



REPORT ON MEDICAL CERTIFICATION OF CAUSE OF DEATH 2013

**Directorate of
Economics and
Statistics
Thiruvananthapuram**





INDEX

	Title	Page No
	Preface	
	Executive Summary	
Chapter I	Introduction	1 – 4
Chapter II	Comparison of MCCD and CRS Data	5 – 10
Chapter III	Leading Causes of Death	11– 60
Chapter IV	Specific Cause of Mortality in Different Age Groups	61 – 78
Appendix I	List of Hospitals Reporting MCCD.	
Appendix II	Form No 4 - Medical Certificate of Cause of Death – for Hospital events.	
Appendix III	Form No 4A - Medical Certificate of Cause of Death – for Non Hospital events.	
Appendix IV	Major Groups and the description of ICD-10 Codes.	
Appendix V	National List based on ICD-10.	
Appendix VI	Centre wise cause of death under major cause group.	
Appendix VII	Centre wise Cause of Death (Age wise and Sex wise).	
Appendix VIII	Cause of Death under major cause group.	
Appendix IX	Cause of Death (Age wise and Sex wise).	



PREFACE

The World Health Organisation (WHO) has provided a whole some definition of health-“Health is a state of complete physical, mental and social well-being and not merely the absence of diseases of infirmity”. This report on Medical Certification of Cause of Death is brought out by the Directorate of Economics & Statistics and office of the Additional Chief Registrar (Births & Deaths) Kerala. The Registration of Births and Deaths Act 1969 provides certification of cause of death by the medical practitioners who have last attended the deceased. Section 10(2) of the act empowers the State Government to introduce the system of Medical Certification of Cause of Death in respective states.

The report has been prepared exclusively on the basis of data on institutional deaths in four Corporations viz; Thiruvananthapuram, Kollam, Ernakulum and Kozhikode and one Alappuzha Municipality. In domiciliary cases MCCD is not covered and so the readers of this report may bear in mind that the study is confined to 12.34% of the total deaths which have been taken place in hospitals.

Data on medically certified deaths received from 150 hospitals of the state have been tabulated in conformity with the ICD-Tenth Revision (ICD-10). The Statistics on causes of death have been presented, cross tabulating them by age and sex. The report consists of four Chapters. First chapter is the introduction on medical certification of cause of death (MCCD). Second chapter is a report and comparison of death of MCCD with that of CRS. Tables on detailed statistics pertaining to leading causes are given in chapter three. This part contains a study of institutional deaths-sex-wise and age-wise. It has also been attempted to analyse the incidence of major causes of death during 2013 in five centres, on the basis of ICD-10 classification of WHO. This chapter also includes analysis of deaths due to heart attack, cancer, tuberculosis, pneumonia, diabetic’s mellitus etc. in five centres in Kerala. Specific cause of mortality in different age groups is given in fourth chapter.

I congratulate the MCCD team for preparation of this important document and hope it will serve as a useful source of information for policy makers, planners and academicians and other stake holders who are directly or indirectly involved in the management of Public Health.

Thiruvananthapuram
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V. Ramachandran
Director General



CONTRIBUTING TEAM

Team Leader

A.P.Harilal

(Additional Chief Registrar of Births and Deaths)

Data Processing / Report Writing

C.P.Resmi

(Nosologist)

Data Validation / Data Entry

C.G.Rajesh

(Research Assistant)

Data Collection/ICD CODING

1. B.Surendran Nair

(Deputy Health Officer, Thiruvananthapuram)

2. D.Sushama

(Deputy Health Officer, Kollam)

3. P.Priya

(Deputy Health Officer, Alappuzha)

4. Prasy.K.Prabhakar

(Deputy Health Officer, Kochi)

5. D.Praseeda

(Deputy Health Officer, Kozhikode)

Layout & Design

Sivakumar A.

(Statistical Inspector)



EXECUTIVE SUMMARY

Reliable cause specific mortality statistics is required on a regular basis by Administrators, Policy Planners, Researchers and other Professionals for evidence based decision making with regard to resource allocation, monitoring of indicators, identifying priorities for programmes and other related activities in the area of Public Health. Keeping this in view, the scheme of Medical Certification of Cause of Death (MCCD) was introduced in the country under the provisions of Registration of Births and Deaths (RBD) Act, 1969. Section 10(2) of the Act empowers the State Government to enforce the provision relating to Medical Certification of Cause of Death (MCCD) in specified areas taking into consideration the availability of medical facilities. Section 10(3) of the Act provides issuing a certificate of the cause of death by the medical practitioner who has attended the deceased at the time of death.

Methodology

The necessary data is collected in the prescribed forms (Form No.4 for Institutional deaths and Form No.4A for Non-institutional deaths). Both these forms have been designed by World Health Organisation and are supposed to be filled-up by the medical professionals attending to the deceased at the time of terminal illness. Thereafter, these forms are to be sent to the concerned Registrars of Births and Deaths for tabulation as per National list, based on Tenth revision of International Classification of Disease (ICD 10), for onward transmission to the Additional Chief Registrar's Office. The State subsequently sends it to the Office of the Registrar General of India in the standardised format for National level consolidation.

In Kerala the scheme has been introduced in four Corporations viz; Thiruvananthapuram, Kollam, Kochi, Kozhikode and Alappuzha Municipality. The data on medically certified deaths received from these five centres in Form 4 have been tabulated in conformity with ICD-10. The statistics on causes of death have been presented in a tabular manner classified by age and sex.

Scope of the report

The report on 'Medical Certification of Cause of Death 2013' is based upon 32096 (Males-20171 and Females-11925) medically certified deaths (12.34% of total registered deaths) supplied by 150 hospitals. As mentioned above, owing to different levels of efficiency of medical certification across the State, the number of deaths reported therein may lack the

representative feature in the strict sense. However, it may be sufficient to throw some valuable insight into deaths by various cause groups.

Overall findings

Following are nine leading cause-groups of deaths constituting around 93.26% of total medically certified deaths:

- I. Diseases of Circulatory System (29.79%).
 - II. Neoplasm (15.20%).
 - III. Endocrine, Nutritional and Metabolic Diseases (10.90%).
 - IV. Diseases of the Respiratory System (10.44%).
 - V. Diseases of the Digestive System (8.14%).
 - VI. Certain Infectious and Parasitic diseases (5.93%).
 - VII. Injury, Poisoning and certain other consequences of External Causes (5.03%).
 - VIII. The Genitourinary System (4.23%).
 - IX. Certain condition originating in the perinatal period (3.60%).
- Among the “Diseases of the Circulatory System” deaths, “Ischemic Heart Diseases” (IHD) account for the highest number of deaths (35.33%).
 - The second leading cause group, Neoplasms (cancer) is responsible for 15.20% of the total medically certified deaths, of which “Malignant neoplasm of digestive organs” accounts for 27.20%. This is followed by “Malignant neoplasms of respiratory and intrathoracic organs” (18.61%) and Malignant Neoplasms of Lymphoid, Haematopoietic and Related tissue” (18.14%) accounts more than one-sixth of deaths under this group.
 - The group of “Endocrine, Nutritional and Metabolic Diseases” is the third leading cause group accounting for 10.90% of the total medically certified deaths. Under this cause group, “Diabetes Mellitus” group alone accounts for 93.77% of total deaths reported and 10.23% of total medically certified deaths.
 - The major group “Diseases of the Respiratory System” is the fourth leading cause (10.44%). “Lower Respiratory Disorders” accounting for around 67.55% of the total deaths under this category. The other major cause in this group is “Other diseases of the respiratory system including Pneumonia” causing 31.82% of death.
 - The major group comprising “Diseases of Digestive System” is the fifth leading cause accounting for 8.14% of the total medically certified deaths. Among the deaths due to disorders of digestive system, “Diseases of the Liver” alone accounts for 81.75% of the total deaths in this group.
 - The major group “Certain Infectious and Parasitic Diseases” which is the sixth leading cause (5.93%) of death is mainly constituted by Tuberculosis and Septicaemia. Under this major group, the shares of these two diseases are 21.39% and 28.22% respectively.
 - The seventh leading cause group “Injury, Poisoning and certain other consequences of External causes” accounting 5.03% of total medically certified deaths.

- The major group comprising “The Genitourinary System” is the eight leading cause accounting for (4.23%) of the total medically certified deaths.
- The ninth leading group “Certain conditions originating in the perinatal period” accounting for 3.60% of the total medically certified deaths. “Slow foetal growth, foetal malnutrition and immaturity” and “Hypoxia, birth asphyxia and other respiratory conditions” accounts for 41.18% and 27.94% of the deaths under the group respectively.

Age-wise:

- Around 5.78% of reported medically certified deaths have been of the infants (age less than 1 year).
- About 62.30% of infant deaths have been reported to be caused by ‘Certain conditions originating in the perinatal period’ and about 28.43% deaths have been caused by ‘Congenital Malformations, Deformations and Chromosomal Abnormalities’.
- Among the children aged ‘1-4’, “Congenital Malformations, Deformations and Chromosomal Abnormalities” have taken the highest toll of 19.02% and 16.10% of death is due to “Neoplasms” in which 36.36% is due to ‘Leukaemia’.
- In the age group ‘5-14’, major group ‘Neoplasms’ is in the topmost position with the share of 24.67% in which 48.65% of death is due to ‘Leukaemia’. 18% of deaths in this group is due to ‘Injury Poisoning & certain other consequences of External causes’ and 13% of death is due to ‘Certain Infectious and Parasitic Diseases’.
- In the age-group of ‘15-24’, major group, “Injury Poisoning & certain other consequences of External causes” is the first among the leading causes contributing around 33.28%. It implies that this age-group of adolescents is most vulnerable to injuries and poisoning related deaths. Around 17.12% of death under this age group is due to ‘Neoplasm’.
- In the age-group of ‘25-34’, major group, “Injury Poisoning & certain other consequences of External causes” is the first among the leading causes contributing around 22.02%. It implies that these age-group of youths are also more vulnerable to injuries and poisoning related deaths. ‘Neoplasm’ and ‘Diseases of Circulatory System’ contribute around 15% each of death under this age group. 12.93% of death is due to ‘Certain Infectious and Parasitic Diseases’.
- In the age-group ‘35-44’, the first two leading causes are “Neoplasm” and “Diseases of Circulatory System” having almost equal shares of 19.55% and 18.60% respectively. ‘Diseases of the Digestive System’ and ‘Injury poisoning & certain other consequences of External causes’ contributing around 15.31% and 12.37% respectively.
- For the age-groups of ‘45-54’, the first two leading causes of death are “Diseases of Circulatory System” and “Neoplasm” having 24.46% and 20.09% respectively. The 16.25% of death under this age group comes under ‘Diseases of the Digestive System’ in which 88.26% is due to ‘Diseases of the liver’.
- 21.78% of the total medically certified death comes under the age group ‘55-64’. In this age group the first leading causes of death is “Diseases of Circulatory System” (30.91%).

The next two leading causes are “Neoplasm” and “Endocrine, Nutritional and Metabolic Diseases” having percentage of 19.24 and 13.25 respectively. Under Neoplasm, 27.14% death comes under ‘Malignant neoplasm of digestive organs’. Under “Endocrine, Nutritional and Metabolic Diseases” 96.11% due to ‘Diabetes mellitus’.

- For the age-group 65-69 years, the leading causes of death is “Diseases of Circulatory System” (34.75%). The cause ‘Neoplasm’ is the next major cause of death (16.43%).
- The age group 70 and above contribute the maximum incidence (33.37%) of total medically certified deaths. The leading causes of death are “Diseases of Circulatory System” (40.26%). The cause ‘Diseases of the Respiratory System’ is the next major cause of death (15.04%).

Gender-wise:

- Under the Civil Registration System, the percentage number of births registered - 52% were males and 48% were females, and in the percentage number of deaths registered - 57% were males and 43% were females.
- In the total medically certified death, 63% were males and 37% were female.
- There is significant difference between males and females for all age groups under medically certified deaths.
- For below one year, 55.50% of deaths were male and 44.50% were female. The difference in percentage is significantly high for ‘15- 24’ above age group (males-61%, females-39%) and it is maximum for the age group ‘55-64’ (males-69%, females-31%).
- There is significant difference for both males and females as far as nine leading causes are concerned.
- For ‘Diseases of the digestive system’ and ‘Injury, poisoning and certain other consequences of external causes’ the difference is significantly high.



Chapter

I

INTRODUCTION



Chapter I

INTRODUCTION

Medical Research is currently facing stiff challenges from the spread of variety of ailments like Cancer, AIDS, Heart Diseases, Juvenile diabetes, Non-communicable diseases, Swine flu and Chikungunya etc. For tackling these issues, good documentation of information on the causes of death is indispensable. Recognising this fact and in order to draw the profile of different natural and manmade causes of death, the international community of medical professionals, under the aegis of World Health Organisation have codified most of the disease labelling them “International Classification of Diseases (ICD)”. This ICD is customised to the Indian conditions under the scheme of “Medical Certification of Cause of Death (MCCD)”.

The scheme of Medical Certification of Cause of Death has got the statutory backing under sections 10(2) and 10(3), 17(1) (b) and 23(3) of the Registration of Births and Deaths Act, 1969.

The provisions relating to MCCD in Registration of Births & Deaths Act 1969, are as follows:

Section 10(2): In any area, the State Government having regard to the facilities available therein in this behalf may require that a certificate as to the cause of death shall be obtained by Registrar from such person and in such form as may be prescribed.

Section 10(3): Where the State Government has required under sub-section (2) that a certificate as to the cause of death shall be obtained, in the event of the death of any person who, during his last illness, was attended by a medical practitioner, the medical practitioner shall, after the death of that person, forthwith, issue without charging any fee, to the person required under this Act to give information concerning the death, a certificate in the prescribed form stating to the best of his knowledge and belief the cause of death; and the certificate shall be received and delivered by such person to the Registrar at the time of giving information concerning the death as required by this Act.

Section 17(1) b): Subject to any rules made in this behalf by the State Government, including rules relating to the payment of fees and postal charges, any person may obtain an extract from registration records relating to any death; provided that no extract relating to any death, issued to any person, shall disclose the particulars regarding the cause of death as entered in the register.

Section 23(3): Any medical practitioner who neglects or refuses to issue a certificate under sub-section (3) of section 10 and any person who neglects or refuses to deliver such certificates shall be punishable with fine which may extend to fifty rupees.

The necessary data is collected in the prescribed Form No.4 (Appendix-II) as filled in by the concerned hospital authorities. A separate Form No.4A (Appendix-III) has been prescribed for non-institutional deaths, which are attended to by the medical practitioners. These forms conform to the international format of medical certification of cause of death as evolved by the World Health Organisation (WHO). These forms comprising two parts which incorporate immediate and antecedent causes of death along with the identification and other particulars of the deceased. Part-I provides for entering the diseases in a specific sequence of events leading to death, so that the immediate cause is recorded first and the underlying cause, the last. The underlying cause is that morbid condition which initiated the chain of events leading to death. Besides, there is also a provision for recording the approximate intervals between onset of disease and death in the sequence of events. Part- II of the form allows recording information on other significant morbid conditions, but not directly related to the cause of death. Doctors attending to the deceased during his/her terminal illness are required to fill the forms up.

World Health Organisation (WHO) periodically reviews the system of International Classification of Diseases (ICD). Tenth revision of the ICD (ICD-10) was endorsed by the Forty-third World Health Assembly in May 1990 and came into use in WHO Member States as from 1994; however it has been adopted in the Office of the Registrar General of India (ORGI) for classification of causes of deaths since 1999 Report on MCCD. The statistics on medically certified causes of deaths has been tabulated as per the National List (ICD –10, modified according to Indian conditions) as given in Appendices-IV & V. The underlying cause of death is taken into account while tabulating the cause-specific mortality.

The statistics presented in this report, provide information on cause-specific mortality cross classified by sex and broad age-groups. The report is based on medically certified deaths occurring in hospitals (whether public or private) covered under the Scheme. As only selected hospitals, and that too mostly from urban areas, are covered at present under the scheme of MCCD, the profile presented here may not yield the reliable pattern of cause specific mortality prevalent in the states/country. Keeping this in view, the data- users may take due caution while deducing the mortality pattern.

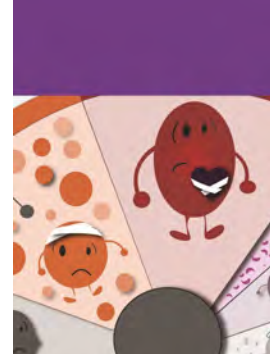
The report is presented in 4 chapters and 9 appendices. Chapters two and three deal with ‘Scheme of MCCD: Status of Implementation’ and ‘Distribution of Deaths by Cause’ respectively. Chapter 4 analyses the specific cause of mortality among different age groups by gender. Appendices contain detailed statistical tables for ready reference.



Chapter

II

COMPARISON OF MCCD AND CRS DATA



Chapter II

COMPARISON OF MCCD AND CRS DATA

The data on MCCD has been presented as per the National List based on 10th revision of International Classification of Diseases (ICD-10), to facilitate meaningful comparison and drawing valid conclusions thereof. The report aims at summarising the findings of the data reported on medically certified deaths for Thiruvananthapuram, Kollam, Kochi, Kozhikode Corporations and Alappuzha Municipality by age, sex and major cause-groups. 'The report on Medical Certification of Cause of Death – 2013' is based upon 32096 (Males: 20171 and Females: 11925) medically certified deaths. This represents 12.34 % of total registered deaths in the State.

As per the reported information, the number of hospitals, covered and reporting data on Medical Certification of Cause of Death in the States/UTs is presented in Appendix I

Table 2.1 Number of deaths reported under CRS and MCCD

Centres	Type of attention at death under CRS					MCCD	% of MCCD to total death
	Institutional	Medical Attention other than institution	No medical attention	Not stated	Total		
Alappuzha (M)	373	57	661	0	1091	2905	266.27
Kochi ©	7988	637	1019	3	9647	6621	68.63
Kollam ©	2366	314	731	0	3411	1889	55.38
Kozhikode ©	11104	968	851	2	12925	9711	75.13
Thiruvananthapuram ©	13929	851	1557	4	16341	10970	67.13
Total	35760	2827	4819	9	43415	32096	73.93
State Total	155104	45122	59886	83	260195		12.34

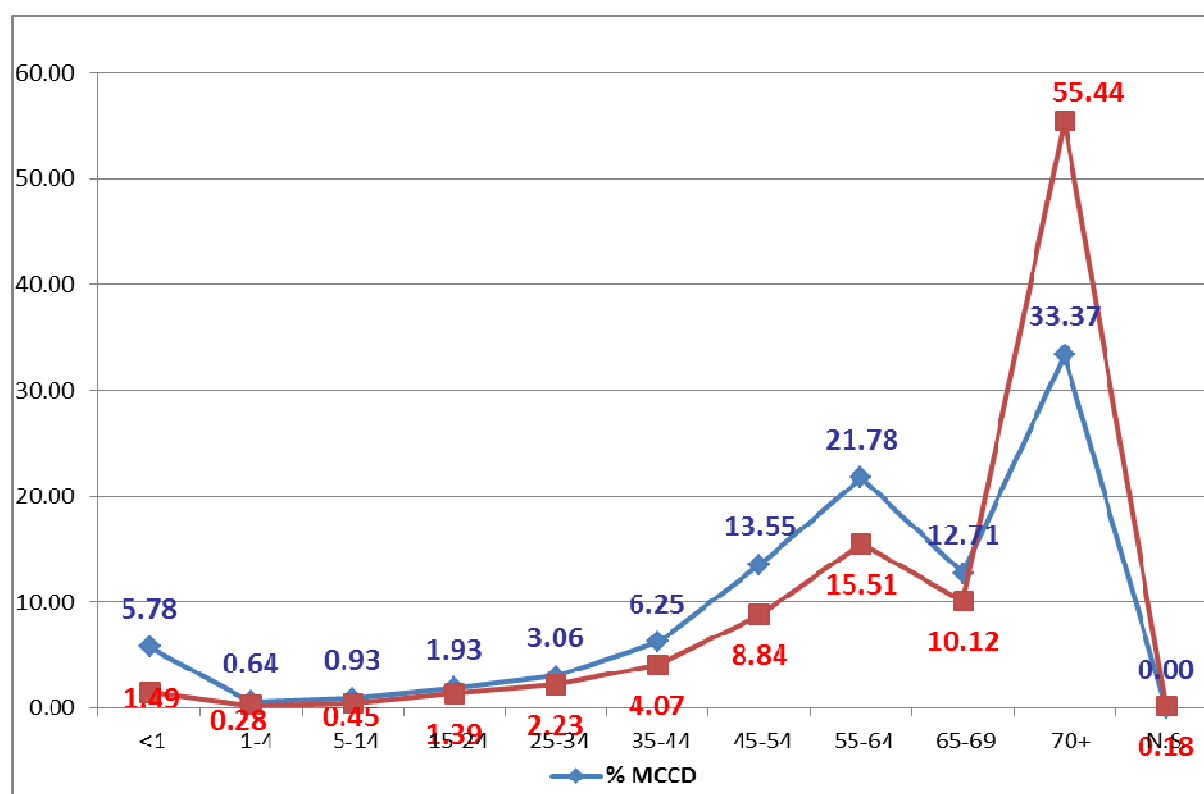
Table 2.1 gives a comparison of type of attention of death under Civil Registration System (CRS) and Medically Certified Death. It may be noted that only 12.34% of total registered death in Kerala is Medically Certified, which is 20.69% of the institutional death of the State. 73.93% of the total death registered in these five centres comes under MCCD, which is 89.75% of the institutional death in these centres. The number of Medically Certified Deaths in Alappuzha (Municipality) is more than registered deaths under CRS because the Form 4 from Medical College, Alappuzha is being collected even though the institution is situated outside Municipality area.

The age and sex wise distribution of deaths under Civil Registration System, Medically Certified Deaths and the age wise percentage of the total deaths with respect to total deaths are given below.

Table 2.2: Percentage Distribution of Deaths by Age and Sex under MCCD and CRS

Age Group	Medically Certified Deaths						Deaths reported under CRS					
	Male		Female		Total		Male		Female		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
< 1	1029	5.1	825	6.92	1854	5.78	2101	1.42	1772	1.57	3873	1.49
1-4	111	0.55	94	0.79	205	0.64	418	0.28	319	0.28	737	0.28
5-14	170	0.84	130	1.09	300	0.93	672	0.46	490	0.46	1162	0.45
15-24	377	1.87	242	2.03	619	1.94	2458	1.67	1158	1.03	3616	1.39
25-34	611	3.03	371	3.11	982	3.06	4066	2.76	1744	1.55	5810	2.23
35-44	1352	6.7	653	5.48	2005	6.25	7606	5.15	2984	2.65	10590	4.07
45-54	3065	15.20	1285	10.78	4350	13.55	16567	11.23	6434	5.71	23001	8.84
55-64	4813	23.86	2178	18.26	6991	21.78	28086	19.03	12278	10.9	40364	15.51
65-69	2617	12.98	1461	12.25	4078	12.70	16670	11.30	9673	8.58	26343	10.12
70+	6026	29.87	4686	39.29	10712	33.37	68651	46.52	75593	67.10	144244	55.44
N.S	0	0	0	0	0	0	259	0.18	196	0.17	455	0.18
Total	20171	100	11925	100	32096	100	147554	100	112641	100	260195	100

Chart 2.1 : Percentage Distribution of Deaths by Age under MCCD and CRS



The centre wise causes of death for twenty major classifications are separately given Appendix VI.

The age wise cause of death total of five centres for twenty major classifications are also separately given Appendix VIII.

Since the scheme is implemented only in five centres, analysis is made by taking the total number of deaths happened in these five centres. As mentioned above, owing to different levels of efficiency of medical certification across the State, the number of deaths reported therein may lack the representative feature in the strict sense, however, it may be sufficient to throw some valuable insight into deaths by various cause groups and their gravity.



Chapter

III

LEADING CAUSES OF DEATH

3.0 Introduction

3.1 Diseases of the Circulatory System (IX), (I00-I99):

- 3.1.1 Ischemic Heart Diseases
- 3.1.2 Cerebrovascular Diseases
- 3.1.3 Diseases of Pulmonary Circulation and other forms of Heart Disease
- 3.1.4 Hypertensive Diseases
- 3.1.5 Other Diseases of the Circulatory System
- 3.1.6 Acute Rheumatic Fever and Chronic Rheumatic Heart Diseases

3.2. Neoplasms (II), (C00-D48):

- 3.2.1 Malignant Neoplasms of Digestive Organs
 - 3.2.1.1 Malignant Neoplasm of Liver
 - 3.2.1.2 Malignant Neoplasm of Stomach
- 3.2.2 Malignant Neoplasm of Respiratory and Intra Thoracic Organs
- 3.2.3 Malignant Neoplasms of Lymphoid, Haematopoietic and Related Tissue
 - 3.2.3.1 Leukaemia
- 3.2.4 Malignant Neoplasms of Bone, Mesothelial and Soft Tissue, Skin and Breast
- 3.2.5 Malignant Neoplasms of Genitourinary Organs
- 3.2.6 Malignant Neoplasms of Other and Unspecified Sites
- 3.2.7 Other Neoplasms

3.3. Endocrine, Nutritional and Metabolic Diseases (IV): (E00-E89)

3.4 Diseases of the Respiratory System (X): (J00-J98)

3.5 Diseases of the Digestive System (XI): (K00-K92)

- 3.5.1 Diseases of the Liver

3.6 Certain Infectious and Parasitic Diseases (I): (A00-B99)

- 3.6.1 Septicaemia.
- 3.6.2 Tuberculosis
- 3.6.3 Human Immunodeficiency Virus [HIV]
- 3.6.4 Hepatitis B

3.7 Injury Poisoning and Certain Other Consequences of External Causes (XIX): (S00-T98)

- 3.7.1 Fractures, other injuries of specified, unspecified and multiple body regions, Intracranial and internal injuries, including nerves
- 3.7.2 Burns and Corrosions
- 3.7.3 Poisonings by drugs & biological substances; and Toxic effects of substances chiefly nonmedicinal as to source
- 3.7.4 Snake Bite

3.8 Diseases of the Genitourinary System (XIV): (N00-N99)

3.9 Certain Conditions Originating in the Perinatal Period (XVI): (P00-P96)

3.10 Distribution of Causes of Deaths under 'Other Groups'



Chapter III

LEADING CAUSES OF DEATH

3.0 Introduction

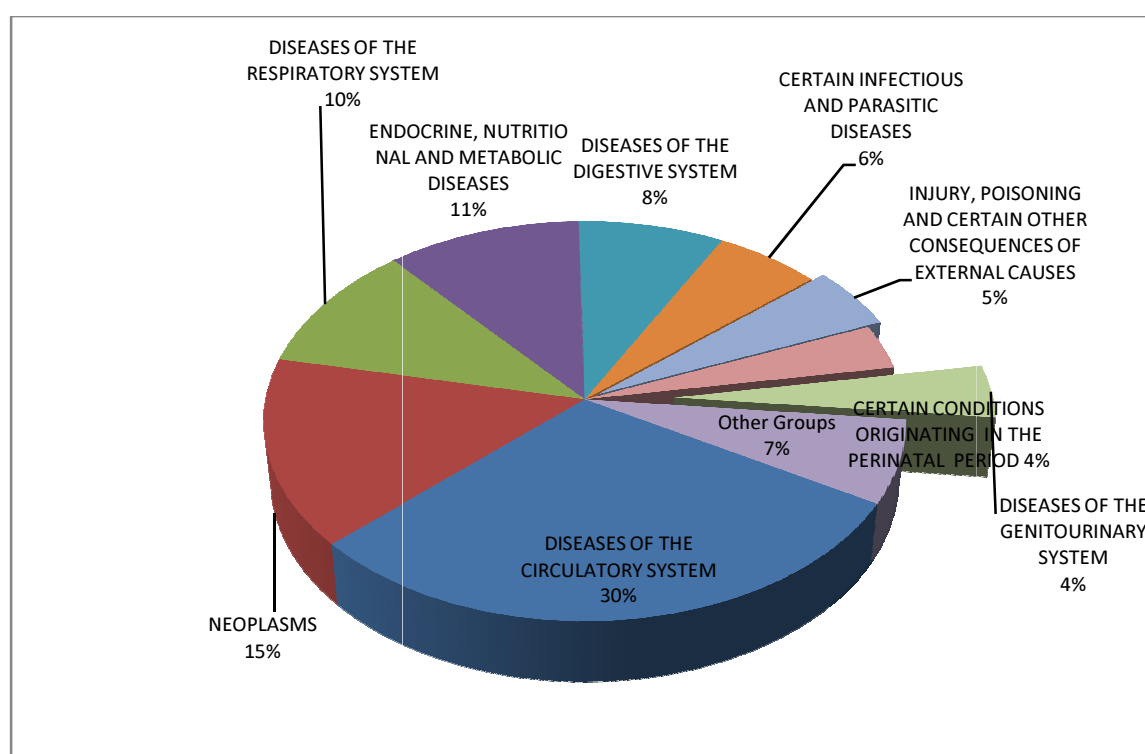
The nine leading cause groups of deaths viz; Diseases of the Circulatory System (I00-I99), Neoplasm (C00-D48), Endocrine, Nutritional and Metabolic Diseases (E00-E89), Diseases of the Respiratory System (J00-J98), Diseases of the Digestive System (K00-K92), Certain Infectious and Parasitic Diseases (A00-B99), Injury, Poisoning and Certain other Consequences of External Causes (S00-T98), Diseases of the Genitourinary System (N00-N99), and Certain Conditions Originating in the Perinatal Period (P00-P96) taken together account for about 93.26% of the total Medically Certified Deaths. All other causes are taken together and grouped into single ‘Other Group’ category. It is detailed in Table 3.0

Table 3.0: Distribution of Medically Certified Deaths by Sex and Nine leading cause-groups during 2013

Sl No.	Cause of Death	Sex					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	Diseases of the Circulatory System (I00-I99)	5652	28.02	3909	32.78	9561	29.79
2	Neoplasms (C00-D48)	2982	14.78	1897	15.91	4879	15.20
3	Endocrine, Nutritional and Metabolic Diseases (E00-E89)	2001	9.92	1499	12.57	3500	10.90
4	Diseases of the Respiratory System (J00-J98)	2325	11.53	1025	8.60	3350	10.44
5	Diseases of the Digestive System (K00-K92)	2075	10.29	538	4.51	2613	8.14
6	Certain Infectious and Parasitic Diseases (A00-B99)	1294	6.42	609	5.10	1903	5.93
7	Injury, Poisoning and Certain Other Consequences Of External Causes (S00-T98)	1171	5.80	444	3.72	1615	5.03
8	Diseases of the Genitourinary System (N00-N99)	809	4.01	548	4.60	1357	4.23
9	Certain Conditions Originating in the Perinatal Period (P00-P96)	626	3.10	530	4.44	1156	3.60
10	Other Groups	1236	6.13	926	7.77	2162	6.74
	TOTAL	20171	100	11925	100	32096	100

Among the leading cause groups, 'Diseases of Circulatory System (I00-I99)' constitute the maximum i.e. 29.79% of total Medically Certified Deaths, followed by 'Neoplasms (C00-D48)' 15.20%, 'Endocrine, Nutritional and Metabolic Diseases (E00-E89)' 10.90%, 'Diseases of the Respiratory System (J00-J98)' 10.44%, 'Diseases of the Digestive system (K00-K92)' 8.14%, 'Certain Infectious and Parasitic Diseases' 5.93%, 'Injury, Poisoning and Certain Other Consequences of External Causes (S00-T98)' 5.03% and 'Diseases of the Genitourinary System (N00-N99)' 4.23% followed by 'Certain Conditions Originating in the Perinatal Period (P00-P96)' constitute 3.60% of total Medically Certified Deaths and 'All other groups' constitute around 6.74%.

Chart 3.0: Percentage distribution of deaths under MCCD by leading cause group



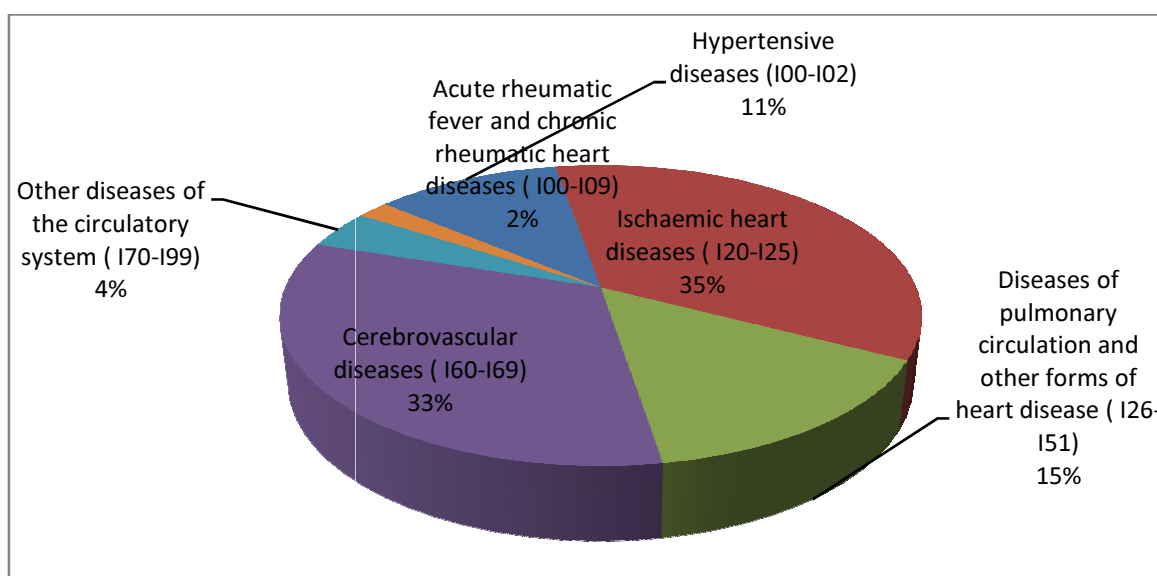
3.1 Diseases of the Circulatory System (IX), (I00-I99):

The maximum number of deaths is reported under 'Diseases of the Circulatory System', which is 29.79% of the total 32096 Medically Certified Deaths. It accounts for 28.02% of males and 32.78% of female deaths in their respective totals of medically certified deaths. The distribution of major components under this cause group is presented in Table 3.1 and is depicted in Chart 3.1.

Table 3.1: Distribution of major causes of deaths among 'Diseases of Circulatory System'

Sl No	Cause of Death	Sex				Total	
		Male		Female			
		No.	%	No.	%	No.	%
1	Ischaemic heart diseases (I20-I25)	2116	37.44	1261	32.26	3377	35.33
2	Cerebrovascular diseases (I60-I69)	1832	32.41	1287	32.92	3119	32.62
3	Diseases of pulmonary circulation and other forms of heart disease (I26-I51)	806	14.26	611	15.63	1417	14.82
4	Hypertensive diseases(I00-I02)	595	10.53	474	12.13	1069	11.18
5	Other diseases of the circulatory system (I70-I99)	243	4.30	153	3.91	396	4.14
6	Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09)	60	1.06	123	3.15	183	1.91
7	Total Medically Certified Deaths due to Diseases of Circulatory System	5652	100.00	3909	100.00	9561	100.00

Chart 3.1: Percentage distribution of medically certified deaths due to 'Diseases of Circulatory System'

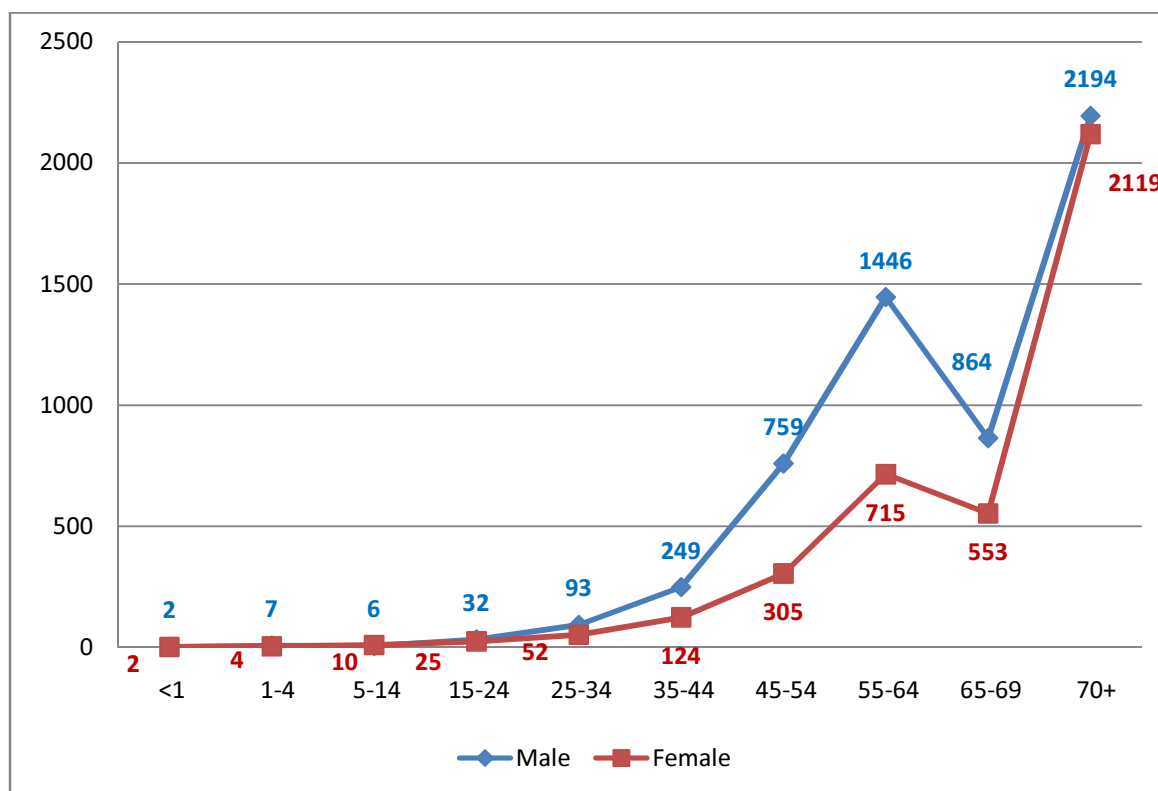


The age distribution of medically certified deaths due to 'Diseases of Circulatory System' has been given in Table 3.2 and highlighted in Chart 3.2. The age distribution under this cause group is in consonance with the general epidemiology of circulatory system which increases with age.

Table 3.2: Age & Sex wise distribution of deaths due to 'Diseases of Circulatory System'.

Sl No.	Age Group	Sex				Total	
		Male		Female			
		No.	%	No.	%	No.	%
1	<1	2	0.03	2	0.05	4	0.04
2	1-4	7	0.12	4	0.10	11	0.11
3	5-14	6	0.11	10	0.26	16	0.17
4	15-24	32	0.57	25	0.64	57	0.60
5	25-34	93	1.64	52	1.33	145	1.52
6	35-44	249	4.41	124	3.17	373	3.90
7	45-54	759	13.43	305	7.80	1064	11.13
8	55-64	1446	25.58	715	18.29	2161	22.60
9	65-69	864	15.29	553	14.15	1417	14.82
10	70+	2194	38.82	2119	54.21	4313	45.11
11	N.S.	0	0.00	0	0.00	0	0.00
	Total	5652	100.00	3909	100.00	9561	100.00

Chart 3.2: Age & Sex wise distribution of deaths due to 'Diseases of Circulatory System'.



3.1.1 Ischemic Heart Diseases

The sub-group 'Ischemic Heart Diseases (IHD)' characterized by reduced blood supply to the heart muscle, usually due to Coronary artery disease (arthrosclerosis of the Coronary arteries) accounts for the highest number of deaths (35.33%) under the major group 'Diseases of Circulatory System'. Out of the death due to Ischemic Heart Disease, 62.66% were males and 37.34% were females. The age distribution of medically certified deaths due to 'Ischemic Heart Diseases (IHD)' has been given in Table 3.3. It is the main cause of death of aged, 86.88% of the death is above the age group '55 and above'.

Table 3.3: Age & Sex wise distribution of deaths due to 'Ischemic Heart Diseases (IHD)'

Sl No.	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	0	0.00	0	0.00	0	0.00
2	1-4	0	0.00	0	0.00	0	0.00
3	5-14	0	0.00	0	0.00	0	0.00
4	15-24	1	0.05	0	0.00	1	0.03
5	25-34	15	0.71	1	0.08	16	0.47
6	35-44	63	2.98	12	0.95	75	2.22
7	45-54	281	13.28	70	5.55	351	10.39
8	55-64	547	25.85	219	17.37	766	22.68
9	65-69	336	15.88	196	15.54	532	15.75
10	70+	873	41.26	763	60.51	1636	48.45
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	2116	100	1261	100	3377	100

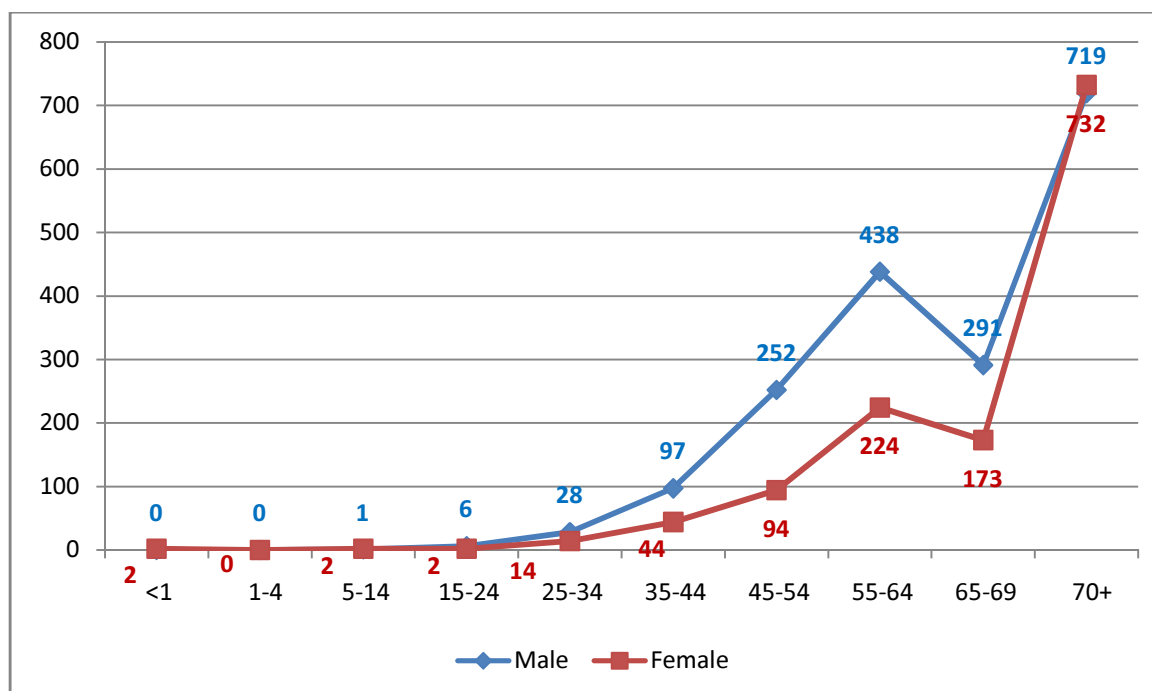
3.1.2 Cerebrovascular Diseases

The sub group 'Cerebrovascular Diseases' is reported to be the second highest cause of deaths constituting 32.62% of the 'Diseases of Circulatory System'. More deaths occurred in '45 and above' age group. Out of the death due to Cerebrovascular Diseases, 58.74% were males and 41.26% were female. The age distribution of medically certified deaths due to 'Cerebrovascular Diseases' has been given in Table 3.4 and is graphically represented in Chart 3.3.

Table 3.4: Age & Sex wise distribution of deaths due to 'Cerebrovascular Diseases'

Sl No	Age Group	SEX					
		Male		Female		Total	
		Number	%	Number	%	Number	%
1	<1	0	0.00	2	0.16	2	0.06
2	1-4	0	0.00	0	0.00	0	0.00
3	5-14	1	0.05	2	0.16	3	0.10
4	15-24	6	0.33	2	0.16	8	0.26
5	25-34	28	1.53	14	1.09	42	1.35
6	35-44	97	5.29	44	3.42	141	4.52
7	45-54	252	13.76	94	7.30	346	11.09
8	55-64	438	23.91	224	17.40	662	21.22
9	65-69	291	15.88	173	13.44	464	14.88
10	70+	719	39.25	732	56.88	1451	46.52
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	1832	100	1287	100	3119	100

Chart 3.3: Age & Sex wise distribution of deaths due to 'Cerebrovascular Diseases'



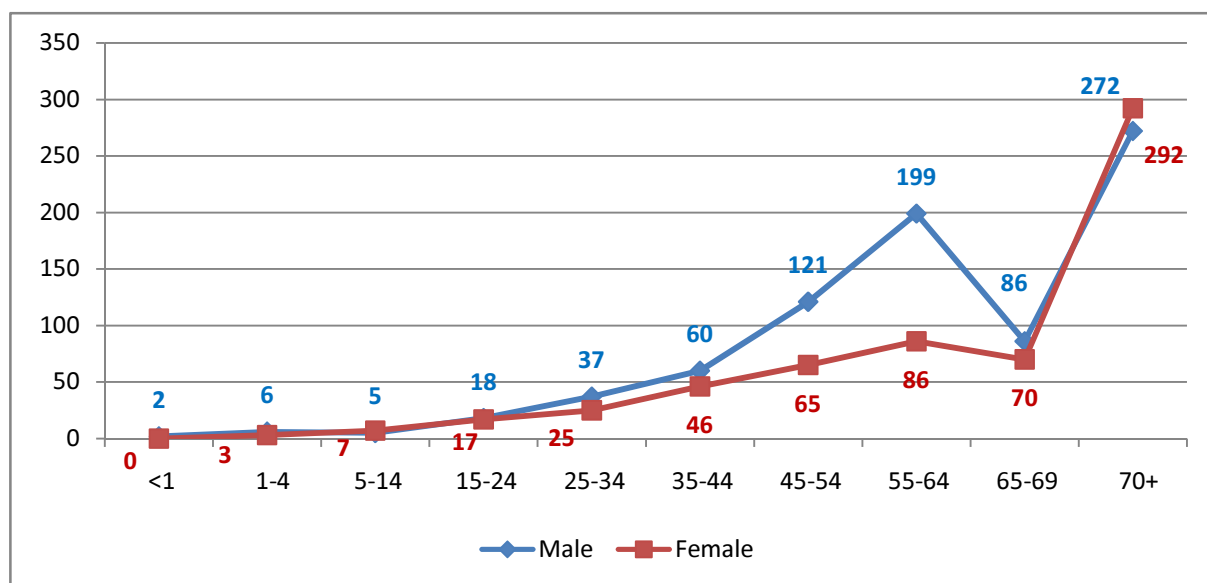
3.1.3 Diseases of Pulmonary Circulation and other forms of Heart Diseases.

‘Diseases of Pulmonary Circulation and other forms of heart Diseases’ (14.82%) is the third highest cause under the major group ‘Diseases of Circulatory System’. More deaths occurred in ‘55 and above’ age group. Out of the death due to ‘Diseases of Pulmonary Circulation and other forms of Heart Diseases’, 56.88% were males and 43.12% were female.

Table 3.5: Age & Sex wise distribution of deaths due to ‘Diseases of Pulmonary Circulation and other forms of Heart Diseases’

Sl No	Age Group	SEX					
		Male		Female		Total	
		Number	%	Number	%	Number	%
1	<1	2	0.25	0	0.00	2	0.14
2	1-4	6	0.74	3	0.49	9	0.64
3	5-14	5	0.62	7	1.15	12	0.85
4	15-24	18	2.23	17	2.78	35	2.47
5	25-34	37	4.59	25	4.09	62	4.38
6	35-44	60	7.44	46	7.53	106	7.48
7	45-54	121	15.01	65	10.64	186	13.13
8	55-64	199	24.69	86	14.08	285	20.10
9	65-69	86	10.67	70	11.46	156	11.01
10	70+	272	33.75	292	47.79	564	39.80
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	806	100	611	100	1417	100

Chart 3.4: Age & Sex wise distribution of deaths due to 'Diseases of Pulmonary Circulation and other forms of Heart Diseases'



3.1.4 Hypertensive Diseases

The sub group 'Hypertensive Diseases' is reported to be the fourth highest cause of deaths constituting 11.18% of the 'Diseases of Circulatory System'. More deaths occurred in '55 and above' age group. Out of the death due to Hypertensive Diseases, 55.66% were males and 44.34% were female.

Table 3.6: Age & Sex wise distribution of deaths due to 'Hypertensive Diseases'

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	0	0.00	0	0.00	0	0.00
2	1-4	0	0.00	0	0.00	0	0.00
3	5-14	0	0.00	1	0.21	1	0.09
4	15-24	1	0.17	1	0.21	2	0.19
5	25-34	2	0.34	1	0.21	3	0.28
6	35-44	15	2.52	5	1.05	20	1.87
7	45-54	65	10.92	38	8.02	103	9.64
8	55-64	185	31.09	113	23.84	298	27.88
9	65-69	101	16.97	73	15.40	174	16.28
10	70+	226	37.98	242	51.05	468	43.78
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	595	100	474	100	1069	100

3.1.5 Other diseases of the Circulatory System

‘Other diseases of the circulatory system’ (4.14%) is the fifth highest cause under the major group ‘Diseases of Circulatory System’, which includes diseases of arteries, arterioles & capillaries. Out of the death due to ‘Other diseases of the circulatory system’, 61.36% were males and 38.64% were female. Maximum deaths reported for ‘55 and above’ age.

Table 3.7: Age & Sex wise distribution of deaths due to ‘Other diseases of the Circulatory System’

Sl No	Age Group	SEX					
		Male		Female		Total	
		Number	%	Number	%	Number	%
1	<1	0	0.00	0	0.00	0	0.00
2	1-4	0	0.00	1	0.65	1	0.25
3	5-14	0	0.00	0	0.00	0	0.00
4	15-24	3	1.23	2	1.31	5	1.26
5	25-34	7	2.88	4	2.61	11	2.78
6	35-44	9	3.70	6	3.92	15	3.79
7	45-54	28	11.52	14	9.15	42	10.61
8	55-64	56	23.05	37	24.18	93	23.48
9	65-69	46	18.93	23	15.03	69	17.42
10	70+	94	38.68	66	43.14	160	40.40
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	243	100	153	100	396	100

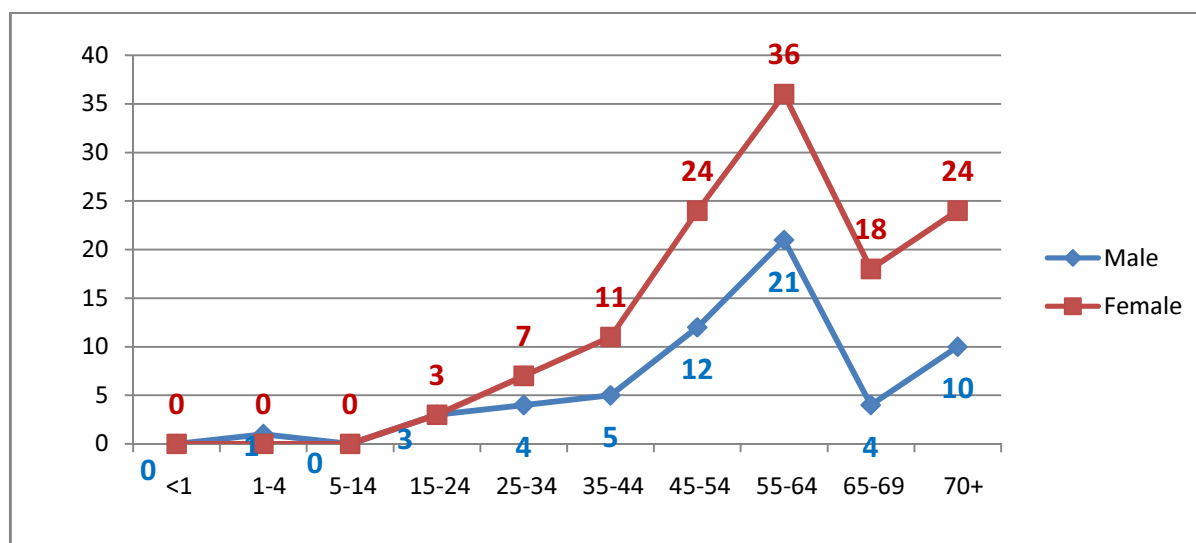
3.1.6 Acute Rheumatic Fever and Chronic Rheumatic Heart Diseases

‘Acute Rheumatic Fever and Chronic Rheumatic Heart Diseases’ (1.91%) is the next highest cause under the major group ‘Diseases of Circulatory System’. The percentages of female deaths to male deaths are more in ‘Acute rheumatic fever and chronic rheumatic heart diseases’.

Table 3.8: Age & Sex wise distribution of deaths due to 'Acute Rheumatic Fever and Chronic Rheumatic Heart Diseases'.

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	0	0.00	0	0.00	0	0.00
2	1-4	1	1.67	0	0.00	1	0.55
3	5-14	0	0.00	0	0.00	0	0.00
4	15-24	3	5.00	3	2.44	6	3.28
5	25-34	4	6.67	7	5.69	11	6.01
6	35-44	5	8.33	11	8.94	16	8.74
7	45-54	12	20.00	24	19.51	36	19.67
8	55-64	21	35.00	36	29.27	57	31.15
9	65-69	4	6.67	18	14.63	22	12.02
10	70+	10	16.67	24	19.51	34	18.58
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	60	100	123	100	183	100

Chart 3.5: Age & Sex wise distribution of deaths due to 'Acute Rheumatic Fever and Chronic Rheumatic Heart Diseases'



3.2. Neoplasms/Cancer (II), (C00-D48):

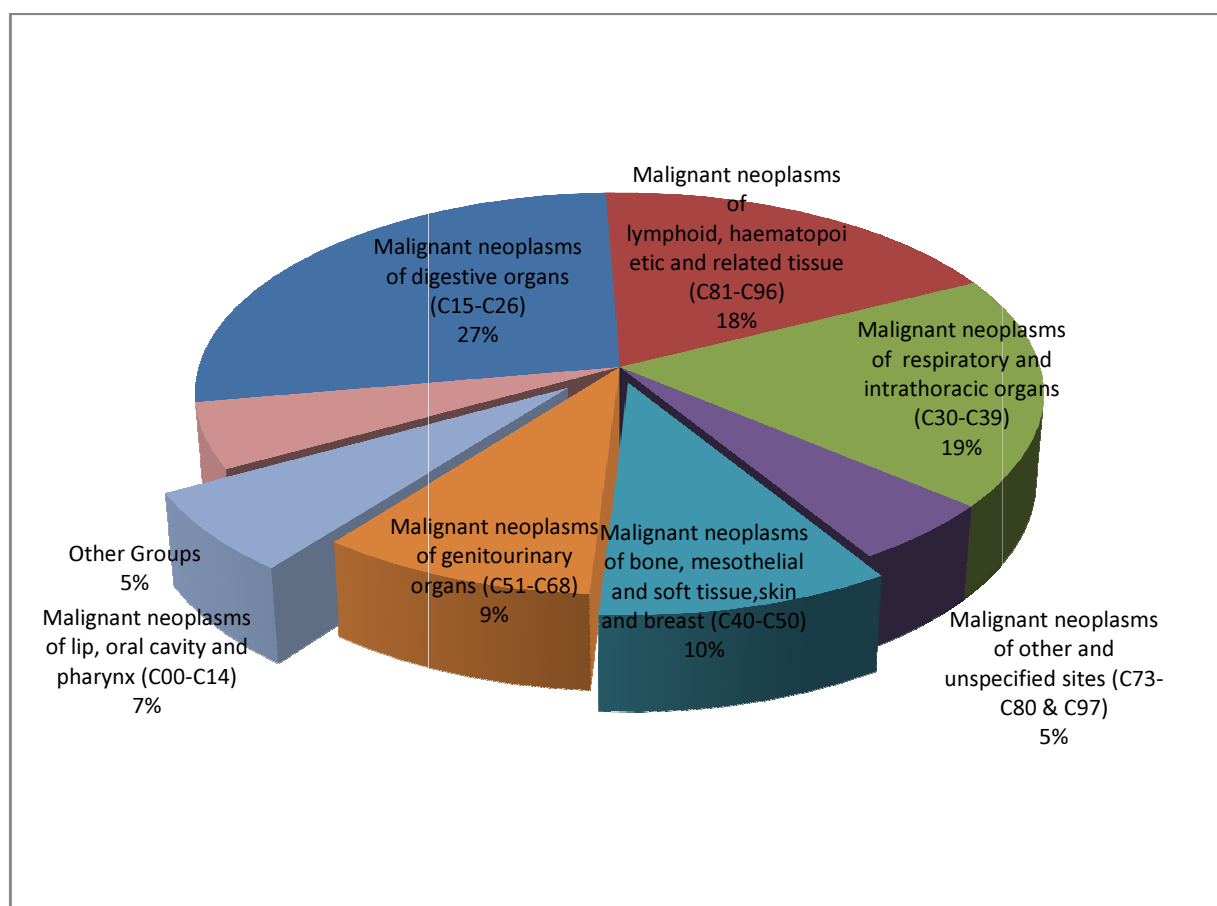
The second leading cause is 'Neoplasm', which is commonly known as Cancer, is responsible for 15.20% of the total Medically Certified Deaths. The share of deaths due to 'Neoplasms' in total males deaths is 14.78% as compared to the corresponding figure of 15.91% in case of female. Out of 4879 Neoplasm deaths, 2982 were males (61.12%) and 1897 were females (38.88%). The distribution of major causes of deaths under the group is given in the Table 3.9 and depicted in Chart 3.6.

Table 3.9: Distribution of major causes of deaths among 'Neoplasms'

Sl No	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	Malignant neoplasms of digestive organs (C15-C26)	929	31.15	398	20.98	1327	27.20
2	Malignant neoplasms of respiratory and intrathoracic organs (C30-C39)	769	25.79	139	7.33	908	18.61
3	Malignant neoplasms of lymphoid, haematopoietic and related tissue (C81-C96)	522	17.51	363	19.14	885	18.14
4	Malignant neoplasms of bone, mesothelial and soft tissue, skin and breast (C40-C50)	52	1.74	427	22.51	479	9.82
5	Malignant neoplasms of genitourinary organs (C51-C68)	198	6.64	262	13.81	460	9.43
6	Malignant neoplasms of lip, oral cavity and pharynx (C00-C14)	243	8.15	76	4.01	319	6.54
7	Malignant neoplasms of eye, brain and other parts of central nervous system (C69-C72)	86	2.88	72	3.80	158	3.24
8	Malignant neoplasms of other and unspecified sites (C73-C80 & C97)	132	4.43	112	5.90	244	5.00
9	Carcinoma in situ (D00-D09)	1	0.03	0	0.00	1	0.02
10	Benign neoplasms (D10-D36)	23	0.77	23	1.21	46	0.94
11	Other and unspecified neoplasm (D37-D48)	27	0.91	25	1.32	52	1.07
	Total Medically Certified Deaths due to Neoplasm	2982	100	1897	100	4879	100
	Deaths due to Neoplasm as percentage to total medically certified deaths		14.78		15.91		15.20

Among the 'Neoplasm' deaths, 'Malignant Neoplasm of Digestive Organs' accounts for the highest mortality (27.20%), followed by 'Malignant Neoplasm of Respiratory and Intrathoracic Organs' (18.61%), 'Malignant of Lymphoid, Haematopoietic & other related tissue' (18.14%), 'Malignant neoplasms of bone, mesothelium and soft tissue, skin and breast' (9.82%) and 'Malignant neoplasms of genitourinary organs' (9.43%). 'Malignant neoplasms of lip, oral cavity and pharynx' (6.54%), 'Malignant neoplasms of other and unspecified sites' (5.00%) and 'Malignant neoplasms of eye, brain and other parts of central nervous system' (3.24%) are other major causes.

Chart 3.6: Percentage distribution of major causes of deaths due to 'Neoplasms' under MCCD – 2013



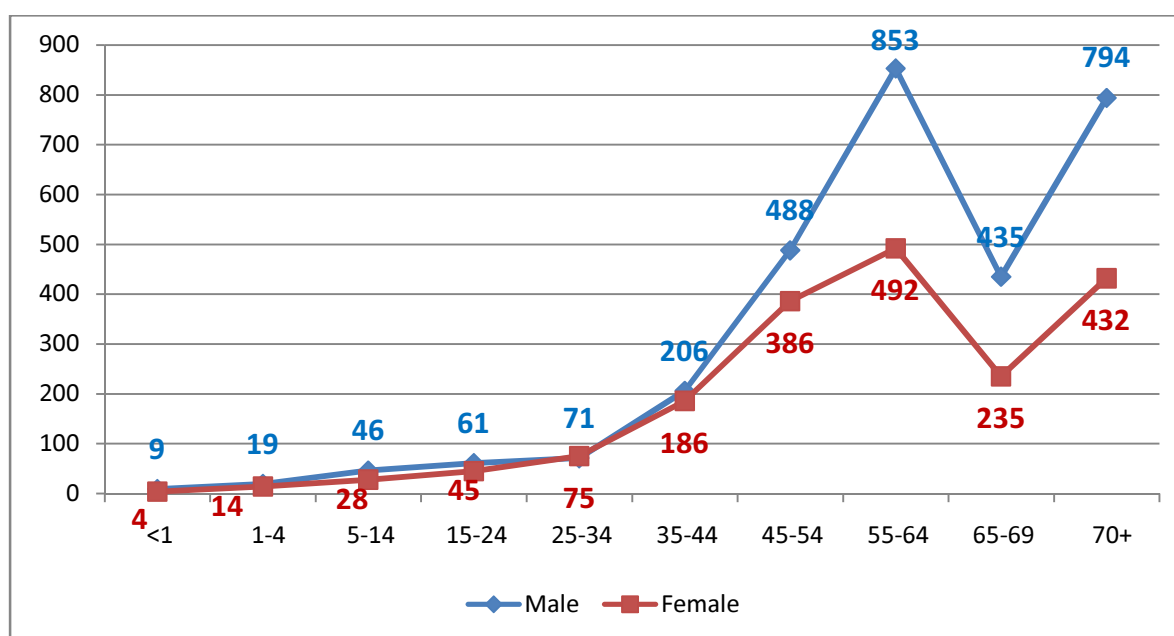
Comparatively less number of 'Neoplasm' death occurred for '35 and below' age group and maximum number of 'Neoplasm' death occurred for '55 and above' age group. Number of Neoplasm death is almost the same for male and female for the age up to 34. For '35 and above' age, male deaths due to 'Neoplasm' are more. The age distribution of medically certified deaths due to 'Neoplasm' has been given in Table 3.10

Table 3.10: Age distribution of deaths due to 'Neoplasm' under MCCD-2013.

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	9	0.30	4	0.21	13	0.27
2	1-4	19	0.64	14	0.74	33	0.68
3	5-14	46	1.54	28	1.48	74	1.52
4	15-24	61	2.05	45	2.37	106	2.17
5	25-34	71	2.38	75	3.95	146	2.99
6	35-44	206	6.91	186	9.80	392	8.03
7	45-54	488	16.36	386	20.35	874	17.91
8	55-64	853	28.60	492	25.94	1345	27.57
9	65-69	435	14.59	235	12.39	670	13.73
10	70+	794	26.63	432	22.77	1226	25.13
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	2982	100.00	1897	100.00	4879	100.00

The age distribution of medically certified deaths due to 'Neoplasm' has been highlighted in Chart 3.7. The age distribution under this cause group is increases with age.

Chart 3.7: Age distribution of deaths due to 'Neoplasm'



3.2.1 Malignant Neoplasms of Digestive Organs

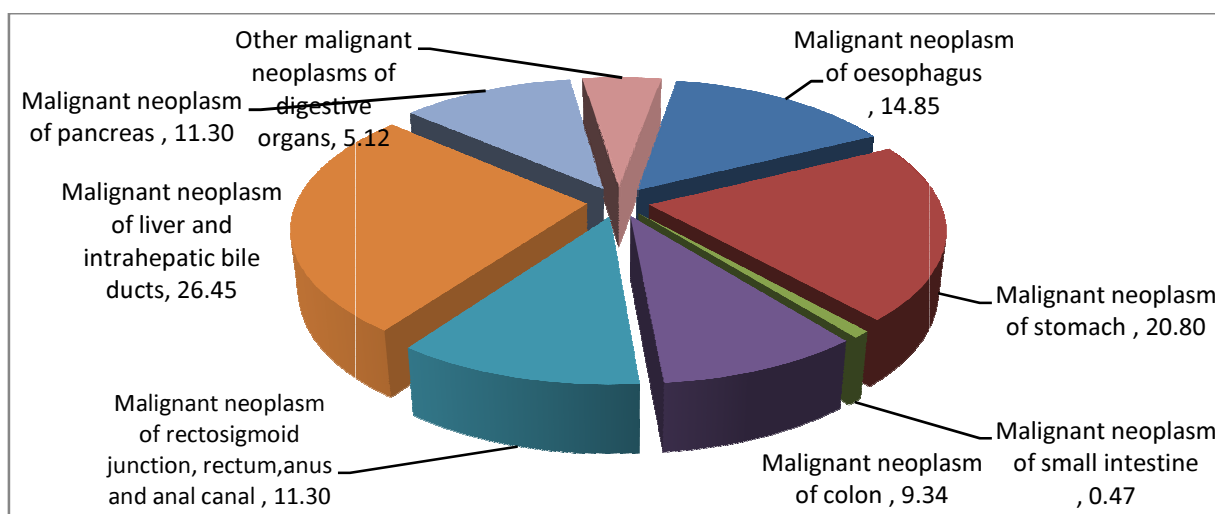
The sub group 'Malignant Neoplasms of Digestive Organs' is reported to be the highest cause of deaths constituting 27.20% of the deaths due to 'Neoplasm'. The share of deaths due to 'Malignant Neoplasms of Digestive Organs' in males, to total male Neoplasm deaths is 31.15% as against 20.98% of corresponding female Neoplasm deaths. Out of 1327 death under this cause, 929 were males (70%). That means death due to 'Malignant Neoplasms of Digestive Organs' in males is more than double that of females.

Among the death covered under 'Malignant Neoplasms of Digestive Organs', 26.45% is due to 'Malignant neoplasm of liver'. Out of which the male death accounts for about 84.33% of the total deaths due to malignancy in liver. 'Malignant Neoplasm of Stomach' (20.80%), 'Malignant neoplasm of oesophagus' (14.85%), 'Malignant neoplasm of recto sigmoid junction, rectum, anus and anal canal' (11.30%), 'Malignant neoplasm of pancreas' (11.30%), and 'Malignant neoplasm of colon' (9.34%) are other major causes under this group. The distribution of major causes of deaths under the group is given in the Table 3.11 and depicted in Chart 3.8.

Table 3.11: Distribution of major causes of deaths among 'Malignant Neoplasms of Digestive Organs'

Sl No	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	Malignant neoplasm of liver and intrahepatic bile ducts	296	31.86	55	13.82	351	26.45
2	Malignant neoplasm of stomach	199	21.42	77	19.35	276	20.80
3	Malignant neoplasm of oesophagus	146	15.72	51	12.81	197	14.85
4	Malignant neoplasm of recto sigmoid junction, rectum, anus and anal canal	83	8.93	67	16.83	150	11.30
5	Malignant neoplasm of pancreas	94	10.12	56	14.07	150	11.30
6	Malignant neoplasm of colon	77	8.29	47	11.81	124	9.34
7	Malignant neoplasm of small intestine including duodenum	7	0.75	4	1.01	11	0.83
8	Other malignant neoplasms of digestive organs	27	2.91	41	10.30	68	5.12
	Total Medically Certified Deaths due to 'Malignant neoplasms of digestive organs '	929	100	398	100	1327	100.00
	Deaths due to 'Malignant neoplasms of digestive organs' as percentage to total Neoplasm deaths.		31.15		20.98		27.20

Chart 3.8: Percentage distribution of major causes of deaths due to 'Malignant Neoplasms of Digestive Organs' under MCCD – 2013

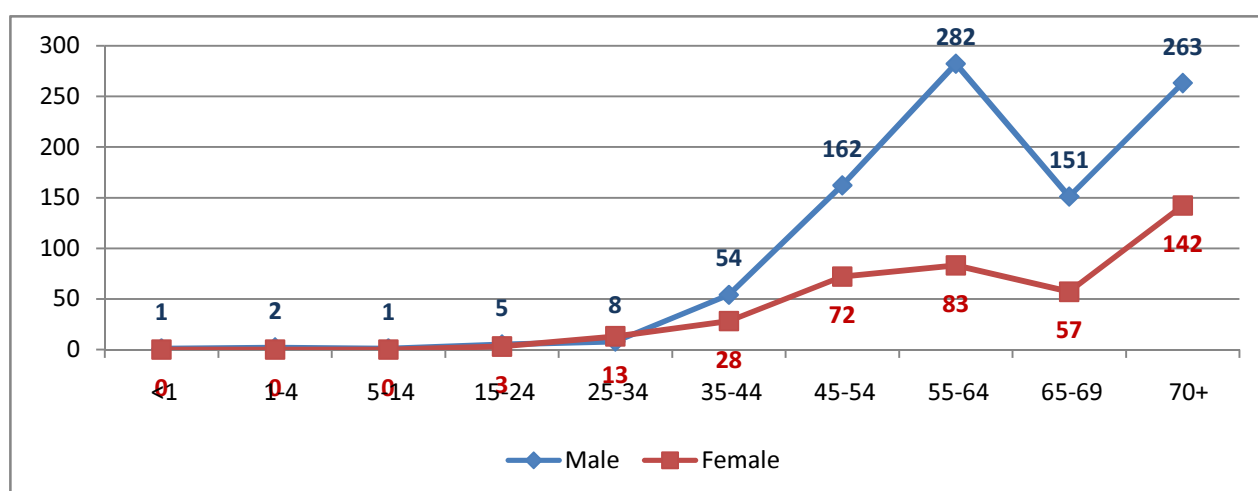


Comparatively less number of 'Malignant Neoplasms of Digestive Organs' death occurred for '25 and below' age group. Maximum number of death occurred for '55 and above' age group. Number of death is almost the same for male and female for the age up to 34 under this group. For '35 and above' age, male deaths are more. The age wise distribution of major causes of deaths under 'Malignant Neoplasms of Digestive Organs' given in the Table 3.12 and depicted in Chart 3.9

Table 3.12: Age distribution of deaths due to 'Malignant Neoplasms of Digestive Organs' under

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	1	0.11	0	0.00	1	0.08
2	1-4	2	0.22	0	0.00	2	0.15
3	5-14	1	0.11	0	0.00	1	0.08
4	15-24	5	0.54	3	0.75	8	0.60
5	25-34	8	0.86	13	3.27	21	1.58
6	35-44	54	5.81	28	7.04	82	6.18
7	45-54	162	17.44	72	18.09	234	17.63
8	55-64	282	30.36	83	20.85	365	27.51
9	65-69	151	16.25	57	14.32	208	15.67
10	70+	263	28.31	142	35.68	405	30.52
	TOTAL	929	100	398	100	1327	100

Chart 3.9: Age distribution of deaths due to 'Malignant Neoplasms of Digestive Organs'



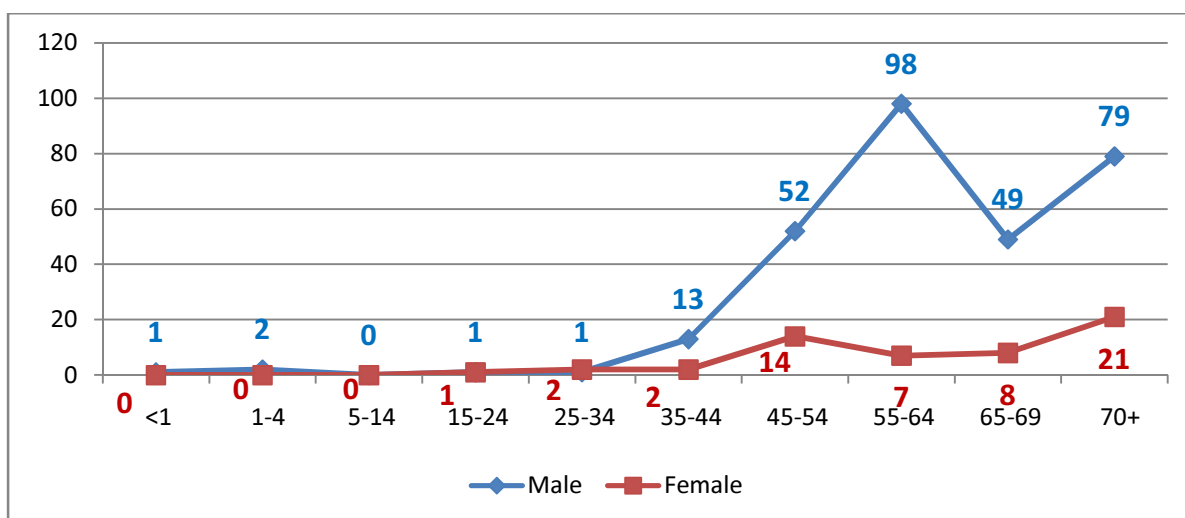
3.2.1.1 Malignant Neoplasm of Liver

Among the death covered under 'Malignant Neoplasms of Digestive Organs', 26.45% is due to 'Malignant neoplasm of liver'. Maximum number of deaths occurred for males. Out of 351 deaths due to 'Malignant neoplasm of liver', 296 were male deaths (84.33%). This is almost 6 times more than that of female deaths. Number of deaths is very less for age 'under 34'. For '45 and above' age, number of deaths is high. The age distribution of medically certified deaths due to 'Malignant neoplasm of liver' has been given in Table 3.13 and has been highlighted in Chart 3.10

Table 3.13: Age distribution of deaths due to 'Malignant neoplasm of liver'

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	1	0.34	0	0.00	1	0.28
2	1-4	2	0.68	0	0.00	2	0.57
3	5-14	0	0.00	0	0.00	0	0.00
4	15-24	1	0.34	1	1.82	2	0.57
5	25-34	1	0.34	2	3.64	3	0.85
6	35-44	13	4.39	2	3.64	15	4.27
7	45-54	52	17.57	14	25.45	66	18.80
8	55-64	98	33.11	7	12.73	105	29.91
9	65-69	49	16.55	8	14.55	57	16.24
10	70+	79	26.69	21	38.18	100	28.49
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	296	100	55	100	351	100

Chart 3.10: Age distribution of deaths due to 'Malignant neoplasm of liver' under MCCD-2013



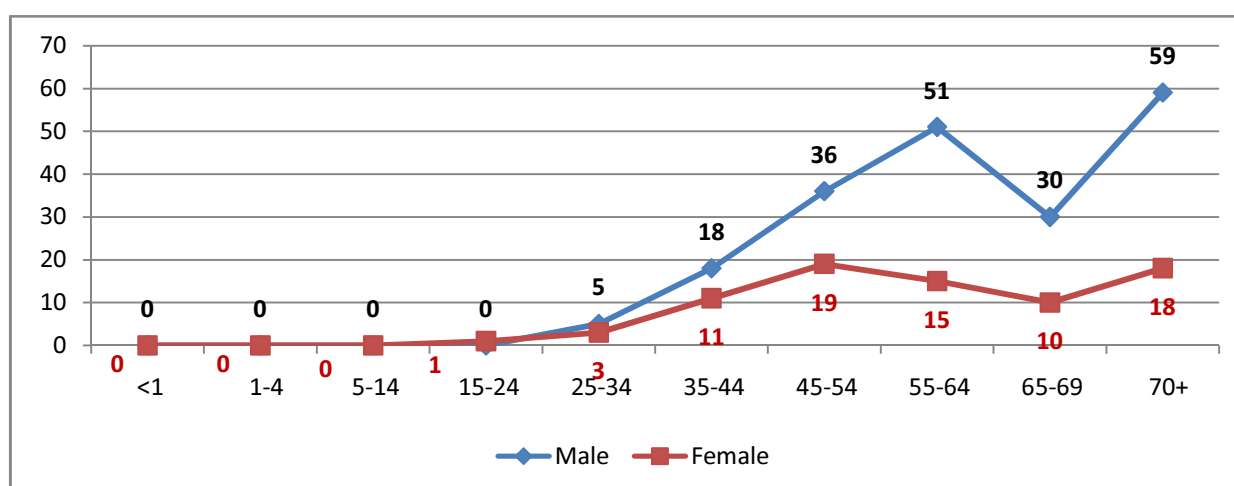
3.2.1.2 Malignant Neoplasm of Stomach

Among the death covered under 'Malignant Neoplasms of Digestive Organs', 20.80% is due to 'Malignant Neoplasm of Stomach'. Maximum number of deaths occurred for males. Out of 276 deaths due to 'Malignant Neoplasm of Stomach', 199 were male deaths (72.10%). No deaths occurred under age 25. For '45 and above' age, number of deaths is high. The age distribution of medically certified deaths due to 'Malignant Neoplasm of Stomach' given in Table 3.14 has been highlighted in Chart 3.11

Table 3.14: Age distribution of deaths due to 'Malignant Neoplasm of Stomach' under

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	0	0.00	0	0.00	0	0.00
2	1-4	0	0.00	0	0.00	0	0.00
3	5-14	0	0.00	0	0.00	0	0.00
4	15-24	0	0.00	1	1.30	1	0.36
5	25-34	5	2.51	3	3.90	8	2.90
6	35-44	18	9.05	11	14.29	29	10.51
7	45-54	36	18.09	19	24.68	55	19.93
8	55-64	51	25.63	15	19.48	66	23.91
9	65-69	30	15.08	10	12.99	40	14.49
10	70+	59	29.65	18	23.38	77	27.90
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	199	100	77	100	276	100

Chart 3.11: Age distribution of deaths due to 'Malignant Neoplasm of Stomach' under



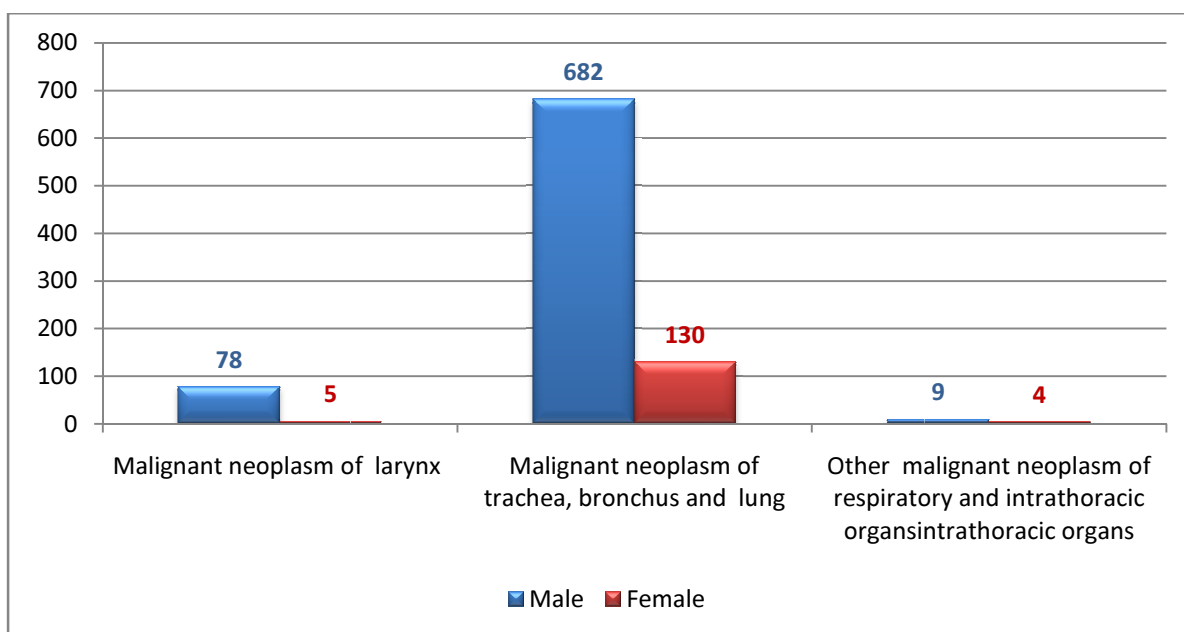
3.2.2 Malignant Neoplasm of Respiratory and Intra Thoracic Organs

The sub group 'Malignant Neoplasm of Respiratory and Intra Thoracic Organs' is reported to be the second highest cause of deaths constituting 18.61% of the 'Neoplasm' deaths. Among deaths caused by 'Malignant Neoplasm of Respiratory and Intra Thoracic Organs' about 89.43% is due to Lung Cancer in male. Lung Cancer alone accounts for around 22.88% of total male Neoplasm deaths. Then shows an increase in death from the age 35 and maximum number of death in the age group '55-64'. Out of 812 deaths due to 'Malignant Neoplasm of Lungs', 682 were male deaths (83.99%). This is almost five times more than that of female deaths.

Table 3.15: Distribution of major causes of deaths among 'Malignant Neoplasms of Respiratory and Intra Thoracic Organs'

SL NO	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	Malignant neoplasm of trachea, bronchus and lung	682	88.69	130	93.53	812	89.43
2	Malignant neoplasm of larynx	78	10.14	5	3.60	83	9.14
3	Other malignant neoplasm of respiratory and intrathoracic organs	9	1.17	4	2.88	13	1.43
	Total Medically Certified Deaths due to Malignant neoplasms of respiratory and intrathoracic organs	769	100	139	100	908	100
	Deaths due to 'Malignant neoplasms of respiratory and intrathoracic organs' as percentage to total Neoplasm deaths.		25.79		7.33		18.61

Chart 3.12: Distribution of major causes of deaths among 'Malignant Neoplasms of Respiratory and Intra Thoracic Organs'



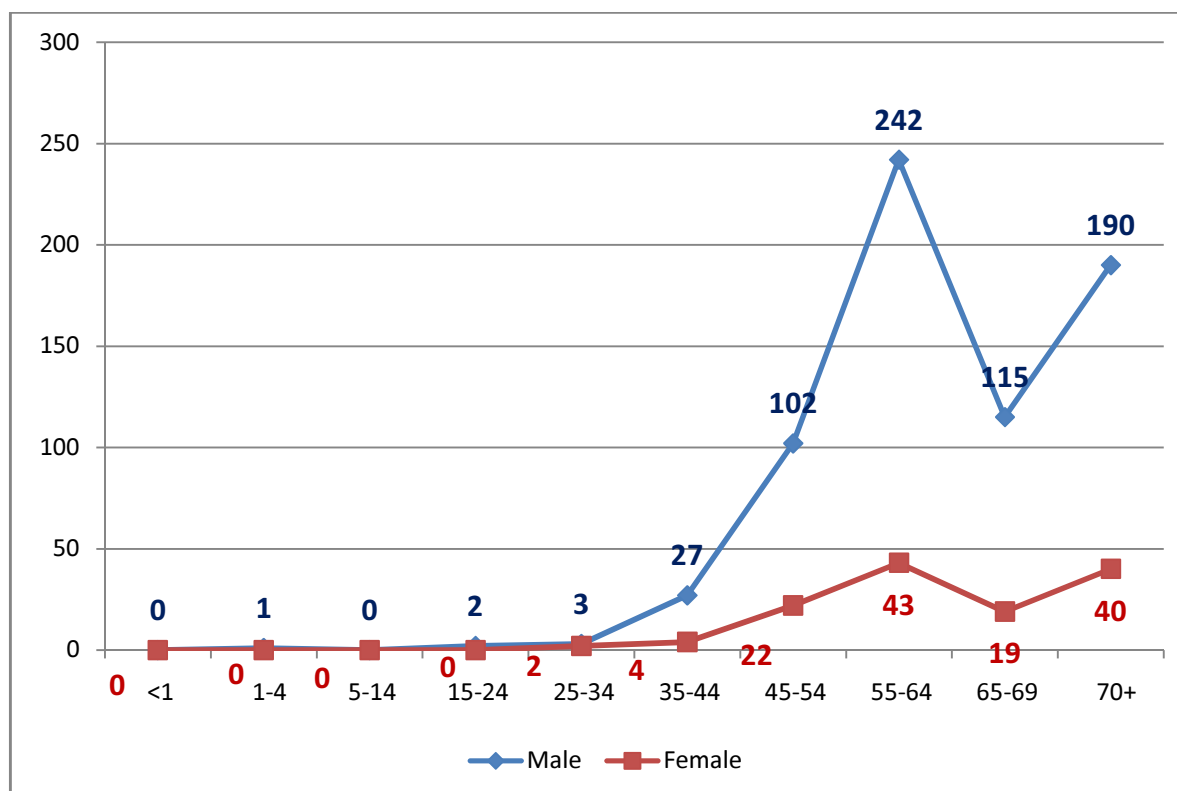
The age distribution of medically certified deaths due to 'Malignant neoplasm of lungs' has been highlighted in Table 3.16.

Table 3.16: Age distribution of deaths due to 'Malignant neoplasm of lungs'

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	0	0.00	0	0.00	0	0.00
2	1-4	1	0.15	0	0.00	1	0.12
3	5-14	0	0.00	0	0.00	0	0.00
4	15-24	2	0.29	0	0.00	2	0.25
5	25-34	3	0.44	2	1.54	5	0.62
6	35-44	27	3.96	4	3.08	31	3.82
7	45-54	102	14.96	22	16.92	124	15.27
8	55-64	242	35.48	43	33.08	285	35.10
9	65-69	115	16.86	19	14.62	134	16.50
10	70+	190	27.86	40	30.77	230	28.33
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	682	100	130	100	812	100

The age distribution of medically certified deaths due to 'Malignant neoplasm of lungs' has been highlighted in Chart 3.13.

Chart 3.13: Age distribution of deaths due to 'Malignant Neoplasm of Lungs'



3.2.3 Malignant Neoplasms of Lymphoid, Haematopoietic and Related Tissue

The sub group 'Malignant Neoplasms of Lymphoid, Haematopoietic and Related Tissue' is reported to be the third highest cause of deaths constituting 18.14% of the deaths due to 'Neoplasm'. The percentage of female deaths due to 'Malignant neoplasms of lymphoid, haematopoietic and related tissue' to total female neoplasm deaths is 19.14% as compared to 17.51% of corresponding male neoplasm deaths.

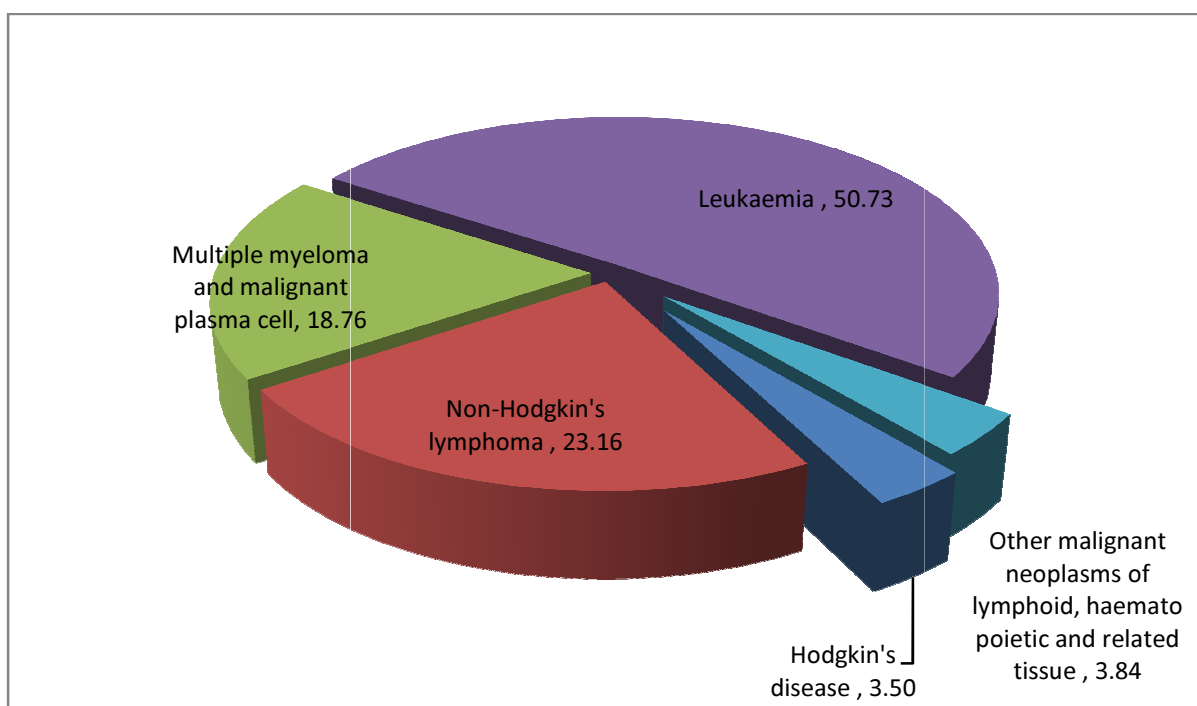
Among the death covered under the group, 50.73% is due to 'Leukaemia'. 'Non-Hodgkin's lymphoma' (23.16%), 'Multiple myeloma and malignant plasma cell' (18.76%) are other major causes. The distribution of major causes of deaths under the group is given in the Table 3.17.

Table 3.17: Age distribution of deaths due to 'Malignant Neoplasms of Lymphoid, Haematopoietic and Related Tissue'

Sl. no	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	Leukaemia	244	46.74	205	56.47	449	50.73
2	Non-Hodgkin's lymphoma	132	25.29	73	20.11	205	23.16
3	Multiple myeloma and malignant plasma cell	107	20.50	59	16.25	166	18.76
4	Hodgkin's disease	22	4.21	9	2.48	31	3.50
5	Other malignant neoplasms of lymphoid, haematopoietic and related tissue	17	3.26	17	4.68	34	3.84
	Total Medically Certified Deaths due to Malignant neoplasms of lymphoid, haematopoietic and related tissue	522	100	363	100	885	100
	Deaths due to Malignant neoplasms of lymphoid, haematopoietic and related tissue as percentage to total Deaths due to Neoplasm		17.51		19.14		18.14

The major causes of death in the group 'Malignant Neoplasms of Lymphoid, Haematopoietic and Related Tissue' is given on Chart 3.14.

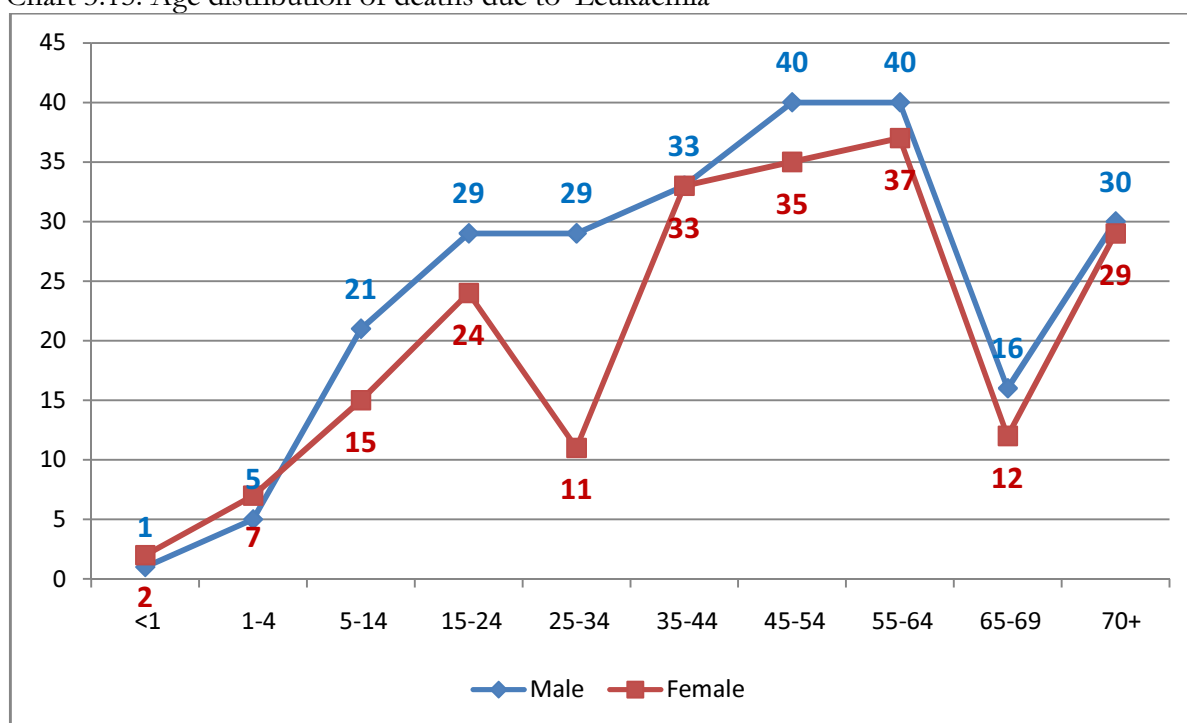
Chart 3.14: Distribution of major causes of deaths among 'Malignant Neoplasms of Lymphoid, Haematopoietic and Related Tissue'



3.2.3.1 Leukaemia

In the sub group 'Malignant Neoplasms of Lymphoid, Haematopoietic and Related Tissue', 50.73% of death is due to Leukaemia, which is 9.20% of the total 'Neoplasm' deaths. 54.34% of death due to Leukaemia was males. It occurred in all age groups and maximum number of deaths in the age group '55-64'. It is one of the main reasons for death of children in the age group '1-4'. The age distribution of medically certified deaths due to Leukaemia has been highlighted in Chart 3.15

Chart 3.15: Age distribution of deaths due to 'Leukaemia'



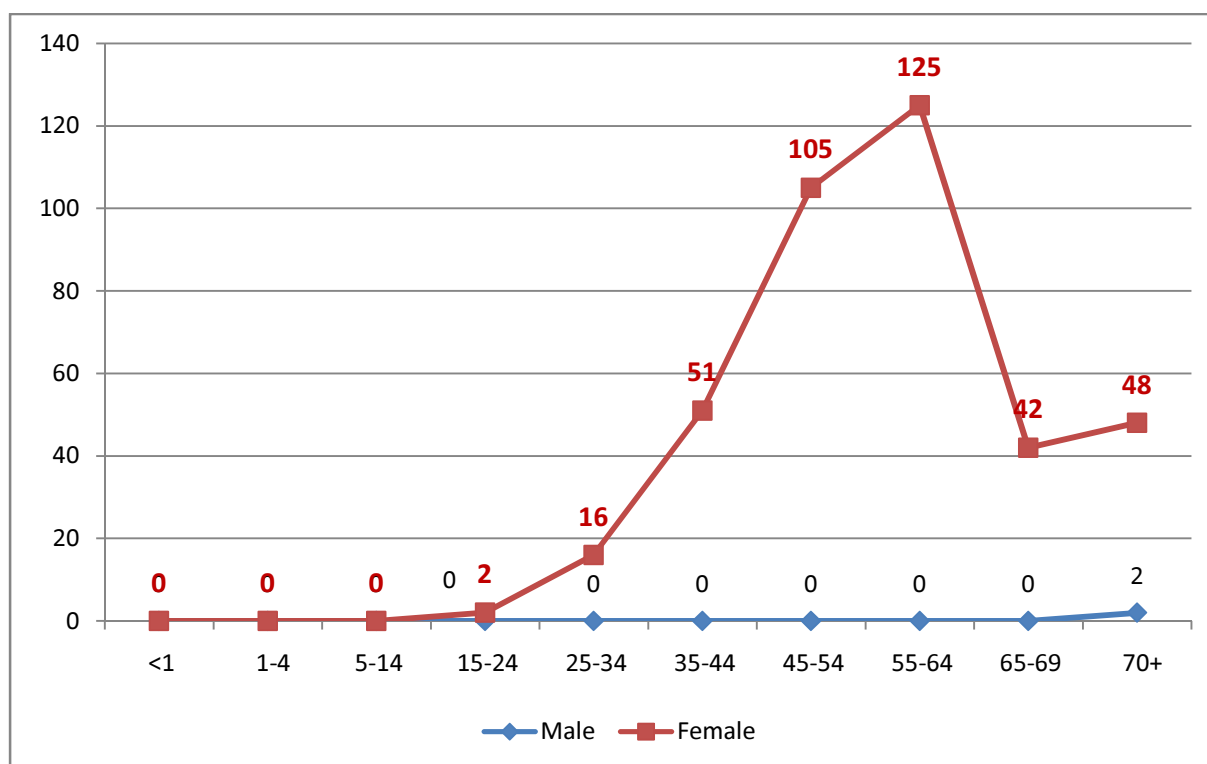
3.2.4 Malignant Neoplasms of Bone, Mesothelial and Soft Tissue, Skin and Breast

The sub group 'Malignant Neoplasms of Bone, Mesothelial and Soft Tissue, Skin and Breast' is reported to be the fourth highest cause of deaths constituting 9.82% of the 'Neoplasm'. Among deaths caused by 'Malignant neoplasms of bone, mesothelial and soft tissue, skin and breast' about 81.21% is due to Breast Cancer in female. Breast Cancer alone accounts 20.51% of the total female Neoplasm death. Maximum female death due to breast cancer occurred in the age group '55-64' and 2 male deaths occurred in 70 above age group. The age distribution of medically certified deaths due to 'Malignant neoplasm of Breast' has been highlighted in Table 3.18.

Table 3.18: Age distribution of deaths due to 'Malignant Neoplasm of Breast'

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	0	0.00	0	0.00	0	0.00
2	1-4	0	0.00	0	0.00	0	0.00
3	5-14	0	0.00	0	0.00	0	0.00
4	15-24	0	0.00	2	0.51	2	0.51
5	25-34	0	0.00	16	4.11	16	4.09
6	35-44	0	0.00	51	13.11	51	13.04
7	45-54	0	0.00	105	26.99	105	26.85
8	55-64	0	0.00	125	32.13	125	31.97
9	65-69	0	0.00	42	10.80	42	10.74
10	70+	2	100.00	48	12.34	50	12.79
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	2	100	389	100	391	100

Chart 3.16: Age distribution of deaths due to 'Malignant Neoplasm of Breast'



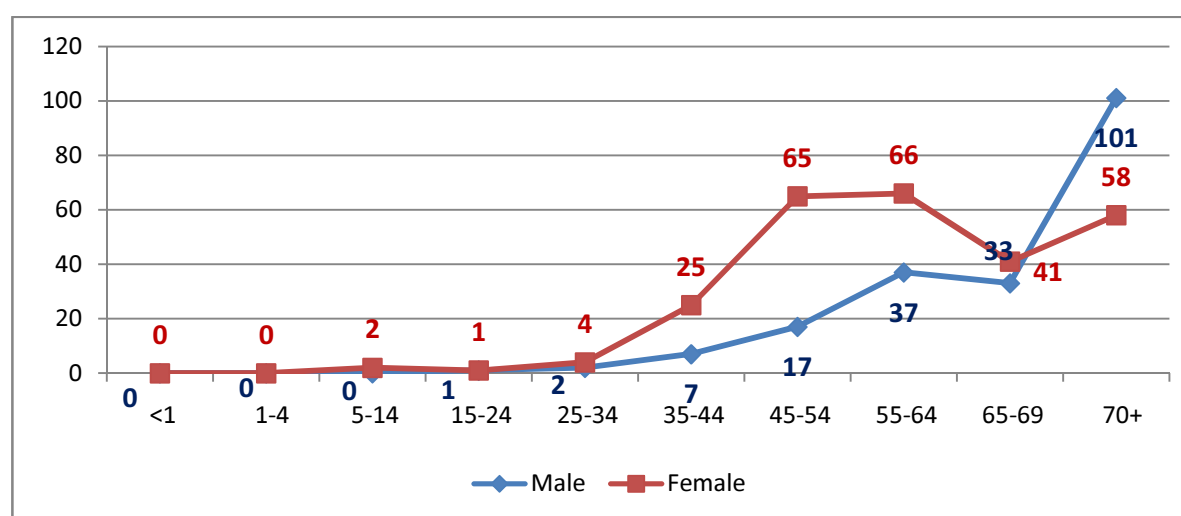
3.2.5 Malignant Neoplasms of Genitourinary Organs

Under the cause, 'Malignant Neoplasms of Genitourinary Organs', 26.74% is due to 'Malignant Neoplasm of Ovary'. Under this group 54.04% of male death is due to 'Malignant Neoplasm of Prostate' and 24.74% of male death is due to 'Malignant Neoplasm of Bladder'. The age distribution of medically certified deaths due to 'Malignant Neoplasms of Genitourinary Organs' has been highlighted in Table 3.19

Table 3.19: Age distribution of deaths due to 'Malignant Neoplasms of Genitourinary Organs'

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	0	0.00	0	0.00	0	0.00
2	1-4	0	0.00	0	0.00	0	0.00
3	5-14	0	0.00	2	0.76	2	0.43
4	15-24	1	0.51	1	0.38	2	0.43
5	25-34	2	1.01	4	1.53	6	1.30
6	35-44	7	3.54	25	9.54	32	6.96
7	45-54	17	8.59	65	24.81	82	17.83
8	55-64	37	18.69	66	25.19	103	22.39
9	65-69	33	16.67	41	15.65	74	16.09
10	70+	101	51.01	58	22.14	159	34.57
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	198	100	262	100	460	100

Chart 3.17: Age distribution of deaths due to 'Malignant Neoplasms of Genitourinary Organs'



3.2.6 Malignant Neoplasms of Other and Unspecified Sites

The percentage of male deaths and female deaths under the cause, 'Malignant neoplasms of other and unspecified sites' are 54.10% and 45.90% respectively which is 5.00% of the total Neoplasm deaths.

3.2.7 Other Neoplasms

Under 'Other Neoplasms', the causes with 'Malignant neoplasms of eye, brain and other parts of central nervous system' 3.24%, 'Carcinoma in situ' 0.02%, 'Benign neoplasms' 0.94%, and 'Other and unspecified neoplasm' 1.07% are reported under Medically Certified Deaths.

3.3. Endocrine, Nutritional and Metabolic Diseases (IV): (E00-E89)

This is the third leading cause group which has contributed to 10.90% of the total Medically Certified Deaths. Diabetes Mellitus, Thyroid disorders, Malnutrition are the major cause under this group. 'Diabetes Mellitus' that causes serious health complications such as renal failures, heart disease, stroke and blindness, is a disease in which Pancreas no longer produces enough Insulin or when cells stop responding to the Insulin that is produced, so that glucose in the blood cannot be absorbed into the cells of the body, is the leading cause of death. It alone accounts for 93.77% of total deaths reported under the cause group. Out of 3282 deaths due to 'Diabetes Mellitus', 1907 were males (58.10%). The share of diabetes mellitus in total Medically Certified Deaths is 10.23%.

This is the major cause of death due to Non Communicable Diseases. Starting from the age of 35, it shows very high increase in death rate with respect to age. The age wise distribution deaths under 'Diabetes Mellitus' is depicted in the Chart 3.18 and the age wise distribution deaths under the group "Endocrine, Nutritional and Metabolic Diseases" is depicted in the Table 3.20.

Chart 3.18: Age & Sex wise distribution of deaths due to 'Diabetes Mellitus'

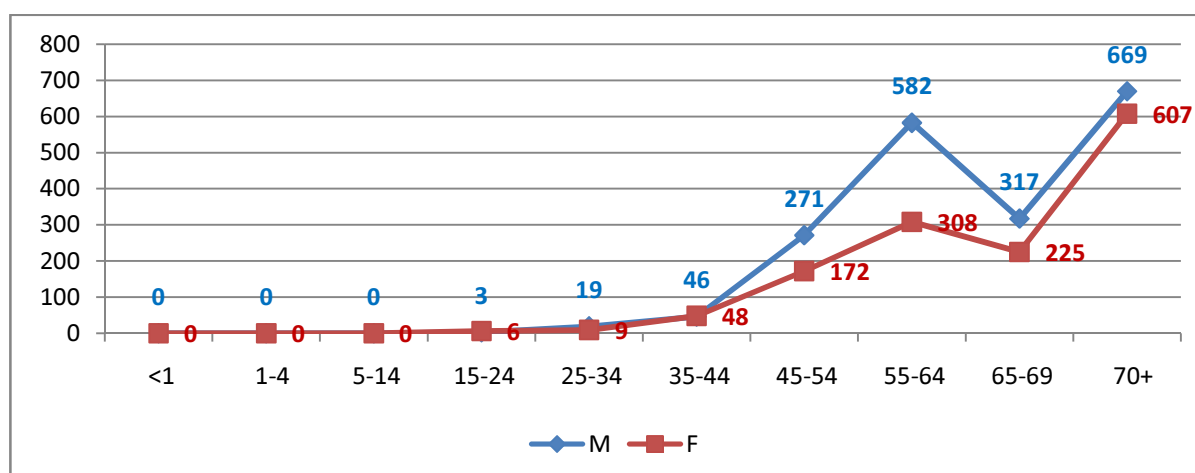


Table 3.20: Age & Sex wise distribution of deaths due to 'Endocrine, Nutritional and Metabolic Diseases'

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	15	0.75	15	1.00	30	0.86
2	1-4	3	0.15	4	0.27	7	0.20
3	5-14	1	0.05	4	0.27	5	0.14
4	15-24	7	0.35	6	0.40	13	0.37
5	25-34	23	1.15	19	1.27	42	1.20
6	35-44	51	2.55	57	3.80	108	3.09
7	45-54	280	13.99	183	12.21	463	13.23
8	55-64	596	29.79	330	22.01	926	26.46
9	65-69	324	16.19	237	15.81	561	16.03
10	70+	701	35.03	644	42.96	1345	38.43
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	2001	100.00	1499	100.00	3500	100.00

3.4 Diseases of the Respiratory System (X): (J00-J98)

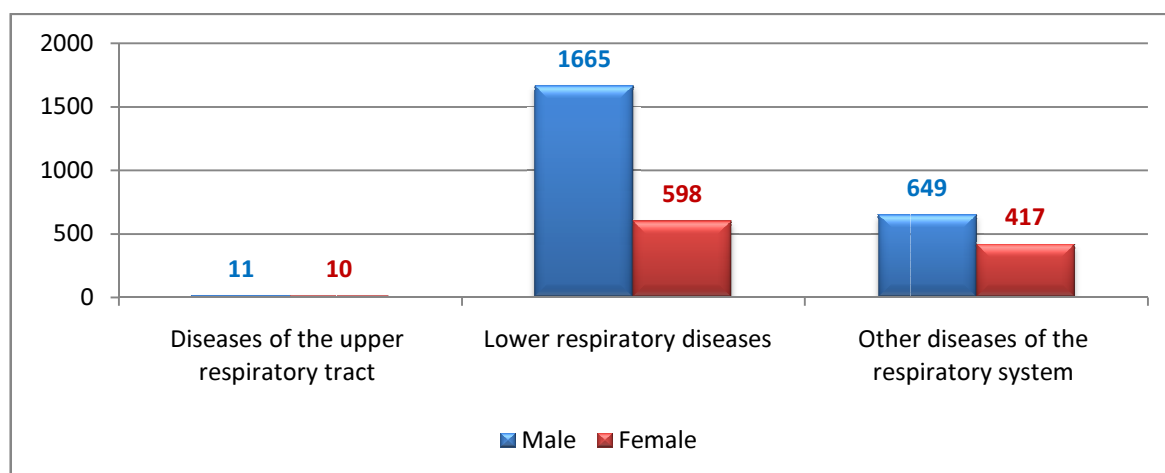
The major group of 'Diseases of Respiratory System' is the fourth leading cause, responsible for 10.44% of the total Medically Certified Deaths. This is one of the main reasons for death among males. This has contributed to 11.53% of male and 8.60% of female of the respective total Medically Certified Deaths. Pneumonia and Chronic Obstructive Pulmonary Disease are the major diseases under this category. The distribution of chief constituents of the major cause group is given Table 3.21 and is presented in Chart 3.19

Table 3.21: Distribution of major causes of deaths among 'Diseases of the Respiratory System'

Sl No	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	Lower respiratory diseases (J20-J22 & J40-J47)	1665	71.61	598	58.34	2263	67.55
2	Other diseases of the respiratory system (J10-J18,J60-J98)	649	27.91	417	40.68	1066	31.82
3	Diseases of the upper respiratory tract (J00-J06 & J30-J39)	11	0.47	10	0.98	21	0.63
	Total Medically Certified Deaths due to Diseases of the Respiratory System	2325	100	1025	100	3350	100
	Deaths due to Diseases of the Respiratory System' as percentage to total medically certified deaths		11.53		8.60		10.44

'Lower Respiratory disorders' is the leading cause of death, and has caused 67.55 out of every hundred reported deaths under the major cause group 'Diseases of Respiratory System'. Out of 2263 death happened in this group, 1665 were male (73.57%). Chronic Obstructive Pulmonary Disease (COPD) is the major cause, which is 64.48% of the death reported under 'Respiratory System Disease'. The percentage share of Chronic Obstructive Pulmonary Disease (COPD) to the total Medically Certified Deaths is 6.73%. It is followed by 'Other Diseases of the Respiratory System', which includes 'Pneumonia' an Inflammatory illness of the lung. It is one of the leading cause of death in this major group constitutes about 17.19% of the deaths reported under 'Respiratory System Disease'. The percentage share of Pneumonia to the total Medically Certified Deaths is 1.80%.

Chart 3.19: Age & Sex wise distribution of major causes of deaths among 'Diseases of the Respiratory System'



The death due to 'Respiratory System Disease' is high among infants, then decreases in the age group '5- 44'. From '45 and above' age, death increases. The age composition of deaths due to 'Diseases of Respiratory System' is presented in Table 3.22 and is highlighted in Chart 3.20.

Chart 3.20: Age & Sex wise distribution of deaths due to 'Diseases of Respiratory System'

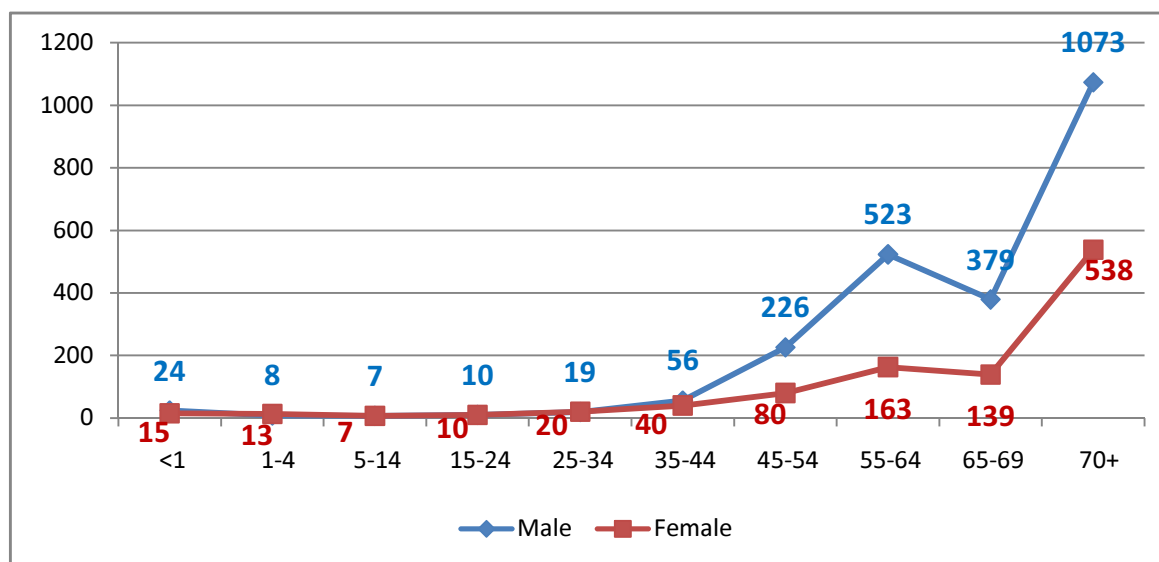


Table 3.22: Age & Sex wise distribution of deaths due to 'Diseases of Respiratory System'

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	24	1.03	15	1.46	39	1.16
2	1-4	8	0.34	13	1.27	21	0.63
3	5-14	7	0.30	7	0.68	14	0.42
4	15-24	10	0.43	10	0.98	20	0.60
5	25-34	19	0.82	20	1.95	39	1.16
6	35-44	56	2.41	40	3.90	96	2.87
7	45-54	226	9.72	80	7.80	306	9.13
8	55-64	523	22.49	163	15.90	686	20.48
9	65-69	379	16.30	139	13.56	518	15.46
10	70+	1073	46.15	538	52.49	1611	48.09
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	2325	100.00	1025	100.00	3350	100.00

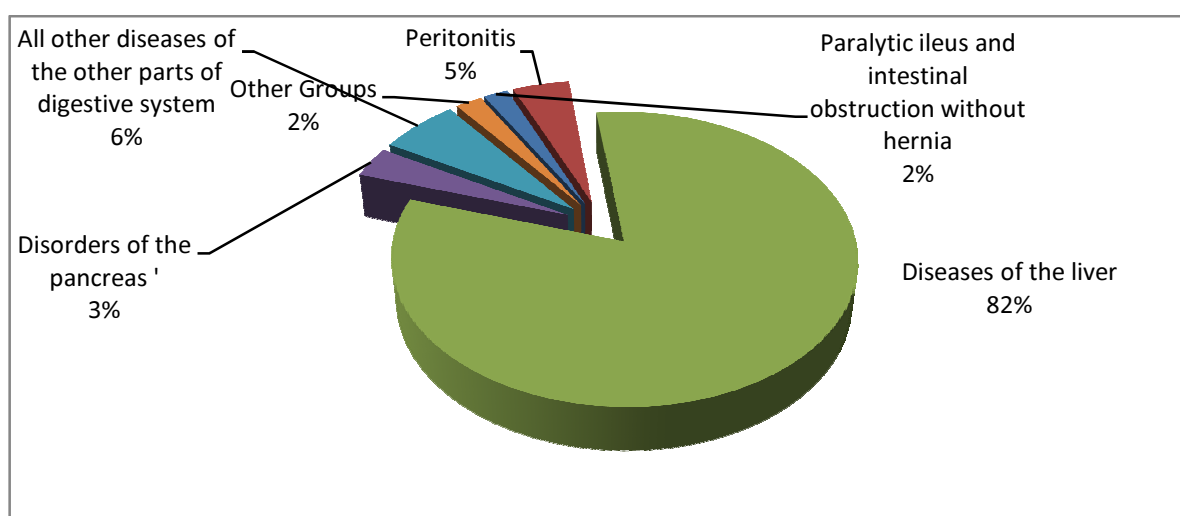
3.5 Diseases of the Digestive System (XI): (K00-K92)

The major group comprising 'Diseases of Digestive system' is the fifth leading cause group, responsible for 8.14% of the total Medically Certified Deaths with 10.29% of male and 4.51% of female deaths. The percentage of male digestive disorder deaths to total Medically Certified Deaths is more than four times to that of corresponding female figures. 79.41% of deaths under this category were males. The major cause of death in this group is 'Diseases of the Liver'. The distribution of major causes of deaths under this group is given in the Table 3.23 and is highlighted in Chart 3.21

Table 3.23: Distribution of major causes of deaths due to 'Diseases of Digestive System'

Sl No	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	Diseases of the liver	1772	85.40	364	67.66	2136	81.75
2	Peritonitis	79	3.81	38	7.06	117	4.48
3	Disorders of the pancreas '	70	3.37	19	3.53	89	3.41
4	Paralytic ileus and intestinal obstruction without hernia	25	1.20	26	4.83	51	1.95
5	All other diseases of the other parts of digestive system	100	4.82	65	12.08	165	6.31
6	Other Groups	29	1.40	26	4.83	55	2.10
	Total Medically Certified Deaths due to Diseases of Digestive System	2075	100.00	538	100.00	2613	100.00
	Deaths due to Diseases of Digestive System as percentage to total medically certified deaths		10.29		4.51		8.14

Chart 3.21: Distribution of major causes of deaths due to 'Diseases of Digestive System'

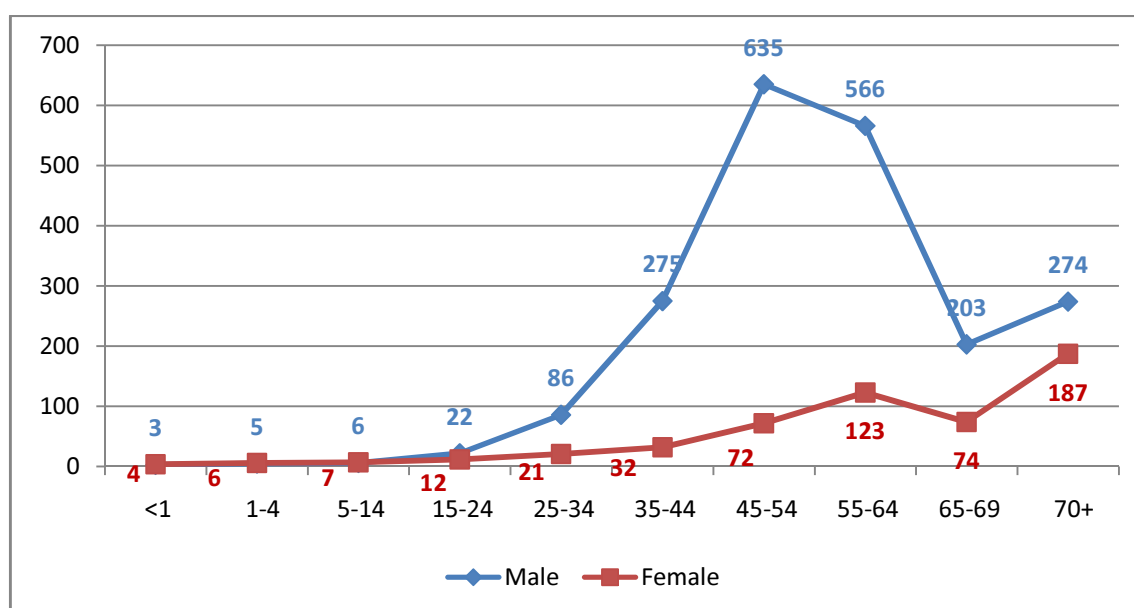


Comparatively less number of deaths occurred below the age 25 for male and female. Starting from the age of 25, it shows very high increase in death rate for males with respect to age. As revealed from the Table 3.24, the highest share of deaths is reported for the age group '45-54'. The age composition of deaths due to 'Diseases of Digestive system' is presented in Table 3.24 and is highlighted in Chart 3.22.

Table 3.24: Age & Sex wise distribution of deaths due to 'Diseases of Digestive System' under MCCD-2013

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	3	0.14	4	0.74	7	0.27
2	1-4	5	0.24	6	1.12	11	0.42
3	5-14	6	0.29	7	1.30	13	0.50
4	15-24	22	1.06	12	2.23	34	1.30
5	25-34	86	4.14	21	3.90	107	4.09
6	35-44	275	13.25	32	5.95	307	11.75
7	45-54	635	30.60	72	13.38	707	27.06
8	55-64	566	27.28	123	22.86	689	26.37
9	65-69	203	9.78	74	13.75	277	10.60
10	70+	274	13.20	187	34.76	461	17.64
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	2075	100.00	538	100.00	2613	100.00

Chart 3.22: Age & Sex wise distribution of deaths due to 'Diseases of Digestive System' under MCCD-2013



3.5.1 Diseases of the liver

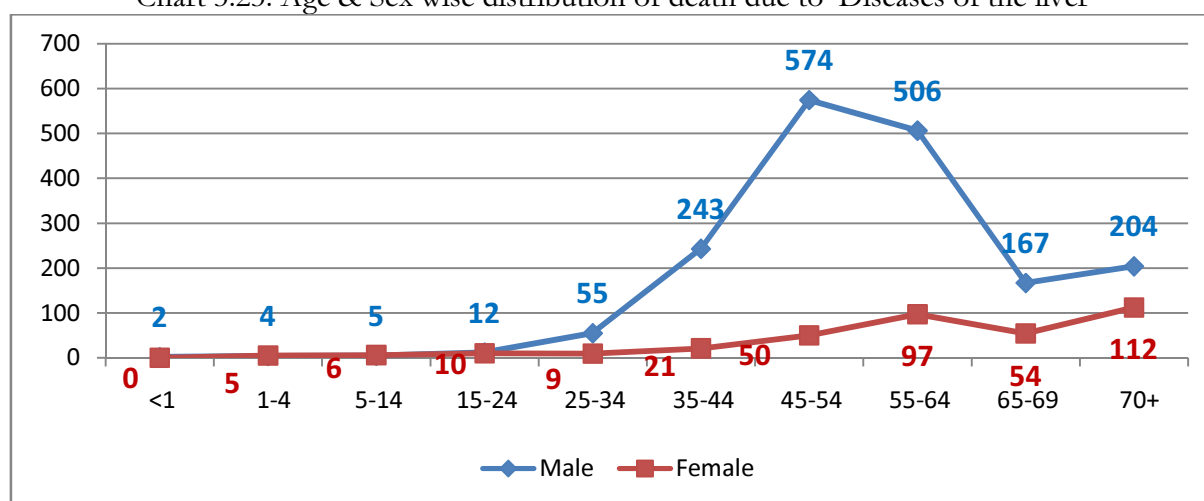
81.75% of cause under 'Diseases of Digestive System' is 'Diseases of the liver'. Out of 2136 death reported due to 'Diseases of the liver', 1772 were males (82.96%). This disease is the main cause of male deaths. The male deaths due to 'Diseases of the liver', is 5.52% of the total Medically Certified Deaths, which is 8.78% of total Medically Certified Deaths of males.

The age wise distribution of death due to disease of liver is shown in Table 3.25. Up to the age group of 0-24, the number of death of male and female are almost same, and then shows huge difference in deaths from the '25 and above' age. Maximum number of deaths was reported in the age group '45-54', under Medically Certified Deaths. This is highlighted in Chart 3.23.

Table 3.25: Age & Sex wise distribution of death due to 'Diseases of the liver'

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	2	0.11	0	0.00	2	0.09
2	1-4	4	0.23	5	1.37	9	0.42
3	5-14	5	0.28	6	1.65	11	0.51
4	15-24	12	0.68	10	2.75	22	1.03
5	25-34	55	3.10	9	2.47	64	3.00
6	35-44	243	13.71	21	5.77	264	12.36
7	45-54	574	32.39	50	13.74	624	29.21
8	55-64	506	28.56	97	26.65	603	28.23
9	65-69	167	9.42	54	14.84	221	10.35
10	70+	204	11.51	112	30.77	316	14.79
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	1772	100	364	100	2136	100

Chart 3.23: Age & Sex wise distribution of death due to 'Diseases of the liver'



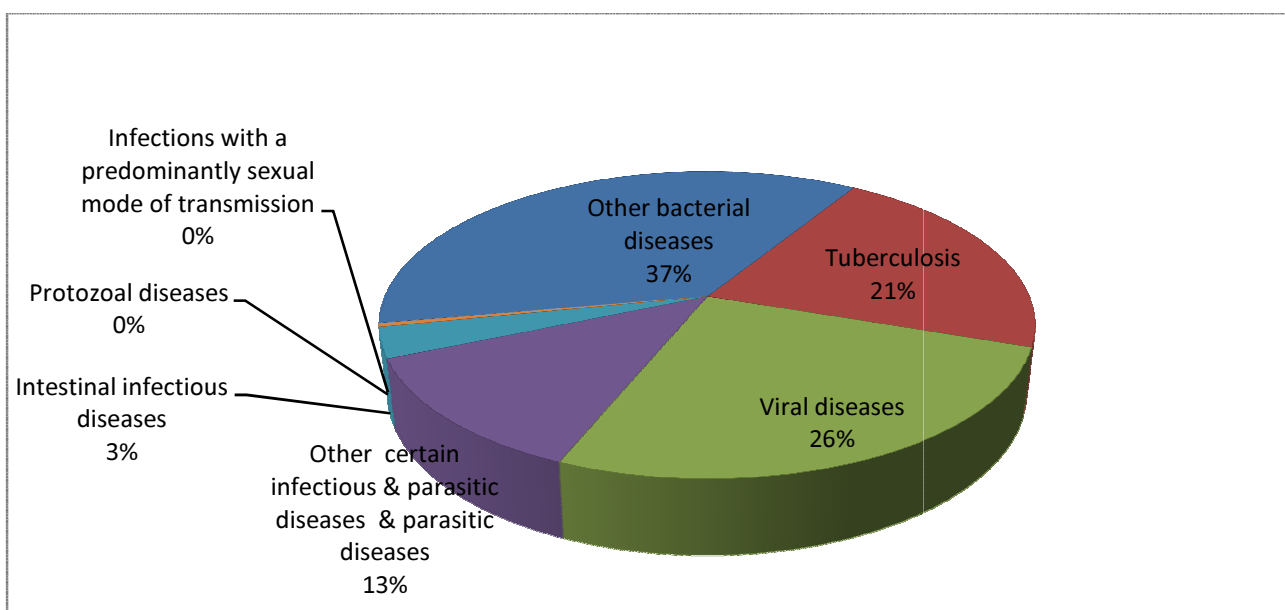
3.6 Certain Infectious and Parasitic Diseases (I): (A00-B99)

It is the sixth leading cause group of disease accounting for 5.93% of total Medically Certified Deaths, which constitute 6.42% of male and 5.11% of female medically certified deaths of their respective totals. Tuberculosis, Diarrhoea, Septicaemia, Human Immunodeficiency Virus [HIV] disease and Hepatitis are the major causes under this group. Around 28.22% of death under this group is due to Septicaemia and 21.39% is due to Tuberculosis. Out of 494 deaths occurred under the group 'Viral Diseases', 116 deaths is due to 'Human immunodeficiency virus [HIV] disease'. The distribution of major components under this cause group is shown in the Table 3.26 and is depicted in Chart 3.24.

Table 3.26: Distribution of major causes of deaths among 'Certain Infectious and Parasitic Diseases' under MCCD –2013

Sl No	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	Other bacterial diseases (A20-A49)	435	33.62	262	43.02	697	36.63
2	Viral diseases (A70-A74 & A80-B34)	323	24.96	171	28.08	494	25.96
3	Tuberculosis (A15-A19)	317	24.50	90	14.78	407	21.39
4	Intestinal infectious diseases (A00-A09)	32	2.47	29	4.76	61	3.21
5	Protozoal diseases (B50-B64)	4	0.31	3	0.49	7	0.37
6	Infections with a predominantly sexual mode of transmission (A50-A64)	1	0.08	0	0.00	1	0.05
7	Other certain infectious & parasitic diseases and late effects of infectious & parasitic diseases (A65-A69 & A75-A79, B35-B49, B65-B99)	182	14.06	54	8.87	236	12.40
	Total Medically Certified Deaths due to Certain Infectious and Parasitic Diseases	1294	100	609	100	1903	100
	Deaths due to Certain Infectious and Parasitic Diseases as percentage to total medically certified deaths	1294	6.42	609	5.11	1903	5.93

Chart 3.24: Percentage distribution of medically certified deaths due to 'Certain Infectious & Parasitic Diseases' MCCD – 2013

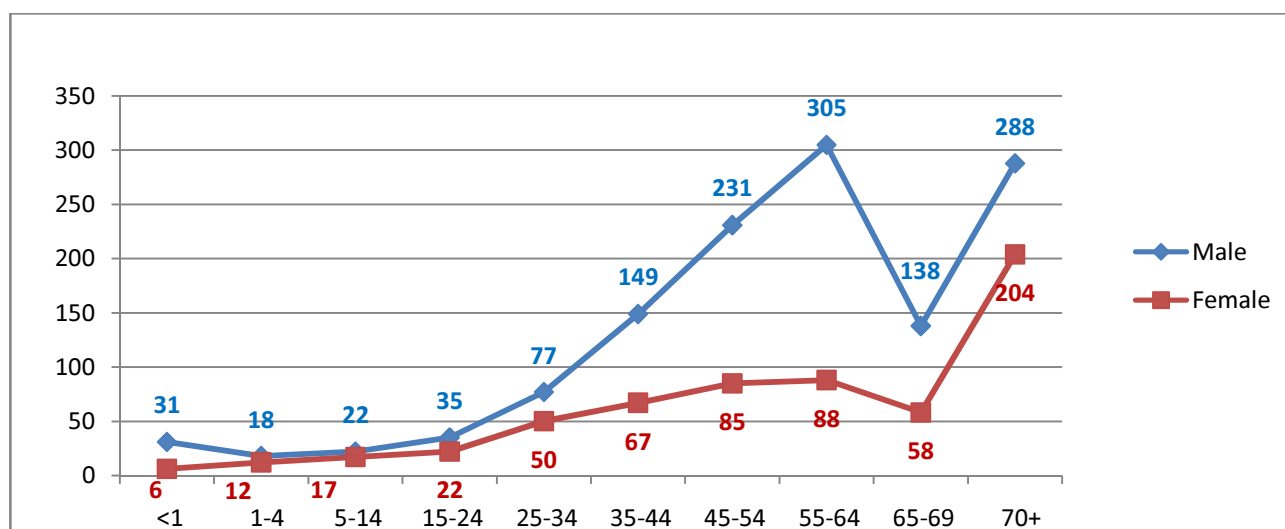


The age and sex wise distribution of medically certified deaths due to 'Certain Infectious and Parasitic Diseases' has been given below in Table 3.27 and is presented in Chart 3.25.

Table 3.27: Age & Sex wise distribution of deaths due to 'Certain Infectious and Parasitic Diseases'

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	31	2.40	6	0.99	37	1.94
2	1-4	18	1.39	12	1.97	30	1.58
3	5-14	22	1.70	17	2.79	39	2.05
4	15-24	35	2.70	22	3.61	57	3.00
5	25-34	77	5.95	50	8.21	127	6.67
6	35-44	149	11.51	67	11.00	216	11.35
7	45-54	231	17.85	85	13.96	316	16.61
8	55-64	305	23.57	88	14.45	393	20.65
9	65-69	138	10.66	58	9.52	196	10.30
10	70+	288	22.26	204	33.50	492	25.85
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	1294	100.00	609	100.00	1903	100.00

Chart 3.25: Age & Sex wise distribution of deaths due to 'Certain Infectious & Parasitic Diseases'



3.6.1 Septicaemia.

Among 'Certain Infectious and Parasitic Diseases', the group 'Other bacterial diseases' is the highest reported medically certified cause of mortality, constituting around 36.63% in which, 77.04% is due to 'Septicaemia'. 1.67% of total Medically Certified Death is due to 'Septicaemia'. Out of 537 deaths reported under 'Septicaemia', 313 were male (58.29%). Number of deaths was more for infants and for '45 years and above'. Maximum deaths were reported in the age group '55-64'. This is given below in Table 3.28.

Table 3.28: Age & Sex wise distribution of death due to 'Septicaemia'

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	14	4.47	6	2.68	20	3.72
2	1-4	4	1.28	3	1.34	7	1.30
3	5-14	2	0.64	2	0.89	4	0.74
4	15-24	6	1.92	4	1.79	10	1.86
5	25-34	12	3.83	7	3.13	19	3.54
6	35-44	19	6.07	16	7.14	35	6.52
7	45-54	43	13.74	17	7.59	60	11.17
8	55-64	58	18.53	26	11.61	84	15.64
9	65-69	36	11.50	19	8.48	55	10.24
10	70+	119	38.02	124	55.36	243	45.25
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	313	100	224	100	537	100

3.6.2 Tuberculosis

Among 'Certain Infectious and Parasitic Diseases', the group 'Tuberculosis' is the second highest reported medically certified cause of mortality, constituting around 21.39% in which, 79.85% is due to 'Respiratory Tuberculosis'. 'Respiratory Tuberculosis' deaths in males are 80.62% as against 19.38% of females.

3.6.3 Human Immunodeficiency Virus [HIV]

25.96% of death under the group 'Certain Infectious and Parasitic Diseases' is due to 'Viral diseases', in which Human Immunodeficiency Virus [HIV] disease causes 23.48% of deaths. Out of 116 deaths under HIV, 87 were males (75%). More deaths were reported in the age group '25-54', which is 84.48% of death due to HIV. 37.93% of death is reported in the age group 35-44. Age wise distribution of death due to 'Human Immunodeficiency Virus [HIV]' has been given below in Table 3.29.

Table 3.29: Age & Sex wise distribution of death due to 'Human Immunodeficiency Virus [HIV]'

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	0	0.00	0	0.00	0	0.00
2	1-4	1	1.15	0	0.00	1	0.86
3	5-14	1	1.15	1	3.45	2	1.72
4	15-24	1	1.15	0	0.00	1	0.86
5	25-34	13	14.94	6	20.69	19	16.38
6	35-44	34	39.08	10	34.48	44	37.93
7	45-54	26	29.89	9	31.03	35	30.17
8	55-64	9	10.34	1	3.45	10	8.62
9	65-69	2	2.30	1	3.45	3	2.59
10	70+	0	0.00	1	3.45	1	0.86
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	87	100	29	100	116	100

3.6.4 Hepatitis B

In the group 'Viral diseases', another leading cause is 'Acute Hepatitis B' (17.41%), next is 'Other viral hepatitis' (14.17%) and 'Other viral encephalitis' (7.29%). Out of the Viral Hepatitis deaths, maximum death is due to Hepatitis B. The age wise distribution of deaths due to Hepatitis B is given below. 67.44% of deaths were males. 80.23% of deaths reported in the age group '35-69' and maximum number of deaths was in the age group '45-54' (26.74%). This is shown in Table 3.30.

Table 3.30: Age & Sex wise distribution of death due to 'Hepatitis B'

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	0	0.00	0	0.00	0	0.00
2	1-4	0	0.00	0	0.00	0	0.00
3	5-14	0	0.00	0	0.00	0	0.00
4	15-24	3	5.17	1	3.57	4	4.65
5	25-34	3	5.17	2	7.14	5	5.81
6	35-44	11	18.97	7	25.00	18	20.93
7	45-54	12	20.69	11	39.29	23	26.74
8	55-64	17	29.31	2	7.14	19	22.09
9	65-69	5	8.62	4	14.29	9	10.47
10	70+	7	12.07	1	3.57	8	9.30
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	58	100	28	100	86	100

3.7 Injury Poisoning and Certain other Consequences of External Causes (XIX): (S00-T98)

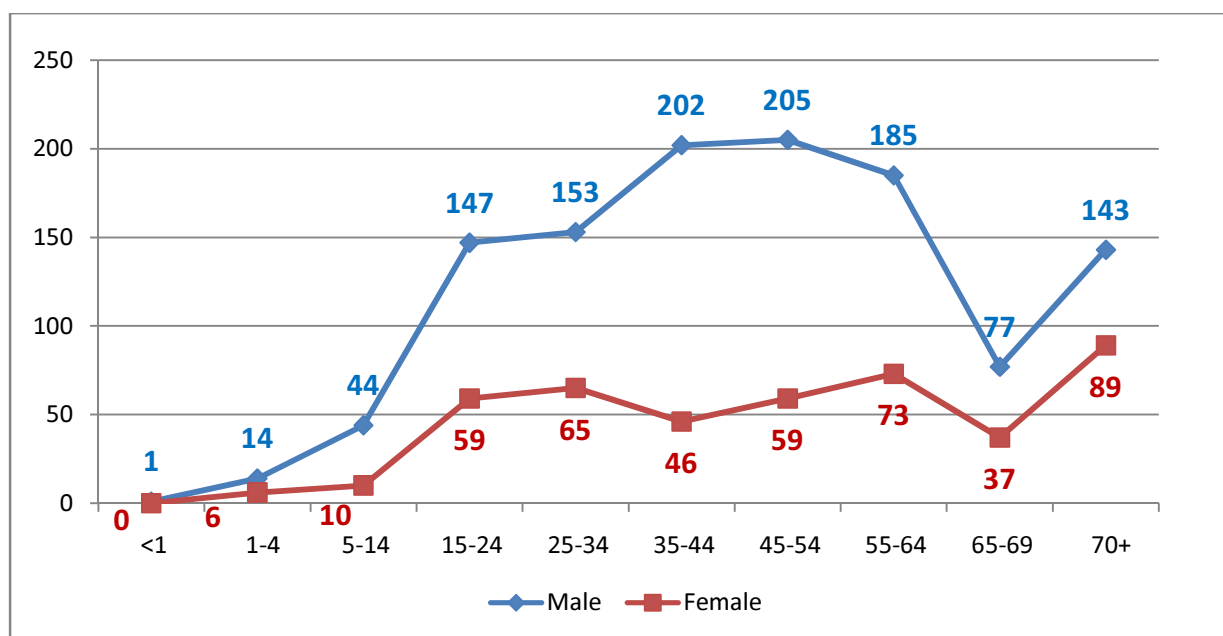
The external causes like Road Accidents, Suicides, Falls, Burns and Corrosions, Snake Bite, and Violence are the main reason for the death under 'Injury Poisoning and Certain other Consequences of External Causes'. It is the seventh leading cause group responsible for 5.03% of total Medically Certified Deaths. This has caused 5.81% of male and 3.72% of female deaths. Three fourth of deaths under this category are males.

Under this cause group 'Fractures, Other injuries of specified, unspecified and multiple body regions, Intracranial and internal injuries, including nerves' alone have contributed to 58.27% of the total deaths, this is followed by 'Burns and Corrosions' (14.92%) and 'Poisonings by drugs and biological substances and toxic effects of substances chiefly non-medicinal as to source' with 161 male and 62 female deaths (13.81%). Death due to Burns and corrosions among females is 74.27% as compared to 25.73% among males, under this major group. The distribution of chief constituents of the major cause group is given in the Table 3.31. Age distribution of deaths due to 'Injury, Poisoning and Certain Other Consequences of External Causes' and is depicted in Chart 3.26.

Table 3.31: Distribution of major causes of deaths among 'Injury, Poisoning and Certain Other Consequences of External Causes'

Sl No	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	Fractures, Other injuries of specified, unspecified and multiple body regions , Intracranial and internal injuries, including nerves	788	67.29	153	34.46	941	58.27
2	Burns and Corrosions	62	5.29	179	40.32	241	14.92
3	Poisonings by drugs & biological substances; and Toxic effects of substances chiefly non-medicinal as to source	161	13.75	62	13.96	223	13.81
4	Late effects of injuries, of poisoning and of other consequences of external causes	107	9.14	10	2.25	117	7.24
5	Other and unspecified effects of external causes and certain early complications of trauma	33	2.82	19	4.28	52	3.22
6	Complications of Surgical and Medical care, not elsewhere classified	13	1.11	13	2.93	26	1.61
7	Other Groups	7	0.598	8	1.80	15	0.93
	Total Medically Certified Deaths due to INJURY, POISONING AND CERTAIN OTHER CONSEQUENCES OF EXTERNAL CAUSES	1171	100	444	100	1615	100
	Deaths due to 'Injury, poisoning and certain other consequences of external causes ' as percentage to total medically certified deaths		5.805		3.72		5.032

Chart 3.26: Age & Sex wise distribution of deaths due to 'Injury, Poisoning and Certain Other Consequences of External Causes'



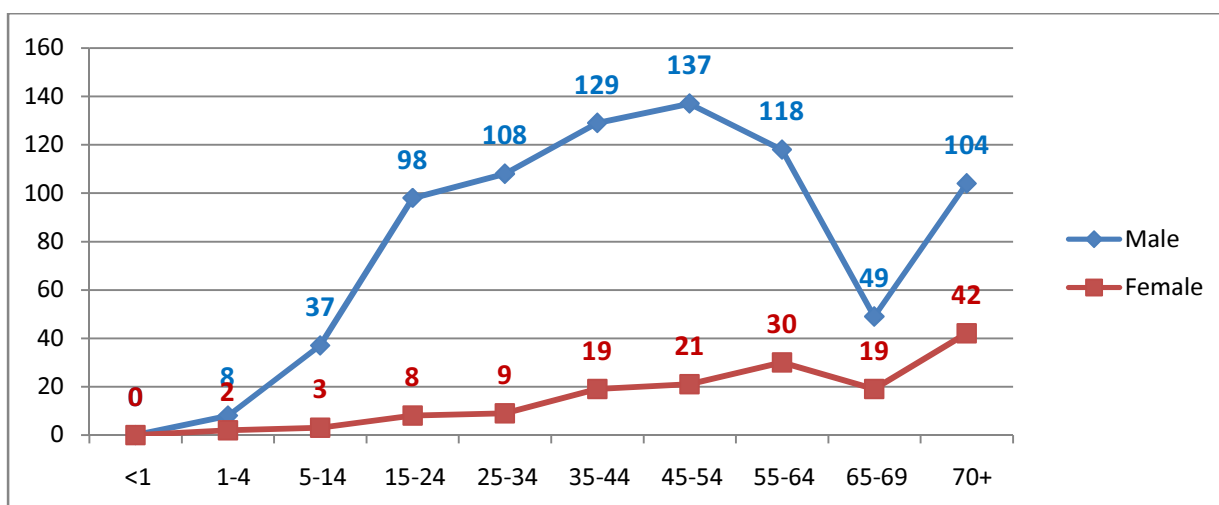
3.7.1 Fractures, other injuries of specified, unspecified and multiple body regions, Intracranial and internal injuries, including nerves

The external causes like Road Accidents, Suicides and Falls, are the main reason for the death under the cause 'Fractures, other injuries of specified, unspecified and multiple body regions, Intracranial and internal injuries, including nerves'. 83.74% of the deaths under the external cause are males. That is four out of five deaths are males. Due to this external cause, one male death out of ten are happening under the age group '15-24', '25-34', '35-44', '55-64', and two male deaths out of ten are happening under the age group '45-54'. The age wise distribution of deaths under this cause are given in Table 3.32 and depicted in Chart 3.27.

Table 3.32: Age & Sex wise distribution of deaths due to 'Fractures, other injuries of specified, unspecified and multiple body regions, Intracranial and internal injuries, including nerves'

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	0	0.00	0	0.00	0	0.00
2	1-4	8	1.02	2	1.31	10	1.06
3	5-14	37	4.70	3	1.96	40	4.25
4	15-24	98	12.44	8	5.23	106	11.26
5	25-34	108	13.71	9	5.88	117	12.43
6	35-44	129	16.37	19	12.42	148	15.73
7	45-54	137	17.39	21	13.73	158	16.79
8	55-64	118	14.97	30	19.61	148	15.73
9	65-69	49	6.22	19	12.42	68	7.23
10	70+	104	13.20	42	27.45	146	15.52
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	788	100	153	100	941	100

Chart 3.27: Age & Sex wise distribution of deaths due to 'Fractures, Other injuries of specified, unspecified and multiple body regions, Intracranial and internal injuries, including nerves'



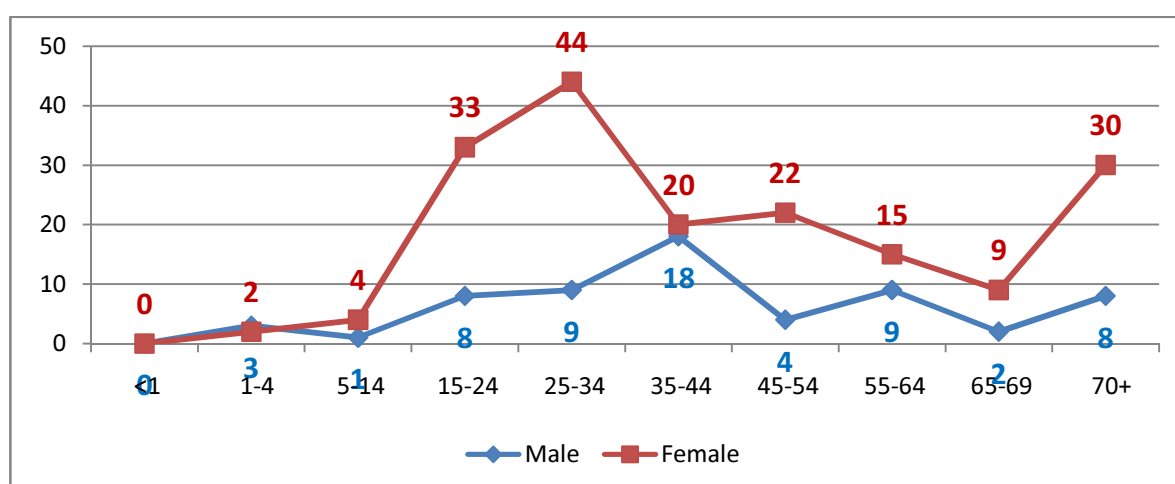
3.7.2 Burns and Corrosions

The external causes like Suicides and Accidents are the main reason for the death under 'Burns and Corrosions'. Under the cause, 74.27% were female deaths. 65.56% of the female deaths due this cause are happening during the age group '15-54'. Maximum female deaths were reported in the age group '25-34', (21.99%).

Table 3.33: Age & Sex wise distribution of deaths due to 'Burns and Corrosions'

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	0	0.00	0	0.00	0	0.00
2	1-4	3	4.84	2	1.12	5	2.07
3	5-14	1	1.61	4	2.23	5	2.07
4	15-24	8	12.90	33	18.44	41	17.01
5	25-34	9	14.52	44	24.58	53	21.99
6	35-44	18	29.03	20	11.17	38	15.77
7	45-54	4	6.45	22	12.29	26	10.79
8	55-64	9	14.52	15	8.38	24	9.96
9	65-69	2	3.23	9	5.03	11	4.56
10	70+	8	12.90	30	16.76	38	15.77
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	62	100	179	100	241	100

Chart 3.28: Age & Sex wise distribution of deaths due to 'Burns and Corrosions'



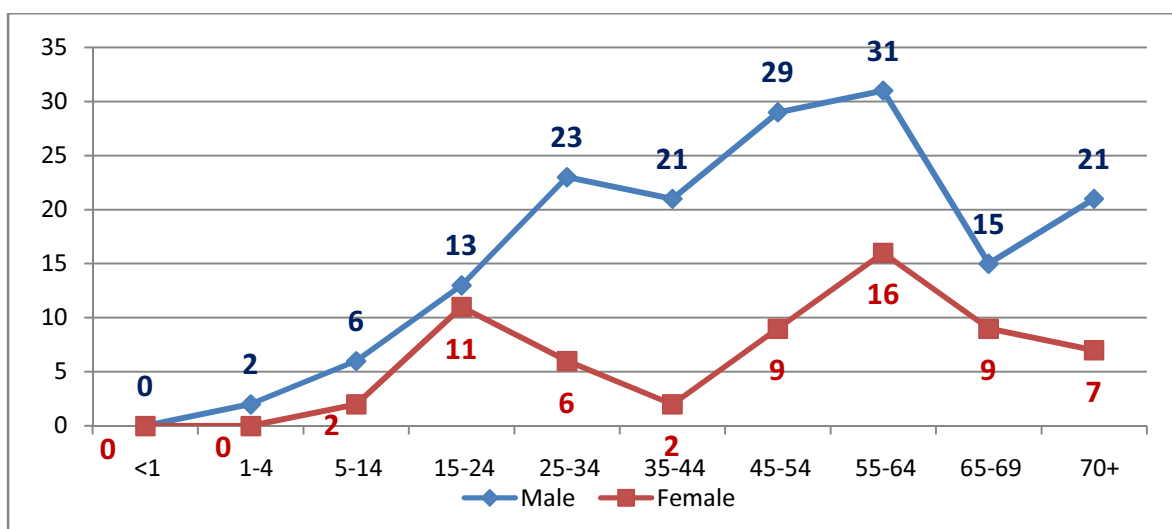
3.7.3 Poisonings by drugs & biological substances; and Toxic effects of substances chiefly non-medicinal as to source

The external causes like Suicides and Accidents are the main reason for the death under this category. Suicides due to poisons, insecticides, acids, medicines and biological substances come under this category. 72.20% of death under this cause were males. For males, high death rate is happening during the age group '15-64' which is 72.67% of the total male death under this cause. Maximum deaths are happening in the age group '55-54'. During the age group '15-64', the percentage of female death is 70.97%.

Table 3.34: Age & Sex wise distribution of deaths due to 'Poisonings by drugs & biological substances; and Toxic effects of substances chiefly non medicinal as to source'

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	0	0.00	0	0.00	0	0.00
2	1-4	2	1.24	0	0.00	2	0.90
3	5-14	6	3.73	2	3.23	8	3.59
4	15-24	13	8.07	11	17.74	24	10.76
5	25-34	23	14.29	6	9.68	29	13.00
6	35-44	21	13.04	2	3.23	23	10.31
7	45-54	29	18.01	9	14.52	38	17.04
8	55-64	31	19.25	16	25.81	47	21.08
9	65-69	15	9.32	9	14.52	24	10.76
10	70+	21	13.04	7	11.29	28	12.56
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	161	100	62	100	223	100

Chart 3.29: Age & Sex wise distribution of deaths due to 'Poisonings by drugs & biological substances; and Toxic effects of substances chiefly nonmedical as to source'



3.7.4 Snake Bite

40 deaths occurred due to snake bite, in which 80% were male deaths.

3.8 Diseases of the Genitourinary System (XIV): (N00-N99)

The major group comprising 'Diseases of the Genitourinary System' is the eighth leading cause group, responsible for 4.23% of the total Medically Certified Deaths with 4.01% of male and 4.60% of female deaths to their respective total Medically Certified Deaths. The percentage of male deaths to total death under this group is 59.62%.

The distribution of major causes of deaths under this group is given in the Table 3.35 and is highlighted in Chart 3.30. The leading cause under this category is due to 'Renal failure' (31.54%). Out of 428 deaths due to 'Renal failure', 247 were males which is 57.71%.

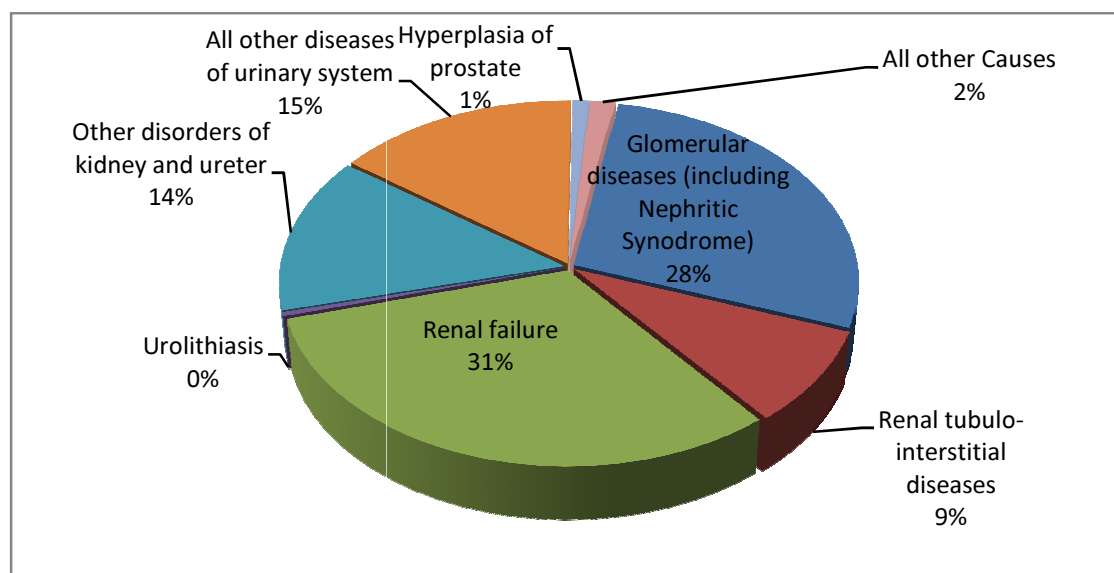
The second leading cause under this cause group 27.78% of death is due to 'Glomerular diseases (including Nephritic Syndrome)'. Glomerular disease reduces the ability of the kidneys to maintain a balance of certain substances in bloodstream. In people with glomerular disease, red blood cells and protein may be excreted into the urine, while toxins may be retained. Out of 377 deaths reported due to 'Glomerular diseases', 248 were males (65.78%).

'All other diseases of urinary system' is the next leading cause representing 15.03% of the deaths under this group.

Table 3.35: Distribution of major causes of deaths among 'Diseases of the Genitourinary System'

Sl No	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	Renal failure	247	30.53	181	33.03	428	31.54
2	Glomerular diseases (including Nephritic Syndrome)	248	30.66	129	23.54	377	27.78
3	All other diseases of urinary system	92	11.37	112	20.44	204	15.03
4	Other disorders of kidney and ureter	111	13.72	80	14.60	191	14.08
5	Renal tubule-interstitial diseases	75	9.27	42	7.66	117	8.62
6	Hyperplasia of prostate	14	1.73	0	0.00	14	1.03
7	Urolithiasis	2	0.25	3	0.55	5	0.37
8	All other Causes	20	2.47	1	0.18	21	1.55
	Total Medically Certified Deaths due to DISEASES OF THE GENITOURINARY SYSTEM	809	100	548	100	1357	100
	Deaths due to DISEASES OF THE GENITOURINARY SYSTEM as percentage to total medically certified deaths		4.01		4.60		4.23

Chart 3.30: Distribution of major causes of deaths among 'Diseases of the Genitourinary System'

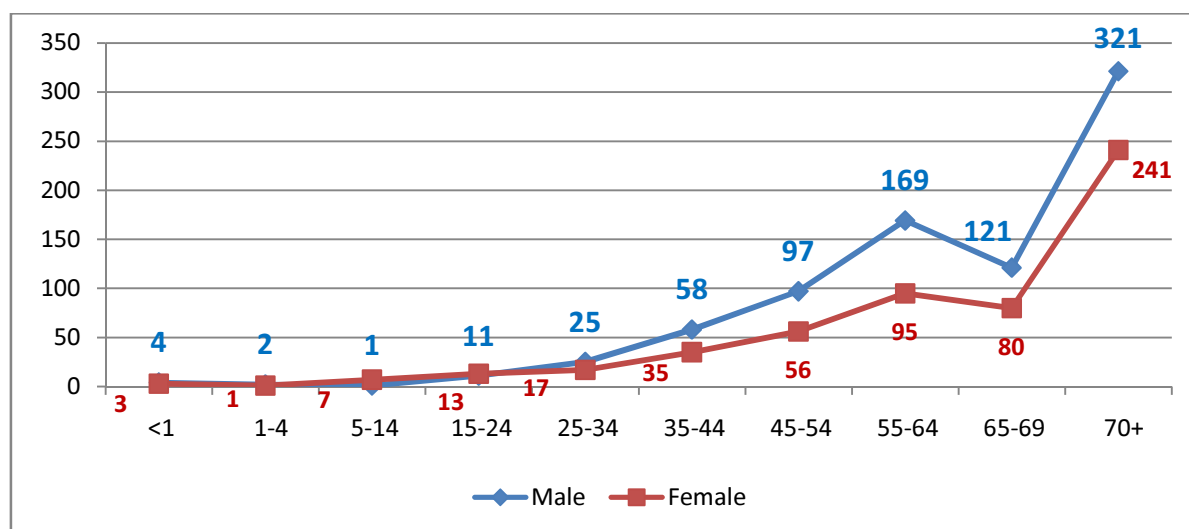


The age wise distribution of death among 'Diseases of the Genitourinary System' is shown below. The death rate increases with age and is significantly high 'above 45'. Above the age 45 the death is reported is 86.96%.

Table 3.36: Age & Sex wise distribution of major causes of deaths among 'Diseases of the Genitourinary System'

Sl No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	4	0.49	3	0.55	7	0.52
2	1-4	2	0.25	1	0.18	3	0.22
3	5-14	1	0.12	7	1.28	8	0.59
4	15-24	11	1.36	13	2.37	24	1.77
5	25-34	25	3.09	17	3.10	42	3.10
6	35-44	58	7.17	35	6.39	93	6.85
7	45-54	97	11.99	56	10.22	153	11.27
8	55-64	169	20.89	95	17.34	264	19.45
9	65-69	121	14.96	80	14.60	201	14.81
10	70+	321	39.68	241	43.98	562	41.41
11	N.S.	0	0.00	0	0.00	0	0.00
	TOTAL	809	100.00	548	100.00	1357	100.00

Chart 3.31: Age & Sex wise distribution of major causes of deaths among 'Diseases of the Genitourinary System'



3.9 Certain Conditions Originating in the Perinatal Period (XVI): (P00-P96)

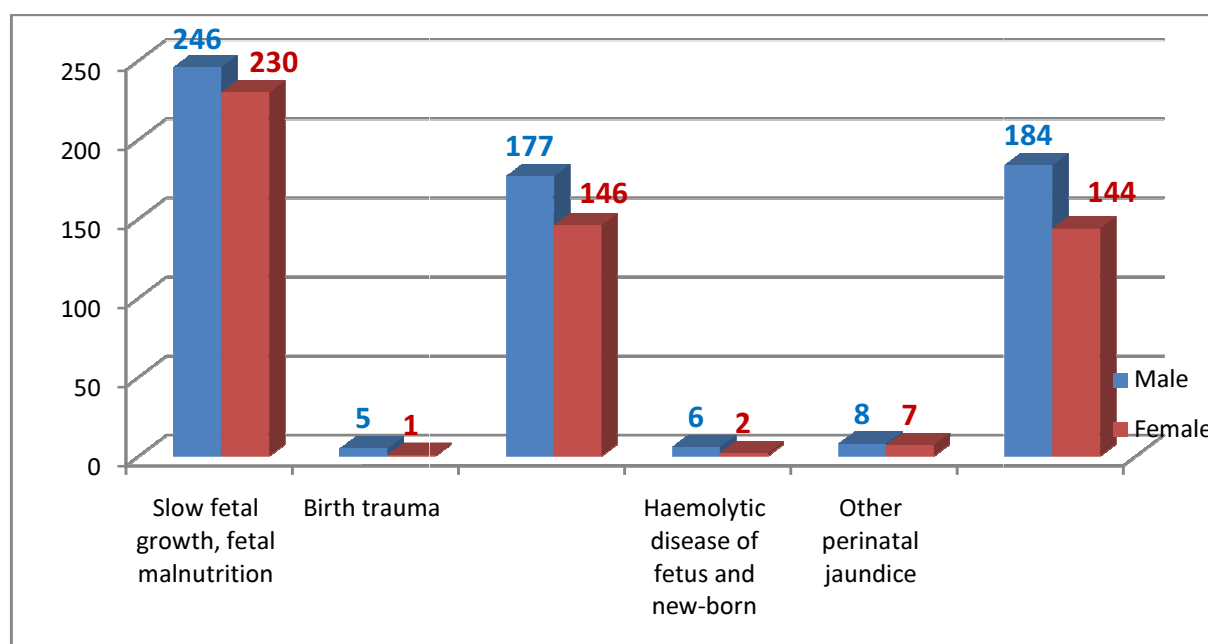
The major group of 'Certain Conditions Originating in the Perinatal Period' is the leading cause of Infant deaths, responsible for 3.60% of the total Medically Certified Deaths. This has contributed to 3.10% of male and 4.44% of female deaths of the total Medically Certified Deaths. 'Slow Foetal Growth, Foetal Malnutrition', 'Hypoxia, birth

asphyxia and other respiratory conditions' are the main cause of death occurred in the perinatal period (below one year). 54.15% of deaths due to this cause were males.

Table 3.37: Distribution of Major Causes of deaths among 'Certain Conditions Originating in the Perinatal Period'

Sl No	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	Slow foetal growth, foetal malnutrition and immaturity	246	39.30	230	43.40	476	41.18
2	Hypoxia, birth asphyxia and other respiratory conditions	177	28.27	146	27.55	323	27.94
3	Other perinatal jaundice	8	1.28	7	1.32	15	1.30
4	Haemolytic disease of foetus and new-born	6	0.96	2	0.38	8	0.69
5	Birth trauma	5	0.80	1	0.19	6	0.52
6	All other conditions originating in the perinatal period	184	29.39	144	27.17	328	28.37
	Total Medically Certified Deaths due to CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD	626	100	530	100	1156	100
	Deaths due to CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD as percentage to total medically certified deaths	626	3.10	530	4.44	1156	3.60

Chart 3.32: Distribution of major causes of deaths among 'Certain Conditions Originating in the Perinatal Period'

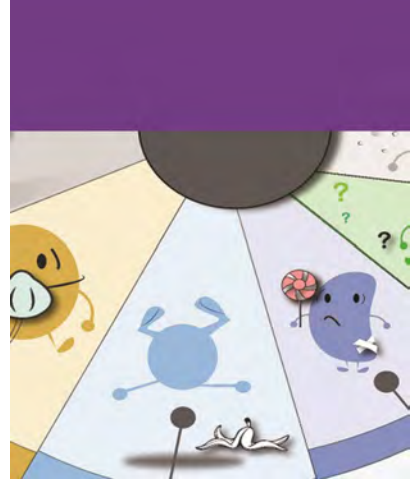


3.10 Distribution of Causes of Deaths under 'Other Groups'

The distribution of cause of death included as 'Other Groups' are given below. Out of the total medically certified death, 2162 deaths (6.74%) are coming in this group in which 1236 were males and 926 were females.

Table 3.38: Distribution of causes of deaths under 'Other Groups'

Sl No	Cause of Death	Sex					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	Congenital malformations, deformations and chromosomal abnormalities	351	1.74	279	2.34	630	1.96
2	Diseases of the nervous system	364	1.80	241	2.02	605	1.88
3	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	220	1.09	115	0.96	335	1.04
4	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	128	0.63	143	1.20	271	0.84
5	Diseases of the skin and subcutaneous tissue (100-198)	78	0.39	54	0.59	132	0.41
6	Diseases of the musculoskeletal system and connective tissue	46	0.23	70	0.59	116	0.36
7	Mental and behavioural disorders	48	0.24	9	0.08	57	0.18
8	Pregnancy, childbirth and the puerperium		0.00	15	0.13	15	0.05
9	Diseases of the ear and mastoid process	0	0	0	0	0	0
10	Diseases of the eye and adnexa	1	0	0	0.00	1	0.00
	Deaths due to 'Other Groups' as percentage to total medically certified deaths	1236	6.13	926	7.77	2162	6.74



Chapter IV

SPECIFIC CAUSE OF MORTALITY IN DIFFERENT AGE GROUPS

- 4.1 Infants
- 4.2 Children aged 1-4 year
- 4.3 Children aged 5-14 years
- 4.4 Persons aged 15-24 years
- 4.5 Persons aged 25-34 years
- 4.6 Persons aged 35-44 years
- 4.7 Persons aged 45-54 years
- 4.8 Persons aged 55-64 years
- 4.9 Persons aged 65-69 years
- 4.10 Old aged Persons (70 years and above)

Specific Cause of Mortality in Different Age Groups

1. Infants:

Out of the total Medically Certified Deaths, around 5.78% has been reported for the Infants (children who could not complete their first birthday). The shares of male and female deaths to the corresponding totals of medically certified deaths are 5.10% and 6.92% respectively. Out of 1854 under one year deaths, 1029 were male (55.50%).

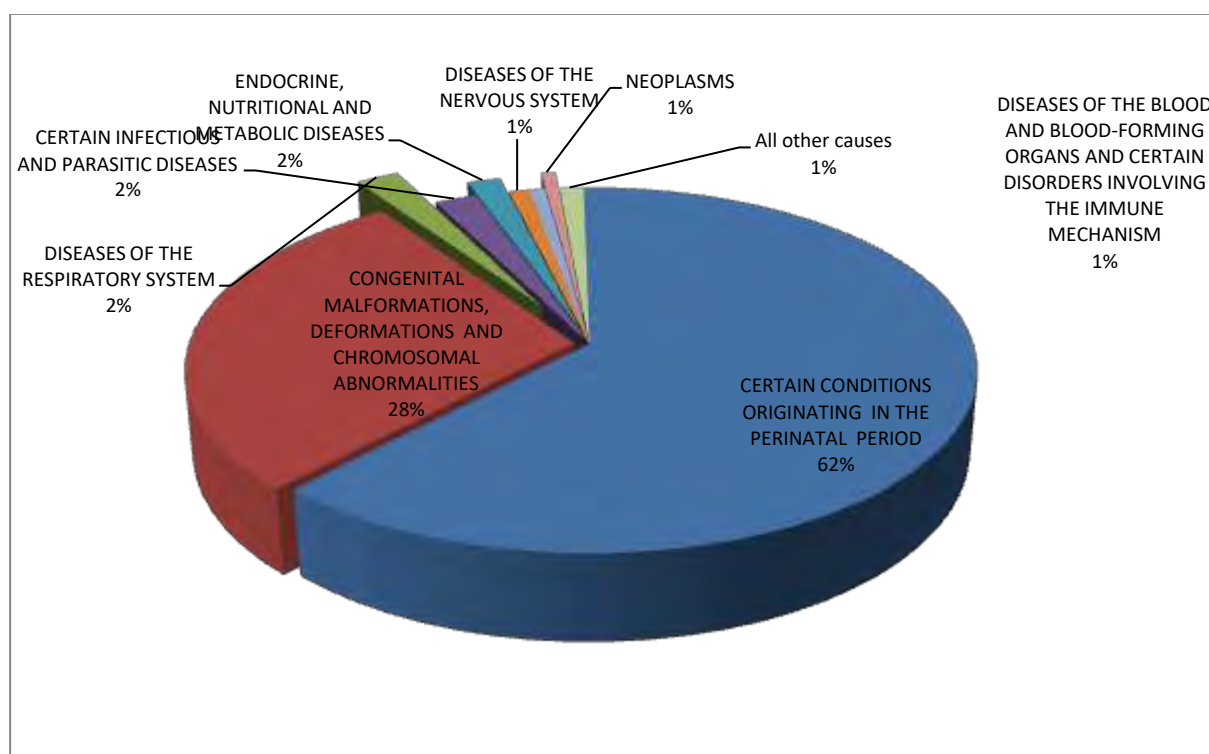
The maximum incidence of death under this age group has been reported to be caused by 'Certain conditions originating in the perinatal period' (62.30%), which includes diseases 'Slow fetal growth, fetal malnutrition and immaturity' (41.21%), 'Hypoxia, birth asphyxia and other respiratory conditions' (27.97%).

This is followed by 'Congenital Malformations, Deformations & Chromosomal Abnormalities' (28.43%) of which 'Congenital Malformations of the Circulatory System' (50.28%) in the major constituent. 'Diseases of the respiratory system' contribute about 2.10% of the total infant deaths of which 89.74% is due to Pneumonia. 'Certain infectious and parasitic diseases' contribute about 2.00% of the total infant deaths of which 54.05% due to Septicaemia. 'Endocrine Nutritional and Metabolic Diseases' contribute about 1.62% , and 'Neoplasms' contribute about 0.76%. The distribution of mortality among infants by major cause groups has been given in Table 4.1 and is highlighted in Chart 4.1

Table 4.1: Distribution of mortality among Infants by major cause group

M.G/CA T./S.C	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
XVI.	Certain conditions originating in the perinatal period	625	60.74	530	64.24	1155	62.30
XVII.	Congenital malformations, deformations and chromosomal abnormalities	299	29.06	228	27.64	527	28.43
X.	Diseases of the respiratory system	24	2.33	15	1.82	39	2.10
I.	Certain infectious and parasitic diseases	31	3.01	6	0.73	37	2.00
IV.	Endocrine, nutritional and metabolic diseases	15	1.46	15	1.82	30	1.62
VI.	Diseases of the nervous system	9	0.87	9	1.09	18	0.97
III.	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (d50-d89)	6	0.58	8	0.97	14	0.76
II.	Neoplasms	9	0.87	4	0.48	13	0.70
	All other causes	11	1.07	10	1.21	21	1.13
	ALL CAUSES (MAJOR GROUP I to XIX)	1029	100	825	100	1854	100
	Deaths in the age group <1 year as percentage to total Medically certified Deaths	1029	5.10	825	6.92	1854	5.78

Chart 4.1: Percentage distribution of mortality among infants by major cause group



2. Children aged 1-4 year:

Of the total Medically Certified Deaths, 0.64% has been reported from this age-group. It accounts for 0.55% of males and 0.79% of female deaths in their respective total medically certified deaths. Out of 205 deaths in the age group '1-4', 111 were males (54.15 %).

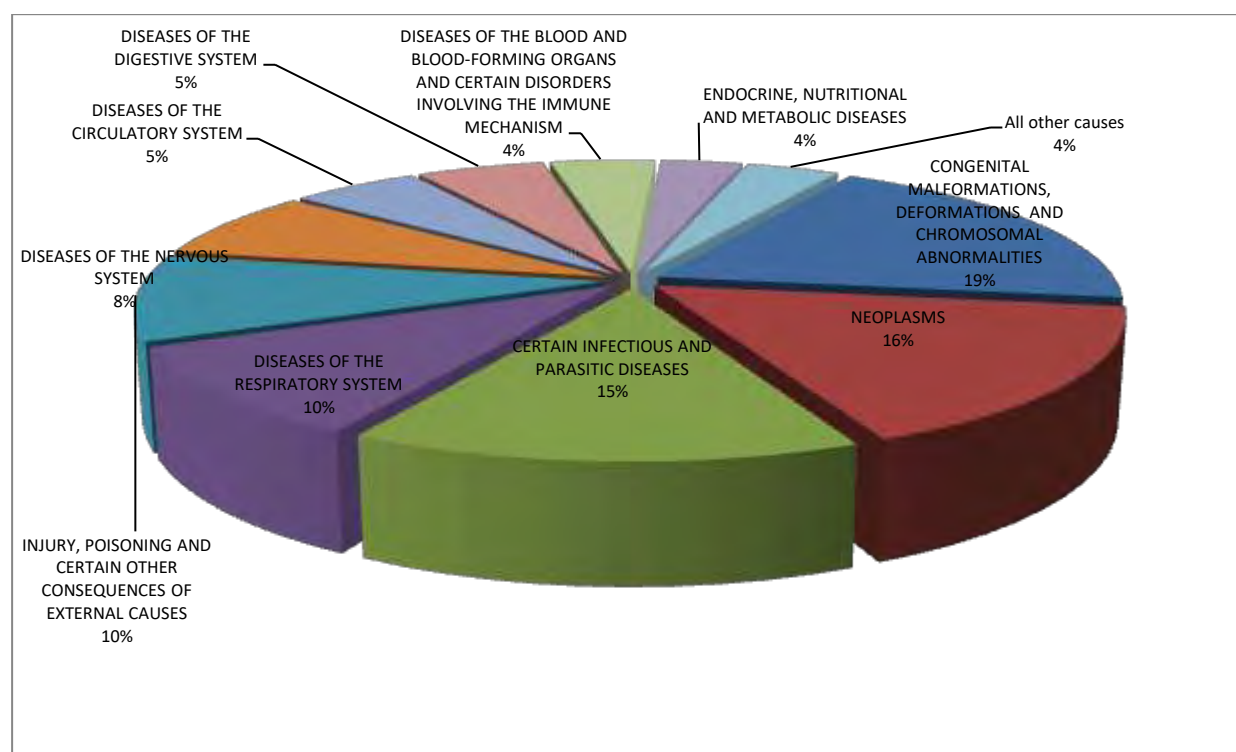
'Congenital malformations, deformations and chromosomal abnormalities' is responsible for 19.02% of deaths in this age group. The second highest cause is 'Neoplasm' representing 16.10% under this age group of which 36.36% is due to 'Leukaemia'. 'Certain infectious and parasitic diseases' cause 14.63% of death under this age group of which 26.67% is due to 'Dengue fever'. 'Diseases of the respiratory system' rank fourth, constituting 10.24% of total medically certified deaths in the age group followed by 'Injury, poisoning and certain other consequences of external causes'(9.76%) and 'Diseases of the nervous system'(7.80%).

The distribution of mortality in the age group '1-4' by major cause group has been given in Table 4.2 and Chart 4.2.

Table 4.2: Distribution of mortality among children in the age group '1-4' by major cause group.

M.G/C AT./S. C	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
XVII.	Congenital malformations, deformations and chromosomal abnormalities	20	18.02	19	20.213	39	19.02
II.	Neoplasms	19	17.12	14	14.89	33	16.10
I.	Certain infectious and parasitic diseases	18	16.22	12	12.77	30	14.63
X.	Diseases of the respiratory system	8	7.21	13	13.83	21	10.24
XIX.	Injury, poisoning and certain other consequences of external causes	14	12.61	6	6.38	20	9.76
VI.	Diseases of the nervous system	8	7.21	8	8.51	16	7.80
IX.	Diseases of the circulatory system	7	6.31	4	4.26	11	5.37
XI.	Diseases of the digestive system	5	4.50	6	6.38	11	5.37
III.	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	3	2.70	6	6.38	9	4.39
IV.	Endocrine, nutritional and metabolic diseases	3	2.70	4	4.26	7	3.41
	All other causes	6	5.41	2	2.13	8	3.90
	ALL CAUSES (MAJOR GROUP I to XIX)	111	100	94	100	205	100
	Deaths in the age group 1-4 year as percentage to total Medically certified Deaths-		0.55		0.79		0.64

Chart 4.2: Percentage distribution of mortality among children in the age group '1-4' by major cause group



3. Children aged 5-14 years:-

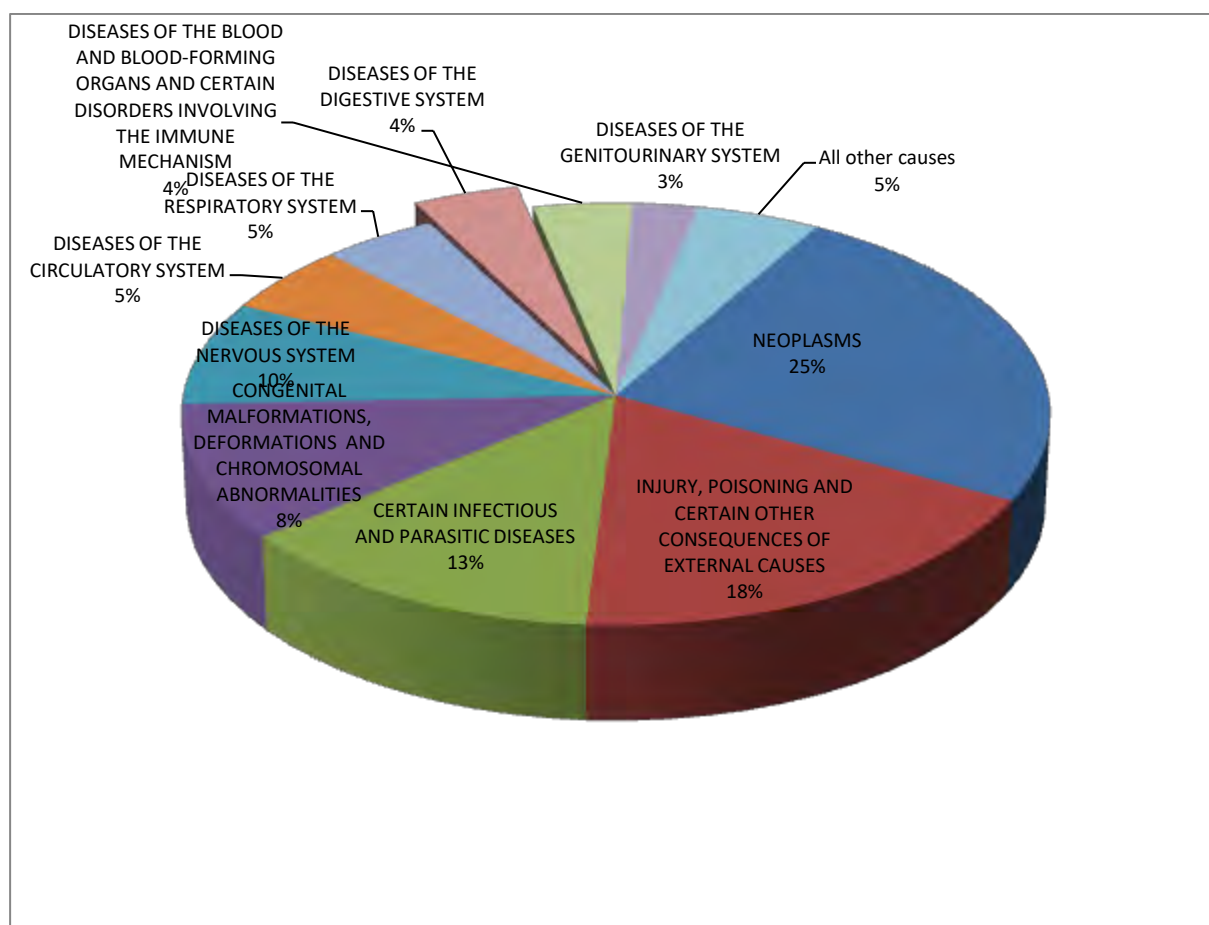
The share of this age group in the total medically certified deaths is 0.93%. It accounts for 0.84% of males and 1.09% of female deaths in their respective total medically certified deaths. Out of 300 deaths in the age group '5-14', 170 were males (56.67%).

Of the total reported deaths under this age group, the share of 'Neoplasms' is 24.67%, is the major cause of death, of which 48.65% is due to 'Leukaemia'. Followed by 'Injury, poisoning and certain other consequences of external causes' (18.00%), 'Certain infectious and parasitic diseases' (13.00%), 'Diseases of the nervous system'(10.33%). 'Congenital Malformation, Deformation & Chromosomal Abnormalities' (8.00%), 'Diseases of the circulatory system' (5.33%) and 'Diseases of Respiratory System'(4.67%), 'Diseases of the digestive system' (4.33%), 'Diseases of the blood and blood-forming organs and Certain disorders involving the immune mechanism' (4.00%) and 'Diseases of the genitourinary system'(2.67%) are the other major causes reported in this age group. The distribution of mortality in the age group '5-14', by major cause groups is given in Table 4.3 and Chart 4.3.

Table 4.3: Distribution of mortality among children in the age group '5-14' by major cause groups

M.G/ CAT. /S.C	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
II.	Neoplasms	46	27.06	28	21.538	74	24.67
XIX.	Injury, poisoning and certain other consequences of external causes	44	25.88	10	7.6923	54	18.00
I.	Certain infectious and parasitic diseases	22	12.94	17	13.077	39	13.00
VI.	Diseases of the nervous system	15	8.82	16	12.308	31	10.33
XVII.	Congenital malformations, deformations and chromosomal abnormalities	13	7.65	11	8.4615	24	8.00
IX.	Diseases of the circulatory system	6	3.53	10	7.6923	16	5.33
X.	Diseases of the respiratory system	7	4.12	7	5.3846	14	4.67
XI.	Diseases of the digestive system	6	3.53	7	5.3846	13	4.33
III.	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	8	4.71	4	3.0769	12	4.00
XIV.	Diseases of the genitourinary system	1	0.59	7	5.3846	8	2.67
	All other causes	2	1.18	13	10	15	5.00
	ALL CAUSES (MAJOR GROUP I to XIX)	170	100	130	100	300	100
	Deaths in the age group 5-14 year as percentage to total Medically certified Deaths-		0.84		1.09		0.93

Chart 4.3: Percentage distribution of mortality among children in the age group '5-14' by major cause groups



4. Persons aged 15-24 years:

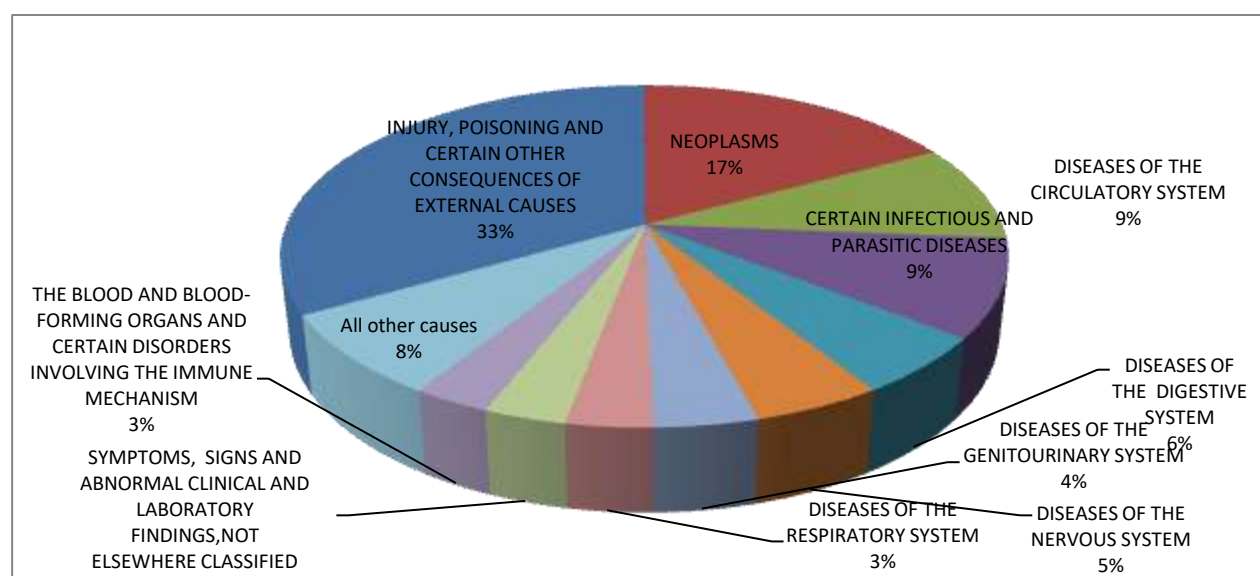
This age-group has contributed to 1.93% of the total medically certified deaths. It accounts for 1.87% of males and 2.03% of female deaths in their respective total medically certified deaths. Out of 619 deaths in the age group '15-24', 377 were males (60.90%).

The category consisting of 'Injury, Poisoning & Certain Other Consequences of External Causes', has caused the maximum 33.28% of total deaths reported under this age-group. Of the total reported deaths under this age group, the share of 'Neoplasms' is 17.12% is the second major cause of death, of which 50.00% is due to 'Leukaemia'. 'Certain Infectious and Parasitic Diseases' and 'Diseases of Circulatory System' are other leading causes of deaths, accounting for 9.21% of deaths followed by 'Diseases of the digestive system' (5.49%) , 'Diseases of the nervous system' (4.85%), 'Diseases of the genitourinary system' (3.88%) and 'Diseases of the respiratory system' (3.23%). The distribution of mortality in the age group '15-24', by major cause groups has been shown in Table 4.4 and Chart 4.4.

Table 4.4: Distribution of mortality among persons in the age group '15-24' by major Cause groups.

M.G/C AT./S. C	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
XIX.	Injury, poisoning and certain other consequences of external causes	147	38.99	59	24.38	206	33.28
II.	Neoplasms	61	16.18	45	18.60	106	17.12
I.	Certain infectious and parasitic diseases	35	9.28	22	9.09	57	9.21
IX.	Diseases of the circulatory system	32	8.49	25	10.33	57	9.21
XI.	Diseases of the digestive system	22	5.84	12	4.96	34	5.49
VI.	Diseases of the nervous system	23	6.10	7	2.89	30	4.85
XIV.	Diseases of the genitourinary system	11	2.92	13	5.37	24	3.88
X.	Diseases of the respiratory system	10	2.65	10	4.13	20	3.23
XVIII.	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	10	2.65	9	3.72	19	3.07
III.	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (d50-d89)	9	2.39	9	3.72	18	2.91
	All other causes	17	4.51	31	12.81	48	7.75
	ALL CAUSES (MAJOR GROUP I to XIX)	377	100	242	100	619	100
	Deaths in the age group 15-24 year as percentage to total Medically certified Deaths-		1.87		2.03		1.93

Chart 4.4: Percentage distribution of medically certified deaths in the age group '15 -24' by major cause groups



5. Persons aged 25-34 years:

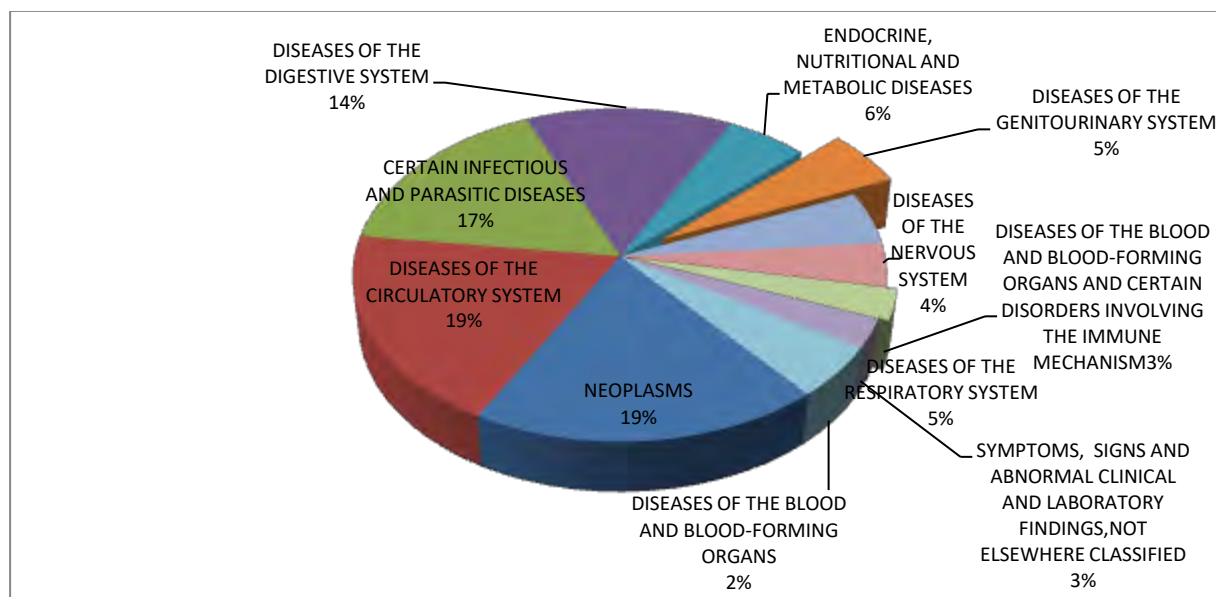
This age group has constituted around 3.06% of total medically certified deaths. It accounts for 3.03% of males and 3.11% of female deaths in their respective total medically certified deaths. Out of 982 deaths in the age group '25-34', 611 were males (62.22%).

A significant percentage of deaths have been reported due to 'Injury, Poisoning & Certain Other Consequences of External Causes' (22.20%). Number of male death is more than female under this cause (70.18%). The second leading cause in the age group are 'Neoplasm'(14.87%) and 'Diseases of the Circulatory System' (14.77%). The other major determinants of deaths are 'Certain Infectious and Parasitic Diseases' (12.93%), 'Diseases of the digestive system' (10.90%), 'Endocrine, nutritional and metabolic diseases' and 'Diseases of the genitourinary system' (4.28%) and 'Diseases of the respiratory system' (3.97%). The distribution of mortality in the age group '25-34', by major cause groups has been depicted in Table 4.5 and Chart 4.5.

Table 4.5: Distribution of mortality among persons in the age group '25-34' by major cause groups

M.G/C AT./S. C	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
XIX.	Injury, poisoning and certain other consequences of external causes	153	25.04	65	17.52	218	22.20
II.	Neoplasms	71	11.62	75	20.22	146	14.87
IX.	Diseases of the circulatory system	93	15.22	52	14.02	145	14.77
I.	Certain infectious and parasitic diseases	77	12.60	50	13.48	127	12.93
XI.	Diseases of the digestive system	86	14.08	21	5.66	107	10.90
IV.	Endocrine, nutritional and metabolic diseases	23	3.76	19	5.12	42	4.28
XIV.	Diseases of the genitourinary system	25	4.09	17	4.58	42	4.28
X.	Diseases of the respiratory system	19	3.11	20	5.39	39	3.97
VI.	Diseases of the nervous system	26	4.26	6	1.62	32	3.26
III.	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	12	1.96	11	2.96	23	2.34
XVIII.	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	14	2.29	8	2.16	22	2.24
	All other causes	12	1.96	27	7.28	39	3.97
	ALL CAUSES (MAJOR GROUP I to XIX)	611	100	371	100	982	100
	Deaths in the age group 25-34 year as percentage to total Medically certified Deaths-		3.03		3.11		3.06

Chart 4.5: Percentage distribution of medically certified deaths in the age group '25-34' by major cause groups



6. Persons aged 35-44 years:

The overall contribution of this age-group in total medically certified deaths is 6.25%. It accounts for 6.70% of males and 5.48% of female deaths in their respective total medically certified deaths. Out of 2005 deaths in the age group '35-44', 1352 were males (67.43%).

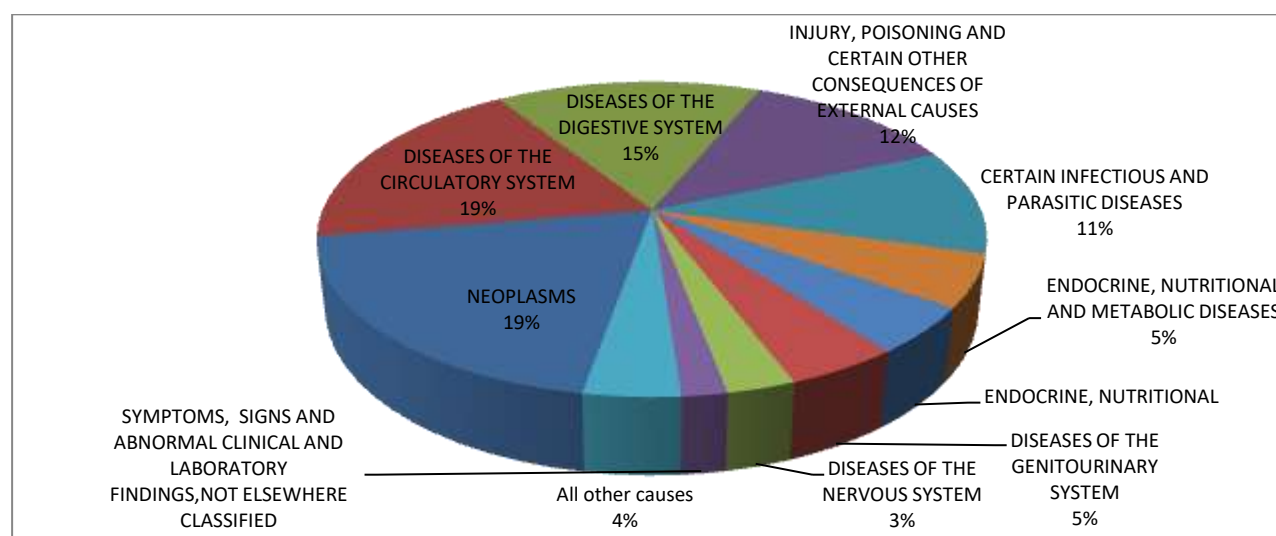
A significant percentage of deaths have been reported due to 'Neoplasm' (19.55%) of which 20.92% is due to 'Malignant neoplasms of digestive organs' and 16.84% is due to 'Leukaemia'. Number of male death is more than female under this cause (52.55%).

The second leading cause in the age group is 'Diseases of the Circulatory System' (18.60%) of which number of male death is more than female death (66.76%). 'Diseases of Digestive System' (15.31%) of which number of male death is more than female death (89.58%), 'Injury, Poisoning and Certain Other Consequences of External Causes' (12.37%) of which number of male death is more than female death (81.45%), 'Certain Infectious and Parasitic Diseases' (10.77%), 'Endocrine, nutritional and metabolic diseases' (5.39%) of which 87.04% due to 'Diabetes mellitus', and 'Diseases of Respiratory System' (4.79%) are other leading cause groups of deaths under this age-group. The distribution of mortality in the age group '35-44', by major cause groups has been presented in Table 4.6 and Chart 4.6.

Table 4.6: Distribution of mortality among persons in the age group '35-44' by major cause groups

M.G/ CAT. /S.C	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
II.	Neoplasms	206	15.24	186	28.48	392	19.55
IX.	Diseases of the circulatory system	249	18.42	124	18.99	373	18.60
XI.	Diseases of the digestive system	275	20.34	32	4.90	307	15.31
XIX.	Injury, poisoning and certain other consequences of external causes	202	14.94	46	7.04	248	12.37
I.	Certain infectious and parasitic diseases	149	11.02	67	10.26	216	10.77
IV.	Endocrine, nutritional and metabolic diseases	51	3.77	57	8.73	108	5.39
X.	Diseases of the respiratory system	56	4.14	40	6.13	96	4.79
XIV.	Diseases of the genitourinary system	58	4.29	35	5.36	93	4.64
VI.	Diseases of the nervous system	32	2.37	24	3.68	56	2.79
XVIII.	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	30	2.22	7	1.07	37	1.85
	All other causes	44	3.25	35	5.36	79	3.94
	ALL CAUSES (MAJOR GROUP I to XIX)	1352	100	653	100	2005	100
	Deaths in the age group 35-44 year as percentage to total Medically certified Deaths-		6.70		5.48		6.25

Chart 4.6: Percentage distribution of medically certified deaths in the age group '35-44' by major cause group.



7. Persons aged 45-54 years:

This age group has contributed to 13.55% of the total medically certified deaths. It accounts for 15.20% of males and 10.78% of female deaths in their respective total medically certified deaths. Out of 4350 deaths in the age group '45-54', 3065 were males (70.46%).

The prominent causes of mortality in this age group are 'Diseases of Circulatory System' (24.46%) of which 71.33% were males. The second leading cause in the age group is 'Neoplasm' (20.09%) of which number of male death is more than female death (55.84%). 'Diseases of the Digestive System' (16.25 %) is the third leading cause of death in the age group of which 89.82% were males. 'Endocrine, nutritional and metabolic diseases' (10.64%), 'Certain, Infectious and Parasitic Diseases' (7.26%), 'Diseases of the Respiratory System' (7.03%), and 'Injury, Poisoning & Certain other consequences of External Causes' (6.07%) are other leading cause groups of deaths under this age-group. The distribution of mortality in the age group '45-54', by major cause groups has been presented in Table 4.7.

Table 4.7: Distribution of mortality among persons in the age group '45-54' by major cause groups

M.G/C AT./S.C	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
IX.	Diseases of the circulatory system	759	24.76	305	23.735	1064	24.46
II.	Neoplasms	488	15.92	386	30.04	874	20.09
XI.	Diseases of the digestive system	635	20.72	72	5.60	707	16.25
IV.	Endocrine, nutritional and metabolic diseases	280	9.14	183	14.24	463	10.64
I.	Certain infectious and parasitic diseases	231	7.54	85	6.61	316	7.26
X.	Diseases of the respiratory system	226	7.37	80	6.23	306	7.03
XIX.	Injury, poisoning and certain other consequences of external causes	205	6.69	59	4.59	264	6.07
XIV.	Diseases of the genitourinary system	97	3.16	56	4.36	153	3.52
VI.	Diseases of the nervous system	42	1.37	18	1.40	60	1.38
XVIII.	Symptoms, signs and abnormal clinical and laboratory findings ,not elsewhere classified	42	1.37	16	1.25	58	1.33
	All other causes	60	1.96	25	1.95	85	1.95
	ALL CAUSES (MAJOR GROUP I to XIX)	3065	100	1285	100	4350	100
	Deaths in the age group 45-54 year as percentage to total Medically certified Deaths-		15.20		10.78		13.55

8. Persons aged 55-64 years:

This age group has contributed to 21.78% of the total medically certified deaths. It accounts for 23.86% of males and 18.26% of female deaths in their respective total medically certified deaths. Out of 6991 deaths in the age group '55-64', 4813 were males (68.85%).

The prominent causes of mortality in this age group are 'Diseases of Circulatory System' (30.91%) of which 66.91% were males. The second leading cause in the age group is 'Neoplasm' (19.24%) of which number of male death is more than female death

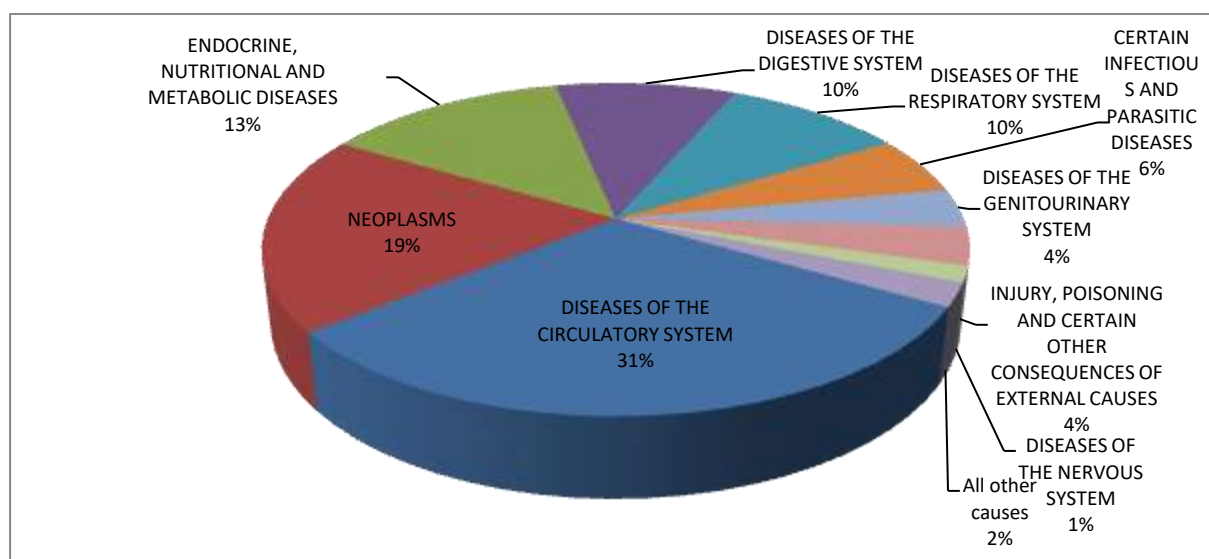
(63.42%). Under 'Neoplasm', the major cause is 'Malignant neoplasms of digestive organs' (27.14%) and 'Malignant neoplasms of respiratory and intrathoracic organs' (22.83%).

'Endocrine, nutritional and metabolic diseases' is the third leading cause of death (13.25%) in the age group of which 64.36% were males and 96.11% due to 'Diabetes mellitus'. 'Diseases of the Digestive System' (9.86%) of which 87.52% due to 'Diseases of the liver', 'Diseases of the Respiratory System' (9.81%), Certain, Infectious and Parasitic Diseases' (5.62%), 'Diseases of the genitourinary system' (3.78%) and 'Injury, Poisoning & Certain other consequences of External Causes' (3.69%) are other leading cause groups of deaths under this age-group. The distribution of mortality in the age group '55-64', by major cause groups has been presented in Table 4.8 and Chart 4.7.

Table 4.8: Distribution of mortality among persons in the age group '55-64' by major cause groups

M.G/ CAT. /S.C	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
IX.	Diseases of the circulatory system	1446	30.04	715	32.83	2161	30.91
II.	Neoplasms	853	17.72	492	22.59	1345	19.24
IV.	Endocrine, nutritional and metabolic diseases	596	12.38	330	15.15	926	13.25
XI.	Diseases of the digestive system	566	11.76	123	5.65	689	9.86
X.	Diseases of the respiratory system	523	10.87	163	7.48	686	9.81
I.	Certain infectious and parasitic diseases	305	6.34	88	4.04	393	5.62
XIV.	Diseases of the genitourinary system	169	3.51	95	4.36	264	3.78
XIX.	Injury, poisoning and certain other consequences of external causes	185	3.84	73	3.35	258	3.69
VI.	Diseases of the nervous system	73	1.52	34	1.56	107	1.53
	All other causes	97	2.02	65	2.98	162	2.32
	ALL CAUSES (MAJOR GROUP I to XIX)	4813	100	2178	100	6991	100
	Deaths in the age group 55-64 year as percentage to total Medically certified Deaths-		23.86		18.26		21.78

Chart 4.7: Percentage distribution of mortality among persons in the age group '55-64' by major cause groups



9. Persons aged 65-69 years:

This age group has a share of 12.71% in the total medically certified deaths. It accounts for 12.97% of males and 12.25% of female deaths in their respective total medically certified deaths. Out of 4078 deaths in the age group '65-69', 2617 were males (64.17%).

'Diseases of the Circulatory System' have contributed to the maximum number (34.75%) of total deaths in this age-group. In the Circulatory System deaths "Ischaemic Heart Diseases" have taken the highest toll contributing around 37.54% followed by 'Cerebrovascular diseases' (32.75%).

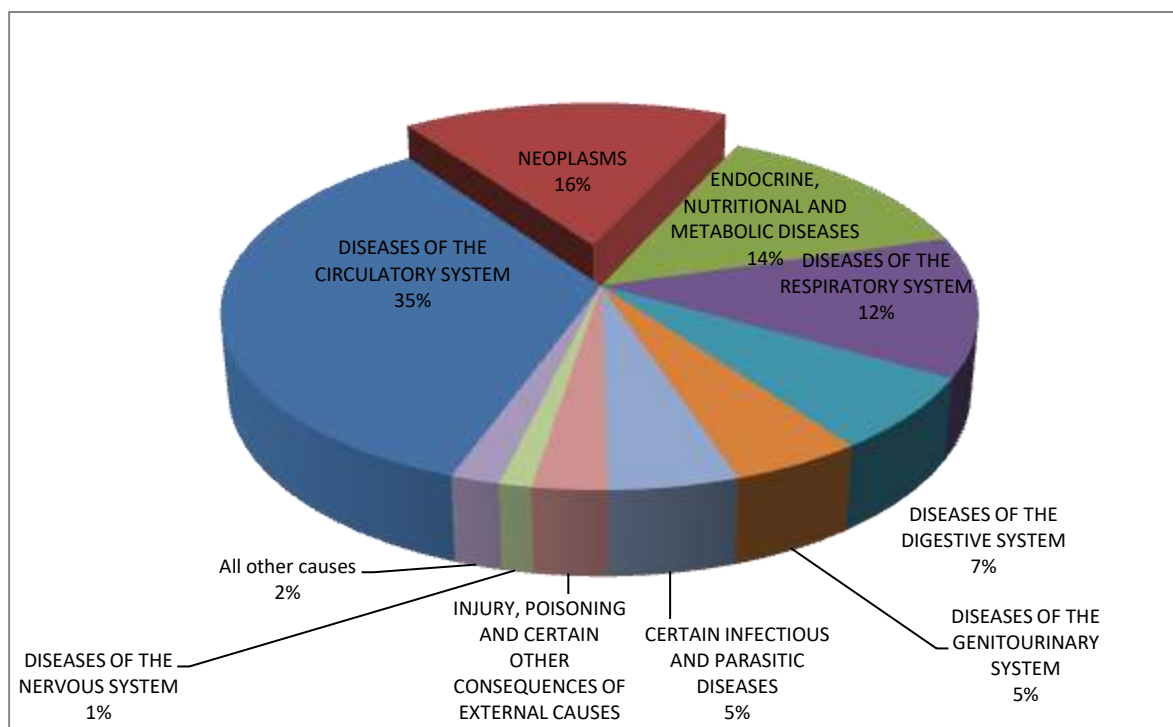
The second leading cause in the age group is 'Neoplasm' (16.43%) of which number of male death is more than female death (64.93%). Under Neoplasm, maximum death is due to 'Malignant neoplasms of digestive organs' (31.04%), followed by 'Malignant neoplasms of respiratory and intrathoracic organs'(22.99%)'.

Around 96.61% of the deaths under the cause group 'Endocrine, Nutritional and Metabolic Diseases', is due to 'Diabetes Mellitus'. The cause group 'Diseases of the respiratory system' is responsible for 12.70% of the total deaths. The distribution of mortality in the age group '65-69' by major cause group has been highlighted in the Table 4.9 and Chart 4.8.

Table 4.9: Distribution of mortality among persons in the age group '65-69' by major cause groups

M.G/C AT./S.C	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
IX.	Diseases of the circulatory system	864	33.01	553	37.85	1417	34.75
II.	Neoplasms	435	16.62	235	16.08	670	16.43
IV.	Endocrine, nutritional and metabolic diseases	324	12.38	237	16.22	561	13.76
X.	Diseases of the respiratory system	379	14.48	139	9.51	518	12.70
XI.	Diseases of the digestive system	203	7.76	74	5.07	277	6.79
XIV.	Diseases of the genitourinary system	121	4.62	80	5.48	201	4.93
I.	Certain infectious and parasitic diseases	138	5.27	58	3.97	196	4.81
XIX.	Injury, poisoning and certain other consequences of external causes	77	2.94	37	2.53	114	2.80
VI.	Diseases of the nervous system	28	1.07	21	1.44	49	1.20
	All other causes	48	1.83	27	1.85	75	1.84
	ALL CAUSES (MAJOR GROUP I to XIX)	2617	100	1461	100	4078	100
	Deaths in the age group 65-69 year as percentage to total Medically certified Deaths-		12.97		12.25		12.71

Chart 4.8: Percentage distribution of mortality among persons in the age group '65-69' by major cause groups



10. Old aged Persons (70 years and above):

This age group, as expected, has reported the maximum incidence (33.37%) of total medically certified deaths. It accounts for 29.87% of males and 39.30% of female deaths in their respective total medically certified deaths. Out of 10712 deaths in 70 and above age group, 6026 were males (56.25%).

In this age group 'Diseases of the Circulatory System' alone contribute 40.26% of deaths. Ischemic Heart Diseases constitute maximum number (37.93%) of Circulatory system deaths followed by 'Cerebrovascular diseases' (33.64%).

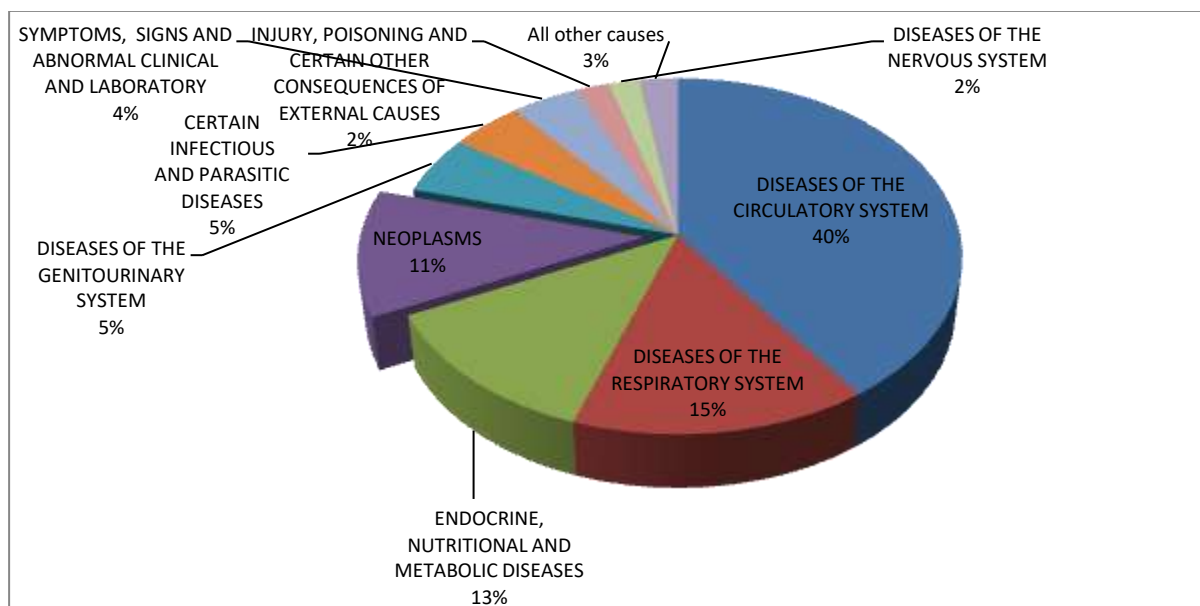
The major group 'Diseases of Respiratory System' is the second leading cause of death with 15.04 % of total deaths under this age group. 'Other Lower Respiratory Disorders', 'Pneumonia' and 'All other Diseases of the Respiratory System' are the major constituents of Diseases of Respiratory system with the shares of 67.41%, 14.64% and 14.59% respectively.

With the share of 12.56%, 'Endocrine, Nutritional and Metabolic Disease' is the third leading cause group of death in this age group. Under this age cause group, 'Diabetes Mellitus' is the only cause account for about 94.87% deaths. The distribution of mortality in the age group 70 years and above, by major cause group has been presented in Table 4.10 and Chart 4.9.

Table 4.10: Distribution of mortality among old aged persons '70 or above years' by major cause groups

M.G/C AT./S.C	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
IX.	Diseases of the circulatory system	2194	36.41	2119	45.22	4313	40.26
X.	Diseases of the respiratory system	1073	17.81	538	11.48	1611	15.04
IV.	Endocrine, nutritional and metabolic diseases	701	11.63	644	13.74	1345	12.56
II.	Neoplasms	794	13.18	432	9.22	1226	11.45
XIV.	Diseases of the genitourinary system	321	5.33	241	5.14	562	5.25
I.	Certain infectious and parasitic diseases	288	4.78	204	4.35	492	4.59
XI.	Diseases of the digestive system	274	4.55	187	3.99	461	4.30
XIX.	Injury, poisoning and certain other consequences of external causes	143	2.37	89	1.90	232	2.17
VI.	Diseases of the nervous system	108	1.79	98	2.09	206	1.92
	All other causes	130	2.16	134	2.86	264	2.46
	ALL CAUSES (MAJOR GROUP I to XIX)	6026	100	4686	100	10712	100
	Deaths in the age group 70+ year as percentage to total Medically certified Deaths-		29.87		39.30		33.37

Chart 4.9: Percentage distribution of mortality among old aged persons '70 or above years' by major cause groups





APPENDICES

Appendix I	List of Hospitals Reporting MCCD
Appendix II	Form No 4 Medical Certificate of Cause of Death - For Hospital events
Appendix III	Form No 4A Medical Certificate of Cause of Death – for Non Hospital events
Appendix IV	Major Groups and the description of ICD-10 Codes
Appendix V	National List based on ICD-10.
Appendix VI	Centre wise cause of death under major cause group
Appendix VII	Centre wise Cause of Death (Age wise and Sex wise)
Appendix VIII	Cause of Death under major cause group
Appendix IX	Cause of Death (Age wise and Sex wise)

LIST OF HOSPITALS REPORTING MCCD

Thiruvananthapuram (44 Nos.)

SI No	Name of Hospital	Govt/Pvt
1	CHC Fort Hospital, Trivandrum	Govt
2	ESI Hospital, Peroorkada	Govt
3	Govt. Dist.Model Hospital ,Peroorkada	Govt
4	Govt. Mental Healthcare, Oolampara	Govt
5	General Hospital ,Trivandrum	Govt
6	Govt. MCH ,Trivandrum	Govt
7	Govt. W&C Hospital, Thycaud	Govt
8	Regional Cancer Centre ,Trivandrum	Govt
9	Sanitorium for Chest diseases, Pulayanarcotta	Govt
10	SAT Hospital , Trivandrum	Govt
11	Sree ChithiraThirunal Institute of Medical Science& Technology	Govt
12	AJ Hospital, Kazhakkootam	Pvt
13	Al Areef Hospital ,Ambalathara	Pvt
14	Anadiyil Hospital, Thekkummoody	Pvt
15	Ananthapuri Hospital&Research Centre, Chakka	Pvt
16	Arumana Hospital,	Pvt
17	Attukal Devi Institute of medical Sciences Ltd , Attukal	Pvt
18	BNV Hospital, Thiruvallam.	Pvt
19	Beema Mahim SUT, Beemapally	Pvt
20	Cosmopolitan Hospital ,Murinjapalam	Pvt
21	Credence Hospital, Ulloor	Pvt
22	CSI Mission Hospital ,Kazhakkootam	Pvt
23	Dr.Govindans Hospital, GH Junction	Pvt
24	Geethanjali Hospital, Vazhuthacaud	Pvt
25	Gowreesha Hospital, Gowreeshapattam	Pvt
26	Holy Cross Hospital , Sangumugham	Pvt
27	Jubilee Memorial Hospital, Palayam	Pvt
28	KJK Hospital ,Nalanchira	Pvt
29	KIMS Hospital, Anayara.	Pvt
30	Lords Hospital, Anayaara	Pvt
31	Meditrena Hospital, Plamoodu	Pvt
32	PRS Hospital, Killipalam	Pvt
33	Samad Hospital, Pattoor	Pvt
34	Santhwana Hospital, Ambalamukku	Pvt
35	SK Hospital, Edapazhinji	Pvt
36	SP Fort Hospital ,Fort	Pvt
37	Sree RamakrishnaAshramam Hospital, Shasthamangalam	Pvt
38	St.Anns Nursing Home Pallimukku	Pvt
39	SUT Hospital, Pattom	Pvt
40	SUT Royal Hospital, Pongummoodu	Pvt
41	SUT Royal Mother&Baby Hospital	Pvt

42	The India Hospital, Melethampanoor	Pvt
43	TSC Hospital, Veli	Pvt
44	Valsala Nursing Home, Bakery	Pvt

Kollam (17 Nos.)

SINo	Name of Hospital	Govt/Pvt
1	AARM District Hospital	Govt
2	AGC Nursing Home	Pvt
3	Bishop Benziger Hospital	Pvt
4	Dr. K Damodaran Memorial Hospital	Pvt
5	Dr. Nairs Hospital	Pvt
6	Victoria Hospital	Govt
7	Kumar Hospital	Pvt
8	ESI Hospital	Govt
9	N.S. Hospital	Pvt
10	Sankar Shashtyabdapoorthy Memorial Hospital	Pvt
11	Upasana Hospital	Pvt
12	Prathibha Hospital	Pvt
13	PHC Palathra	Pvt
14	Govt. Homoeo Hospital	Govt
15	Govt. Ayurvedic Hospital	Govt
16	Nani Memorial Hospital	Govt
17	N.S Hospital Maternity Home	Pvt

Alappuzha (8 Nos.)

SINo	Name of Hospital	Govt/Pvt
1	T.D.Medical College Hospital	Govt
2	General Hospital	Govt
3	Women & Children Hospital	Govt
4	ESI Hospital	Govt
5	District Ayurveda Hospital	Govt
6	Panchakarma Hospital	Govt
7	District Homoeo Hospital	Govt
8	Sahrudaya Hospital	Pvt

Ernakulam (40 Nos.)

Sl No	Name of Hospital	Govt/Pvt
1	General Hospital, Ernakulam	Govt
2	Lisie Hospital, Ernakulam	Pvt
3	Lourde Hospital, Ernakulam	Pvt
4	Lakshmi Hospital, Ernakulam	Pvt
5	M.A.J Hospital, Edappilly	Pvt
6	Amritha Institute of Medical Science and Research Centre	Pvt
7	Medical Trust Hospital	Pvt
8	Ernakulam Medical Centre	Pvt

9	P.V.S Memorial Hospital	Pvt
10	Cochin Hospital	Pvt
11	Krishna Hospital	Pvt
12	Akshaya Hospital	Pvt
13	Sree Sudheendra Medical Mission	Pvt
14	Dr. Joy's Hospital for Women and Children	Pvt
15	E S I Hospital	Pvt
16	Welcare Hospital	Pvt
17	Specialist Hospital	Pvt
18	Dr.Kunjalu's Nursing Home	Pvt
19	City Hospital Pvt. Ltd	Pvt
20	P N V M Hospital	Pvt
21	I N H S Sanjeevani	Pvt
22	Cochin Port Trust Hospital	Pvt
23	Indira Gandhi Co-operative Hospital	Pvt
24	Govt. Women and Children	Govt
25	Govt. Hospital Fort Cochin	Govt
26	Govt. Maharaja's Hospital	Govt
27	Gautham Hospital	Pvt
28	Lakshmi Hospital Fort Cochin	Pvt
29	Sangeeth Nursing Home	Pvt
30	Jishy Hospital	Pvt
31	Jacob's Hospital	Pvt
32	Westside Hospital	Pvt
33	Chandrassery Hospital	Pvt
34	Holy Cross Hospice	Pvt
35	Anne Marry Joachim Hospital	Pvt
36	Our Lady Hospital	Pvt
37	Fathima Hospital	Pvt
38	Sunrise Hospital	Pvt
39	Polakkulath Narayanan Renai Medicity	Pvt
40	V.G.Saraf Memorial Hospital	Pvt

Kozhikode (41 Nos)

SINo	Name of Hospital	Govt/Pvt
1	Alsheimer's and Related disorder society of India	Pvt
2	Ashoka Hospital	Pvt
3	Baby Memorial Hospital	Pvt
4	Calicut Hospital and Nursing Home	Pvt
5	Chest Hospital	Pvt
6	City Co-op Hospital	Pvt
7	District Co-op Hospital ,Kozhikode	Pvt
8	Dr. Vidhya Prakash's Homoeo clinic	Pvt
9	Dr. Ismail Sait Medical centre for Homoeopathic Research and Hospital	Pvt
10	Fathima Hospital	Pvt

11	Govt. Homoeo Hospital	Govt
12	Govt. Leprosy Hospital Kozhikode	Govt
13	Govt. Women & Children Hospital	Govt
14	Govt. Ayurvedic Hospital	Govt
15	Govt. General Hospital	Govt
16	Govt. Homoeo Medical College Hospital	Govt
17	Govt. Mental Hospital	Govt
18	Institute of Chest Diseases	Govt
19	Institute of Maternal and Child Health Medical College	Govt
20	Iquraa International Hospital and Research Centre	Pvt
21	Koyas Hospital	Pvt
22	Malabar Diabetic Foundation	Pvt
23	Malabar Eye Hospital & Research Centre Pvt Ltd	Pvt
24	Malabar Hospital& Urology Centre	Pvt
25	Malabar Institute of Medical Science Ltd	Pvt
26	Manohar Hospital	Pvt
27	Medical College Hospital	Pvt
28	Super Speciality Block	Pvt
29	National Hospital	Pvt
30	Nirmala Hospital	Pvt
31	PVS Hospital Pvt Ltd	Pvt
32	Pain & Palliative Care Society	Pvt
33	Rajendra Nursing Home	Pvt
34	Ramanatha Nursing Home	Pvt
35	R.M Hospital	Pvt
36	Santhi Hospital	Pvt
37	Shiba Surgery & Urology Centre	Pvt
38	TPs Hospital	Pvt
39	Vathiad Medical Centre	Pvt
40	Vijaya Hospital	Pvt
41	Viveka Hospital	Pvt

TOTAL MCCD HOSPITAL IN KERALA-150

FOR HOSPITAL EVENTS**FORM NO. 4**

(See Rule 7)

MEDICAL CERTIFICATE OF CAUSE OF DEATH

(Hospital In-patients. Not to be used for still births)

To be sent to Registrar along with Form No. 2 (Death Report)

Name of the Hospital.....I hereby
 certify that the person whose particular care given below died in the hospital in ward
 No.....On..... At.....AM/PM.

NAME OF DECEASED :					For use of Statistical Office
Sex	Age of Death :				
1. Male 2. Female	If one year or more, age in years	If less than one year, age in month	If less than one month age in days	If less than one day, age in hours	
CAUSE OF DEATH I (a)..... Immediate cause Due to(or as a consequences of) State the disease, injury or complication Which caused death, not the mode of dying such as heart failure, asthenia, etc. Antecedent cause (b)..... Due to (or as a consequences of) Morbid conditions, if any, Giving rise to the above cause stating under lying conditions last II Other significant conditions (c)..... contributing to the death but not related to the disease or condition causing it.....					Interval between onset and death approx.

Manner of Death

How did the injury occur?

1. Natural 2. Accident 3. Suicide 4. Homicide

5. Pending investigation.

If deceased was a female, was the pregnancy the death associated with? 1. Yes 2. No

If yes, was there a delivery? 1. Yes 2. No.

Name and signature of the Medical attendant certifying the cause of death

Date of verification.....

(To be detached and handed over to the relative of the deceased)

Certified that Sri/Smt/Kum.....S/W/D of

Sri.....R/O.....was admitted to
this hospital onand expired on

Doctor.....

(Medical Superintendent& Name of Hospital)

FOR NON-HOSPITAL EVENTS**FORM NO. 4A**

(See Rule 7)

MEDICAL CERTIFICATE OF CAUSE OF DEATH

(For non-institutional deaths .Not to be used for still birth)

To be sent to register along with Form No.2 (Death Report)

I hereby certify that the deceased Sri/Smt/Kumson/wife/daughter ofresident ofwas under my treatment from.....to.....and he/she died onatAM/PM.

NAME OF DECEASED					For use of Statistical Office
Sex	Age of Death				
1. Male	If one year or more, age in years	If less than one year, age in month	If less than one month age in days	If less than one day, age in hours	
2. Female					
CAUSE OF DEATH I (a)..... Immediate cause Due to (or as a consequences of) State the disease, injury or complication Which caused death, not the mode of dying such as heart failure, asthenia, etc Antecedent cause (b)..... Due to (or as a consequences of) Morbid conditions, if any, Giving rise to the above cause, Stating underlying conditions last II Other significant conditions (c)..... Contributing to the death But not related to the disease or Condition causing it.					Interval between onset and death approx.

If deceased was a female, was the pregnancy the death associated with? 1. Yes 2. No

If yes, was there a delivery? 1. Yes 2. No

Name and signature of the Medical attendant certifying the cause of death

Date of verification.....

(To be detached and handed over to the relative of the deceased)

Certified that Sri/Smt/Kum.....S/W/D of Sri.....R/O.....was under my treatment from.....to.....and he/she expired onAM/PM.

Doctor.....
 (Medical Superintendent & Name of Hospital)

MAJOR GROUPS AND THE DESCRIPTION OF ICD-10 CODES

The classification of diseases may be defined as a system of categories to which morbid entities are assigned according to established criteria. The Tenth Revision of International Classification of Diseases (ICD-10) is a single coded list of three-character categories, each of which can be further divided into up to ten four-character subcategories. In place of the purely numeric coding system of ICD-9, ICD-10 uses alphanumeric code with a letter in the first position and a number in the second, third and fourth positions the fourth character follows a decimal point. The code numbers can range from A00.0 to Z99.9. The letter U is not used and is kept blank for use in future. Codes U00 - U49 is kept reserved to be used for the provisional assignment of new diseases of uncertain etiology. Codes U50-U99 may be used in research, e.g. when testing an alternative sub-classification for a special project.

2. The National list for tabulation of Morbidity and Mortality based on the Ninth Revision of ICD-9, 1975 was adopted in MCCD from 1980 to 1998. Subsequently, the World Health Organization (WHO) brought out 10th Revision of International Classification of Diseases (ICD) and the National List for tabulation of Morbidity and Mortality data, based on ICD-10 has been finalized in consultation with the states to meet their requirements and has been adopted from 1999 onward for MCCD Report. The list based on ICD-10 comprises of 20 major Groups, 69 categories and 193 sub-categories of causes as compared to 18 major groups including supplementary classification of Injury & poisoning, 66 categories and 194 sub-categories of causes (includes few single causes) of national list based on ICD-9. Chapters, Blocks of three-character categories and group of three/four-character categories of ICD-10 have been considered as Major Groups, Categories and sub-categories respectively in the national list.

3. As per the recommendations of the ICD-10, data on “Medical Certification of Cause of Death” have been tabulated for a total of 69 categories of causes under Major Groups I to XX of National List including External Causes of morbidity and mortality.

National List based on ICD-10

Major Groups I to XIX:

1. Categories-58 (Group of three-character categories)
2. Sub-categories-177 (Group of 3/4-character categories and 3/4 -character single category)

&

Major Group XX: External Causes of Morbidity & Mortality

3. Categories-11 (Group of three-character categories)
4. Sub-categories-16 (Group of 3/4-character categories and 3/4 -character single category)

The descriptions for all Major Groups of the National list based on ICD-10 are as under

Major Cause Groups	Description and ICD codes
I	Certain Infectious and parasitic diseases (A00-B99)
II	Neoplasms (C00-D48)
III	Diseases of the blood and blood forming organs and certain disorders involving the immune mechanism (D50-D89)
IV	Endocrine, nutritional and metabolic diseases (E00-E89)
V	Mental and behavioural disorders (F01-F99)
VI	Diseases of the nervous system (G00-G98)
VII	Diseases of the eye and Adnexa (H00-H59)
VIII	Diseases of the ear and mastoid process (H60-H95)
IX	Diseases of the circulatory system (I00-I99)
X	Diseases of the respiratory system (J00-J98)
XI	Diseases of the digestive system (K00-K92)
XII	Diseases of the skin and subcutaneous tissue (L00-L98)
XIII	Diseases of the musculoskeletal system and connective tissue (M00-M99)
XIV	Diseases of the genitourinary system (N00-N99)
XV	Pregnancy, childbirth and the puerperium (O00-O99)
XVI	Certain conditions originating in the perinatal period (P00-P96)
XVII	Congenital malformation, deformation and chromosomal abnormalities (Q00-Q99)
XVIII	Symptoms, signs and abnormal clinical and laboratory findings, n.e.c. (R00-R99)
XIX	Injury, poisoning and certain other consequences of external causes (S00-T98)
XX	External causes of morbidity and mortality (V01-Y89)
XXI*	Factors influencing health status and contact with health services (Z00-Z99)

* Not in use in India.

NATIONAL LIST FOR TABULATION OF MORTALITY & MORBIDITY BASED ON THE TENTH REVISION OF INTERNATIONAL CLASSIFICATION OF DISEASES (ICD)

Major Group No.	CAUSE OF DEATH ICD-10 CODES
I. CERTAIN INFECTIOUS AND PARASITIC DISEASES	A00-B99
1 Intestinal infectious diseases	A00-A09
1 Cholera	A00
2 Typhoid fever and paratyphoid fevers	A01
3 Food poisoning	A02, A05
4 Shigellosis	A03
5 Amoebiasis	A06
6 Diarrhoea and gastroenteritis of presumed infectious origin	A09
7 Other intestinal infectious diseases	A04, A07-A08
2 Tuberculosis	A15-A19
1 Respiratory tuberculosis	A15-A16
2 Tuberculosis of nervous system	A17
3 Tuberculosis of other organs & miliary tuberculosis	A18-A19
3 Other bacterial diseases	A20-A49
1 Plague	A20
2 Leprosy	A30
3 Neonatal tetanus	A33
4 Other tetanus	A34-A35
5 Diphtheria	A36
6 Whooping cough	A37
7 Meningococcal infection	A39
8 Septicaemia	A40-A41
9 All other types of bacterial diseases	A21-A28, A31-A32, A38, A42-A49
4 Infections with a predominantly sexual mode of transmission	A50-A64
1 Syphilis	A50-A53
2 Other types of infections with a predominantly sexual mode of transmission	A54-A64

5 Viral diseases	A70-A74 & A80-B34
1 Acute poliomyelitis	A80
2 Rabies	A82
3 Japanese encephalitis	A83.0
4 Other viral encephalitis	A83.1-A83.9, A84-A86
5 Dengue fever	A90
6 Other arthropod-borne viral fevers and viral haemorrhagic fevers	A91-A94, A96-A99
7 Smallpox	B03
8 Measles	B05
9 Acute Hepatitis	BB16
10 Other viral hepatitis	B15, B17-B19
11 Human immunodeficiency virus [HIV] disease	B20-B24
12 All other types of viral diseases	A70-A74, A81, A87-A89, A95, B00-B02, B04, B06-B09 & B25-B346
Protozoal diseases	B50-B64
1 Malaria	B50-B54
2 All other types of protozoal diseases	B55-B64
7 Other certain infectious & parasitic diseases and late effects of infectious & parasitic diseases	A65-A69 & A75-A79, B35-B49
1 Filariasis	B74
2 Other helminthiasis	B65-B73, B75, B77-B83
3 Other spirochaetal diseases and Rickettsioses	A65-A69 & A75-A79
4 All other infectious & parasitic diseases and late effects of infectious & parasitic diseases	B35-B49, B76, B85-B99
II. NEOPLASMS	C00-D48
8 Malignant neoplasms of lip, oral cavity and pharynx	C00-C14
9 Malignant neoplasms of digestive organs	C15-C26
1 Malignant neoplasm of oesophagus	C15
2 Malignant neoplasm of stomach	C16
3 Malignant neoplasm of small intestine including Duodenum	C17
4 Malignant neoplasm of colon	C18
5 Malignant neoplasm of rectosigmoid junction, rectum,anus and anal canal	C19-C21
6 Malignant neoplasm of liver and intrahepatic bile ducts	C22
7 Malignant neoplasm of pancreas	C25
8 Other malignant neoplasms of digestive organs	C23-C24, C26

10 Malignant neoplasms of respiratory and intrathoracic Organs	C30-C39
1 Malignant neoplasm of larynx	C32
2 Malignant neoplasm of trachea, bronchus and lung	C33-C34
3 Other malignant neoplasm of respiratory and intrathoracic organs	C30-C31, C37-C39
11 Malignant neoplasms of bone, mesothelial and soft tissue, skin and breast	C40-C50
1 Malignant neoplasm of bone and articular cartilage	C40-C41
2 Malignant melanoma of skin	C43
3 Other malignant neoplasms of skin	C44
4 Malignant neoplasms of mesothelial and soft tissue	C45-C49
5 Malignant neoplasm of breast	C50
12 Malignant neoplasms of genitourinary organs	C51-C68
1 Malignant neoplasm of cervix uteri	C53
2 Malignant neoplasm of other and unspecified parts of Uterus	C54-C55
3 Malignant neoplasm of ovary	C56
4 Malignant neoplasm of placenta	C58
5 Other malignant neoplasms of female genital organs	C51-C52, C57
6 Malignant neoplasm of prostate	C61
7 Other malignant neoplasms of male genital organs	C60, C62-C63
8 Malignant neoplasm of bladder	C67
9 Other malignant neoplasms of urinary tract	C64-C66, C68
13 Malignant neoplasms of eye, brain and other parts of central nervous system	C69-C72
1 Malignant neoplasm of eye & adnexa	C69
2 Malignant neoplasm of meninges, brain and other parts of central nervous system	C70-C72
14 Malignant neoplasms of other and unspecified sites	C73-C80 & C97
15 Malignant neoplasms of lymphoid, haematopoietic and related tissue	C81-C96
1 Hodgkin's disease	C81
2 Non-Hodgkin's lymphoma	C82-C85
3 Multiple myeloma and malignant plasma cell neoplasms	C90
4 Leukaemia	C91-C95
5 Other malignant neoplasms of lymphoid, haematopoietic and related tissue	C88 & C96
16 Carcinoma in situ	D00-D09
17 Benign neoplasms	D10-D36
1 Leiomyoma of uterus	D25
2 All other benign neoplasms	D10-D24 & D26-D36
18 Other and unspecified neoplasm	D37-D48

III. DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS AND CERTAIN DISORDERS INVOLVING THE IMMUNE MECHANISM	D50-D89
19 Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	D50-D89
1 Thalassaemia	D56
2 Other anaemias	D50-D55, D57-D64
3 All other diseases of blood and blood-forming organs	D65-D76
4 Certain disorders involving the immune mechanism	D80-D89
IV. ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES	E00-E89
20 Malnutrition	E40-E46
1 Kwashiorkor	E40
2 Nutritional marasmus	E41
3 Other protein-energy malnutrition	E42-E46
21 Endocrine, other nutritional and metabolic diseases	E00-E34 & E50-E89
1 Disorders of thyroid gland	E00-E07
2 Diabetes mellitus	E10-E14
3 All other nutritional deficiencies	E50-E64
4 All other endocrine and metabolic diseases	E15-E34 & E65-E89
V. MENTAL AND BEHAVIOURAL DISORDERS	F01-F99
22 Mental and behavioural disorders	F01-F99
1 Mental and behavioural disorders due to psychoactive substance use	F10-F19
2 Schizophrenia, schizotypal & delusional disorders	F20-F29
3 All other mental and behavioural disorders	F01-F09, F30-F99
VI. DISEASES OF THE NERVOUS SYSTEM	G00-G98
23 Inflammatory diseases of the central nervous system	G00-G09
1 Meningitis	G00 & G03
2 Encephalitis, myelitis and encephalomyelitis	G04
3 Other inflammatory diseases of the central nervous system	G06, G08-G09
24 Other diseases of the nervous system	G10-G98
1 Alzheimer's disease	G30
2 Epilepsy	G40-G41
3 All other diseases of the nervous system	G10-G25, G31, G35-G37, G43-G98

VII. DISEASES OF THE EYE AND ADNEXA	H00-H59
25 Disease of the eye and adnexa	H00-H59
VIII. DISEASES OF THE EAR AND MASTOID PROCESS	H60-H95
26 Diseases of the ear and mastoid process	H60-H93
IX. DISEASES OF THE CIRCULATORY SYSTEM	I00-I99
27 Acute rheumatic fever and chronic rheumatic heart diseases	I00-I09
1 Acute rheumatic fever	I00-I02
2 Chronic rheumatic heart diseases	I05-I09
28 Hypertensive diseases	I10-I15
1 Hypertensive heart disease	I11
2 All other hypertensive diseases	I10, I12-I15
29 Ischaemic heart diseases	I20-I25
1 Acute myocardial infarction	I21-I22
2 All other ischaemic heart diseases	I20 & I23-I25
30 Diseases of pulmonary circulation and other forms of heart disease	I26-I51
1 Pulmonary heart disease and diseases of pulmonary circulation	I26-I28
2 Other forms of heart diseases	I30-I51
31 Cerebrovascular diseases	I60-I69
32 Other diseases of the circulatory system	I70-I99
1 Atherosclerosis	I70
2 Arterial embolism and thrombosis	I74
3 Other diseases of arteries, arterioles & capillaries	I71-I73 & I77-I78
4 Phlebitis, thrombophlebitis, venous embolism and thrombosis I80-I82	
5 All other diseases of the circulatory system	I83-I99
X. DISEASES OF THE RESPIRATORY SYSTEM	J00-J98
33 Diseases of the upper respiratory tract	J00-J06 & J30-J39
1 Acute pharyngitis and acute tonsillitis	J02-J03
2 Acute laryngitis and tracheitis	J04
3 Other acute upper respiratory infections	J00-J01 & J05-J06
4 All other diseases of upper respiratory tract	J30-J39

34 Lower respiratory diseases	J20-J22 & J40-J47
1 Acute bronchitis and acute bronchiolitis	J20-J21
2 Bronchitis, chronic and unspecified, emphysema	J40-J43
3 Asthma	J45-J46
4 Other lower respiratory disorders	J22, J44 & J47
35 Other diseases of the respiratory system	J10-J18, J60-J98
1 Influenza	J10-J11
2 Pneumonia	J12-J18
3 Pleurisy	J90
4 All other diseases of the respiratory system	J60-J86, J92-J98.
 XI. DISEASES OF THE DIGESTIVE SYSTEM	 K00-K92
36 Diseases of oral cavity, salivary glands and jaws	K00-K14
37 Diseases of the other parts of digestive system	K20-K92
1 Gastric and duodenal ulcer	K25-K27
2 Gastritis and duodenitis	K29
3 Diseases of appendix	K35-K38
4 Hernia	K40-K46
5 Paralytic ileus and intestinal obstruction without hernia	K56
6 Peritonitis	K65
7 Diseases of the liver	K70-K76
8 Cholelithiasis and cholecystitis	K80-K81
9 Disorders of the pancreas	K85-K86
10 All other diseases of the other parts of digestive system	K20-K22, K28, K30-K31, K50-K55, K57-K63, K66, K82-K83 & K90-K92
 XII. DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE	 L00-L98
38 Diseases of the skin and subcutaneous tissue	L00-L98
1 Infections of the skin and subcutaneous tissue	L00-L08
2 All other diseases of the skin and subcutaneous tissue	L10-L98
 XIII. DISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE	 M00-M99
39 Diseases of the musculoskeletal system and connective tissue	M00-M99
1 Rheumatoid arthritis and other inflammatory polyarthropathies	M05-M13
2 Osteomyelitis	M86
3 All other diseases of the musculoskeletal system and connective tissue	M00-M02, M15-M85, M87-M99

XIV. DISEASES OF THE GENITOURINARY SYSTEM	N00-N99
40 Diseases of urinary system	N00-N39
1 Glomerular diseases (including Nephritic Syndrome)	N00-N07
2 Renal tubulo-interstitial diseases	N10-N15
3 Renal failure	N17-N19
4 Urolithiasis	N20-N23
5 Other disorders of kidney and ureter	N25-N28
6 All other diseases of urinary system	N30-N39
41 Other diseases of the genitourinary system	N40-N99
1 Hyperplasia of prostate	N40
2 All other diseases of male genital organs	N41-N50
3 Salpingitis and oophoritis	N70
4 All other diseases of female genital organs	N60-N64 & N71-N99
XV. PREGNANCY, CHILDBIRTH AND THE PUERPERIUM	O00-O99
42 Pregnancy with abortive outcome	O00-O08
1 Spontaneous abortion	O03
2 Medical abortion	O04
3 Other pregnancies with abortive outcome	O00-O02 & O05-O08
43 Other direct obstetric deaths	O10-O92
1 Oedema, proteinuria and hypertensive disorders in pregnancy, childbirth and the puerperium	O10-O16
2 Infections of genitourinary tract in pregnancy	O23
3 Obstructed labour	O64-O66
4 Complications pre-dominantly related to the puerperium	O85-O92
5 Other complications of pregnancy and delivery	O20-O22, O24-O63 & O67-O84
44 Other obstetric conditions, not elsewhere classified	O95-O99
1 Indirect obstetric deaths	O98-O99
2 All other obstetric conditions, not elsewhere classified	O95-O97
XVI. CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD	P00-P96
45 Certain conditions originating in the perinatal period	P00-P96
1 Slow foetal growth, foetal malnutrition and immaturity	P05-P07
2 Birth trauma	P10-P15
3 Hypoxia, birth asphyxia and other respiratory conditions	P20-P28
4 Haemolytic disease of foetus and new-born	P55
5 Other perinatal jaundice	P58-P59
6 All other conditions originating in the perinatal period	P00-P04, P08, P29-P54, P56-P57, P60-P96.

XVII. CONGENITAL MALFORMATIONS, DEFORMATIONS AND CHROMOSOMAL ABNORMALITIES		Q00-Q99
46 Congenital malformations, deformations and chromosomal abnormalities		Q00-Q99
1 Spina bifida		Q05
2 Congenital malformations of the circulatory system		Q20-Q28
3 Cleft lip and cleft palate		Q35-Q37
4 All other congenital malformations, deformations and chromosomal abnormalities, not elsewhere classified		Q00-Q04, Q06-Q18, Q30-Q34 & Q38-Q99
XVIII. SYMPTOMS, SIGNS AND ABNORMAL CLINICAL AND LABORATORY FINDINGS, NOT ELSEWHERE CLASSIFIED		R00-R99
47 Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified		R00-R99
1 Abdominal and pelvic pain		R10
2 Ascites		R18
3 Somnolence, stupor and coma		R40
4 Fever of unknown origin		R50
5 Senility		R54
6 Syncope and collapse		R55
7 Convulsions, not elsewhere classified		R56
8 Shock, not elsewhere classified		R57
9 All other symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified		R00-R09, R11-R17, R19-R39 R41- R49, R51-R53, R58-R99
XIX. INJURY, POISONING AND CERTAIN OTHER CONSEQUENCES OF EXTERNAL CAUSES		S00-T98
48 Fractures		S02, S12, S22, S32, S42, S52, S62, S72, S82, S92, T02, T08, T10 & T12
1 Fracture of skull and facial bones		S02
2 Fracture of neck, thorax or pelvis		S12, S22, S32 & T08
3 Fracture of upper limb		S42, S52, S62 & T10
4 Fractures of lower limb		S72, S82, S92 & T12
5 Fractures involving multiple body regions and of unspecified body region		T02
49 Dislocations, sprains and strains of specified and multiple body regions		S03, S13, S23, S33, S43, S53, S63, S73, S83, S93, T03
50 Intracranial and internal injuries, including nerves		S04, S06, S14, S24, S26-S27, S34, S36-S37, S44, S54, S64, S74, S84 & S94

51 Crushing injuries and traumatic amputations of specified and multiple body regions	S07-S08, S17-S18, S28, S38, S47-S48, S57-S58, S67-S68, S77-S78, S87-S88, S97-S98, T04-T05
52 Other injuries of specified, unspecified and multiple body regions	S00-S01, S05, S09-S11, S15-S16, S19-S21, S25, S29-S31, S35, S39-S41, S45-S46, S49-S51, S55-S56, S59-S61, S65-S66, S69-S71, S75-S76, S79-S81, S85-S86, S89-S91, S95-S96, S99, T00-T01, T06-T07, T09, T11, T13-T14
53 Effects of foreign body entering through natural orifice	T15-T19
54 Burns and Corrosions	T20-T32
55 Poisonings by drugs & biological substances; and Toxic effects of substances chiefly nonmedicinal as to source	T36-T50 & T51-T65
56 Other and unspecified effects of external causes and certain early complications of trauma	T33-T35, T66-T79
57 Complications of Surgical and Medical care, not elsewhere classified	T80-T88
58 Late effects of injuries, of poisoning and of other consequences of external causes	T90-T98
XX. EXTERNAL CAUSES OF MORBIDITY AND MORTALITY	V01-Y89
E48 Transport accidents	V01-V99
1 Railway accidents	V05, V15, V80.6, V81, V82.2, V87.6 & V88.6
2 Motor vehicle traffic accidents	V02-V04, V09.2-V09.3, V12-V14, V19.4-V19.6, V19.9, V20-V28, V29.4-V29.6, V29.9, V30-V38, V39.4-V39.6, V39.9, V40-V48, V49.4-V49.6, V49.9, V50-V58, V59.4-V59.6, V59.9, V60-V68, V69.4-V69.6, V69.9, V70-V78, V79.4-V79.6, V79.9, V80.3-V80.5, V82.1, V87.0-V87.5, V87.7-V87.9, V89.2-V89.3
3 Other road vehicle accidents	V01, V06, V09.9, V10-V11, V16-V18, V19.8, V29.8, V39.8, V49.8, V59.8, V69.8, V79.8, V80.0-V80.2, V80.7-V80.9,

	V82.3-V82.7, V82.9 & V89.1
4 Water transport accidents	V90-V94
5 Air & Space transport accidents	V95-V97
6 All other transport accidents	V09.0-V09.1, V19.0-V19.3, V29.0-V29.3, V39.0-V39.3, V49.0-V49.3, V59.0-V59.3, V69.0-V69.3, V79.0-V79.3 , V82.0, V82.8, V83-V86, V88.0-V88.5, V88.7-V88.9, V89.0, V89.9, V98-V99
E49 Accidental Falls	W00-W19
E50 Accidental drowning and submersion	W65-W74
E51 Exposure to smoke, fire and flames	X00-X09
E52 Accidental poisoning by and exposure to noxious substances	X40-X49
E53 Intentional self-harm (Suicide- attempted)	X60-X84
E54 Assault (Homicide)	X85-Y09
E55 Other Violence	Y10-Y36
1 Event of undetermined intent Y10-Y34	
2 Legal intervention Y35	
3 Operations of war Y36	
E56 Complications of medical and surgical care	Y40-Y84
1 Drugs, medicaments and biological substances causing adverse effects in therapeutic use	Y40-Y59
2 Misadventures during surgical & medical care, adverse incidents in diagnostic and therapeutic use, abnormal reactions and late complications	Y60-Y69, Y70-Y82 & Y83-Y84
E57 Other external causes of accidental injury, not elsewhere classified	W20-W64, W75-W99, X10-X39, X50-X59
1 Accidents caused by machinery, and by cutting & piercing instruments	W24-W31
2 Accidents caused by firearm missile	W32-W34
3 Bites of snakes & other venomous animals	X20-X27
4 Sun stroke	X32
5 All other accidents including late effects	W20-W23, W35-W64, W75-W99, X10-X19, X28-X31, X33-X39 & X50-X59
E58 Late effects of external causes of morbidity and mortality	Y85-Y89

Table : CENTRE WISE CAUSE OF DEATH UNDER MAJOR CAUSE GROUP

M.G /CAT. /S.C	CAUSE OF DEATH	SEX	Thruvana nthapura m	Kollam	Kochi	Kozhikode	Alappuzha	Total
1	2	3	4	5	6	7	8	9
I.	Certain infectious and parasitic diseases (A00-B99)	M	709	21	109	359	96	1294
		F	331	11	63	165	39	609
		T	1040	32	172	524	135	1903
II.	Neoplasms (C00-D48)	M	1019	81	799	915	168	2982
		F	701	65	506	495	130	1897
		T	1720	146	1305	1410	298	4879
III.	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50-D89)	M	50	0	29	42	7	128
		F	36	4	30	65	8	143
		T	86	4	59	107	15	271
IV.	Endocrine, nutritional and metabolic diseases (E00-E89)	M	542	16	623	617	203	2001
		F	481	12	393	456	157	1499
		T	1023	28	1016	1073	360	3500
V.	Mental and behavioural disorders (F01-F99)	M	35	0	1	9	3	48
		F	4	0	1	4	0	9
		T	39	0	2	13	3	57
VI.	Diseases of the nervous system (G00-F98)	M	152	3	16	119	74	364
		F	84	2	12	94	49	241
		T	236	5	28	213	123	605
VII.	Diseases of the eye and adnexa (H00-H59)	M	0	0	0	0	1	1
		F	0	0	0	0	0	0
		T	0	0	0	0	1	1
VIII.	Diseases of the ear and mastoid process (H60-H95)	M	0	0	0	0	0	0
		F	0	0	0	0	0	0
		T	0	0	0	0	0	0
IX.	Diseases of the circulatory system (I00-I99)	M	1882	545	1140	1564	521	5652
		F	1291	387	750	1037	444	3909
		T	3173	932	1890	2601	965	9561
X.	Diseases of the respiratory system (J00-J98)	M	683	266	414	643	319	2325
		F	375	111	184	230	125	1025
		T	1058	377	598	873	444	3350
XI.	Diseases of the digestive system (K00-K92)	M	694	86	662	494	139	2075
		F	176	54	137	146	25	538
		T	870	140	799	640	164	2613
XII.	Diseases of the skin and subcutaneous tissue (L00-L98)	M	54	0	1	16	7	78
		F	31	0	0	19	4	54
		T	85	0	1	35	11	132

M.G /CAT. /S.C	CAUSE OF DEATH	SEX	Thruvana nthapura m	Kollam	Kochi	Kozhikode	Alappuzha	Total
XIII.	Diseases of the musculoskeletal system and connective tissue (M00-M99)	M	22	0	0	16	8	46
		F	39	0	1	24	6	70
		T	61	0	1	40	14	116
XIV.	Diseases of the genitourinary system (N00- N99)	M	288	74	118	267	62	809
		F	179	78	88	165	38	548
		T	467	152	206	432	100	1357
XV.	Pregnancy, childbirth and the puerperium (O00-O99)	F	6	1	2	6	0	15
		T	6	1	2	6	0	15
XVI.	Certain conditions originating in the perinatal period (P00-P96)	M	156	11	81	341	37	626
		F	136	7	50	300	37	530
		T	292	18	131	641	74	1156
XVII.	Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)	M	91	0	55	197	8	351
		F	84	0	46	142	7	279
		T	175	0	101	339	15	630
XVIII.	Symptoms, signs and abnormal clinical and laboratory findings,not elsewhere classified (R00-R99)	M	48	11	23	74	64	220
		F	26	12	11	40	26	115
		T	74	23	34	114	90	335
XIX.	Injury, poisoning and certain other consequences of external causes (S00-T98)	M	407	24	199	465	76	1171
		F	158	7	77	185	17	444
		T	565	31	276	650	93	1615
XX.	External causes of morbidity and mortality (V01-Y89)	M	196	24	219	452	43	934
		F	71	7	78	198	5	359
		T	267	31	297	650	48	1293
	ALL CAUSES (MAJOR GROUP I to XIX)	M	6832	1138	4270	6138	1793	20171
		F	4138	751	2351	3573	1112	11925
		T	10970	1889	6621	9711	2905	32096
	ALL CAUSES (MAJOR GROUP I to XX)	M	7028	1162	4489	6590	1836	21105
		F	4209	758	2429	3771	1117	12284
		T	11237	1920	6918	10361	2953	33389