.7 | 10.5 | 8.2 | 8.2 | 4.6 | 3.8 | 10.3 |  |  |
| Health worker | 3.5 | 3.3 | 3.7 | 1.1 | 2.3 | 7.0 | 3.3 |  |  |
| Untrained midwife | 11.9 | 13.4 | 12.6 | 17.2 | 20.6 | 23.5 | 14.0 |  |  |
| Others | 12.1 | 16.2 | 15.6 | 18.8 | 12.4 | 19.9 | 15.0 |  |  |
| Total | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ |  |  |
| Number of women | $\mathbf{7 9 7}$ | $\mathbf{7 6 0}$ | $\mathbf{4 0 5}$ | $\mathbf{2 1 9}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 9}$ | $\mathbf{2 3 9 0}$ |  |  |

### 6.6 Average expenditure for ANC, PNC and delivery care

In the table 6.6.1 it is observed that in all three stages ante-natal, delivery and post-natal care cost in urban area was higher than that in rural area. Average expenditure for ante-natal care was Tk. 1187 in which it was Tk. 1021 in rural area and Tk. 1814 in urban area. Average expenditure for delivery care in case of cesarean Tk. 13032 and in case of normal delivery the cost was Tk.1251. The expenditure for caesarian delivery in rural area was Tk. 12535 and Tk. 13804 in urban area. For normal delivery the average expenditure in rural area was Tk. 1097 and in urban area it was Tk.1982. Average post-natal care in rural area was Tk. 889 and in urban area it was Tk.1503.

Table 6.6.1: Average expenditure for ANC, PNC and delivery care

| Residence | Average expenditure (Tk.) |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | ANC | PNC | Caesarian <br> delivery | Normal delivery |
| Rural | 1021 | 889 | 12535 | 1097 |
| Urban | 1814 | 1503 | 13804 | 1982 |
| National | $\mathbf{1 1 8 7}$ | $\mathbf{1 0 1 7}$ | $\mathbf{1 3 0 3 2}$ | $\mathbf{1 2 5 1}$ |

According the table 6.6.2, average expenditure for ANC, PNC, normal and caesarean delivery is highest in Private hospital, $2^{\text {nd }}$ highest expenditure for these is in Govt. Hospital/ health centres and the lowest expenditure is in NGO health centres.

Table 6.6.2: Average expenditure for ANC, PNC, Normal and Caesarean delivery by type of delivery places

| Delivery places | Average. expenditure (Tk) |  |  |  |
| :--- | ---: | :---: | :---: | :---: |
|  | ANC | PNC | Caesarean <br> Delivery | Normal <br> Delivery |
| Govt. hospital/health centre | 1505 | 1555 | 10752 | 2936 |
| N.G.O health centre | 998 | 578 | 8670 | 2108 |
| Private hospital/health centre | 2830 | 1910 | 14572 | 5546 |
| Total | $\mathbf{1 1 8 7}$ | $\mathbf{1 0 1 7}$ | $\mathbf{1 3 0 3 2}$ | $\mathbf{1 2 5 1}$ |

### 6.7 TT coverage

Ever married women aged 15-49 year who received TT for their last pregnancy during last 1 year of survey are shown in table 6.7. About $58 \%$ of women aged 15-49 received TT during last pregnancy. Recipients of TT among mothers during last pregnancy in rural areas was little higher than that in urban areas. Mothers not received TT during last pregnancy does not mean that they were at risk, because some of them might have fulfilled their TT doses before the last pregnancy. In the questionnaire there was no scope to find out who completed the TT doses before the last pregnancy.

Table 6.7 Percentage distribution of ever married women aged 15-49 year who received TT during their last pregnancy by residence

| Use of TT | National | Rural | Urban |
| :--- | :---: | :---: | :---: |
| TT received | 58.2 | 58.4 | 57.8 |
| TT not received | 41.8 | 41.6 | 42.2 |
| $r$ Total | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ |

## CHAPTER-7

VACCINATION AND VITAMIN-A COVERAGE

Vaccination coverage for children of 12-23 months and coverage of vitamin-A capsule for the children 06-59 months are addressed by sex, residence and divisions in this chapter. Reasons for not taking vaccines are also shown here. Mothers or caregiver of the children aged 00-23 months were asked whether the child had been vaccinated or not. If the response was positive then she or he was asked to show the card issued as a document of vaccination. If they failed to show the card then using the recall method the information regarding vaccination were collected. All mothers or caregivers of children aged 06-59 months were asked whether their children had been taken or not vitamin-A capsule in the last National Immunization Day (NID).

### 7.1 Vaccination of children

According to table 7.1.1, vaccines for BCG, Penta-1,2,3, OPV-1,2,3 were separately covered among more than $80 \%$ children of age 12-23 months and the coverage of vaccine for measles was $79 \%$. Coverage of all vaccines together for this age group is $70 \%$. More male children were vaccinated than female children and more urban children are vaccinated than rural children of this age group.

Table 7.1.1: Children of 12-23 months who received specific vaccines by sex and residence
(In Percentage)

| Vaccines | National |  |  | Rural |  |  |  | Urban |  |  |
| :--- | :---: | :---: | ---: | :---: | :---: | :---: | :---: | :---: | ---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |  |
| BCG | 88.3 | 89.2 | 87.3 | 88.0 | 88.8 | 87.1 | 89.4 | 90.7 | 88.2 |  |
| Penta-1 | 90.4 | 91.4 | 89.3 | 90.1 | 90.9 | 89.3 | 91.5 | 93.5 | 89.4 |  |
| Penta-2 | 87.6 | 88.2 | 86.9 | 87.2 | 87.5 | 86.8 | 88.9 | 90.6 | 87.1 |  |
| Penta-3 | 84.6 | 85.9 | 83.3 | 84.2 | 85.4 | 82.9 | 86.0 | 87.6 | 84.5 |  |
| OPV-1 | 84.2 | 85.1 | 83.2 | 83.6 | 84.5 | 82.6 | 86.4 | 87.2 | 85.5 |  |
| OPV-2 | 82.7 | 84.0 | 81.2 | 82.1 | 83.1 | 81.0 | 84.8 | 87.7 | 81.9 |  |
| OPV-3 | 80.2 | 82.1 | 78.2 | 79.8 | 81.6 | 77.8 | 81.9 | 84.1 | 79.6 |  |
| Measles | 79.5 | 80.9 | 78.0 | 79.3 | 80.8 | 77.6 | 80.3 | 81.2 | 79.4 |  |
| All vaccines | 70.2 | 71.2 | 69.2 | 69.8 | 71.1 | 68.4 | 71.7 | 71.6 | 71.8 |  |

Note: (Penta = DPT, HEP B and Hib)

Figure 7.1.2 shows that coverage of all vaccines among children of age 12-23 months was highest in Rajshahi division (81.1\%) and lowest in Sylhet division (60.6\%). In all divisions other than Khulna, coverage of vaccine was higher in urban area than in rural area. In Khulna division, this coverage was $75.3 \%$ in rural area and $64.4 \%$ in urban area. Difference between urban and rural children in vaccinations was highest in Barisal division and there coverage in urban area was $80.4 \%$ and in rural area it was $58.6 \%$.

Fig 7.1.2: Children of 12-23 months who received all vaccines by divisions and residence (\%)


According to the figure 7.1.3 the gap of coverage of all vaccines between male and female was more in Khulna division where male coverage was $78 \%$ and female coverage was $69 \%$. In Chittagong and Barisal divisions more female children of this age group were vaccinated than male children.

Fig 7.1.3: Children of 12-23 months received all vaccines by divisions and sex (\%)


Table 7.1.4 shows that about $6.0 \%$ children of age 12-23 months were out of vaccination. The main reason for not getting vaccine was lack of knowledge about necessity of vaccine and it was $3.0 \%$.

Table 7.1.4: Children aged 12-23 months not covered with vaccination by reasons and division (In Percentage)

| Reasons | Barisal | Chittagong | Dhaka | Khulna | Rajshahi | Rangpur | Sylhet | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Under weight | 0.0 | 0.5 | 0.7 | 0.5 | 0.5 | 0.0 | 1.0 | 0.5 |
| Lack of <br> knowledge on <br> necessity of <br> vaccine | 4.1 | 1.4 | 3.8 | 2.3 | 1.5 | 2.0 | 7.4 | 3.0 |
| No <br> knowledge <br> about doses <br> of given <br> vaccine | 0.0 | 0.6 | 1.0 | 0.0 | 0.0 | 0.5 | 1.4 | 0.6 |
| Don't know <br> the place of <br> vaccine center | 0.0 | 0.4 | 0.5 | 0.0 | 0.5 | 0.5 | 0.3 | 0.4 |
| Illness of <br> baby | 0.3 | 0.4 | 0.4 | 0.0 | 1.0 | 0.5 | 0.0 | 0.4 |
| Fear of side <br> effects | 0.8 | 0.2 | 0.1 | 0.0 | 0.5 | 0.2 | 0.0 | 0.2 |
| Others | 0.8 | 0.2 | 1.1 | 0.2 | 0.0 | 1.5 | 2.9 | 0.9 |
| Total | 5.9 | $\mathbf{3 . 7}$ | 7.5 | 2.9 | $\mathbf{4 . 0}$ | $\mathbf{5 . 3}$ | $\mathbf{1 3 . 1}$ | $\mathbf{6 . 0}$ |

### 7.2 Coverage of vitamin-A capsule

According to table 7.2, about 81\% children aged 06-59 months were covered with vitamin-A capsule in the last National Immunization Day (NID) before the survey. Among the divisions Chittagong had the highest coverage with $86 \%$ and Barisal and Sylhet had the lowest coverage with $75 \%$. In the rural areas the coverage was $79 \%$ and that in urban areas were $85 \%$.

Table 7.2: Children aged 06-59 months who received vitamin-A capsule in the last NID by sex, residence and division

| Division | National |  |  | Rural |  |  |  |  |  |  |  |  | Urban |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |  |  |  |  |  |  |
| Barisal | 75 | 76 | 74 | 75 | 75 | 74 | 76 | 78 | 74 |  |  |  |  |  |  |
| Chittagong | 86 | 85 | 86 | 84 | 84 | 85 | 90 | 90 | 91 |  |  |  |  |  |  |
| Dhaka | 81 | 82 | 80 | 80 | 82 | 78 | 83 | 82 | 84 |  |  |  |  |  |  |
| Khulna | 82 | 81 | 83 | 81 | 80 | 83 | 85 | 87 | 83 |  |  |  |  |  |  |
| Rajshahi | 80 | 81 | 79 | 79 | 80 | 77 | 85 | 85 | 85 |  |  |  |  |  |  |
| Rangpur | 78 | 78 | 77 | 76 | 77 | 76 | 87 | 90 | 84 |  |  |  |  |  |  |
| Sylhet | 75 | 77 | 73 | 74 | 77 | 72 | 81 | 82 | 80 |  |  |  |  |  |  |
| Total | $\mathbf{8 1}$ | $\mathbf{8 1}$ | $\mathbf{8 0}$ | $\mathbf{7 9}$ | $\mathbf{8 0}$ | $\mathbf{7 9}$ | $\mathbf{8 5}$ | $\mathbf{8 5}$ | $\mathbf{8 5}$ |  |  |  |  |  |  |

## CHAPTER-8

## KNOWLEDGE REGARDING HIV/AIDS, TT VACCINE \& NID

HIV/AIDS is one of the threats to mankind. HIV means Human immune deficiency virus and AIDS means Acquired Immune Deficiency Syndrome. HIV is responsible for the diseases which totally destroy our immunity and thus result death. TT means Tetanus Toxoid which is a vaccine given to prevent tetanus disease. This chapter deals with knowledge regarding HIV/ AIDS among population aged 15-24 years. As the issue of HIV/ AIDS is very sensitive, there were some special instructions in collecting the data. For this issue interviewers were asked to interview every individual of the age group 15-24 year with a very special care and efficiency. In spite of 3 times visiting a household if a respondent of this age group was unavailable and unwilling to respond then he or she was marked as absent or unwilling.

Information on knowledge of receiving TT vaccine for the reproductive ages among the mothers having children of 00-59 months and knowledge of National Immunization Day (NID) among these mothers were also included in this chapter. Mothers were asked whether they knew about receiving TT vaccine to protect newborn and mother from tetanus. If the answer was positive then they were asked to tell the schedules of vaccines.

### 8.1 Knowledge of HIV/AIDS

Table 8.1.1 describes the population aged 15-24 years by having the knowledge of learning source of HIV/AIDS (Multiple responses). Television was the main source (62.5\%) of information of learning about HIV/AIDS and $83.8 \%$ of population aged 15-24 years heard it from this electronic media. About $22 \%$ population of this age group learnt it from educational institutes and about $22 \%$ heard it from radio.

Table 8.1.1: Knowledge of population aged 15-24 years on HIV/ AIDS by learning source by sex and residence (Multiple responses)
(In Percentage)

| Sources of learning <br> about HIV/AIDS | National |  |  |  | Rural |  |  |  | Urban |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |  |  |
| Radio | 21.3 | 21.9 | 20.7 | 20.4 | 20.8 | 19.8 | 24.4 | 25.4 | 23.4 |  |  |
| Television | 62.5 | 63.8 | 61.0 | 59.2 | 61.2 | 57.1 | 72.9 | 73.2 | 72.7 |  |  |
| Billboard/Poster | 12.8 | 14.4 | 11.2 | 10.9 | 12.5 | 9.2 | 19.1 | 21.1 | 17.3 |  |  |
| News papers | 12.9 | 14.1 | 11.6 | 10.7 | 12.1 | 9.1 | 20.1 | 21.1 | 19.2 |  |  |
| Educational | 21.7 | 20.8 | 22.8 | 21.0 | 20.2 | 21.9 | 24.0 | 22.6 | 25.3 |  |  |
| Institutes | 17.3 | 17.3 | 17.2 | 17.2 | 17.5 | 16.9 | 17.4 | 16.6 | 18.2 |  |  |
| Relative/Friends | 2.1 | 1.9 | 2.4 | 2.1 | 1.9 | 2.2 | 2.4 | 2.0 | 2.8 |  |  |
| Others |  |  |  |  |  |  |  |  |  |  |  |

Populations aged 15-24 years by having the knowledge of transmission mode of HIV/AIDS are shown in table 8.1.2 (multiple responses). About 47\% of population aged 15-24 years thought that using used needles/syringes was the way of transmission of HIV/AIDS. About 13\% population of this age group did not know about the transmission process of HIV/AIDS.

Table 8.1.2: Knowledge of population aged 15-24 years on transmission mode of HIV/AIDS by sex and residence

| Knowledge of HIV/AIDS transmission |  |  |  |  |  |  | Urban |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | National |  |  | Rural |  |  |  |  |  |
|  | Total | Male | Female | Total | Male | Female | Total |  | Female |
| Sex without condom | 34.5 | 36.0 | 33.0 | 32.4 | 34.1 | 30.6 | 41.2 | 42.4 | 40.1 |
| Using used needles/syringes | 47.3 | 47.7 | 46.9 | 43.8 | 45.0 | 42.5 | 58.8 | 57.2 | 60.3 |
| Unsafe blood transfusions | 28.2 | 28.4 | 27.9 | 25.6 | 26.1 | 25.0 | 36.6 | 36.3 | 36.9 |
| Sharing razors and blades | 18.0 | 20.4 | 15.5 | 16.8 | 19.2 | 14.2 | 22.0 | 24.4 | 19.7 |
| Intercourse with HIV/AIDS affected Husband/ wife | 13.4 | 13.0 | 13.9 | 12.6 | 12.4 | 12.8 | 16.1 | 14.9 | 17.3 |
| By born | 3.5 | 3.3 | 3.8 | 3.2 | 2.9 | 3.5 | 4.7 | 4.7 | 4.7 |
| Don't know | 12.9 | 12.2 | 13.6 | 13.9 | 13.0 | 15.0 | 9.5 | 9.4 | 9.6 |

### 8.2 Knowledge of prevention of HIV/AIDS

In the table 8.3, population aged 15-24 years is described by having the knowledge of prevention of HIV/AIDS (Multiple response). About $40 \%$ population aged $15-24$ years had the knowledge of preventive measures of HIV/AIDS as avoiding sharing syringe. About $17 \%$ population of this age group did not know about preventive measures.

Table 8.2: Population aged 15-24 years by having the knowledge of prevention of HIV/AIDS, sex and residence

|  |  |  |  |  |  |  |  | (In | centage) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Knowledge about HIV/AIDS prevention | National |  |  | Rural |  |  | Urban |  |  |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| Protected sex | 33.3 | 34.4 | 32.2 | 30.9 | 32.4 | 29.2 | 41.1 | 41.1 | 41.0 |
| Transfusion of unscreened blood | 36.8 | 37.2 | 36.4 | 33.9 | 35.0 | 32.6 | 46.5 | 45.1 | 47.7 |
| Avoid sharing syringe | 39.4 | 40.5 | 38.3 | 36.6 | 38.3 | 34.8 | 48.3 | 48.0 | 48.6 |
| Avoid sharing razors /blades | 14.6 | 16.4 | 12.6 | 13.2 | 15.1 | 11.1 | 19.0 | 21.1 | 17.2 |
| Not giving birth by HIV/ AIDS infected Husband/ wife | 9.3 | 8.6 | 10.0 | 8.5 | 8.0 | 9.1 | 11.7 | 10.7 | 12.7 |
| Don't know | 16.9 | 15.9 | 17.9 | 17.9 | 16.7 | 19.2 | 13.5 | 13.2 | 13.7 |

### 8.3 Knowledge of TT doses

Mothers with children 00-59 months having knowledge about TT doses for reproductive health are shown in table 8.4 by residence. Among mothers with children $00-59$ months, $24 \%$ had correct knowledge regarding TT doses for reproductive age. More mothers in rural (24.8\%) had correct knowledge compared to mothers in urban area (22.7\%).

Table 8.3: Percentage distribution of mothers with children 00-59 months having knowledge about TT doses for reproductive age by residence

| Residence | Mother having knowledge about TT doses (\%) |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TT2 | TT3 | TT4 | TT5 | All TT |  |
| Rural | 37.6 | 36.6 | 33.3 | 30.2 | 24.8 |  |
| Urban | 36.5 | 35.5 | 34.3 | 30.9 | 22.7 |  |
| National | $\mathbf{3 7 . 3}$ | $\mathbf{3 6 . 4}$ | $\mathbf{3 3 . 5}$ | $\mathbf{3 0 . 3}$ | $\mathbf{2 4 . 4}$ |  |

### 8.4 Knowledge about NID

The table 8.5 deals with mothers with children 00-59 months having knowledge about National Immunization Day (NID). Among mothers $83 \%$ knew about national immunization day whereas this was $81 \%$ in rural and $89 \%$ in urban area. Mothers of Dhaka division (86\%) were the highest in this regard and mothers of Sylhet division (77\%) were in the lowest among divisions.

Table 8.4: Percentage distribution of mothers with children 00-59 months having knowledge about NID for vaccination by division and residence

| Division | National | Rural | Urban |
| :--- | :---: | :---: | :---: |
| Barisal | 81 | 80 | 84 |
| Chittagong | 80 | 78 | 87 |
| Dhaka | 86 | 84 | 90 |
| Khulna | 85 | 84 | 89 |
| Rajshahi | 84 | 83 | 89 |
| Rangpur | 82 | 81 | 90 |
| Sylhet | Total | $\mathbf{8 3}$ | 76 |
|  | $\mathbf{8 1}$ | $\mathbf{8 9}$ |  |

## CHAPTER-9

## USE OF TOBACCO AND ABUSE OF INTOXICATING SUBSTANCE

This chapter describes about use of tobacco and narcotics among population 15 years and above. All the individuals of this age group were asked separately and help of other members of the household were also sought if needed. For information of this part, interviewers were instructed to be cautious enough and to be tactful. Assistance from the Local Registrars of SVRS project of BBS living in the same PSU was also helpful in collecting data on these types of sensitive issues. Age of initiation for smoking, tobacco \& narcotic use, expenditure for tobacco and narcotic in the previous day of data collection, distribution of tobacco and narcotic users by sex, residence, division and level of education are presented in the chapter.

### 9.1 Tobacco users and intoxicating substance abuser (15+year)

Table 9.1.1 shows that about $33.5 \%$ population (15+) used tobacco where $44.3 \%$ were male and $23 \%$ were female. More people in rural area (35.3\%) used tobacco than people in urban areas (27.8\%). Rate of smokers was $19.8 \%$ and the rate of smokeless tobacco ( tobacco leaf, zarda , gull) was $16.8 \%$. More male were engaged in smoking (36.7\%) and in abusing intoxicating substance (1.3\%). In using smokeless tobacco female (20.2\%) were more compared to male (13.4\%). Rate of smoking, smokeless tobacco and intoxicating substance abusing was higher in rural areas compared to urban areas.

Table 9.1.1: Rate of tobacco (smoking and smokeless) users and intoxicating substance abuser (15+ years) by sex and residence

Rate of Tobacco user by age group and sex
(In Percentage)

|  | Age group (year) |  |  |  |  | Total | Number of tobacco <br> users 15+ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | $\mathbf{1 5 - 1 9}$ | $\mathbf{2 0 - 3 4}$ | $\mathbf{3 5 - 4 9}$ | $\mathbf{5 0 +}$ | 44.3 | 20126 |  |
| Male | 7.7 | 33.4 | 61.4 | 65.2 | 44 | 23.0 | 10423 |
| Female | 2.1 | 10.3 | 32.5 | 44.9 | $\mathbf{3}$ |  |  |
|  | Total | $\mathbf{5 . 2}$ | $\mathbf{2 1 . 1}$ | $\mathbf{4 6 . 7}$ | $\mathbf{5 5 . 2}$ | $\mathbf{3 3 . 5}$ | $\mathbf{3 0 5 4 9}$ |

Rate of smoker by age group and sex
(In percentage)

|  | Age group (year) |  |  |  |  | Total | Number of smokers <br> $\mathbf{1 5 +}$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | $\mathbf{1 5 - 1 9}$ | $\mathbf{2 0 - 3 4}$ | $\mathbf{3 5 - 4 9}$ | $\mathbf{5 0 +}$ |  | 16641 |  |
| Male | 6.7 | 29.6 | 52.6 | 49.2 | 36.7 | 1467 |  |
| Female |  | 0.8 | 1.6 | 4.5 | 6.0 | 3.2 | 14.2 |
|  | Total | $\mathbf{4 . 0}$ | $\mathbf{1 4 . 7}$ | $\mathbf{2 8 . 1}$ | $\mathbf{2 8 . 0}$ | $\mathbf{1 9 . 8}$ | $\mathbf{1 8 1 0 8}$ |

Rate of smokeless tobacco user by age group and sex

|  | Age group (year) |  |  |  |  | Total | No of smokeless <br> tobacco users 15+ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{1 5 - 1 9}$ | $\mathbf{2 0 - 3 4}$ | $\mathbf{3 5 - 4 9}$ | $\mathbf{5 0 +}$ |  | 6016 |  |
| Male | 1.3 | 6.7 | 17.2 | 26.5 | 13.4 | 9141 |  |
| Female | 1.3 | 9.0 | 28.9 | 39.5 | 20.2 | $\mathbf{1 5 1 5 7}$ |  |
|  | Total | $\mathbf{1 . 3}$ | $\mathbf{7 . 9}$ | $\mathbf{2 3 . 2}$ | $\mathbf{3 2 . 9}$ | $\mathbf{1 6 . 8}$ |  |

## Rate of intoxicating substance abuser by age group and sex

(In Percentage)

|  | Age group (year) |  |  |  |  |  | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\mathbf{1 5 - 1 9}$ | $\mathbf{2 0 - 3 4}$ | $\mathbf{3 5 - 4 9}$ | $\mathbf{5 0 +}$ |  | Number of intoxicating <br> substance abuser |
| Male | 0.3 | 1.2 | 1.9 | 1.6 | 1.3 | 593 |  |
| Female |  | 0.1 | 0.2 | 0.5 | 0.5 | 0.4 | 151 |
|  | Total | $\mathbf{0 . 2}$ | $\mathbf{0 . 7}$ | $\mathbf{1 . 2}$ | $\mathbf{1 . 1}$ | $\mathbf{0 . 8}$ | $\mathbf{7 4 4}$ |

Rate of tobacco user by sex and residence
(In Percentage)

|  | Rural | Urban | Total |
| :--- | :---: | :---: | :---: |
| Male | 46.1 | 38.7 | 44.3 |
| Female |  | 24.8 | 17.3 |
|  | $\mathbf{3 5 . 3}$ | $\mathbf{2 7 . 8}$ | 23.0 |
|  | Total |  | $\mathbf{3 3 . 5}$ |

Rate of smoker by age group and sex
(In Percentage)

|  | Rural | Urban | Total |
| :--- | :---: | :---: | :---: |
| Male | 37.9 | 32.7 | 36.7 |
| Female |  | 3.6 | 2.2 |
|  | Total | $\mathbf{2 0 . 6}$ | $\mathbf{1 7 . 2}$ |

Rate of smokeless tobacco user by sex and residence
(In Percentage)

|  | Rural | Urban | Total |
| :--- | :---: | :---: | :---: |
| Male | 14.5 | 9.8 | 13.4 |
| Female | 21.8 | 15.3 | 20.2 |
|  | Total | $\mathbf{1 8 . 2}$ | $\mathbf{1 2 . 6}$ |

Rate of intoxicating substance abuser user by sex and residence
(In Percentage)

|  | Rural | Urban | Total |
| :--- | :---: | :---: | :---: |
| Male | 1.4 | 1.0 | 1.3 |
| Female |  | 0.4 | 0.1 |
|  | $\mathbf{0 . 9}$ | $\mathbf{0 . 6}$ | 0.4 |

According to table 9.1.3, there exists a negative correlation between education and the use of tobacco (both smoking and smokeless) and abuse of intoxicating substance. As the level of education increases, the use of tobacco and intoxicating substance decreases. Overall rate of smoking was $19.8 \%$ and it was $27.3 \%$ among persons without education, $22.2 \%$ among persons with primary, $47 \%$ of non-educated people aged 10 years and above use tobacco \& narcotics and it was the highest portion among people of different level of education and about $24 \%$ of this group of people do smoking. About $45 \%$ of HSC and above used tobacco \& narcotics.

Table 9.1.3: Percentage distribution of smokers, smokeless tobacco users and intoxicating substance abusers by level of education

|  | Rate of Smokers 15+ year by education |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female | Total |
| Level of education | No schooling | 56.2 | 5.7 | 27.3 |
|  | I-IV | 39.2 | 3.4 | 22.2 |
|  | V | 38.3 | 2.2 | 20.5 |
|  | VI-IX | 26.3 | 1.1 | 13.3 |
|  | SSC | 19.7 | 0.9 | 11.8 |
|  | HSC and above | 17.2 | 0.4 | 11.5 |
|  | Others | 8.7 | 0.0 | 5.8 |
|  | Total | 36.7 | 3.2 | 19.8 |
|  | Number of smokers | 16641 | 1467 | 18108 |
| Rate of Smokeless tobacco user 15+ year by education |  |  |  |  |
|  |  | Male | Female | Total |
| Level of education | No schooling | 21.1 | 33.4 | 28.2 |
|  | I-IV | 14.6 | 22.1 | 18.2 |
|  | V | 13.8 | 18.4 | 16.1 |
|  | VI-IX | 8.8 | 7.9 | 8.3 |
|  | SSC | 7.2 | 4.7 | 6.2 |
|  | HSC and above | 5.9 | 3.1 | 5.0 |
|  | Others | 11.7 | 13.4 | 12.2 |
|  | Total | 13.4 | 20.2 | 16.8 |
|  | Number of smokeless tobacco users | 6016 | 9141 | 15157 |
| Rate of intoxicating substance abuser 15+ year by education |  |  |  |  |
|  |  | Male | Female | Total |
| Level of education | No schooling | 2.4 | 0.7 | 1.4 |
|  | I-IV | 1.5 | 0.3 | 0.9 |
|  | V | 1.1 | 0.1 | 0.6 |
|  | VI-IX | 0.7 | 0.1 | 0.4 |
|  | SSC | 0.6 | 0.1 | 0.4 |
|  | HSC and above | 0.6 | 0.1 | 0.4 |
|  | Total | 1.3 | 0.4 | 0.8 |
|  | Intoxicating substance abusers | 593 | 151 | 744 |

### 9.2 Age of initiation for tobacco users and intoxicating substance abuser

According to table 9.2, about $44 \%$ smokers start it at the age of $20-34$ year. More than $47 \%$ of intoxicating substance abusers started it at the age of 20-34 year and $33 \%$ of the users started it at 1619 year. About $53 \%$ of smokeless tobacco users started it at the age of 20-34 year.

Table 9.2: Proportion of Smokers, Smokeless Tobacco users and intoxicating substance abusers by age of initiation and by sex (\%)

| Age of initiation of smoking (In year) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50+ | Total |
| Male | 0.6 | 12.5 | 39.7 | 43.6 | 3.2 | 0.5 | 100 |
| Female | 1.1 | 11.5 | 28.0 | 46.5 | 10.1 | 2.8 | 100 |
| Total | 0.6 | 12.4 | 38.7 | 43.9 | 3.7 | 0.7 | 100 |
| Age of initiation of smokeless tobacco use (In year) |  |  |  |  |  |  |  |
|  | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50+ | Total |
| Male | 2.4 | 6.1 | 21.4 | 51.5 | 14.7 | 3.9 | 100 |
| Female | 2.2 | 6.4 | 19.2 | 53.4 | 16.1 | 2.8 | 100 |
| Total | 2.3 | 6.3 | 20.1 | 52.7 | 15.5 | 3.2 | 100 |
| Age of initiation of intoxicating substance abuse (In year) |  |  |  |  |  |  |  |
|  | 5-9 | 10-14 | 15-19 | 20-34 | 35-49 | 50+ | Total |
| Male | 3.2 | 12.4 | 31.9 | 46.8 | 4.6 | 1.1 | 100 |
| Female | 1.3 | 7.3 | 36.7 | 49.0 | 3.5 | 2.1 | 100 |
| Total | 2.8 | 11.3 | 33.0 | 47.3 | 4.4 | 1.3 | 100 |

### 9.3 Tobacco users by Division

Table 9.3 shows that about $45 \%$ of population aged 15 years and above of Sylhet division used tobacco and it was highest among divisions whereas the percentage of tobacco users for national level was $33.5 \%$. The least tobacco users were in Rajshahi division and it was $28.9 \%$. About $52.5 \%$ male and $37.5 \%$ female of Sylhet division were tobacco users.

Table 9.3: Tobacco (smoking + smokeless) users by division and sex (\%)

| Division | Male | Female | Total |
| :--- | :---: | :---: | :---: |
| Barisal | 37.8 | 26.8 | 32.3 |
| Chittagong | 44.3 | 24.2 | 34.0 |
| Dhaka | 43.4 | 25.2 | 34.1 |
| Khulna | 42.1 | 16.5 | 29.4 |
| Rajshahi | 43.6 | 14.3 | 28.9 |
| Rangpur | 48.7 | 20.8 | 34.9 |
| Sylhet | 52.5 | 37.5 | 44.8 |
|  | $\mathbf{4 4 . 3}$ | $\mathbf{2 3 . 0}$ | $\mathbf{3 3 . 5}$ |

### 9.4 Average expenditure per day for using tobacco and intoxicating substance abuse

Expenditure on the specific item in the previous day of data collection was recorded. So expenditure was under estimated for those who did not spend for these purposes every day. Table 9.4 describes that per day average expenditure for smoking per capita was Tk. 15.8, for narcotic Tk. 31.1 and for smokeless tobacco Tk. 4.9. On an average per day expenditure incurred by a male smoker was Tk. 16.3 and by female Tk. 8.5. In case of intoxicating substance a male abuser spent per day Tk. 34.6 while a female abuser spent Tk. 11.9. It is revealed that males were more addicted than female and spent more money.

Table 9.4: Average expenditure per day for using tobacco and narcotics by sex
(Figure in Taka)

| Sex | Per day avg. exp for <br> smoking | Per day avg. exp for <br> intoxicating substance <br> abuse | Per day avg. exp for <br> tobacco (smokeless) |
| :--- | :---: | :---: | :---: |
| Male | 16.3 | 34.6 | 5.6 |
| Female | 8.5 | 11.9 | 4.5 |
| Total | $\mathbf{1 5 . 8}$ | $\mathbf{3 1 . 1}$ | $\mathbf{4 . 9}$ |

## CHAPTER-10 <br> IMPAIRMENTS AND ACCIDENTS/ INJURY

According to recommendation of Washington Group, information on six types of impairments was collected. This chapter also includes prevalence of accidents/ injury, expenditure due to accident, type of treatment etc.

Impairment means any loss or abnormality of physiological and psychological function. The estimates have been produced at national, rural, urban and divisional levels. The results documented here were based on single response, i.e. a person had been identified as disabled on the basis of the most serious impairment as considered by the respondent from amongst the impairments reported. No multiple responses on disabilities/impairments were used on the tables, only single responses on disabilities/impairments had been used. The question to identify a person as impaired was whether the HH had any member with any kind of impairments. Once identified as impaired, a special interview of impaired person was conducted on categories of impairments like difficulties in seeing, hearing, walking/climbing, remembering/concentrating, self-care, communicating to others and about treatment expenditure for the last 90 days of the survey.

### 10.1 Impaired persons

Prevalence of impaired persons per 1000 population was 7.2 at national level and it was 7.3 in rural and 6.8 in urban areas as revealed in Table 10.1.1. Male were more (7.5) impaired compared to female (6.8) in both national and in rural but in urban areas female were more impaired than male. Prevalence of impaired persons was highest in Barisal division (8.7) and it was lowest in Rangpur division (3.3).

Table 10.1.1: Prevalence of physically or mentally impaired persons by sex, residence and division
(Per 1000 population)

| Division | National |  |  |  | Rural |  |  |  | Urban |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |  |  |
| Barisal | 8.7 | 10.4 | 7.8 | 12.5 | 10.0 | 15.1 | 3.2 | 12.2 | 1.8 |  |  |
| Chittagong | 6.6 | 9.9 | 4.8 | 10.0 | 11.2 | 8.9 | 2.5 | 5.8 | 1.7 |  |  |
| Dhaka | 3.7 | 5.6 | 2.5 | 5.0 | 6.1 | 4.0 | 2.3 | 4.6 | 1.5 |  |  |
| Khulna | 7.0 | 10.2 | 5.2 | 8.6 | 8.9 | 8.3 | 4.7 | 16.1 | 2.7 |  |  |
| Rajshahi | 4.0 | 6.1 | 2.8 | 5.3 | 5.6 | 4.9 | 2.2 | 8.2 | 1.1 |  |  |
| Rangpur | 3.3 | 4.7 | 2.5 | 4.7 | 4.7 | 4.7 | 1.1 | 4.4 | 0.7 |  |  |
| Sylhet | 7.6 | 11.1 | 5.7 | 10.2 | 11.7 | 8.8 | 3.6 | 7.8 | 3.0 |  |  |
|  | $\mathbf{7 . 2}$ | $\mathbf{7 . 5}$ | $\mathbf{6 . 8}$ | $\mathbf{7 . 3}$ | $\mathbf{7 . 8}$ | $\mathbf{6 . 7}$ | $\mathbf{6 . 8}$ | $\mathbf{6 . 6}$ | $\mathbf{7 . 0}$ |  |  |
| Number of <br> impaired persons | $\mathbf{1 0 5 5}$ | $\mathbf{5 4 3}$ | $\mathbf{5 1 2}$ | $\mathbf{6 7 3}$ | $\mathbf{3 5 8}$ | $\mathbf{3 1 5}$ | $\mathbf{3 8 2}$ | $\mathbf{1 8 5}$ | $\mathbf{1 9 7}$ |  |  |

In the table 10.1.2, distribution of impaired persons is shown by type of impairments, sex and residence. Persons with difficulty walking/climbing were most among different type of impairments and its prevalence per 1000 population was $3.3,2^{\text {nd }}$ most impairments were difficulty seeing with the prevalence 1.4 per 1000 population.

Table 10.1.2: Prevalence of impaired persons by type of difficulties, sex and residence
(Per 1000 population)

| Type of difficulty | Total |  |  |  | Rural |  |  |  | Urban |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |  |  |
| Seeing | 1.4 | 1.5 | 1.4 | 0.8 | 0.7 | 1.0 | 1.2 | 0.8 | 1.7 |  |  |
| Hearing | 0.8 | 0.8 | 0.8 | 1.9 | 2.1 | 1.7 | 0.7 | 0.6 | 0.8 |  |  |
| Walking/ climbing | 3.3 | 3.5 | 3.0 | 1.5 | 1.8 | 1.2 | 3.3 | 3.8 | 2.9 |  |  |
| Remembering/ <br> concentrating | 0.7 | 0.7 | 0.7 | 1.0 | 1.0 | 0.9 | 0.7 | 0.6 | 0.9 |  |  |
| Self care | 0.3 | 0.3 | 0.4 | 0.7 | 0.8 | 0.7 | 0.3 | 0.3 | 0.3 |  |  |
| Communicating | 0.6 | 0.7 | 0.5 | 0.6 | 0.6 | 0.6 | 0.5 | 0.6 | 0.5 |  |  |
| Total | $\mathbf{7 . 2}$ | $\mathbf{7 . 5}$ | $\mathbf{6 . 8}$ | $\mathbf{7 . 3}$ | $\mathbf{7 . 8}$ | $\mathbf{6 . 7}$ | $\mathbf{6 . 8}$ | $\mathbf{6 . 6}$ | $\mathbf{7 . 0}$ |  |  |

### 10.2 Rate of receiving care

In the questionnaire, there was no scope to identify whether the treatment received was from trained or untrained health care provider. According to table 10.2, among the impaired persons $99.7 \%$ are receiving treatment from any provider. $100 \%$ of the people having difficulty with walking/ climbing, remembering/ concentrating, self care \& communicating and $99.4 \%$ people with seeing difficulty, $98.0 \%$ with hearing difficulty received treatment.

Table 10.2: Rate of receiving care of impaired persons from any provider by residence and type of difficulty for last 3 months
(In Percentage)

| Type of difficulty | Total |  |  | Rural |  |  |  | Urban |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |  |
| Seeing | 99.4 | 98.8 | 100.0 | 99.2 | 98.6 | 100.0 | 100.0 | 100.0 | 100.0 |  |
| Hearing | 98.0 | 100.0 | 96.2 | 98.7 | 100.0 | 97.3 | 95.8 | 100.0 | 92.8 |  |
| Walking/climbing | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |  |
| Remembering/ <br> concentrating | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |  |
| Self care | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |  |
| Communicating | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |  |
| Total | $\mathbf{9 9 . 7}$ | $\mathbf{9 9 . 8}$ | $\mathbf{9 9 . 6}$ | $\mathbf{9 9 . 7}$ | $\mathbf{9 9 . 7}$ | $\mathbf{9 9 . 7}$ | $\mathbf{9 9 . 6}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{9 9 . 1}$ |  |

### 10.3 Average expenditure

In the table 10.3, it is found that average expenditure for impaired persons for 3 months preceding to the survey was Tk.4225. Average expenditure for impairment related to remembering/ concentrating was highest (Tk.5608) and the lowest average expenditure was for impairment unable to maintain self care (Tk.2527). Among the different parts of treatment, expenditure for medicine was highest (Tk.2521) and it was lowest for surgery (Tk.130). The average cost of surgery is lowest due to recipient of surgery was very fewer compared to other types of treatment.

Table 10.3: Average expenditure of treatment recipients by types of impairment.

| Type of <br> Impairment | Average Expenditure (Tk) |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Medicine Prescription Communi |  |  |  |  |  |  |  |
| cation |  | Medical <br> test | Surgical Clinic/hos <br> cost | Others <br> pital rent <br> Exp. | Average <br> Exp. |  |  |  |
| Difficulty seeing | 1724 | 345 | 296 | 578 | 298 | 111 | 222 | 3574 |
| Difficulty hearing | 1392 | 240 | 257 | 387 | 305 | 79 | 168 | 2829 |
| Difficulty walking/ <br> climbing | 2860 | 349 | 294 | 422 | 71 | 164 | 304 | 4465 |
| Difficulty <br> remembering/ <br> concentrating | 3490 | 534 | 487 | 663 | 25 | 88 | 321 | 5608 |
| Difficulty with self- <br> care | 1583 | 183 | 221 | 293 | 11 | 98 | 138 | 2527 |
| Difficulty <br> communicating | 3396 | 391 | 431 | 601 | 16 | 401 | 328 | 5564 |
| Total | $\mathbf{2 5 2 1}$ | $\mathbf{3 5 1}$ | $\mathbf{3 1 8}$ | $\mathbf{4 8 3}$ | $\mathbf{1 3 0}$ | $\mathbf{1 5 4}$ | $\mathbf{2 6 9}$ | $\mathbf{4 2 2 5}$ |

### 10.4 Injured persons

Table 10.4.1 deals with prevalence of injured persons per 1000 population by types of injury and sex. Prevalence of injured persons per 1000 populations for 3 months preceding to the survey was 7.0 whereas prevalence of male injured was 9.3 and that of female was 4.6 . Prevalence of severe type of injury/wound per 1000 was 1.2 where it was 1.8 for male and 0.6 for female and the proportion of severe type of injured/wounded persons among the all injured persons is $17 \%$. Other than burn, in all types of injury male were more injured than female. Prevalence of severe burn per 1000 population in female was 0.3.

Table 10.4.1 Prevalence of injured persons per 1000 population by types of injury and sex

| Types of Injury | Total | Male | Female |
| :--- | :---: | :---: | :---: |
| Severe injury/Wound | 1.2 | 1.8 | 0.6 |
| Swelling any parts of body | 0.9 | 1.2 | 0.5 |
| Pounded/Bruised | 1.2 | 1.8 | 0.5 |
| Fractured | 1.3 | 1.6 | 0.9 |
| Severe burn | 0.2 | 0.2 | 0.3 |
| Violence | 0.1 | 0.1 | 0.0 |
| Sprained | 1.2 | 1.3 | 1.0 |
| Suicide | 0.1 | 0.1 | 0.0 |
| Others | 0.9 | 1.1 | 0.6 |
|  | $\mathbf{7 . 0}$ | $\mathbf{9 . 3}$ | $\mathbf{4 . 6}$ |

Table 10.4.2 describes that people of urban areas had accident more compared to people of rural areas except beside houses, in school and in field. Out of 7.0 injured per 1000 population 2.0 had accident in house, 1.5 beside houses, 1.3 in other working places.

Table 10.4.2: Prevalence of injured person by place of accident and residence

| Place of Accident |  | National | Rural |
| :--- | ---: | ---: | ---: |
| Per 1000 population) | Urban |  |  |
| Inside the house | 2.1 | 2.0 | 2.2 |
| Near the house | 1.5 | 1.6 | 1.5 |
| On way to school | 0.3 | 0.3 | 0.5 |
| Inside school | 0.1 | 0.1 | 0.1 |
| On way to work | 0.9 | 0.7 | 1.3 |
| On way to field | 0.1 | 0.1 | 0.2 |
| In work place | 1.9 | 1.9 | 1.9 |
| In play ground | 0.1 | 0.1 | 0.2 |
|  | $\mathbf{7 . 0}$ | $\mathbf{6 . 7}$ | $\mathbf{7 . 8}$ |

### 10.5 Rate of receiving care of injured persons

Table 10.5.1 shows the distribution of injured persons by type of treatment providers and sex. About $61 \%$ of the injured persons went to doctor, $18 \%$ received treatment from Pharmacy/self-treatment or others. About $6 \%$ injured person went to Kabirazi/Unani/Ayurbedic. In the rural area, about $60 \%$ of injured persons and in urban area about $66 \%$ of injured consulted with doctor.
Table 10.5.1: Rate of receiving care of injured persons by type of treatment providers, sex and residence


### 10.6 Average expenditure of treatment due to accident

Table 10.6.1 presents that average expenditure of treatment per accident wasTk. 4521 whereas it was Tk. 4875 for urban and Tk. 4396 for rural areas. This average expenditure was Tk. 4937 for male whereas it was Tk. 3675 for female.

Table 10.6.1: Average expenditure per treatment recipient due to accident by sex and residence, December, 2011-February 2012

| Residence | Average expenditure (Tk.) |  |  |
| :--- | ---: | :---: | :---: |
|  | Total | Male | Female |
| Rural | 4396 | 4752 | 3693 |
| Urban | 4875 | 5445 | 3620 |
| National | $\mathbf{4 5 2 1}$ | $\mathbf{4 9 3 7}$ | $\mathbf{3 6 7 5}$ |

The table 10.6 .2 shows that the highest average treatment cost for last 90 days was Tk .8248 for fractured bone and this expenditure wasTk. 9521 for male and Tk. 5917 for female. Lowest average treatment cost was Tk. 601 due to violence whereas it was Tk. 225 for male and Tk. 1204 for female.

Table 10.6.2: Average expenditure per treatment recipient due to accident by sex and injury, December, 2011-February 2012

| Type of Injury | Average expenditure (Tk.) |  |  |
| :--- | ---: | :---: | :---: |
|  | Total | Male | Female |
| Swelling any parts of body | 7239 | 7868 | 5235 |
| Pounded/Bruised | 1957 | 1940 | 1997 |
| Dislocation | 2605 | 2796 | 1928 |
| Fractured | 2640 | 4079 | 828 |
| Severe burn | 8248 | 9521 | 5917 |
| Violence | 5795 | 5319 | 6006 |
| Sprained | 601 | 225 | 1204 |
| Attempt to suicide | 2452 | 3150 | 1533 |
| Others | 1833 | 2040 | 1332 |
|  | 3601 | 2903 | 4861 |

## REFERENCES

BBS, 1994 : Summary Report of Survey on Prevalence of Morbidity and Health Status
BBS, 1996 : Summary Report of Survey on Prevalence of Morbidity and Health Status
BBS, 1997 : Report of Survey on Prevalence of Morbidity, Treatment Status, Treatment Expenditures, Fertility, Immunization and Smoking

BBS, 1999 : Health Situation and Health Care Expenditures in Bangladesh (Evidences from Nationally Representative Surveys)

BBS, 2000 : Report of Health and Demographic Survey
BBS, 2010 : Report of Sample Vital Registration System
Epidemiology : Leon Gordis
WHO, 2009 : Global Adult Tobacco Survey Bangladesh Report
Health Programmes of Bangladesh: http://dghs.gov.bd/en/index.php/health-programmes.
Strategic Plan for Health, Population \& Nutrition Sector Development Program (HPNSDP)
MoHFW, 2011-2016
WHO, 1980 : International Classification Impairments, Disabilities.

## APPENDICES

## APPENDIX-A: STATISTICAL TABLES

Table P-1: Percentage distribution of population by age group and sex (Barisal Division)

| Age group (In <br> year) | Total | Male | Female | Sex ratio |
| :--- | :---: | :---: | :---: | :---: |
| $00-04$ | 8.5 | 8.1 | 8.9 | 92.8 |
| $05-09$ | 11.0 | 11.4 | 10.7 | 108.3 |
| $10-14$ | 13.1 | 13.2 | 12.9 | 104.3 |
| $15-19$ | 10.2 | 11.3 | 9.0 | 127.3 |
| $20-24$ | 8.1 | 8.3 | 7.9 | 107.7 |
| $25-29$ | 8.0 | 7.7 | 8.4 | 93.1 |
| $30-34$ | 6.1 | 5.2 | 6.9 | 76.9 |
| $35-39$ | 6.6 | 5.8 | 7.4 | 80.2 |
| $40-44$ | 5.6 | 5.6 | 5.6 | 102.9 |
| $45-49$ | 4.8 | 4.9 | 4.6 | 109.5 |
| $50-54$ | 5.2 | 4.7 | 5.6 | 84.6 |
| $55-59$ | 3.8 | 4.2 | 3.3 | 128.1 |
| $60-64$ | 3.2 | 3.3 | 3.2 | 105.3 |
| $65-69$ | 2.1 | 2.2 | 2.0 | 110.4 |
| $70-74$ | 1.9 | 2.1 | 1.7 | 127.9 |
| $75-79$ | 0.8 | 0.9 | 0.7 | 122.9 |
| $80 \&$ more | 1.3 | 1.2 | 1.4 | 84.7 |
|  | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 1 . 5}$ |
| No. of population | $\mathbf{1 1 3 6 5}$ | $\mathbf{5 7 2 4}$ | $\mathbf{5 6 4 1}$ |  |

Table P-2: Percentage distribution of population by age group, sex (Chittagong Division)

| Age group (In year) | Total | Male | Female | Sex ratio |
| :--- | :---: | :---: | :---: | :---: |
| $00-04$ | 9.8 | 10.1 | 9.4 | 106.1 |
| $05-09$ | 12.6 | 12.9 | 12.3 | 103.2 |
| $10-14$ | 13.1 | 13.4 | 12.8 | 103.2 |
| $15-19$ | 10.8 | 11.9 | 9.8 | 119.2 |
| $20-24$ | 9.6 | 9.4 | 9.8 | 94.1 |
| $25-29$ | 7.6 | 7.1 | 8.1 | 87.1 |
| $30-34$ | 6.2 | 5.4 | 7.1 | 76.0 |
| $35-39$ | 5.9 | 5.4 | 6.3 | 84.5 |
| $40-44$ | 5.6 | 5.2 | 5.9 | 87.7 |
| $45-49$ | 4.5 | 4.4 | 4.6 | 93.4 |
| $50-54$ | 4.3 | 4.2 | 4.3 | 95.0 |
| $55-59$ | 3.4 | 3.6 | 3.1 | 115.7 |
| $60-64$ | 2.3 | 2.5 | 2.2 | 113.0 |
| $65-69$ | 1.6 | 1.6 | 1.5 | 105.7 |
| $70-74$ | 1.3 | 1.4 | 1.2 | 112.9 |
| $75-79$ | 0.7 | 0.8 | 0.7 | 124.0 |
| $80 \&$ more | 0.8 | 0.7 | 0.9 | 77.3 |
|  | 100.0 | 100.0 | 100.0 | 98.5 |
| No. of population | 27337 | 13568 | 13769 |  |

Table P-3: Percentage distribution of population by age group and sex (Dhaka Division)

| Age group (In year) | Total | Male | Female | Sex ratio |
| :--- | ---: | ---: | ---: | ---: |
| $00-04$ | 9.2 | 9.4 | 9.0 | 102.3 |
| $05-09$ | 11.5 | 11.5 | 11.5 | 98.2 |
| $10-14$ | 11.8 | 12.4 | 11.2 | 108.6 |
| $15-19$ | 9.6 | 10.2 | 9.0 | 111.1 |
| $20-24$ | 8.8 | 8.2 | 9.5 | 84.9 |
| $25-29$ | 8.2 | 7.5 | 8.8 | 84.0 |
| $30-34$ | 6.9 | 6.6 | 7.2 | 90.0 |
| $35-39$ | 6.4 | 5.8 | 7.0 | 80.6 |
| $40-44$ | 6.2 | 6.1 | 6.2 | 96.5 |
| $45-49$ | 5.3 | 5.7 | 4.9 | 112.5 |
| $50-54$ | 4.8 | 4.7 | 4.9 | 94.5 |
| $55-59$ | 3.6 | 3.8 | 3.5 | 107.4 |
| $60-64$ | 2.6 | 2.8 | 2.5 | 108.7 |
| $65-69$ | 1.8 | 2.0 | 1.7 | 117.2 |
| $70-74$ | 1.4 | 1.6 | 1.3 | 115.0 |
| $75-79$ | 0.8 | 0.9 | 0.7 | 133.0 |
| $80 \&$ more | 1.0 | 0.9 | 1.0 | 84.7 |
|  | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{9 8 . 2}$ |
| No. of population | $\mathbf{3 9 4 3 9}$ | $\mathbf{1 9 5 4 0}$ | $\mathbf{1 9 8 9}$ |  |

Table P-4: Percentage distribution of population by age group and sex (Khulna Division)

| Age group (In year) | Total | Male | Female | Sex ratio |
| :--- | ---: | ---: | ---: | ---: |
| $00-04$ | 7.9 | 7.9 | 7.8 | 104.9 |
| $05-09$ | 10.0 | 10.0 | 10.1 | 100.9 |
| $10-14$ | 11.0 | 11.7 | 10.4 | 115.5 |
| $15-19$ | 9.7 | 11.1 | 8.4 | 135.1 |
| $20-24$ | 8.8 | 8.7 | 8.9 | 101.0 |
| $25-29$ | 8.1 | 7.3 | 9.0 | 83.3 |
| $30-34$ | 7.3 | 6.4 | 8.3 | 79.0 |
| $35-39$ | 7.4 | 6.6 | 8.1 | 83.4 |
| $40-44$ | 6.8 | 6.8 | 6.9 | 99.9 |
| $45-49$ | 5.7 | 6.5 | 4.8 | 140.4 |
| $50-54$ | 5.1 | 4.8 | 5.5 | 88.1 |
| $55-59$ | 3.8 | 4.0 | 3.5 | 116.0 |
| $60-64$ | 2.8 | 3.1 | 2.5 | 123.2 |
| $65-69$ | 1.9 | 2.0 | 1.9 | 106.1 |
| $70-74$ | 1.6 | 1.4 | 1.9 | 75.4 |
| $75-79$ | 1.1 | 1.1 | 1.2 | 95.1 |
| $80 \&$ more | 0.9 | 1.0 | 0.8 | 117.0 |
|  | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 1 . 9}$ |
| No. of population | $\mathbf{1 8 5 5 8}$ | $\mathbf{9 3 6 8}$ | $\mathbf{9 1 9 0}$ |  |

Table P-5: Percentage distribution of population by age group and sex (Rajshahi Division)

| Age group (In year) | Both | Male | Female | Sex ratio |
| :--- | ---: | ---: | ---: | ---: |
| $00-04$ | 8.8 | 9.0 | 8.7 | 102.7 |
| $05-09$ | 9.9 | 10.0 | 9.9 | 101.2 |
| $10-14$ | 10.6 | 10.8 | 10.4 | 104.5 |
| $15-19$ | 9.8 | 10.6 | 9.0 | 117.0 |
| $20-24$ | 9.0 | 8.8 | 9.2 | 96.0 |
| $25-29$ | 8.6 | 8.0 | 9.1 | 88.7 |
| $30-34$ | 7.3 | 6.7 | 8.0 | 83.7 |
| $35-39$ | 7.4 | 6.9 | 7.9 | 87.6 |
| $40-44$ | 6.6 | 6.5 | 6.6 | 99.4 |
| $45-49$ | 5.7 | 6.3 | 5.1 | 124.1 |
| $50-54$ | 4.8 | 4.6 | 5.0 | 91.3 |
| $55-59$ | 3.9 | 4.1 | 3.8 | 107.8 |
| $60-64$ | 2.6 | 2.7 | 2.4 | 111.2 |
| $65-69$ | 1.9 | 2.0 | 1.8 | 110.6 |
| $70-74$ | 1.4 | 1.3 | 1.4 | 95.2 |
| $75-79$ | 0.8 | 0.9 | 0.8 | 118.9 |
| $80 \&$ more | 0.9 | 0.8 | 1.0 | 78.0 |
| Total | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{9 9 . 9}$ |
| No. of population | $\mathbf{1 6 8 2 5}$ | $\mathbf{8 4 0 9}$ | $\mathbf{8 4 1 6}$ |  |

Table P-6: Percentage distribution of population by age group and sex (Sylhet Division)

| Age group (In year) | Total | Male | Female | Sex ratio |
| :--- | ---: | ---: | ---: | ---: |
| $00-04$ | 10.1 | 9.9 | 10.3 | 94.4 |
| $05-09$ | 13.8 | 14.4 | 13.1 | 107.2 |
| $10-14$ | 13.3 | 13.7 | 12.9 | 104.0 |
| $15-19$ | 10.5 | 11.1 | 9.9 | 109.5 |
| $20-24$ | 9.1 | 9.0 | 9.1 | 96.7 |
| $25-29$ | 7.1 | 6.5 | 7.6 | 84.0 |
| $30-34$ | 6.3 | 5.7 | 6.8 | 82.3 |
| $35-39$ | 5.7 | 4.8 | 6.5 | 72.1 |
| $40-44$ | 5.9 | 6.0 | 5.7 | 103.1 |
| $45-49$ | 4.3 | 4.8 | 3.8 | 125.7 |
| $50-54$ | 4.5 | 4.3 | 4.8 | 87.4 |
| $55-59$ | 3.2 | 3.4 | 3.1 | 108.1 |
| $60-64$ | 2.3 | 2.3 | 2.3 | 98.6 |
| $65-69$ | 1.6 | 1.4 | 1.9 | 70.9 |
| $70-74$ | 1.2 | 1.3 | 1.1 | 113.3 |
| $75-79$ | 0.6 | 0.6 | 0.5 | 119.4 |
| $80 \&$ more | 0.7 | 0.7 | 0.7 | 110.1 |
|  | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{9 8 . 3}$ |
| No. of population | $\mathbf{8 8 1 1}$ | $\mathbf{4 3 6 8}$ | $\mathbf{4 4 4 3}$ |  |

Table I-1: Nature of accident by sex and residence (\%)

| Nature of accident | National |  |  |  | Rural |  |  |  | Urban |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| Traveling | 33.0 | 38.0 | 23.0 | 32.3 | 37.7 | 21.7 | 35.6 | 39.5 | 26.9 |
| Drowned | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 1.0 | 0.5 | 2.0 |
| Violence by Husband/wife | 1.0 | 0.0 | 1.0 | 0.4 | 0.3 | 0.5 | 1.5 | 0.8 | 3.1 |
| Violence by intimate <br> partner | 0.0 | 0.0 | 0.0 | 0.2 | 0.3 | 0.0 | 0.4 | 0.6 | 0.0 |
| Acid throwing |  |  |  |  |  |  |  |  |  |
| Violence by head of the <br> household/ housewife | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 1.3 | 0.0 |
| Violence by | 0.0 | 0.0 | 0.1 | 0.0 | 0.4 | 0.1 | 0.2 | 0.0 |  |
| Neighbor/spoiled | 4.0 | 5.0 | 4.0 | 4.9 | 5.2 | 4.4 | 2.9 | 3.7 | 1.2 |
| Severe diseases | 1.0 | 1.0 | 1.0 | 0.3 | 0.3 | 0.5 | 2.5 | 1.9 | 3.9 |
| Electric shock | 2.0 | 2.0 | 1.0 | 1.9 | 2.1 | 1.5 | 2.3 | 2.9 | 0.9 |
| Snake bite | 1.0 | 0.0 | 1.0 | 0.8 | 0.4 | 1.4 | 0.6 | 0.4 | 0.9 |
| Hanging/poisoning | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | 0.4 | 0.1 | 0.2 | 0.0 |
| Others | 55 | 50 | 66 | 56.5 | 51.2 | 67.0 | 52.1 | 47.9 | 61.2 |

Table I-2: Type of transport/vehicles by which the accident occurred (\%)

| Types of vehicle/ <br> transport | National |  |  |  | Rural |  |  |  | Urban |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
| Bus | Both | Male | Female | Both | Male | Female | Both | Male | Female |  |  |
| Truck | 5.9 | 6.4 | 4.9 | 5.8 | 6.1 | 5.4 | 6.1 | 7.3 | 3.4 |  |  |
| Train | 8.1 | 7.7 | 9.0 | 8.3 | 7.9 | 9.2 | 7.6 | 7.2 | 8.5 |  |  |
| Motor car | 0.6 | 0.9 | 0.0 | 0.9 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |
| Motor-cycle | 3.3 | 3.7 | 2.4 | 3.3 | 3.7 | 2.4 | 3.3 | 3.6 | 2.5 |  |  |
| Baby taxi | 3.2 | 14.7 | 5.0 | 10.3 | 13.1 | 5.0 | 14.9 | 19.4 | 5.2 |  |  |
| Bi-Cycle | 4.4 | 4.6 | 4.0 | 4.6 | 4.8 | 4.0 | 3.9 | 3.9 | 4.0 |  |  |
| Rickshaw/Van | 7.9 | 7.2 | 9.2 | 7.1 | 6.6 | 8.0 | 10.1 | 8.7 | 13.2 |  |  |
| Boat | 16.1 | 12.7 | 23.1 | 15.9 | 12.4 | 22.6 | 17.0 | 13.5 | 24.6 |  |  |
| Launch/steamer | 0.9 | 0.9 | 0.9 | 0.7 | 0.8 | 0.5 | 1.6 | 1.3 | 2.2 |  |  |
| Others | 17.1 | 19.0 | 13.1 | 18.8 | 20.8 | 14.8 | 12.2 | 14.0 | 8.2 |  |  |
| Not applicable | 20.9 | 18.2 | 26.3 | 21.2 | 18.5 | 26.6 | 20.0 | 17.4 | 25.6 |  |  |
|  | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ |  |  |

Table M-1 Proportion (\%) and prevalence of morbidity per 1000 population by sex and selected age groups.

| Age group <br> (In year) | Proportion of morbidity (\%) |  | Prevalence of morbidity <br> (Per 1000 population) |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Total | Male | Female | Total | Male | Female |
|  | Total | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 8 5 . 5}$ | $\mathbf{1 7 4 . 4}$ |
| $<1$ Year | 2.5 | 2.8 | 2.2 | 258.6 | 274.1 | 242.8 |
| $0-4$ | 7.1 | 8.5 | 5.9 | 179.9 | 199.0 | 160.3 |
| $5-14$ | 19.3 | 22.6 | 16.4 | 110.1 | 118.7 | 101.2 |
| $15-29$ | 14.0 | 12.2 | 15.6 | 96.1 | 78.7 | 113.3 |
| $30-49$ | 31.2 | 26.4 | 35.3 | 234.3 | 193.9 | 271.8 |
| $50-59$ | 16.5 | 16.6 | 16.4 | 365.4 | 344.7 | 386.2 |
| $60+$ | 19.1 | 22.2 | 16.2 | 476.3 | 500.6 | 449.9 |
| $<5$ | 9.6 | 11.3 | 8.0 | 195.3 | 213.5 | 176.5 |
| $5-14$ | 8.6 | 9.9 | 7.4 | 72.2 | 74.0 | 70.2 |
| $15-49$ (Female) |  |  | 51.0 |  |  | 190.2 |
| $15-59$ | 19.3 | 41.1 | 36.3 | 59.5 | 121.2 | 117.0 |

Table M-2: Proportion (\%) and prevalence (Per 1000 population) of morbidity from communicable and non- communicable diseases by sex.

| Selected diseases | Proportional morbidity |  |  |  | Prevalence of morbidity |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Total | Male | Female | Total | Male | Female |
| 1. Communicable diseases that occurred <br> during last 90 days |  |  |  |  |  |  |
| Chicken pox | 0.8 | 1.0 | 0.6 | 1.4 | 1.7 | 1.1 |
| Diarrhoea | 3.5 | 3.7 | 3.4 | 6.6 | 6.4 | 6.7 |
| Diphtheria | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 |
| Influenza | 1.2 | 1.3 | 1.0 | 2.2 | 2.3 | 2.0 |
| Malaria | 0.8 | 0.9 | 0.7 | 1.5 | 1.6 | 1.3 |
| Measles | 1.4 | 1.4 | 1.4 | 2.6 | 2.4 | 2.8 |
| Mumps | 0.2 | 0.2 | 0.3 | 0.5 | 0.4 | 0.5 |
| Rabies | 0.1 | 0.2 | 0.1 | 0.3 | 0.3 | 0.2 |
| Tetanus | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 |
| Tuberculosis | 0.6 | 0.7 | 0.4 | 1.0 | 1.3 | 0.8 |
| Typhoid | 0.7 | 0.7 | 0.7 | 1.4 | 1.3 | 1.5 |
| Whooping cough | 1.4 | 1.8 | 1.0 | 2.5 | 3.1 | 2.0 |
| 2. Non-communicable diseases that |  |  |  |  |  |  |
| $\quad$ occurred during last 90 days |  |  |  |  |  |  |
| Arthritis | 7.5 | 6.3 | 8.7 | 14.0 | 10.9 | 17.1 |
| Asthma | 2.1 | 2.4 | 1.8 | 3.9 | 4.2 | 3.6 |
| Heart disease | 1.8 | 2.0 | 1.7 | 0.9 | 0.7 | 1.0 |
| Hypertension | 6.7 | 6.0 | 7.3 | 12.4 | 10.5 | 14.4 |
| Cancer | 0.4 | 0.3 | 0.4 | 0.6 | 0.6 | 0.7 |
| Diabetes | 4.2 | 4.4 | 4.1 | 7.8 | 7.7 | 8.0 |
| Tumour | 0.6 | 0.3 | 0.8 | 1.0 | 0.6 | 1.5 |

Table M-4: Proportion and prevalence of infant (<1 year) morbidity per 1000 population from the selected diseases.

| Selected Diseases | Proportional morbidity (\%) |  | Prevalence of morbidity <br> (Per 1000 population) |  |  |  |
| :--- | ---: | :---: | :---: | ---: | ---: | ---: |
|  | Total | Male | Female | Total | Male | Female |
| Acute respiratory | 27.8 | 27.5 | 28.1 | 71.8 | 75.4 | 68.2 |
| Infection | 24.1 | 22.3 | 26.2 | 62.3 | 61.2 | 63.5 |
| Fever (FUO) | 13.5 | 14.2 | 12.6 | 34.8 | 38.8 | 30.7 |
| Diarrhoea | 8.5 | 10.1 | 6.7 | 22.0 | 27.6 | 16.2 |
| Measles | 5.6 | 6.6 | 4.5 | 14.5 | 18.1 | 10.8 |
| Dysentery | 3.6 | 3.7 | 3.5 | 9.3 | 10.2 | 8.4 |
| Skin Disease | 3.4 | 3.9 | 2.9 | 8.8 | 10.6 | 7.0 |
| Influenza | 2.6 | 1.8 | 3.5 | 6.7 | 5.1 | 8.4 |
| New born problem | 1.5 | 1.1 | 1.9 | 3.8 | 3.0 | 4.6 |
| Conjunctivitis | 1.4 | 1.4 | 1.4 | 3.7 | 3.9 | 3.5 |
| Whooping cough | 1.0 | 1.1 | 1.0 | 2.7 | 2.9 | 2.4 |
| Hepatitis-b | 0.8 | 0.0 | 1.7 | 2.1 | 0.0 | 4.2 |
| Kala-azar | 0.8 | 0.2 | 1.5 | 2.0 | 0.6 | 3.5 |
| Mumps | 0.8 | 0.7 | 0.8 | 2.0 | 1.9 | 2.0 |
| Ear infection | 0.7 | 1.3 | 0.0 | 1.7 | 3.5 | 0.0 |
| Malaria | 0.4 | 0.5 | 0.3 | 1.1 | 1.4 | 0.8 |
| Aphtha | 0.4 | 0.3 | 0.4 | 0.9 | 0.8 | 1.1 |
| Chicken pox | 0.1 | 0.0 | 0.2 | 0.3 | 0.0 | 0.6 |
| Kidney disease | 0.3 | 0.4 | 0.3 | 0.9 | 1.0 | 0.7 |
| Hernia | 0.3 | 0.1 | 0.4 | 0.7 | 0.3 | 1.0 |
| Cataract | 0.3 | 0.0 | 0.5 | 0.7 | 0.0 | 1.3 |
| Asthma | 0.3 | 0.0 | 0.5 | 0.6 | 0.0 | 1.3 |
| Tetanus | 0.2 | 0.4 | 0.0 | 0.5 | 1.0 | 0.0 |
| Epilepsy | 0.2 | 0.4 | 0.0 | 0.5 | 1.1 | 0.0 |
| Typhoid | 0.2 | 0.0 | 0.4 | 0.5 | 0.0 | 1.1 |
| Tumour | 0.2 | 0.4 | 0.0 | 0.5 | 1.1 | 0.0 |
| Autism | 0.2 | 0.1 | 0.3 | 0.5 | 0.3 | 0.7 |
| Diabetes | 0.2 | 0.3 | 0.0 | 0.4 | 0.9 | 0.0 |
| Urinary Tract Infection | 0.2 | 0.3 | 0.0 | 0.4 | 0.9 | 0.0 |
| Diphtheria | 0.2 | 0.3 | 0.0 | 0.4 | 0.9 | 0.0 |
| Peptic ulcer | 0.2 | 0.0 | 0.3 | 0.4 | 0.0 | 0.8 |
| Transmitted Diseases | 0.4 | 0.7 | 0.0 | 0.9 | 1.8 | 0.0 |
| Others | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{2 5 8 . 6}$ | $\mathbf{2 7 4 . 1}$ | $\mathbf{2 4 2}$ |
| Total Morbidity |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Table M-5: Proportion and prevalence of child (<2 year) morbidity per 1000 population by sex from the selected diseases

| Diseases | Proportional morbidity (\%) |  |  | Prevalence of morbidity (Per 1000 population) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female |
| Fever (FUO) | 26.0 | 25.7 | 26.4 | 66.5 | 71.3 | 61.6 |
| Acute respiratory Infection | 24.2 | 24.2 | 24.3 | 62.1 | 67.1 | 56.8 |
| Diarrhoea | 17.1 | 15.5 | 19.1 | 43.8 | 43.0 | 44.6 |
| Dysentery | 6.6 | 7.2 | 5.9 | 16.9 | 20.0 | 13.7 |
| Measles | 6.3 | 7.0 | 5.4 | 16.0 | 19.4 | 12.5 |
| Influenza | 3.3 | 3.8 | 2.6 | 8.3 | 10.6 | 6.0 |
| Skin Disease | 2.6 | 3.1 | 2.1 | 6.7 | 8.6 | 4.8 |
| Whooping cough | 1.9 | 2.0 | 1.9 | 4.9 | 5.5 | 4.3 |
| New born problem | 1.4 | 0.9 | 1.9 | 3.5 | 2.6 | 4.4 |
| Conjunctivitis | 1.2 | 0.7 | 1.9 | 3.2 | 2.1 | 4.3 |
| Kala-azar | 0.9 | 0.7 | 1.2 | 2.3 | 1.9 | 2.7 |
| Chicken pox | 0.8 | 0.7 | 1.0 | 2.1 | 2.0 | 2.3 |
| Hepatitis-b | 0.7 | 0.5 | 0.9 | 1.8 | 1.5 | 2.2 |
| Ear infection | 0.6 | 0.4 | 0.8 | 1.6 | 1.2 | 1.9 |
| Mumps | 0.6 | 0.4 | 0.8 | 1.5 | 1.2 | 1.8 |
| Aphtha | 0.6 | 0.7 | 0.4 | 1.5 | 2.0 | 1.0 |
| Others | 0.6 | 0.8 | 0.2 | 1.4 | 2.3 | 0.6 |
| Malaria | 0.6 | 1.0 | 0.0 | 1.4 | 2.8 | 0.0 |
| Asthma | 0.5 | 0.5 | 0.5 | 1.2 | 1.3 | 1.1 |
| Epilepsy | 0.3 | 0.4 | 0.2 | 0.8 | 1.1 | 0.4 |
| Night blindness | 0.3 | 0.4 | 0.2 | 0.7 | 1.1 | 0.4 |
| Cataract | 0.2 | 0.3 | 0.2 | 0.6 | 0.7 | 0.5 |
| Tetanus | 0.2 | 0.2 | 0.3 | 0.6 | 0.4 | 0.7 |
| Goitre | 0.2 | 0.2 | 0.2 | 0.5 | 0.5 | 0.6 |
| Typhoid | 0.2 | 0.4 | 0.0 | 0.5 | 1.0 | 0.0 |
| Peptic ulcer | 0.2 | 0.4 | 0.0 | 0.5 | 1.0 | 0.0 |
| Heart disease | 0.2 | 0.3 | 0.0 | 0.5 | 1.0 | 0.0 |
| Tumour | 0.2 | 0.0 | 0.4 | 0.5 | 0.0 | 1.0 |
| Hernia | 0.2 | 0.2 | 0.2 | 0.5 | 0.5 | 0.4 |
| Diabetes | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 |
| Kidney disease | 0.2 | 0.2 | 0.1 | 0.4 | 0.5 | 0.3 |
| Tuberculosis | 0.1 | 0.0 | 0.2 | 0.3 | 0.0 | 0.6 |
| Paralysis | 0.1 | 0.0 | 0.2 | 0.3 | 0.0 | 0.6 |
| Autism | 0.1 | 0.2 | 0.0 | 0.3 | 0.5 | 0.0 |
| Burn Injury | 0.1 | 0.2 | 0.0 | 0.3 | 0.5 | 0.0 |
| Abdominal pain | 0.1 | 0.2 | 0.0 | 0.3 | 0.5 | 0.0 |
| Cancer/Malignancy | 0.1 | 0.0 | 0.2 | 0.2 | 0.0 | 0.5 |
| Urinary Tract Infection | 0.1 | 0.2 | 0.0 | 0.2 | 0.4 | 0.0 |
| diphtheria | 0.1 | 0.2 | 0.0 | 0.2 | 0.4 | 0.0 |
| Transmitted Diseases | 0.1 | 0.0 | 0.2 | 0.2 | 0.0 | 0.4 |
| Leg Injury | 0.1 | 0.0 | 0.2 | 0.2 | 0.0 | 0.4 |
| Arthritis | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.0 |
| Total | 100.0 | 100.0 | 100.0 | 255.9 | 277.6 | 233.6 |

Table M-6: Proportion and prevalence of morbidity per 1000 under five (<5 year) children from the selected diseases by sex

| Selected Diseases | Proportion of morbidity (\%) |  | Prevalence of morbidity <br> (Per 1000 population) |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Total | Male | Female | Total | Male | Female |
| Fever (FUO) | 30.3 | 30.2 | 30.3 | 59.1 | 64.5 | 53.5 |
| Acute respiratory Infection | 20.4 | 20.4 | 20.4 | 39.8 | 43.5 | 36.0 |
| Diarrhoea | 14.6 | 13.7 | 15.8 | 28.5 | 29.2 | 27.8 |
| Dysentery | 7.2 | 7.0 | 7.4 | 14.0 | 14.9 | 13.0 |
| Measles | 5.0 | 4.9 | 5.0 | 9.7 | 10.4 | 8.9 |
| Influenza | 3.3 | 3.9 | 2.5 | 6.4 | 8.3 | 4.5 |
| Skin Disease | 2.9 | 3.1 | 2.7 | 5.6 | 6.5 | 4.7 |
| Whooping cough | 1.7 | 2.0 | 1.3 | 3.3 | 4.3 | 2.3 |
| Chicken pox | 1.4 | 1.4 | 1.3 | 2.6 | 3.0 | 2.3 |
| Ear infection | 1.3 | 1.3 | 1.2 | 2.5 | 2.8 | 2.1 |
| Conjunctivitis | 1.2 | 1.1 | 1.5 | 2.4 | 2.2 | 2.6 |
| Hepatitis-b | 1.0 | 1.0 | 0.9 | 1.9 | 2.2 | 1.6 |
| Kala-azar | 0.9 | 0.5 | 1.3 | 1.7 | 1.2 | 2.3 |
| New born problem | 0.7 | 0.5 | 0.9 | 1.3 | 1.0 | 1.7 |
| Typhoid | 0.6 | 0.5 | 0.8 | 1.3 | 1.0 | 1.5 |
| Others | 0.6 | 0.6 | 0.6 | 1.2 | 1.3 | 1.0 |
| Malaria | 0.6 | 1.0 | 0.1 | 1.1 | 2.1 | 0.2 |
| Asthma | 0.6 | 0.6 | 0.5 | 1.1 | 1.3 | 0.8 |
| Mumps | 0.5 | 0.3 | 0.7 | 1.0 | 0.7 | 1.3 |
| Urinary Tract Infection | 0.4 | 0.5 | 0.3 | 0.8 | 1.0 | 0.5 |
| Aphtha | 0.3 | 0.4 | 0.3 | 0.7 | 0.8 | 0.6 |
| Leg Injury | 0.3 | 0.4 | 0.3 | 0.7 | 0.8 | 0.5 |
| Tumour | 0.3 | 0.2 | 0.4 | 0.6 | 0.4 | 0.8 |
| Burn Injury | 0.3 | 0.3 | 0.3 | 0.6 | 0.6 | 0.6 |
| Rabies | 0.3 | 0.5 | 0.1 | 0.6 | 1.0 | 0.2 |
| Arthritis | 0.3 | 0.4 | 0.1 | 0.6 | 0.9 | 0.1 |
| Tetanus | 0.3 | 0.2 | 0.3 | 0.5 | 0.5 | 0.6 |
| Night blindness | 0.2 | 0.4 | 0.1 | 0.5 | 0.7 | 0.2 |
| Goitre | 0.2 | 0.2 | 0.2 | 0.4 | 0.5 | 0.4 |
| Cataract | 0.2 | 0.2 | 0.3 | 0.4 | 0.3 | 0.5 |
| Epilepsy | 0.2 | 0.2 | 0.1 | 0.3 | 0.4 | 0.2 |
| Diabetes | 0.2 | 0.2 | 0.1 | 0.3 | 0.5 | 0.1 |
| Diphtheria | 0.2 | 0.3 | 0.0 | 0.3 | 0.6 | 0.0 |
| Hernia | 0.1 | 0.2 | 0.1 | 0.3 | 0.4 | 0.1 |
| Peptic ulcer | 0.1 | 0.2 | 0.1 | 0.3 | 0.4 | 0.2 |
| Kidney disease | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 |
| Paralysis | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 |
| Migraine | 0.1 | 0.2 | 0.1 | 0.3 | 0.3 | 0.2 |
| Heart disease | 0.1 | 0.2 | 0.0 | 0.2 | 0.4 | 0.0 |
| Tonsils | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 |
| Cancer/Malignancy | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |
| Autism | 0.2 | 0.0 | 0.2 | 0.4 | 0.0 |  |
|  |  |  |  |  |  |  |


| Selected Diseases | Proportion of morbidity (\%) |  | Prevalence of morbidity <br> (Per 1000 population) |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Total | Male | Female | Total | Male | Female |
| Allergy | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |
| Abdominal pain | 0.1 | 0.2 | 0.0 | 0.2 | 0.3 | 0.0 |
| Tuberculosis | 0.1 | 0.0 | 0.2 | 0.2 | 0.0 | 0.3 |
| Arsenic | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 |
| Abscess | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.2 |
| Upper Back pain | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.2 |
| Anemia | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.0 |
| Hepatic/Liver Diseases | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.2 |
| Transmitted Diseases | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.2 |
| Haemorrhyds | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.0 |
| Meningitis | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.2 |
| Hurt in hand | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.2 |
| Oedema | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.0 |
| Bronchitis | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 |
| Nasal polyps | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Fracture leg | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Epistaxix | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Neck pain | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Total Morbidity | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 9 5 . 3}$ | $\mathbf{2 1 3 . 5}$ | $\mathbf{1 7 6 . 5}$ |

Table M-7: Proportion and prevalence of morbidity per 1000 population of the adolescents (1019 year) from the selected diseases by sex

| Selected diseases | Proportional morbidity (\%) |  | Prevalence of morbidity (Per |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1000 Population) |  |  |  |  |  |  |
|  | Total | Male | Female | Total | Male | Female |  |
| Fever (FUO) | 37.4 | 36.9 | 38.0 | 27.0 | 27.3 | 26.7 |  |
| Dysentery | 6.8 | 5.7 | 8.1 | 4.9 | 4.2 | 5.7 |  |
| Skin disease | 5.5 | 5.8 | 5.0 | 4.0 | 4.3 | 3.5 |  |
| Hepatitis-b | 3.5 | 4.6 | 2.2 | 2.5 | 3.4 | 1.5 |  |
| Diarrhoea | 2.9 | 3.2 | 2.5 | 2.1 | 2.4 | 1.8 |  |
| Conjunctivitis | 2.8 | 2.8 | 3.0 | 2.1 | 2.0 | 2.1 |  |
| Arthritis | 2.3 | 2.5 | 2.0 | 1.7 | 1.9 | 1.4 |  |
| Malaria | 2.1 | 2.1 | 2.1 | 1.5 | 1.6 | 1.4 |  |
| Asthma | 2.1 | 1.9 | 2.3 | 1.5 | 1.4 | 1.6 |  |
| Peptic ulcer | 2.0 | 1.9 | 2.1 | 1.4 | 1.4 | 1.5 |  |
| Chicken pox | 2.0 | 2.3 | 1.5 | 1.4 | 1.7 | 1.1 |  |
| Measles | 1.8 | 1.4 | 2.2 | 1.3 | 1.0 | 1.5 |  |
| Influenza | 1.5 | 1.3 | 1.8 | 1.1 | 0.9 | 1.3 |  |
| Pregnant | 1.4 | - | 3.1 | 1.0 | - | 2.2 |  |
| Others | 1.4 | 1.7 | 1.0 | 1.0 | 1.3 | 0.7 |  |
| Whooping cough | 1.3 | 1.5 | 1.2 | 1.0 | 1.1 | 0.8 |  |
| Typhoid | 1.3 | 0.9 | 1.8 | 1.0 | 0.7 | 1.3 |  |
| Migraine | 1.3 | 1.1 | 1.6 | 0.9 | 0.8 | 1.1 |  |
| Kala-azar | 1.3 | 1.3 | 1.3 | 0.9 | 1.0 | 0.9 |  |
| Hurt in hand | 1.2 | 2.0 | 0.4 | 0.9 | 1.5 | 0.3 |  |
| Ear infection | 1.2 | 1.5 | 0.9 | 0.9 | 1.1 | 0.7 |  |
| Abdominal pain | 1.2 | 0.9 | 1.5 | 0.8 | 0.7 | 1.0 |  |
| Epilepsy | 1.1 | 1.0 | 1.1 | 0.8 | 0.8 | 0.8 |  |
| Acute respiratory infection(ARI) | 1.0 | 1.2 | 0.8 | 0.7 | 0.9 | 0.6 |  |
| Appendicitis | 0.9 | 0.5 | 1.3 | 0.6 | 0.3 | 0.9 |  |
| Goitre | 0.8 | 0.9 | 0.7 | 0.6 | 0.7 | 0.5 |  |
| Urinary tract infection | 0.8 | 0.6 | 1.0 | 0.6 | 0.4 | 0.7 |  |
| Leg injury | 0.8 | 1.0 | 0.5 | 0.6 | 0.8 | 0.4 |  |
| Tuberculosis | 0.7 | 0.5 | 0.9 | 0.5 | 0.4 | 0.6 |  |
| Night blindness | 0.6 | 0.7 | 0.5 | 0.4 | 0.5 | 0.4 |  |
| Tumour | 0.6 | 0.5 | 0.6 | 0.4 | 0.4 | 0.4 |  |
| Mumps | 0.5 | 0.8 | 0.3 | 0.4 | 0.6 | 0.2 |  |
| Transmitted Diseases | 0.5 | 0.8 | 0.2 | 0.4 | 0.6 | 0.1 |  |
| Heart disease | 0.5 | 0.5 | 0.6 | 0.4 | 0.3 | 0.4 |  |
| Cataract | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.3 |  |
| Tooth Ache | 0.5 | 0.5 | 0.5 | 0.3 | 0.3 | 0.4 |  |
| Gynecology problem | 0.5 | - | 1.0 | 0.3 | - | 0.7 |  |
| Tonsils | 0.5 | 0.5 | 0.5 | 0.3 | 0.4 | 0.3 |  |
| Sore throat | 0.5 | 0.3 | 0.6 | 0.3 | 0.2 | 0.4 |  |
| Rabies | 0.4 | 0.5 | 0.3 | 0.3 | 0.3 | 0.2 |  |
| Nasal Polyps | 0.4 | 0.6 | 0.2 | 0.3 | 0.4 | 0.1 |  |
| Allergy | 0.3 | 0.0 | 0.2 | 0.5 | 0.0 |  |  |
|  |  |  |  |  |  |  |  |


| Selected diseases |  | Proportional morbidity (\%) |  |  | Prevalence of morbidity (Per 1000 Population) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Male | Female | Total | Male | Female |
| Mental Disorder |  | 0.3 | 0.3 | 0.3 | 0.2 | 0.3 | 0.2 |
| Diabetes |  | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 |
| Cancer |  | 0.3 | 0.6 | 0.0 | 0.2 | 0.4 | 0.0 |
| Burn injury |  | 0.3 | 0.4 | 0.1 | 0.2 | 0.3 | 0.1 |
| Aphtha |  | 0.3 | 0.4 | 0.1 | 0.2 | 0.3 | 0.1 |
| Epistaxix |  | 0.2 | 0.3 | 0.1 | 0.2 | 0.3 | 0.1 |
| High blood pressure |  | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Anemia |  | 0.2 | 0.3 | 0.1 | 0.1 | 0.2 | 0.1 |
| Low blood pressure |  | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 |
| Oedema |  | 0.1 | 0.0 | 0.3 | 0.1 | 0.0 | 0.2 |
| Kidney disease |  | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 |
| Paralysis |  | 0.1 | 0.2 | 0.0 | 0.1 | 0.2 | 0.0 |
| Haemorrhyds |  | 0.1 | 0.2 | 0.0 | 0.1 | 0.2 | 0.0 |
| Albinism |  | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Thalassemia |  | 0.1 | 0.2 | 0.0 | 0.1 | 0.1 | 0.0 |
| Hernia |  | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 |
| Diphtheria |  | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 |
| Osteolysis |  | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 |
| Autism |  | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 |
| Oesophagitis |  | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 |
| Arsenic |  | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 |
| Tetanus |  | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 |
| Hormonal problem |  | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 |
| Fracture leg |  | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 |
| Hepatic/ Liver diseases |  | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 |
| Upper back pain |  | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 |
| Pneumonia |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Total | 100.0 | 100.0 | 100.0 | 72.2 | 74.0 | 70.2 |

Table M-8: Proportion and prevalence of morbidity from the selected diseases of women of reproductive age (15-49 year)

| Selected diseases | Proportional morbidity (\%) |  |  | Prevalence of morbidity (Per 1000 Population) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | National | Rural | Urban | National | Rural | Urban |
| Fever (FUO) | 29.6 | 29.2 | 30.8 | 56.4 | 54.5 | 61.9 |
| Peptic ulcer | 9.2 | 9.7 | 7.6 | 17.5 | 18.2 | 15.3 |
| High blood pressure | 6.9 | 6.0 | 9.2 | 13.1 | 11.3 | 18.5 |
| Arthritis | 6.7 | 6.9 | 6.0 | 12.7 | 13.0 | 12.1 |
| Dysentery | 3.3 | 3.8 | 2.1 | 6.3 | 7.0 | 4.2 |
| Pregnancy problems | 3.2 | 3.3 | 3.0 | 6.2 | 6.2 | 6.1 |
| Diabetes | 3.1 | 2.3 | 5.4 | 5.9 | 4.3 | 10.8 |
| Diarrhoea | 2.4 | 2.7 | 1.8 | 4.6 | 5.0 | 3.6 |
| Conjunctivitis | 2.2 | 2.3 | 1.9 | 4.2 | 4.4 | 3.9 |
| Heart disease | 1.9 | 1.9 | 1.9 | 3.6 | 3.5 | 3.7 |
| Transmitted diseases | 1.8 | 2.0 | 1.4 | 3.5 | 3.7 | 2.8 |
| Skin disease | 1.7 | 1.6 | 2.0 | 3.3 | 3.0 | 4.0 |
| Migraine | 1.7 | 1.8 | 1.5 | 3.2 | 3.3 | 3.0 |
| Asthma | 1.6 | 1.4 | 2.0 | 3.0 | 2.6 | 3.9 |
| Urinary tract infection | 1.5 | 1.5 | 1.5 | 2.9 | 2.9 | 3.0 |
| Hepatitis-b | 1.4 | 1.5 | 1.1 | 2.6 | 2.8 | 2.2 |
| Gynecology problem | 1.3 | 1.3 | 1.3 | 2.4 | 2.3 | 2.6 |
| Others | 1.1 | 1.2 | 1.1 | 2.2 | 2.2 | 2.1 |
| Measles | 1.0 | 1.0 | 1.2 | 2.0 | 1.9 | 2.3 |
| Tumour | 1.0 | 1.1 | 0.9 | 2.0 | 2.0 | 1.9 |
| Abdominal pain | 1.0 | 1.0 | 1.0 | 1.9 | 1.8 | 2.1 |
| Cataract | 0.9 | 0.8 | 1.1 | 1.7 | 1.5 | 2.3 |
| Ear infection | 0.9 | 1.0 | 0.7 | 1.7 | 1.8 | 1.3 |
| Influenza | 0.9 | 0.8 | 1.0 | 1.7 | 1.6 | 1.9 |
| Malaria | 0.8 | 0.9 | 0.4 | 1.5 | 1.8 | 0.9 |
| Typhoid | 0.8 | 0.7 | 1.1 | 1.5 | 1.3 | 2.2 |
| Kidney disease | 0.7 | 0.7 | 0.8 | 1.4 | 1.3 | 1.6 |
| Back pain | 0.7 | 0.7 | 0.6 | 1.3 | 1.3 | 1.3 |
| Kala-azar | 0.6 | 0.7 | 0.4 | 1.2 | 1.3 | 0.8 |
| Leg injury | 0.6 | 0.5 | 0.8 | 1.2 | 1.0 | 1.7 |
| Low blood pressure | 0.6 | 0.7 | 0.4 | 1.1 | 1.2 | 0.9 |
| Whooping cough | 0.6 | 0.5 | 0.8 | 1.1 | 0.9 | 1.6 |
| Goitre | 0.6 | 0.6 | 0.4 | 1.1 | 1.2 | 0.7 |
| Tooth ache | 0.5 | 0.5 | 0.4 | 0.9 | 0.9 | 0.9 |
| Osteolysis | 0.4 | 0.4 | 0.4 | 0.8 | 0.8 | 0.9 |
| Chicken pox | 0.4 | 0.4 | 0.4 | 0.8 | 0.8 | 0.7 |
| Cancer | 0.4 | 0.4 | 0.4 | 0.8 | 0.8 | 0.7 |
| Appendicitis | 0.4 | 0.5 | 0.1 | 0.8 | 1.0 | 0.2 |
| Acute respiratory infection (ARI) | 0.4 | 0.5 | 0.3 | 0.8 | 0.8 | 0.6 |
| Tuberculosis | 0.4 | 0.4 | 0.3 | 0.7 | 0.8 | 0.6 |
| Epilepsy | 0.4 | 0.5 | 0.1 | 0.7 | 0.9 | 0.2 |
| Hurt in hand | 0.3 | 0.3 | 0.3 | 0.6 | 0.6 | 0.7 |


| Selected diseases | Proportional morbidity (\%) |  |  | Prevalence of morbidity (Per <br> 1000 Population) |  |  |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  | National | Rural | Urban |
| National | Rural |  | Urban |  |  |  |
| Anemia | 0.3 | 0.3 | 0.3 | 0.6 | 0.6 | 0.5 |
| Night blindness | 0.3 | 0.3 | 0.1 | 0.5 | 0.6 | 0.2 |
| Gallbladder stone | 0.2 | 0.3 | 0.2 | 0.5 | 0.5 | 0.4 |
| Mental disorder | 0.2 | 0.2 | 0.4 | 0.4 | 0.3 | 0.8 |
| Sore throat | 0.2 | 0.2 | 0.3 | 0.4 | 0.4 | 0.6 |
| Mumps | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 |
| Haemorrhyds | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 |
| Nasal Polyps | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 |
| Tonsils | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.4 |
| Oedema | 0.2 | 0.2 | 0.2 | 0.4 | 0.4 | 0.3 |
| Caesarean baby | 0.2 | 0.2 | 0.1 | 0.3 | 0.3 | 0.3 |
| Allergy | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 |
| Paralysis | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.3 |
| Arsenic | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 |
| Tetanus | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.3 |
| Neck pain | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.5 |
| Epistaxix | 0.1 | 0.1 | 0.0 | 0.2 | 0.3 | 0.0 |
| Upper back pain | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.4 |
| Aphtha | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |
| Stoke | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 |
| Burn injury | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 |
| Hepatic/Liver diseases | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 |
| Rabies | 0.1 | 0.0 | 0.2 | 0.2 | 0.0 | 0.5 |
| Post operative infection | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| Fracture leg | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| Oesophagitis | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 |
| Hernia | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 |
| Pneumonia | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 |
| Hormonal Problem | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 |
| Autism | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Abscess | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Diphtheria | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
|  | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 9 0 . 2}$ | $\mathbf{1 8 6 . 7}$ | $\mathbf{2 0 1 . 0}$ |

Table M-9: Proportion (\%) and prevalence of morbidity of per 1000 working age (15-64 year) population from the selected diseases by sex

| Diseases | Proportional morbidity <br> (\%) |  |  |  | Prevalence of morbidity <br> (Per 1000 population) |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Total | Male | Female | Both | Male | Female |
| Fever (FUO) | 28.0 | 28.8 | 27.4 | 55.9 | 50.3 | 61.3 |
| Peptic Ulcer | 9.2 | 9.6 | 9.2 | 18.7 | 16.8 | 20.7 |
| Arthritis | 7.9 | 6.8 | 8.8 | 15.8 | 11.8 | 19.7 |
| High blood Pressure | 7.9 | 7.0 | 8.6 | 15.8 | 12.2 | 19.2 |
| Diabetes | 4.8 | 5.2 | 4.5 | 9.5 | 9.1 | 10.0 |
| Dysentery | 4.0 | 5.2 | 3.1 | 8.0 | 9.1 | 6.8 |
| Heart disease | 2.2 | 2.5 | 2.0 | 4.4 | 4.3 | 4.6 |
| Diarrhoea | 2.2 | 2.2 | 2.2 | 4.4 | 3.8 | 5.0 |
| Conjunctivitis | 2.1 | 1.8 | 2.3 | 4.2 | 3.1 | 5.2 |
| Asthma | 2.1 | 2.4 | 1.8 | 4.1 | 4.2 | 4.0 |
| Skin Disease | 2.0 | 2.4 | 1.7 | 3.9 | 4.1 | 3.8 |
| Hepatitis-b | 1.7 | 2.3 | 1.3 | 3.5 | 4.1 | 2.9 |
| Cataract | 1.3 | 1.4 | 1.3 | 2.7 | 2.4 | 3.0 |
| Pregnant | 1.3 | 0.0 | 2.3 | 2.6 | 0.0 | 5.2 |
| Migraine | 1.3 | 1.0 | 1.5 | 2.5 | 1.7 | 3.3 |
| Transmitted Diseases | 1.1 | 0.6 | 1.6 | 2.3 | 1.0 | 3.5 |
| Whooping cough | 1.1 | 1.6 | 0.8 | 2.2 | 2.7 | 1.7 |
| Others | 1.1 | 1.3 | 1.0 | 2.2 | 2.2 | 2.2 |
| Urinary Tract Infection | 1.1 | 0.8 | 1.3 | 2.2 | 1.3 | 3.0 |
| Measles | 0.8 | 0.7 | 0.9 | 1.7 | 1.3 | 2.0 |
| Influenza | 0.8 | 0.9 | 0.7 | 1.7 | 1.6 | 1.7 |
| Back pain | 0.8 | 0.9 | 0.7 | 1.5 | 1.6 | 1.5 |
| Leg Injury | 0.7 | 0.9 | 0.6 | 1.5 | 1.6 | 1.4 |
| Ear infection | 0.7 | 0.7 | 0.8 | 1.5 | 1.1 | 1.8 |
| Malaria | 0.7 | 0.8 | 0.7 | 1.4 | 1.4 | 1.5 |
| Typhoid | 0.7 | 0.7 | 0.7 | 1.4 | 1.3 | 1.6 |
| Tumour | 0.7 | 0.4 | 0.9 | 1.3 | 0.7 | 2.0 |
| Abdominal pain | 0.6 | 0.5 | 0.8 | 1.3 | 0.8 | 1.7 |
| Tuberculosis | 0.6 | 0.9 | 0.4 | 1.2 | 1.6 | 0.9 |
| Kala-azar | 0.6 | 0.7 | 0.5 | 1.2 | 1.2 | 1.2 |
| Kidney disease | 0.6 | 0.5 | 0.6 | 1.2 | 0.9 | 1.4 |
| Gynecology problem | 0.6 | 0.0 | 1.0 | 1.1 | 0.0 | 2.2 |
| Low Blood Pressure | 0.5 | 0.4 | 0.6 | 1.1 | 0.7 | 1.4 |
| Hurt in hand | 0.5 | 0.8 | 0.4 | 1.1 | 1.3 | 0.8 |
| Goitre | 0.5 | 0.5 | 0.5 | 1.0 | 0.9 | 1.1 |
| Night blindness | 0.5 | 0.5 | 0.4 | 0.9 | 0.9 | 1.0 |
| Tooth Ache | 0.5 | 0.3 | 0.6 | 0.9 | 0.5 | 1.3 |
| Chicken pox | 0.5 | 0.7 | 0.3 | 0.9 | 1.1 | 0.6 |
| Epilepsy | 0.4 | 0.5 | 0.3 | 0.8 | 0.8 | 0.8 |
| Cancer/Malignancy | 0.4 | 0.3 | 0.4 | 0.8 | 0.6 | 0.9 |
| Acute respiratory Infection | 0.4 | 0.4 | 0.3 | 0.7 | 0.7 | 0.7 |
| Haemorrhyds | 0.4 | 0.6 | 0.2 | 0.7 | 1.0 | 0.5 |
|  |  |  |  |  |  |  |


| Diseases | Proportional morbidity (\%) |  |  | Prevalence of morbidity (Per 1000 population) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Both | Male | Female |
| Paralysis | 0.3 | 0.4 | 0.3 | 0.7 | 0.8 | 0.6 |
| Osteolysis | 0.3 | 0.2 | 0.4 | 0.6 | 0.3 | 0.9 |
| Appendicitis | 0.3 | 0.2 | 0.4 | 0.6 | 0.4 | 0.8 |
| Nasal polyps | 0.2 | 0.3 | 0.2 | 0.4 | 0.5 | 0.3 |
| Burn Injury | 0.2 | 0.4 | 0.1 | 0.4 | 0.6 | 0.2 |
| Mumps | 0.2 | 0.2 | 0.2 | 0.4 | 0.3 | 0.4 |
| Allergy | 0.2 | 0.2 | 0.2 | 0.4 | 0.3 | 0.4 |
| Arsenic | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 |
| Mental Disorder | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.4 |
| Anemia | 0.2 | 0.0 | 0.3 | 0.3 | 0.1 | 0.6 |
| Gallbladder stone | 0.2 | 0.1 | 0.2 | 0.3 | 0.2 | 0.5 |
| Tonsils | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.3 |
| Hernia | 0.1 | 0.3 | 0.0 | 0.3 | 0.5 | 0.1 |
| Oedema | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.4 |
| Sore throat | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.3 |
| Aphtha | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |
| Hepatic/Liver Diseases | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |
| Abscess | 0.1 | 0.2 | 0.0 | 0.2 | 0.3 | 0.0 |
| Epistaxix | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |
| Rabies | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |
| Stoke | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 |
| Neck pain | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |
| Tetanus | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 |
| Fracture leg | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 |
| Caesarean Baby | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.3 |
| Upper Back pain | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.2 |
| Post operative infection | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 |
| Pneumonia | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 |
| Geriatric | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 |
| diphtheria | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 |
| Oesophagitis | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Albinism | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Hormonal problem | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bronchitis | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Thalassemia | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Autism | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Shock by electricity | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Morbidity | 100.0 | 100.0 | 100.0 | 199.7 | 174.8 | 224.0 |

Table M-10: Proportion (\%) and prevalence of morbidity per 1000 population of the elderly persons (64+year) from the selected diseases by sex

| Selected Diseases | Proportional morbidity (\%) |  |  | Prevalence of morbidity (Per 1000 population) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female |
| Fever (FUO) | 21.0 | 22.9 | 18.8 | 106.4 | 122.6 | 89.1 |
| Arthritis | 15.2 | 11.9 | 19.1 | 76.9 | 63.7 | 91.0 |
| High blood Pressure | 10.3 | 10.8 | 9.7 | 52.1 | 57.9 | 46.0 |
| Diabetes | 7.2 | 7.3 | 7.1 | 36.4 | 39.0 | 33.5 |
| Peptic Ulcer | 6.5 | 6.1 | 7.0 | 33.1 | 32.8 | 33.4 |
| Cataract | 6.1 | 5.1 | 7.4 | 31.1 | 27.4 | 35.0 |
| Conjunctivitis | 3.8 | 3.0 | 4.9 | 19.4 | 16.0 | 23.0 |
| Asthma | 3.7 | 4.6 | 2.7 | 18.9 | 24.7 | 12.8 |
| Dysentery | 3.0 | 2.8 | 3.4 | 15.4 | 14.7 | 16.1 |
| Whooping cough | 2.0 | 2.4 | 1.5 | 10.2 | 13.0 | 7.2 |
| Heart disease | 1.9 | 2.4 | 1.3 | 9.7 | 12.9 | 6.3 |
| Diarrhoea | 1.8 | 2.1 | 1.5 | 9.2 | 11.2 | 7.1 |
| Night blindness | 1.7 | 1.7 | 1.6 | 8.6 | 9.3 | 7.8 |
| Urinary Tract Infection | 1.2 | 1.7 | 0.7 | 6.2 | 9.0 | 3.3 |
| Paralysis | 1.2 | 1.3 | 1.1 | 6.0 | 6.8 | 5.1 |
| Skin Disease | 1.1 | 1.0 | 1.3 | 5.8 | 5.6 | 6.0 |
| Tuberculosis | 0.7 | 1.0 | 0.3 | 3.4 | 5.5 | 1.2 |
| Back pain | 0.7 | 0.7 | 0.6 | 3.3 | 3.9 | 2.7 |
| Influenza | 0.6 | 0.6 | 0.6 | 3.1 | 3.4 | 2.9 |
| Others | 0.6 | 0.6 | 0.5 | 2.8 | 3.4 | 2.2 |
| Leg Injury | 0.6 | 0.6 | 0.5 | 2.8 | 3.0 | 2.5 |
| Low Blood Pressure | 0.5 | 0.7 | 0.3 | 2.6 | 3.6 | 1.5 |
| Cancer/Malignancy | 0.5 | 0.5 | 0.4 | 2.3 | 2.6 | 2.0 |
| Typhoid | 0.4 | 0.6 | 0.3 | 2.2 | 2.9 | 1.5 |
| Ear infection | 0.4 | 0.5 | 0.4 | 2.2 | 2.6 | 1.8 |
| Kala-azar | 0.4 | 0.3 | 0.6 | 2.1 | 1.4 | 2.8 |
| Geriatric | 0.4 | 0.2 | 0.7 | 2.0 | 0.9 | 3.2 |
| Stoke | 0.4 | 0.5 | 0.3 | 2.0 | 2.5 | 1.3 |
| Haemorrhyds | 0.4 | 0.6 | 0.2 | 1.9 | 3.0 | 0.8 |
| Acute respiratory Infection | 0.4 | 0.4 | 0.4 | 1.8 | 2.0 | 1.7 |
| Measles | 0.4 | 0.3 | 0.4 | 1.8 | 1.7 | 1.9 |
| Transmitted Diseases | 0.3 | 0.2 | 0.5 | 1.7 | 1.2 | 2.3 |
| Hepatitis-b | 0.3 | 0.3 | 0.3 | 1.6 | 1.7 | 1.5 |
| Kidney disease | 0.3 | 0.3 | 0.3 | 1.6 | 1.6 | 1.6 |
| Tumour | 0.3 | 0.3 | 0.4 | 1.6 | 1.4 | 1.8 |
| Abdominal pain | 0.3 | 0.4 | 0.2 | 1.4 | 2.1 | 0.7 |
| Migraine | 0.3 | 0.2 | 0.3 | 1.4 | 1.3 | 1.4 |


| Selected Diseases | Proportional morbidity (\%) |  |  | Prevalence of morbidity (Per 1000 population) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female |
| Malaria | 0.3 | 0.5 | 0.0 | 1.3 | 2.5 | 0.0 |
| Goitre | 0.2 | 0.1 | 0.3 | 1.1 | 0.6 | 1.6 |
| Hernia | 0.2 | 0.3 | 0.0 | 0.9 | 1.8 | 0.0 |
| Arsenic | 0.2 | 0.2 | 0.2 | 0.9 | 1.1 | 0.7 |
| Osteolysis | 0.2 | 0.1 | 0.3 | 0.9 | 0.4 | 1.4 |
| Epilepsy | 0.2 | 0.2 | 0.1 | 0.8 | 1.3 | 0.4 |
| Gallbladder stone | 0.2 | 0.2 | 0.1 | 0.8 | 1.0 | 0.6 |
| Hurt in hand | 0.2 | 0.1 | 0.2 | 0.8 | 0.8 | 0.8 |
| Tooth Ache | 0.2 | 0.2 | 0.2 | 0.8 | 0.9 | 0.7 |
| Tetanus | 0.2 | 0.2 | 0.1 | 0.8 | 0.8 | 0.7 |
| Allergy | 0.1 | 0.1 | 0.1 | 0.6 | 0.6 | 0.6 |
| Sore throat | 0.1 | 0.0 | 0.2 | 0.5 | 0.0 | 1.1 |
| Chicken pox | 0.1 | 0.1 | 0.1 | 0.5 | 0.6 | 0.3 |
| Pneumonia | 0.1 | 0.2 | 0.0 | 0.4 | 0.8 | 0.0 |
| Burn Injury | 0.1 | 0.1 | 0.1 | 0.4 | 0.5 | 0.3 |
| Oedema | 0.1 | 0.1 | 0.0 | 0.4 | 0.7 | 0.0 |
| Rabies | 0.1 | 0.0 | 0.1 | 0.3 | 0.1 | 0.6 |
| Anemia | 0.1 | 0.0 | 0.1 | 0.3 | 0.0 | 0.7 |
| Epistaxix | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.3 |
| Nasal polyps | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.3 |
| Appendicitis | 0.1 | 0.1 | 0.0 | 0.3 | 0.6 | 0.0 |
| Aphtha | 0.1 | 0.0 | 0.1 | 0.3 | 0.1 | 0.4 |
| Tonsils | 0.1 | 0.1 | 0.0 | 0.2 | 0.5 | 0.0 |
| Fracture leg | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.4 |
| Mental Disorder | 0.0 | 0.1 | 0.0 | 0.2 | 0.4 | 0.0 |
| Hepatic/Liver Diseases | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.4 |
| Gynecology problem | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.4 |
| Bronchitis | 0.0 | 0.1 | 0.0 | 0.2 | 0.3 | 0.0 |
| Pregnant | 0.0 | - | 0.0 | 0.1 | - | 0.2 |
| Mumps | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 |
| Post operative infection | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 |
| Abscess | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 |
| Total Morbidity | 100.0 | 100.0 | 100.0 | 505.9 | 534.8 | 475.1 |

Table V-1: Percentage of children age 12-23 months fully immunized by sex, residence and division

| Division | National |  |  | Rural |  |  |  | Urban |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | Total | Male | Female | Tota | Male | Female | Tota | Male | Female |  |
| Barisal | 62 | 62 | 62 | 59 | 58 | 59 | 80 | 78 | 83 |  |
| Chittagong | 77 | 76 | 78 | 77 | 75 | 79 | 76 | 77 | 75 |  |
| Dhaka | 65 | 66 | 65 | 65 | 65 | 63 | 67 | 66 | 68 |  |
| Khulna | 74 | 78 | 69 | 75 | 80 | 70 | 64 | 66 | 63 |  |
| Rajshahi | 81 | 83 | 78 | 80 | 82 | 78 | 86 | 95 | 79 |  |
| Rangpur | 69 | 71 | 66 | 67 | 70 | 63 | 81 | 74 | 95 |  |
| Sylhet | 61 | 63 | 59 | 60 | 62 | 59 | 63 | 71 | 56 |  |
| Total | $\mathbf{7 0}$ | $\mathbf{7 1}$ | $\mathbf{6 9}$ | $\mathbf{7 0}$ | $\mathbf{7 1}$ | $\mathbf{6 8}$ | $\mathbf{7 2}$ | $\mathbf{7 2}$ | $\mathbf{7 2}$ |  |

Table V-2: Percentage of children age 12-23 months who received specific vaccines by division

| Vaccines | Barisal | Chittagong | Dhaka | Khulna | Rajshahi | Rangpur | Sylhet | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| BCG | 90 | 90 | 86 | 92 | 95 | 90 | 76 | 88 |
| Penta-1 | 90 | 94 | 89 | 94 | 94 | 90 | 77 | 90 |
| Penta-2 | 88 | 93 | 85 | 90 | 95 | 86 | 73 | 88 |
| Penta-3 | 80 | 90 | 83 | 88 | 92 | 80 | 71 | 85 |
| OPV-1 | 80 | 88 | 82 | 89 | 91 | 83 | 71 | 84 |
| OPV-2 | 75 | 87 | 80 | 89 | 89 | 82 | 69 | 83 |
| OPV-3 | 70 | 85 | 78 | 87 | 88 | 79 | 69 | 80 |
| Measles | 73 | 86 | 78 | 80 | 87 | 77 | 65 | 79 |
| All vaccines | 62 | 77 | 65 | 74 | 81 | 69 | 61 | 70 |

Table V-3: Percentage of children age 12-23 months who received specific vaccines by sex and division.

| Vaccines | Barisal |  | Chittagong |  | Dhaka |  | Khulna |  | Rajshahi |  | Rangpur |  | Sylhet |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female |
| BCG | 91 | 89 | 88 | 92 | 87 | 84 | 94 | 90 | 96 | 93 | 92 | 86 | 78 | 75 |
| Penta-1 | 89 | 90 | 94 | 95 | 90 | 89 | 96 | 91 | 96 | 92 | 92 | 86 | 79 | 76 |
| Penta-2 | 86 | 90 | 92 | 93 | 85 | 85 | 94 | 87 | 97 | 92 | 87 | 85 | 76 | 70 |
| Penta-3 | 82 | 78 | 90 | 90 | 83 | 82 | 92 | 85 | 94 | 90 | 82 | 78 | 75 | 68 |
| OPV-1 | 79 | 81 | 87 | 90 | 82 | 82 | 94 | 84 | 93 | 88 | 84 | 81 | 75 | 68 |
| OPV-2 | 73 | 77 | 86 | 87 | 81 | 80 | 94 | 84 | 92 | 86 | 83 | 80 | 72 | 66 |
| OPV-3 | 71 | 69 | 85 | 84 | 78 | 77 | 92 | 82 | 90 | 85 | 81 | 75 | 73 | 65 |
| Measles | 77 | 69 | 85 | 86 | 78 | 78 | 87 | 73 | 87 | 87 | 79 | 74 | 69 | 62 |
| All vaccines | 62 | 62 | 76 | 78 | 66 | 65 | 78 | 69 | 83 | 78 | 71 | 66 | 63 | 59 |

## APPENDIX-B: COMPARISONS WITH OTHER SOURCES

Table C-1: Female population 15 years and above by marital status and age group
(In percentage)

| Age group (In year) | Marital Status |  |  |  | Source |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never married | Currently married | Widowed | Divorced |  |
| 15-19 | 73.1 | 26.0 | 0.3 | 0.6 | HMSS-2012 |
|  | 77.1 | 28.0 | 0.5 | 0.4 | SVRS-2010 |
|  | 54.3 | 44.7 | 0.0 | 0.6 | BDHS-2011 |
| 20-24 | 22.7 | 75.4 | 0.5 | 1.2 | HMSS-2012 |
|  | 25.4 | 76.2 | 0.8 | 1.0 | SVRS-2010 |
|  | 13.4 | 83.7 | 0.4 | 1.3 | BDHS-2011 |
| 25-29 | 5.6 | 91.7 | 1.0 | 1.3 | HMSS-2012 |
|  | 7.9 | 91.6 | 1.1 | 1.0 | SVRS-2010 |
|  | 3.0 | 93.2 | 1.3 | 1.0 | BDHS-2011 |
| 30-34 | 1.8 | 94.8 | 1.8 | 1.2 | HMSS-2012 |
|  | 2.7 | 94.7 | 2.0 | 1.0 | SVRS-2010 |
|  | 1.2 | 94.3 | 1.8 | 1.0 | BDHS-2011 |
| 35-39 | 0.8 | 94.4 | 3.3 | 1.2 | HMSS-2012 |
|  | 1.4 | 93.4 | 3.3 | 1.2 | SVRS-2010 |
|  | 0.8 | 91.9 | 4.6 | 1.4 | BDHS-2011 |
| 40-44 | 0.5 | 90.5 | 7.0 | 1.4 | HMSS-2012 |
|  | 1.2 | 89.6 | 7.2 | 1.4 | SVRS-2010 |
|  | 0.3 | 89.8 | 7.2 | 0.8 | BDHS-2011 |
| 45-49 | 0.5 | 85.2 | 12.3 | 1.2 | HMSS-2012 |
|  | 1.0 | 82.1 | 13.9 | 1.6 | SVRS-2010 |
|  | 0.2 | 82.3 | 13.3 | 1.5 | BDHS-2011 |

Table C-2: Comparison of prevalence of morbidity per 1000 population between HMSS/2012 and HDS/2000

| Selected diseases | Prevalence of morbidity |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Source |
| Arthritis | 14.0 | 10.9 | 17.1 | HMSS-2012 |
|  | 4.7 | 4.2 | 5.3 | HDS-2000 |
| Peptic Ulcer | 11.5 | 10.4 | 12.6 | HMSS-2012 |
|  | 15.2 | 14.4 | 16.1 | HDS-2000 |
| Diabetes | 7.8 | 7.7 | 8.0 | HMSS-2012 |
|  | 2.7 | 3.3 | 2.0 | HDS-2000 |
| Diarrhoea | 6.6 | 6.4 | 6.7 | HMSS-2012 |
|  | 9.4 | 9.4 | 9.4 | HDS-2000 |
| Tuberculosis | 1.0 | 1.3 | 0.8 | HMSS-2012 |
|  | 0.9 | 1.2 | 0.6 | HDS-2000 |
| Goitre | 0.8 | 0.8 | 0.4 | HMSS-2012 |
|  | 0.2 | 0.0 | 0.4 | HDS-2000 |
| Asthma | 3.9 | 4.2 | 3.6 | HMSS-2012 |
|  | 5.1 | 5.1 | 5.2 | HDS-2000 |
| Influenza | 2.2 | 2.3 | 2.0 | HMSS-2012 |
|  | 3.4 | 2.9 | 3.9 | HDS-2000 |
| Malaria | 1.5 | 1.6 | 1.3 | HMSS-2012 |
|  | 2.8 | 2.7 | 2.9 | HDS-2000 |
| Typhoid | 1.4 | 1.3 | 1.5 | HMSS-2012 |
|  | 2.1 | 2.3 | 2.0 | HDS-2000 |
| Pneumonia | 0.1 | 0.1 | 0.0 | HMSS-2012 |
|  | 2.4 | 2.6 | 2.3 | HDS-2000 |

Table C-3: Prevalence of morbidity per 1000 children (<2 year) from selected diseases

|  | Prevalence morbidity |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Selected diseases | Total | Male | Female | Source |
| Diarrhoea | 43.8 | 43.0 | 44.6 | HMSS-2012 |
| Measles | 9.4 | 9.5 | 9.4 | HDS-2000 |
| Goitre | 16.0 | 19.4 | 12.5 | HMSS-2012 |
|  | 1.3 | 1.3 | 1.4 | HDS-2000 |
| Whooping cough | 0.5 | 0.5 | 0.6 | HMSS-2012 |
|  | 0.2 | 0.0 | 0.4 | HDS-2000 |
| Kala-azar | 4.9 | 5.5 | 4.3 | HMSS-2012 |
|  | 0.3 | 0.4 | 0.3 | HDS-2000 |
| Malaria | 2.3 | 1.9 | 2.7 | HMSS-2012 |
|  | 0.3 | 0.3 | 0.2 | HDS-2000 |
| Tetanus | 1.4 | 2.8 | 0.0 | HMSS-2012 |
|  | 2.8 | 2.7 | HDS-2000 |  |
| Diphtheria | 0.6 | 0.9 | HDS-2012 |  |

Table C-4: Mothers received TT during last pregnancy

| Use of TT at national level | HDS-2000 | HMSS-2012 |
| :--- | :---: | :---: |
| TT Received | 69.9 | 58.2 |
| TT not received | 30.1 | 41.8 |

Table C-5: Assistance by doctor during delivery

| Residence | HMSS-2012 | MICS-2009 | (In percentage) |
| :--- | :---: | :---: | :---: |
| National | 21.2 | 20.5 | 22.2 |
| Rural | 18.1 | 15.9 | 17.5 |
| Urban | 32.8 | 39.4 | 38.4 |

Table C-6: Knowledge about mode transmission of HIV/AIDS of population aged 15-24 years

| Knowledge <br> transmission | about | HIV/AIDS | HMSS-2012 |  | BDHS-2011 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female |  |  |
| Using used needles/syringes* | 47.7 | 46.9 | 78.3 | 71.5 |  |  |
| Unsafe blood transfusions | 28.4 | 27.9 | 81.0 | 71.2 |  |  |

Note: * BDHS- unsterilized
Table C-7: Antenatal care received by the pregnant women

| Number of ANC visits | HMSS-2012 | BDHS-2011 |
| :--- | :---: | :---: |
| None | 21.0 | 32.1 |
| 1 | 11.9 | 15.3 |
| 2 | 24.8 | 14.4 |
| 3 | 20.1 | 12.5 |
| $4+$ | 22.3 | 25.5 |
| Don't Know/ missing | - | 0.1 |
| Median number of visits | - | 3.3 |
|  | $\mathbf{1 0 0 . 0}$ | $\mathbf{1 0 0 . 0}$ |

## APPENDIX-C: TECHNICAL COMMITTEE

Technical Committee of the suvey

| 01 | Prof. Barkat-e-Khuda, Economics Department, University of Dhaka | Chairperson |
| :---: | :--- | :---: |
| 02 | Director General/ Deputy Director General, BBS | Member |
| 03 | Joint Secretary, Statistics and Informatics Division | Member |
| 04 | Representative, Chairman, Applied Statistics Department, University of <br> Dhaka | Member |
| 05 | Representative, Ministry of Health and Family Welfare (Not below DS) | Member |
| 06 | Director (Research), NIPORT | Member |
| 07 | Director (MIS), DG Health, Dhaka | Member |
| 08 | Representative, Department of Gender Studies, University of Dhaka | Member |
| 09 | Director (Demography), icddr,b | Member |
| 10 | Project Director, SVRS Project, BBS | Member |
| 11 | Dr. Nurul Alam, Scientist, icddr,b | Member |
| 12 | Ms. Tahmina Begum, consultant, World Bank | Member |
| 13 | Dr. M Amir Hossain, Professor, ISRT | Member |
| 15 | Abdur Razzaque, Scientist, icddr,b | Member |
| 14 | Director, Demography and Health Wing, BBS | Member Secretary |

The Terms and Conditions of the Technical Committee are as follows:
(1) To review the technical activities and progress of the wing and guide for undertaking future survey activities;
(2) To identify the data gaps in the areas of population, health and demography and suggest ways and means for the improvement of data collection, compilation and dissemination system;
(3) To provide technical backstopping for conducting health survey including HIV/AIDS and health expenditure, nutrition, demography and population composition related surveys between the census years to meet the annual data needs;
(4) To suggest techniques for improvement of migration and urbanization related data and development of MNSDS (Minimum National and Social Data Set) and indicators of MDGs;
(5) To suggest suitable studies/investigations in the field of fertility, mortality, morbidity, nutrition to complement the census results;
(6) To undertake critical studies of different approaches to population projection and recommend method suitable for the country;
(7) To recommend improvement of urbanization, migration statistics and other social statistics;
(8) Any other tasks assigned by the NSC from time to time.

## APPENDIX-D: WORKING COMMITTEE

| 01 | Director, Demography and Health Wing, BBS | Chairperson |
| :---: | :--- | :---: |
| 02 | Director, Computer Wing, BBS | Member |
| 03 | Director , Industry \& Labour Wing, BBS | Member |
| 04 | Director ,Census Wing, BBS | Member |
| 05 | Project Director , MICS Project, BBS | Member |
| 06 | Project Director , SVRS Project, BBS | Member |
| 07 | Project Director , Nutritional Surveillance Project, BBS | Member |
| 08 | Focal Point Officer, Gender Statistics, BBS | Member |
| 09 | Mr. Mohammad Shaheen, DD, BBS | Member |
| 10 | Mr. Jatan Kumar Saha, System Analyst, BBS | Member |
| 11 | Consultant, Health \& Morbidity Status Survey, BBS | Member |
| 12 | Focal Point Officer, Health \& Morbidity Status Survey, BBS | Member Secretary |

## Terms and Conditions:

(1) To improve the draft tabulation plan prepared by consultant of the project
(2) Any other issues for the improvement of the survey report

## APPENDIX-E: PERSONS INVOLVED

1) Mr. Md. Abul Kalam Azad, Local Consultant
2) Mr. Md. Tahidul Islam, Deputy Director, Demography and Health Wing
3) Mr. Md. Karamat Ali, Senior Programmer, Computer Wing
4) Mrs. Jahan Afroza Begum, Statistical Officer, Demography and Health Wing
5) Md. Alamgir Hossen, Statistical Officer, Census Wing
6) Mr. Md. Feroj-Evna-Yusuf, Statistical Officer, Demography and Health Wing
7) Mrs. Syeda Marufa Saki, Statistical Officer, Demography and Health Wing
8) Mr. Monirul Islam, Assistant Statistical Officer, Demography and Health Wing
9) Mr. Md. Lutfor Rahman, Assistant Statistical Officer, Demography and Health Wing
10) Mr. S. M. Anwar Husain, Statistical Investigator, MSCW Project
11) Mr. Md. Emdadul Haque, Deputy Director and Focal Point Officer

## APPENDIX-F: QUESTIONNAIRE

Government of the peoples Republic of Bangladesh
Demography and Health Wing
Bangladesh Bureau of Statistics Statistics Division
E-27/A Agargaon, Dhaka-1207

## (Confidential)

Collected data will be used only for research and planning

## Questionnaire

## Health and Demographic Survey-2012

Survey of personal characteristics, illness, medical or routine checkup, disability and impairment, treatment and treatment cost of injured by accident and death, information about reproductive health care and socio-economic characteristics. of household members


## SVRS Household No. Sample household No.

## Identification Sample Area

| Area | Code |
| :---: | :---: |
| Upazila $\qquad$ <br> Union/Ward $\qquad$ <br> Sample Area(Mouza/Mohallah $\qquad$ <br> Village $\qquad$ |  |
|  |  |
|  |  |
|  |  |

## Brief Instructions:

1. Information of each and every sample household of a sample area will be collected in the first, second and fourth section of the questionnaire
2. The third section of the questionnaire will be filled in for each and every ill/death/ medical or routine checked-up persons of the households.
3. If there are more than one ill/death/ medical or routine checked-uppersons in the household, use separate third section of the questionnaire for each person and will be attached with the main questionnaire.
4. Accurate information about the illness of child, mother and aged persons will be very careful.
5. Main objectives of the questionnaire are to collect information about illness and treatment expenditure. So it must be keeped in mind that not a mild and simple or all general illness/death// medical or routine checked-uppersons would not be omitted from the count and it will be ensured that nobody is under enumerated.

Name of the data collector $\qquad$
Designation. $\qquad$
Signature with date.

## Section-1

### 1.1 Demographic Characteristics of the Household Members

| 1.Line no. | 2.Name of the household members | 3.Relations hip to the head of the household | 4.Sex <br> Male-1 <br> Female <br> -2 | 5.Age(Completedyear)Below 1year "00" | $\begin{aligned} & \text { 6.Marit } \\ & \text { al } \\ & \text { status } \\ & \text { (Code) } \end{aligned}$ | 7.Level of education (Passed the Class) Code | 8.What was your activity in the last week |  | 9. Whether he or she was sick/ injured last 90 days?* Yes-1 No-2 | 10.What do you measures to protect against mosquito es? (Code) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | (a)Write in details of occupation, persons of age 10+ (From the code list) | (b)Code $\quad$ of occupation (From the code list) |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 1 |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |  |
| 0 |  |  |  |  |  |  |  |  |  |  |

- Relationship to the head of the household Code: Head of the household-1,Husband/wife -2, Son/daughter-3, Brother/sister-4,Father/mother-5, Others-6
- Marital status Code: Unmarried-1, Married-2, Widowed-3, Divorced-4, Separated-5.
- Level of education: Not passed any Class -00, Passed Class-i-01, Passed Class-ii -02, Passed Class-iii -03, Passed Class-iv -04, Passed Class-v -05, Passed Classvi -06, Passed Class-vii -07, Passed Class-viii -08, Passed Class-ix -09, Passed SSC or equivalent -10, Passed HSC or equivalent $\mathbf{- 1 2}$, Graduate or equivalent-16, Post graduate or equivalent-17, Doctor/Engineer/Agriculturalist`-19, Diploma-20, Vocational-21, Others-99
- Protect against mosquitoes Code:Bed net -1, Mat-3, Refiller- 4, Aerosol/spray -5, Incense/fumes-6, Others-7, Nothing-9.
* Information on severe illness/general illness/physical/mental problem, injured happened during last 3 months/90 days shall have to be collected in this questionnaire.


### 1.2 Information for immunized children of age 00-23 month:

| Name of child, line no. and age(According to1.1) |  |  | Information of Vaccination of all child of the household of age 00-23 month |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1.Line number of child | 2.Name of child | 3.Ageof child (month) | 4.Mot hers line no. | 5.Is <br> the <br> child <br> immu <br> nized? <br> Yes-1 <br> No-2 | 6.If the answer of Q. 5 is no then reason (Code) | 7.Is  <br> immuniz  <br> ation  <br> card  <br> ava-  <br> ilable?  <br> Yes-1  <br> No-2  | 8.Surce <br> of <br> Vaccine <br> Govt-1 <br> NGO-2 <br> Others-3 | If the answer of the question no. 5 is yes then the dose for received=1, not received $=2$ and in the row of the week of the child in week. |  |  |  |  |  |  |  |  | 17.Expenditure of all Vaccines (TK.) |  |  |
|  |  |  |  |  |  |  |  | Dose <br> Week | 9. 10 Penta <br> BCG -1 <br>  (DPT, <br>  Hep- <br>  b,Hib) <br>   |  | $\begin{gathered} 11 . \\ \text { Penta-2 } \end{gathered}$ | $\begin{gathered} 12 . \\ \text { Penta-3 } \end{gathered}$ | $\begin{gathered} 13 . \\ \text { OPV-1 } \end{gathered}$ | $\begin{gathered} 14 . \\ \text { OPV-2 } \end{gathered}$ | $\begin{gathered} 15 . \\ \text { OPV-3 } \end{gathered}$ | $\begin{gathered} 16 . \\ \text { Measles } \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { Transp } \\ \text {-ort } \\ \text { Cost } \\ \hline \end{array}$ | Medicine and Other Cost | Total Cost |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|  |  |  |  |  |  |  |  | Dose |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | Week |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | Dose |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | Week |  |  |  |  |  |  |  |  |  |  |  |

* Reasons for non-immunization code:Under weight-1, Unaware of need for immunization -2, Unaware of need for different doses-3, Place, time and source of immunization unknown-4, Due to illness of baby-5, Fear of side effects-6, Lack of money -7, Far distance to immunization centre-8, Other reasons-9.
1.3 Information about the receiving of vitamin A capsule and the TT program of the mother(All the child of age 00-59 months and mother's information about TT program for the last 6 months)


Disability code of the child: Low vision -১, One еуеফ-২, Blind-৩, Hard of hearing -8, Damage/paralyzed of hand/leg-5, Waist problem-6, Gangrene-7, Loss of memoy-8, Nightblindness-9, Others-10.

### 1.4 Personal information of the Physical/Mental impaired persons of the household's member

| 1.Line number | 2.Name of the Physical/Mental impaired persons | 3.If more than one problem/ impairments then put the Code of the main problem | Treatment Expenditure of the Physical/Mental impaired persons during last 3 months |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 4.Medicine (TK.) | 5.Prescription fees (TK.) | 6.Communication Exp. <br> (TK.) | $\begin{aligned} & \text { 7.Medical } \\ & \text { treatment Exp. } \\ & \text { (TK.) } \end{aligned}$ | $\begin{aligned} & \text { 8.Surgical } \\ & \text { Exp. } \\ & \text { (TK.) } \end{aligned}$ | 9.Clinic/ Hospital rent (TK.) | 10.Other <br> Expenses <br> (TK.) | 11.Total Expenditure <br> (TK.) |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |

Code of Physical/Mental problem/impairment: Visual impairments-1, Problem in hearing -2, Problem in mobility -3, Cognition-4,Problem in self care-5, Problem in communication-6

### 1.5 Information of the persons of this household who has injury and accident during last 90 days

| 1.Line number | 2.Name of the injured person | 3.Whether the person is alive or dead? <br> Alive-1 <br> Dead-2(Code) | 4.Type of Wound/ Injury (From the code list) | 5.How the Wound/Injury was occurred? (From the code list) | 6. Place of Injury (From the code list) | 7.Where did you seek treatment for your Injury (Code) | 8. Teatment cost in Injury/Accident (TK.) | 9.Type of Vehicle for Injury \& Accident <br> (From the code list) | 10.Code of disability /impairments due to Injury/accident (From the code list) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

### 1.6 Information of the died persons due to accident of this household during last 90 days

| 1.Line number | 2.Name of the died person due to Accident | 3.Sex <br> Male-1 <br> Female-2 | 4.Age at death (Completed year) | 5.Marital <br> status <br> (Code) <br> (From the <br> code list) | 6.Level of education (Code) (From the code list) |  | 8.How the Accident was occurred? (From the code list) | 9. Place of Injury (From the code list) | 10.Where did you seek treatment for your Injury (Code) | 11.Teatment cost in death due to Injury/Accide nt (TK.) | 9.If the accident by Vehicle, type of Vehicle (From the code list) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

### 1.7 Information of all the persons of this household of age $10+$ who use tobacco leaves /zarda/gul /smoking /narcotics

| $\begin{array}{\|c\|} \hline \text { 1.Line } \\ \text { number } \end{array}$ | 2.Name of the person | 3.Do you use sadapata/ | 4.Do you use any | 5. What type of tobacco/narcoti | 6. Age of initiation of | 7. Age of initiation of | 8.Age of initiation | If the ans act | of the question cost of yesterd | respective | en fill up the Taka. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | zarda/gul/ smoking e.t.c? <br> Yes-1 <br> No-2 | $\begin{gathered} \text { narcotics? } \\ \text { Yes-1 } \\ \text { No-2 } \end{gathered}$ | Cs do you use $?$ (Code) (Multiple response possible) | smoking? | any narcotics? | ofsadapata/ zarda/gul | 9. Cost of smoking (TK.) | 10. Cost use of any drugs (TK.) | 11. Cost of sadapata/ zarda/gul e.t.c (TK.) | 12.Total cost |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |

Smoking/drugs/tobacco Code: Smoking-1, Tobacco leaves (Sadapata)-2, Zarda/gul-3, Wine-4, Hemp (gaza)-5, Hashish (Charash)-6, Heroine-7, Fensidil-8, Injection-9, Yaba-10, Others-11

### 1.8 Information about knowledge and awareness on HIV/AIDS of the household member's of age 15-24:

| 1.Line number | 2. Name of the person | 3.Have you everheard of HIV/AIDS? <br> Yes-1 <br> No-2 | 4. If the answer of the question no. 3 is yes then where did you heard about HIV/AIDS?(Code) <br> (Multiple response possible) | 5. Can you tell that how does the HIV/AIDS spread? (Code) <br> (Multiple response possible) | 6. Do you know how does HIV/AIDS to be prevented? (Code) (Multiple response possible) | 7.Remarks(If the respondent was absent after 3 times visit) <br> Absent-1 <br> No answer-1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |


| Everheard of HIV/AIDS Code $\quad:$ | Radio-1, Television-2,Billboard/Poster-3, News papers-4, Educational Institute-5,Relative/Friend-6, Others-7 |  |
| :--- | :--- | :--- |
| Spread out of HIV/AIDS Code | $:$ | Sex without condom -1, Using used needles/syringes -2 , Unsafe blood transfusions -3 , Use sharing razors and blades -4, |
|  |  | Intercourse with HIV/AIDS affected Husband/ wife -5 , By born -6, Does not know -7 |

## Section 2

Socio-Economic Characteristics of Household
[En-circle the appropriate code)

| 2.01 Ownership of Dwelling (Circle the code) |  | 2.02 Religion of Head of Household (Circle the code) |  | $\begin{gathered} 2.03 \text { Type of } \\ \text { House (Circle the } \\ \text { code) } \end{gathered}$ |  | 2.04 Construction Material of Wall, Roof and Floor of Main House of the Household (Circle the code) |  |  |  | 2.05 Dwelling |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ownership | Code | Religion | Code | House | Code | Materials of Construction | Wall | Roof | Floor | No. of Rooms | No. of Living Rooms | Area of <br> Living <br> Rooms <br> (Sq.Ft) |
| Own | 1 | Islam | 1 | Separate | 1 | Straw/ Bamboo / Polythene/ Canvass | 1 | 1 |  |  |  |  |
| Rented | 2 | Hindu | 2 | Apartment | 2 | Clay/Un-burnt Brick | 2 |  | 2 |  |  |  |
| Rent Free | 3 | Christian | 3 | Conjoined /Barrack | 3 | Tin (CI Sheet) | 3 | 3 |  |  |  |  |
|  |  | Buddha | 4 |  |  | Wood | 4 |  | 4 |  |  |  |
|  |  | Other | 5 |  |  | Tally |  | 5 |  |  |  |  |
|  |  |  |  |  |  | Brick-Cement | 6 | 6 | 6 |  |  |  |
|  |  | Mosaic/Tiles |  |  |  |  | 7 |  |  |  |
|  |  | Other | 8 |  |  | 8 | 8 |  |  |  |


| 2.06 Main Source of Water for (Circle the code) |  |  | 2.07 Source of Cooking Fuel (Circle the code) |  | 2.08 Source of Light (Circle the code) |  | 2.09 Toilet Facility (Circle the code) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Source | Drinking | Other Use | Source of Fuel | Code | Source | Code | Toilet Facility | Code |
| Tap | 1 | 1 | Wood / Bamboo | 1 | Electricity | 1 | Sanitary (Water Sealed) | 1 |
| Tube well /Deep Tube well | 2 | 2 | Kerosene | 2 | Solar Energy | 2 | Sanitary (Non-water Sealed) | 2 |
| Ring Well/Dug Well | 3 | 3 | Gas/LPG | 3 | Kerosene | 3 | Non-sanitary/Kutcha | 3 |
| Pond | 4 | 4 | Electricity | 4 | Biogas | 4 | Open Space | 4 |
| River/Ditch/Canal | 5 | 5 | Straw/Leaves/Dry Cow Dung | 5 | Others | 5 |  |  |
| Others | 6 | 6 | Biogas | 6 |  |  |  |  |
|  |  |  | Others | 7 |  |  |  |  |



## Section 3:

## Information regarding health condition of last 90 days, that is, information regarding serious illness, general illness, death, physical Injury, medical and routine check up done during last $\mathbf{9 0}$ days

3.01 Information of person who experienced illness/death/medical or routine check-up for diagnosis of disease

| Line <br> No. | Name | Kind of person/patient <br> (use the given code) | Age <br> (Completed Year) | Sex | Occupation Code <br> (As per occupation code list) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 |  | 5 | 6 |
|  |  |  |  |  |  |

- Kind of Sick/Person Code: Sick Person-1; Checked-up person-2; Dead person-3; Injured Person-4; Other-5.
- Use line number 90-99 for dead person.

If there are more than one ill/death/ medical or routine checkup persons in the household, use separate third section of the questionnaire for each person and will be attached with the main questionnaire
3.02 Supplementary questions for accurate diagnosis of disease by person who was exposed to sickness/death/medical or routine check-up for any of the following 31 diseases during last 90 days:
[ If any person living in the household has fallen sick or medically checked up during last 90 days for any of the following 31diseases , concerned prescriptions and reports are required to be verified for diagnosis of disease. If it is not thus possible then get the replies of the supplementary questions and encircle correct answer.]

| 1. Ask Questions for diagnosis of Measles |  |  |  | 2. Ask Questions for diagnosis of Dysentery |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.No | Symptom | Last 90 days |  | Q .No | Symptom | Last 90 days |  |
| 1 | First 3 days: Did the Child suffer from cough with high fever and red eye etc? | Yes | No | 1 | Were there loose motion with stomach squeeze for three or more times? | Yes | No |
| 2 | After 3 days: Did remission of fever and showing of red spot on the face seen? | Yes | No | 2. | Was there blood in the stools or blood like excrete? | Yes | No |
| 3. | After following 3 days: Did black seed of dandruff spotted? | Yes | No |  | Was mucus/ dysentery secreted with stools? | Yes | No |
| 4. | Did any other member have/ had similar symptom? | Yes | No |  |  |  |  |
| 5. | Have you yet taken vaccination for measles? | Yes | No |  |  |  |  |


| 3. Ask Questions for diagnosis of Goitre |  |  |  | 4. Ask Questions for diagnosis of Epilepsy |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.No | Symptom | Last 90 days |  | Q.No | Symptom | Last 90 days |  |
| 1 | Does /did the front side of neck inflated like solid mass? | Yes | No | 1. | Did ever lose the sense by shaking or shivering hands and legs? | Yes | No |
| 2 | Does the shape of the mass changes with pressure? | Yes | No | 2. | Was there symptom of pouring saliva or biting of tongue? | Yes | No |
| 3 | Does its position change/ move? | Yes | No | 3. | After getting sense was there pain in leg, headache, sleepy feeling? | Yes | No |


| 5. Ask Questions for diagnosis of Rabies |  |  | 6. Ask Questions for diagnosis of Chicken pox |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.N <br> o | Last 90 days |  | Q.No | Symptom | Last 90 days |  |
| 1 $\begin{array}{l}\text { Did dog or any other animal (cat,fox,mogoose,rat,mole- } \\ \text { rat etc) bite? }\end{array}$ <br> 2 Did | Yes | No | 1. | Is/was there mini boil like water vesicle on the entire body with light fever? | Yes | No |
| 2 $\begin{array}{l}\text { Did take vaccination of dog biting after the biting of the } \\ \text { mentioned animals? }\end{array}$ | Yes | No |  |  |  |  |
| Was there symptom of uneasiness in the biting place, restlessness, problem in drinking water, fear from water, air or light after one week to three months of biting? | Yes | No |  |  |  |  |


| 7. Ask Questions for diagnosis of Conjunctivitis |  |  |  | 8. Ask Questions for diagnosis of Night blindness |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.No | Symptom | Last 90 days |  | Q.No | Symptom | Last 90 days |  |
| 1. | Is/was frequent water shedding with itching or burning sensation? | Yes | No | 1. | Is there trouble in seeing during night? | Yes | No |
| 2. | Is/was the eye became red? | Yes | No | 2. | Is there trouble in seeing during in the day? | Yes | No |
|  |  |  |  | 3. | Is there any white spot in the eye? | Yes | No |


| 9. Ask Questions for diagnosis of Cataract |  |  |  | 10. Ask Questions for diagnosis of Arthritis |  |  |  |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.No | Symptom | Last 90 days | Q.No | Symptom | Last 90 days |  |  |
| 1. | Is/was trouble in seeing? | Yes | No | 1. | Is there symptom of pain in bone joint, problem in <br> walking or often inflation of bone joint? | Yes | No |
| 2. | Is/was feeling of light cover on the eye? | Yes | No |  |  |  |  |
| 3. | Does it seem white it torch light is focused on the eye? | Yes | No |  |  |  |  |


| 11. Ask Questions for diagnosis of Tuberculosis |  |  |  | 12. Ask Questions for diagnosis of Malaria |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.No | Symptom | Last 90 days |  | Q.No | Symptom | Last 90 days |  |
| 1. | Is/was there cough for three or more weeks continuously? | Yes | No | 1. | Is/was Fever with cold and shivering? | Yes | No |
| 2. | Does appetite reduced? | Yes | No | 2. | Is/was remission of fever after some time? | Yes | No |
| 3. | Does the weight reduced? | Yes | No | 3. | Is/was fever irregularly after $1 / 2$ days? | Yes | No |
| 4. | Was there blood with cough? | Yes | No | 4. | Did go or resided in malaria proven areas 1 month before the occurrence of fever? | Yes | No |
| 5. | Was there hidden fever off and on? | Yes | No |  |  |  |  |
| 6. | Does the fever come in the evening, body sweat in the dawn? | Yes | No |  |  |  |  |
| 7. | Was there inflammation of gland, neck? | Yes | No |  |  |  |  |
| 8. | Does/did any member of family suffer from TB? | Yes | No |  |  |  |  |
| 9. | Did take medicine for TB before? | Yes | No |  |  |  |  |
| 10. | Have taken TB vaccination till now? | Yes | No |  |  |  |  |
| 11 | Was the Glands inflamated? | Yes | No |  |  |  |  |


| 13 Ask Questions for diagnosis of Kala-azar |  |  |  | 14. Ask Questions for diagnosis of Peptic Ulcer |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.No | Symptom | Last 90 days |  | Q.No | Symptom | Last 90 days |  |
| 1. | Has/had fever for 2 or more weeks? | Yes | No | 1. | Has/had pain/trouble on the chest? | Yes | No |
| 2. | Feel/did feel weak due to fever? | Yes | No | 2. | Does /did bitterness of pain in empty stomach increased? | Yes | No |
| 3. | Did weight reduce after fever? | Yes | No | 3. | Has/ had sour eructation? | Yes | No |
| 4. | Did live or visit Kala-azar proven area during last one and half years? | Yes | No |  |  |  |  |
| 5. | Did tar like motion or blood vomiting take place? | Yes | No |  |  |  |  |


| 15. Ask Questions for diagnosis of Hepatitis-b |  |  |  | 16. Ask Questions for diagnosis of Diabetes |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.No | Symptom | Last 90 days |  | Q.No | Symptom | Last 90 days |  |
| 1. | Is/was the colour of urine and eye was yellow? | Yes | No | 1. | Did hear the name of diabetes? | Yes | No |
| 2. | Has/had no appetite with light fever? | Yes | No | 2 | Did show the doctor for diabetes? | Yes | No |
| 3. | Does/did vomiting take place along with vomiting tendency? | Yes | No | 3. | Did confirm diabetes ever by showing doctor or blood test? | Yes | No |
|  |  |  |  | 4. | Do you maintain any rules/habit for diabetes? | Yes | No |


| 17. Ask Questions for diagnosis of High Blood Pressure |  |  |  | 18. Ask Questions for diagnosis of Urinary Tract Infection |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.No | Symptom | Last 90 days |  | Q.No | Symptom | Last 90 days |  |
| 1. | Did show the Doctor for high blood pressure? | Yes | No | 1. | Did feel pain in the urinary tract during urinate? | Yes | No |
| 2. | Did the Doctor confirm existence of blood pressure? | Yes | No | 2. | Is/was urinate off and on? | Yes | No |
| 3. | Did follow rules for controlling high blood pressure? | Yes | No | 3. | Has/had pain on abdomen? | Yes | No |
| 19. Ask Questions for diagnosis of Sexually Transmitted Diseases |  |  |  | 20. Ask Questions for diagnosis of Arsenic |  |  |  |
| Q.No | Symptom | Last 90 days |  | Q.No | Symptom | Last 90 days |  |
| 1. | Did excrete come with urine? | Yes | No | 1. | Did you make arsenic test on the drinking water? | Yes | No |
| 2. | Does feel pain during urinate? | Yes | No | 2. | Do you drink arsenic free water? | Yes | No |
| 3. | Has any wound in the sexual organ? | Yes | No | 3. | Is/was sign of dry skin or hand/feet seen? | Yes | No |
| 4. | Is the wound painless or itching free? | Yes | No | 4. | Has/had any boil seen on the skin? | Yes | No |
|  |  |  |  | 5. | Has/had the mark of itching on the spot? | Yes | No |
|  |  |  |  | 6. | Are aware of arsenic attack? | Yes | No |



| 24. Ask Questions for diagnosis of Acute Respiratory Infection |  |  |  | 25. Ask Questions for diagnosis of Mumps |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.No | Symptom | Last 90 days |  | Q.No | Symptom | Last |  |
| 1. | Has/had the child fever with cold-cough? | Yes | No | 1. | Does/did the jaw /jaw bottom lying in front of ear swell? | Yes | No |
| 2. | Did the child inhale off and on? | Yes | No | 2. | Is /was fever and discomfort side by side? | Yes | No |
| 3. | Is/was there trouble in inhaling? | Yes | No | 3. | Does the mouth dry up? | Yes | No |
| 4. | Does/did the chest cage drop down during inhaling? | Yes | No |  |  |  |  |


| 26. Ask Questions for diagnosis of Whooping Cough |  |  |  | 27. Ask Questions for diagnosis of Diphtheria |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.No | Symptom | Last 90 days |  | Q.No | Symptom | Last 90 days |  |
| 1. | Does the Cough continuing for more than 3 weeks? | Yes | No | 1. | Is/was the child suffer from light fever with cough? | Yes | No |
| 2. | Does the cough continue for longer time once it is started? | Yes | No | 2. | Is/was neck inflammation? | Yes | No |
| 3. | Is /was there symptom of fever with cough, dropping of water through nose, becoming of eye and mouth reddish etc? | Yes | No | 3. | Is/was trouble in taking food? | Yes | No |
| 4. | Does blood freeze due to severe cough? | Yes | No | 4. | Is/was there any white covering inside the throat? | Yes | No |
| 5. | Did take three doses of preventive vaccination for whooping cough ever? | Yes | No | 5. | Is/was trouble in inhaling? | Yes | No |
| 6. | Did these symptoms were seen even after vaccination? | Yes | No | 6. | Have three doses of preventive vaccination been taken for Diphtheria till now? If yes, make sure by seeing the card. | Yes | No |
|  |  |  |  | 7. | Has the symptom seen even after preventive vaccination? | Yes | No |


| 28.. Ask Questions for diagnosis of Ear Infection |  |  |  | 29. Ask Questions for diagnosis of Skin Disease |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.No | Symptom | Last 90 days |  | Q.No | Symptom | Last 90 days |  |
| 1. | Did water or putrid fall due to ear sepsis? | Yes | No | 1. | Is/was there small or big boil on the skin due to prickly heat or itching? | Yes | No |
|  |  |  |  | 2. | Does/did serum fall due to itching? | Yes | No |
|  |  |  |  | 3. | Does/did putrid like serum fall ever? | Yes | No |


| 30.. Ask Questions for diagnosis of cancer |  |  |  | 31. Ask Questions for identifying Diarrhoea |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q.No | Symptom | Last 90 days |  | Q.No | Symptom |  |  | Last 90 days |  |
| 1. | Are you suffering from dangerous diseases? | Yes | No | 1. | Have you had passing of liquid or watery stools for 3 or more than 3 times in a day? ('Code yes', indicatesdiarrhoea) |  |  |  |  |
| 2. | Is the disease is cancer? | Yes | No | 2. | If yes, what were the symptoms of diarrhoea in last 90 days?(Circle the code) |  |  |  |  |
| 3. | If the disease is cancer then the doctor traceout the place where it was affected? | Yes | No |  | (a) Dry mouth | (b)Thirst | (c) Dry wrinkled skin | (d) Sunken eyes |  |
|  | (a) Breast/Uterus | Yes | No |  | 1 | 2 | 3 | 4 |  |
|  | (b) Stomach | Yes | No |  | One or more answer of the above mention box indicates the 'dehydration' |  |  |  |  |
|  | (c) Liver | Yes | No | 3. | Treatment of diarrhoea |  |  | Last 90 days |  |
|  | (d) Pharynx | Yes | No |  | (a) On saline packet |  |  | Yes | No |
|  | (e) Oesophugus | Yes | No |  | (b)Home made ore saline |  |  | Yes | No |
|  | (f) Luckemia | Yes | No |  | (c)Others |  |  | Yes | No |
|  | (g) Others | Yes | No |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |


| 32.. Ask Questions for diagnosis of Others(Specify.........) |  |  |  | 33. Ask Questions for diagnosis of of Others (Specify.........) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Q. No | Symptom | Last 90 days |  |  | Symptom | Last 90 days |  |
| 1. |  | Yes | No | 1. |  | Yes | No |
| 2. |  | Yes | No | 2. |  | Yes | No |
| 3. |  | Yes | No | 3. |  | Yes | No |

### 3.3 Information of Sick/Dead/Wounded/ Medical or Routine Checked up persons:

| $\begin{gathered} \text { 1. Line } \\ \text { No } \end{gathered}$ | 2. Name of Disease (One or more diseases) | 3. Code of Diseases | $\begin{aligned} & \text { 4.Did treatment } \\ & \text { of sickness/ } \\ & \text { medical or } \\ & \text { routine check- } \\ & \text { up? } \\ & \text { [Yes-1 No-2] } \end{aligned}$ | 5. If no treatment done put reason code (From Code list) | 6. Was there loss of work due to sickness /check-up? [Yes-1 No-2] | 7. If loss occurredKind of loss code. <br> (From Code list) | 8. For how many days lost? (Days) | 9. If answer of question 4 is yes, then type of institute treatment/checked -up has done? |  | 10. How <br> many <br> days was in hospital? (Days) | 11. Was he cured due to treatment? <br> [Yes-1 <br> No-2] | 12.If answer to Q11 is yes, how many days required to cured? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Institute code | Indoor -1 <br> Outdoor-2 <br> Other -3 |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

Medical Institute Code: Government -1, Private-2, NGO-3, Abroad-4, Own-5, Others(exorcism ,traditional)-6

### 3.3.1 Name of Medical Institution.

Medical Institution Code:

| $\begin{gathered} \text { 1.Line } \\ \text { No } \end{gathered}$ | 2. From whom treatment/prescription was taken? (Code) | Expenditure for Treatment / Medical or Routine check-up |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Medicine |  |  | Doctor |  | Pathological and other tests |  | 10. Operation cost(Taka) | 11.Hospital rent \& other expenditure (Taka) | 12. <br> Expenditure for attendants (Taka) | 13. <br> Transport cost (Taka) | 14. <br> Total Expenditure |
|  |  | 3. From where medicine procured (code) | $\begin{aligned} & \text { 4. Type } \\ & \text { of } \\ & \text { medicine } \end{aligned}$ | 5. Expenditure (Taka) | $\begin{array}{\|l} \hline \text { 6.Type } \\ \text { of } \\ \text { Doctor } \\ \text { (Code) } \end{array}$ | 7. <br> Doctors <br> Fee <br> (Taka) | 8. From where tests were done? (Code) | 9. Expenditure (Taka) |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

N.B. Different codes needed for filling-in the questionnaire are given in the' code list'. Write the appropriate code as answer to question from the set code list

### 3.3.2 Name of Medical Institution.

Medical Institution Code:

| $\begin{array}{\|c\|} \hline \text { 1.Line } \\ \text { No } \end{array}$ | 2. From whom treatment/prescription was taken? (Code) | Expenditure for Treatment / Medical or Routine check-up |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Medicine |  |  | Doctor |  | Pathological and other tests |  | 10. Operation cost(Taka) | 11.Hospital rent \& other expenditure (Taka) | 12. Expenditure for attendants (Taka) | 13.Transportcost (Taka) | 14. <br> Total Expenditure |
|  |  | 3.From where medicine procured (code) | $\begin{aligned} & \text { 4. Type } \\ & \text { of } \\ & \text { medicine } \end{aligned}$ | 5.Expenditure (Taka) | $\begin{array}{\|l} \hline 6 . \text { Type } \\ \text { of } \\ \text { Doctor } \\ \text { (Code) } \end{array}$ | 7. <br> Doctors <br> Fee <br> (Taka) | 8. From where tests were done? (Code) | 9. Expenditure (Taka) |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

N.B. Different codes needed for filling-in the questionnaire are given in the’ code list'. Write the appropriate code as answer to question from the set code list.
3.3.3 Name of Medical Institution.

Medical Institution Code:

| $\begin{aligned} & \text { 1.Line } \\ & \text { No } \end{aligned}$ | 2. From whom treatment/prescription was taken? (Code) | Expenditure for Treatment / Medical or Routine check-up |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Medicine |  |  | Doctor |  | Pathological and other tests |  | 10. Operation cost(Taka) | 11.Hospital rent \& other expenditure (Taka) | 12. <br> Expenditure for attendants (Taka) | 13. <br> Transport cost (Taka) | 14. <br> Total Expenditure |
|  |  | 3.From where medicine procured (code) | $\begin{gathered} \text { 4. Type } \\ \text { of } \\ \text { medicine } \end{gathered}$ | 5.Expenditure (Taka) | $\begin{array}{\|l} \hline \text { 6.Type } \\ \text { of } \\ \text { Doctor } \\ \text { (Code) } \end{array}$ | 7. <br> Doctors Fee (Taka) | 8. From where tests were done? (Code) | 9. Expenditure (Taka) |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Medical Institute Code: Government -1, Private-2, NGO-3, Abroad-4, Own-5, Others (exorcism, traditional)-6

### 3.3.4 Name of Medical Institution.

## Medical Institution Code:

$\square$

| $\begin{array}{\|l\|} \hline \text { 1.Line } \\ \text { No } \end{array}$ | 2. From whom treatment/prescription was taken? (Code) | Expenditure for Treatment / Medical or Routine check-up |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Medicine |  |  | Doctor |  | Pathological and other tests |  | 10. Operation cost(Taka) | 11.Hospital rent \& other expenditure (Taka) | 12. Expenditure for attendants (Taka) | 13. <br> Transport cost (Taka) | 14. <br> Total Expenditure |
|  |  | 3.From where medicine procured (code) | 4. Type of medicine | 5.Expenditure (Taka) | $\begin{array}{\|l} \hline \text { 6. Type } \\ \text { of } \\ \text { Doctor } \\ \text { (Code) } \end{array}$ | 7. <br> Doctors <br> Fee <br> (Taka) | 8. From where tests were done? (Code) | 9. Expenditure (Taka) |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

N.B. Different codes needed for filling-in the questionnaire are given in the’ code list'. Write the appropriate code as answer to question from the set code list.

## Section 4:

## Information related to Fertility and Maternal Health Care

4.1 Information of live births given by the ever married women of age 15-49 years of the household during last one year

| $\begin{array}{\|c\|} \hline 1 . \\ \text { Line } \\ \text { No. } \end{array}$ | 2. Name of <br> Mother | 3. Age of Mother (Completed Years) | 4.ChildBoy or Girl? Boy-1 Girl-2 | 5. Name of Child | 6. Date of Birth of Child (For children of age <1 year) | 7. Type of birth <br> Normal-1 <br> Scessorian-2 | 8. Who helped during child birth? (Code) | 9. <br> Where birth took place? (Code) | 10. How many doctors were consulted before birth? | 11. Prenatal Expenditure (Taka) | 12.Expen diture during delivery. (Taka) | $\begin{array}{\|c} \hline \text { 13. How } \\ \text { many } \\ \text { times } \\ \text { doctors } \\ \text { were } \\ \text { consulted } \\ \text { after birth? } \end{array}$ | 14. Post natal Expen diture (Taka) | 15. Total Expenditure (Taka) | 16. Is the child still alive? <br> Yes-1 No-2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Birth Attendant Code
Doctor-1 , Expert Midwife-2, Nurse-3, Health worker-4, Non-expert midwife-5, Other-6.
Place of delivery code : Government Hospital/Health care Centre-1, NGO Health Centre -2, Private Hospital/health care centre-3, At home-4.
4.2 Information of all the children given birth by the ever married women of age 15-49 years of these households

| $\begin{gathered} \hline \text { 1.Line } \\ \text { No } \end{gathered}$ | $\|$$2 . \quad$ Name of <br> M1other | $\left\|\begin{array}{lr}3 . & \text { What is } \\ \text { your } & \text { duration } \\ \text { of } & \text { marriage } \\ \text { life(Complete } \\ \text { years) }\end{array}\right\|$ | How many of your children out of total live births (Including live births of last 12 months) |  |  |  |  |  |  | 8. What 9. Do you <br> was your have   <br> age during health  <br> first live card?  <br> births? Yes-1   <br> (Complete No-2   <br> year)    |  | 10. If answer 11. Was TT vaccine-  <br> to Q9 is yes, is tion taken during last  <br> TT recorded in pregnancy? If yes, at  <br> the health what month of <br> card? (Mognth) <br> Pregnancy was taken? <br> Yes-1 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 4. Live in this household |  | 5. Live in other places |  | 6. Died |  | 7. Total number of your children |  |  |  |  |  |
|  |  |  | Boy | Girl | Boy | Girl | Boy | Girl |  |  |  | No-2 | Month | Month |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

### 4.3 Information regarding use of family planning methods by the non-pregnant currently married women of age 15-49 years of this household

## During collection of information of this question inform the respondent politely that using family planning method one can delay /stop birth of children

Question-1: Do you or your husband use any family planning method to stop or delay child birth?

Circle the applicable code $:$| Yes- | 1 | No- | 2 |
| :--- | :--- | :--- | :--- |

If answer to Q1 is yes then fill-in one column for each user and write the line number of the user in column 1 for the first user, in column 2 for the second user and so on. Then encircle the applicable method code from the lines mentioned below.

| Family Planning <br> Method(Modern and | Line No of Acceptor | Line No of Acceptor | Line No of Acceptor | Line No of Acceptor | Line No of Acceptor | Line No of Acceptor | Line No of Acceptor | Line No of Acceptor |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Traditional) |  |  |  |  |  |  |  |  |
| Modern Method: | Code | Code | Code | Code | Code | Code | Code | Code |
| Condom | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Pill | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Injection | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| Vasectomy | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| IUD/CT | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Ligation | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Foam Tablet | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| Implant/norplant | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| Traditional Method: |  |  |  |  |  |  |  |  |
| Withdrawal | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
| Safe period | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Others (Mention) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| No reply | 88 | 88 | 88 | 88 | 88 | 88 | 88 | 88 |
| Do not know | 98 | 98 | 98 | 98 | 98 | 98 | 98 | 98 |

Question-2: How much was spent due to use of the above methods during last 1 year?

## Total Expenditure (Taka)

Time taken to fill-in the questionnaire (Minute)

