



Government of Kerala

REPORT ON MEDICAL CERTIFICATION OF CAUSE OF DEATH 2021

**Department of Economics and Statistics
Kerala**

PREFACE

Reliable cause-specific mortality statistics form the bedrock of public health and social development, offering indispensable insights that empower governments, health institutions, and communities to significantly elevate health outcomes and the collective well-being. 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 in specified areas taking into consideration the availability of medical facilities. Section 10(3) of the Act provides for issuing a certificate of the cause of death by the medical practitioner who has attended the deceased at the time of death. Under the scheme, the Office of the Registrar General, India (ORGI) systematically collects, compiles, and tabulates data on medically certified deaths, as sourced from the Offices of the Chief Registrars of Births and Deaths across various States and Union Territories.

In Kerala, the scheme of MCCD is being implemented in five urban local bodies viz Thiruvananthapuram, Kollam, Ernakulam and Kozhikode Corporations and Alappuzha Municipality. The report is prepared exclusively based on data on institutional deaths from these areas, cross-tabulated by age group and sex adhering to the meticulous standards set forth by the Tenth Revision of the International Classification of Diseases (ICD).

The report on MCCD for the year 2021 is particularly significant as it captures the impact of the Covid-19 pandemic, which has profoundly affected the State's public health landscape. Covid-19 emerged as the leading cause of death in several age groups, highlighting severe impact of the pandemic on public health. The report provides detailed insights into the leading causes of death, highlighting how the distribution of deaths by major cause has varied over the years and illustrating the differing risks of death across various age groups. The age-specific analysis sheds light on the different health risks encountered by various demographic groups, aiding in the formulation of targeted health interventions and policies.

The report is prepared by Shri Preeth V.S., Nosologist under the supervision of Shri. T.P. Vinodan, Additional Director (General) and Additional Chief Registrar of Birth and Deaths in the State. The data collection and ICD-10 coding of the cause of death were expertly managed by the Deputy Health Officers in the respective local bodies. I extend my heartfelt congratulations to all contributors for their invaluable roles in bringing out this report in the present form.

I hope this report will serve as an indispensable resource for policymakers, programme managers, academicians, and researchers.

Place : Thiruvananthapuram
Date: 10 -07-2024



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REPORT ON MEDICAL CERTIFICATION OF CAUSE OF DEATH 2021



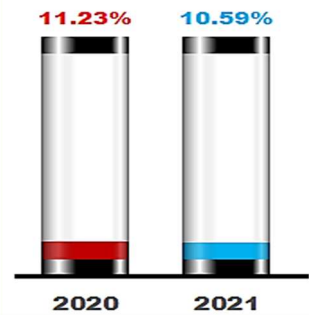
HIGHLIGHTS



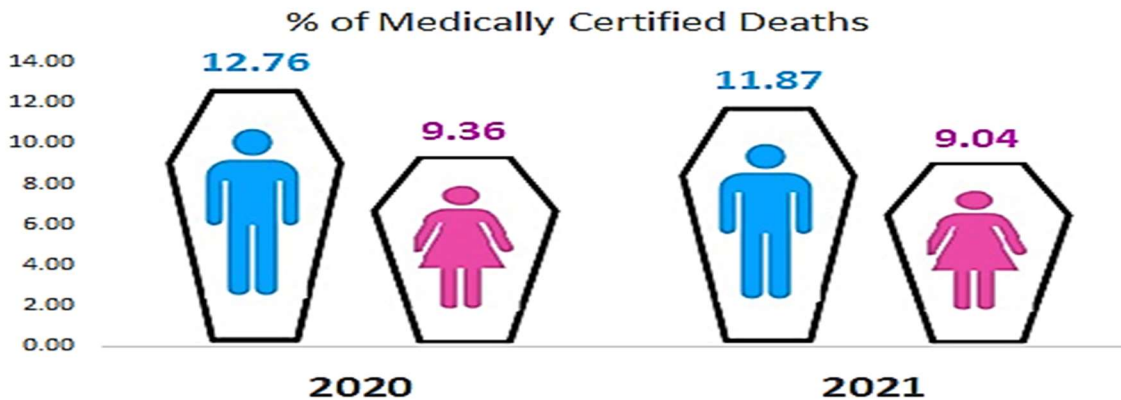
STATUS OF IMPLEMENTATION OF MCCD SCHEME

YEAR	TOTAL NUMBER OF REGISTERED DEATHS	NUMBER OF MEDICALLY CERTIFIED DEATHS
2020	250983	28192
2021	339648	35965

% of Medically Certified Deaths



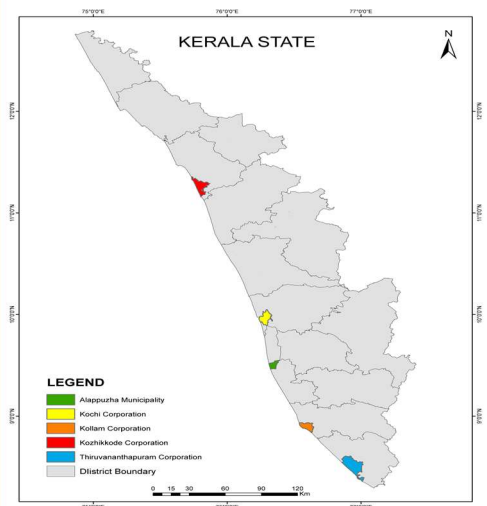
PERCENTAGE OF MEDICALLY CERTIFIED DEATHS BY SEX



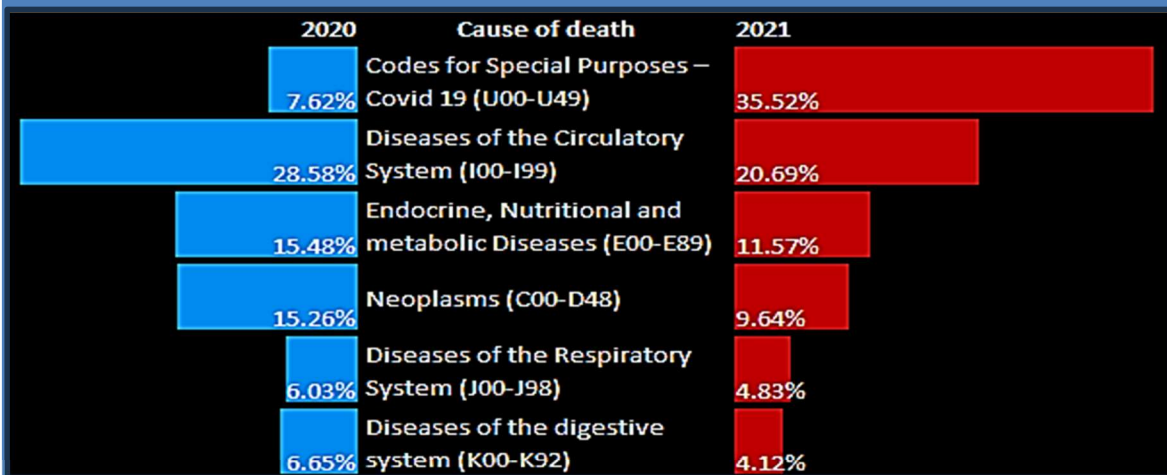
The scheme has been implemented in five centres in Kerala, namely:

1. Thiruvananthapuram Corporation
2. Kollam Corporation
3. Kochi Corporation
4. Kozhikode Corporation
5. Alappuzha Municipality

Currently, data is being collected from 150 hospitals that offer in-patient facilities across all these five centres.



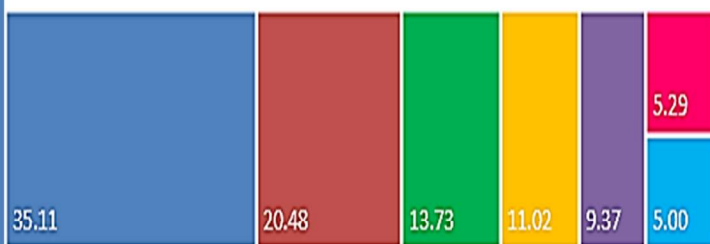
TOP LEADING CAUSES OF DEATH BY MAJOR GROUP



The top leading cause of death in 2021 was COVID-19 and related causes, which accounted for 35.52% of total medically certified deaths, whereas in 2020, diseases of the circulatory system held the top position. The other leading causes of death in 2021, following COVID-19 and related causes, were diseases of the circulatory system (20.69%), endocrine, nutritional, and metabolic diseases (11.57%), neoplasms (9.64%), diseases of the respiratory system (4.83%), diseases of the digestive system (4.12%), and all other causes, which accounted for 13.63% of medically certified deaths.

Percentage distribution of male deaths under MCCD by major cause of death -2021

Codes for Special Purposes – Covid 19 (U00-U49)	35.11%
Diseases of the Circulatory System (I00-I99)	20.48%
Endocrine, Nutritional and metabolic Diseases (E00-E89)	11.02%
Neoplasms (C00-D48)	9.37%
Diseases of the Respiratory System (J00-J98)	5.00%
Diseases of the digestive system (K00-K92)	5.29%
others	13.73%



In 2021, COVID-19 and related causes ranked as the leading cause of death among medically certified deaths in men, accounting for 35.11% of the total medically certified deaths. This was followed by diseases of the circulatory system (20.48%), endocrine, nutritional, and metabolic diseases (11.02%), neoplasms (9.37%), diseases of the digestive system (5.29%), and diseases of the respiratory system (5.00%). All other causes accounted for 13.73% of medically certified deaths.

**Percentage distribution of female deaths under MCCD
by major cause of death 2021**



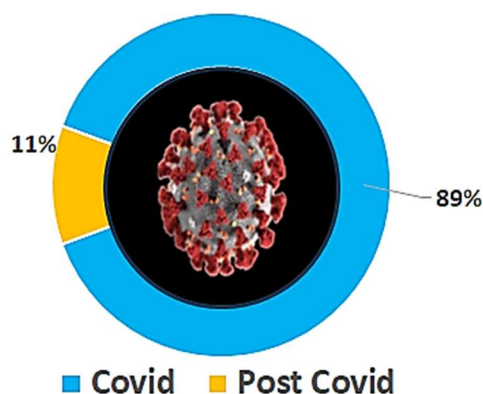
In 2021, COVID-19 and related causes were the leading cause of medically certified female deaths, representing 36.17% of total certified deaths among women. Following this, diseases of the circulatory system accounted for 21.04%, endocrine, nutritional, and metabolic diseases for 12.45%, neoplasms for 10.06%, diseases of the respiratory system for 4.57%, and certain infectious and parasitic diseases for 2.66%. All other causes contributed to 13.06% of medically certified female deaths.

1 COVID-19 AND RELATED DEATHS IN 2021

Percentage of Covid-19 and related deaths to total medically certified deaths

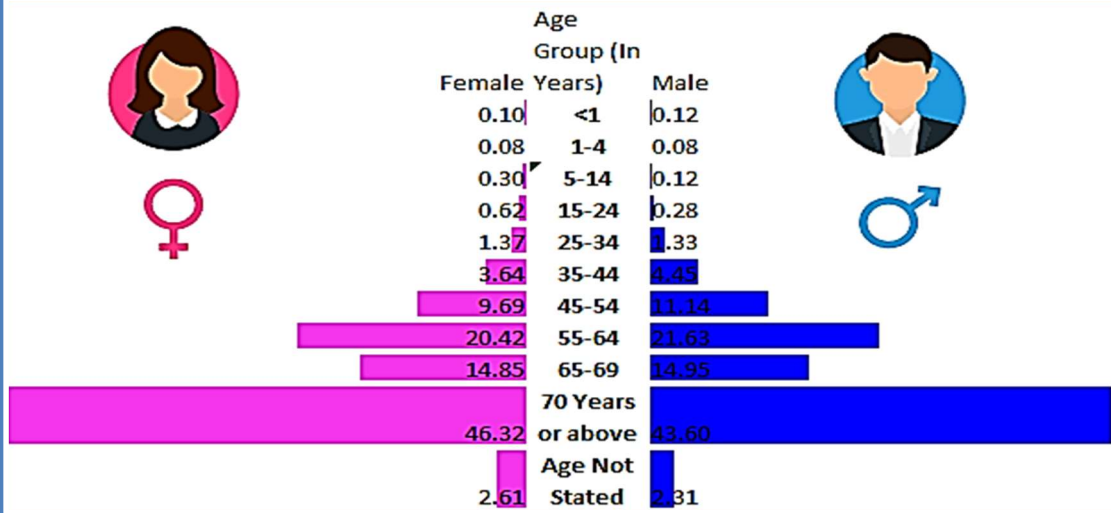


Distribution of cause of deaths among Covid-19 and related causes under MCCD 2021



In Kerala during 2021, the leading major group of causes of death was COVID-19 and its related factors, accounting for 35.52% of total medically certified deaths. Of these deaths, approximately 89% were directly attributed to COVID-19, with the remaining fatalities resulting from post-COVID complications.

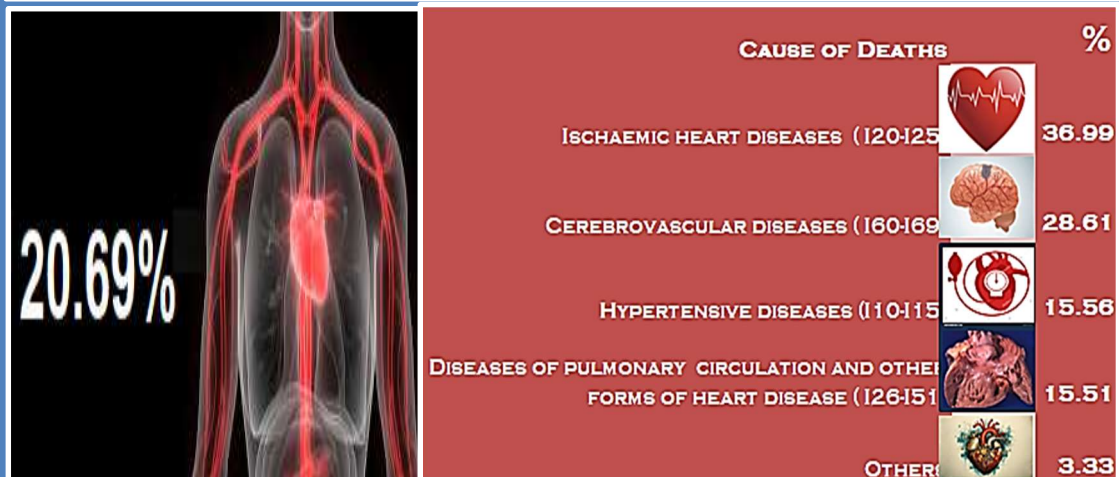
COVID-19 AND RELATED DEATHS IN 2021 BY SEX AND AGE GROUP



During 2021 in Kerala, the age group most severely affected by both COVID and post-COVID fatalities was 70 years and above, for both male and female. Additionally, it's worth noting that approximately 90% of all certified COVID-related deaths were concentrated in individuals aged 45 years and older, for both male and female.

2

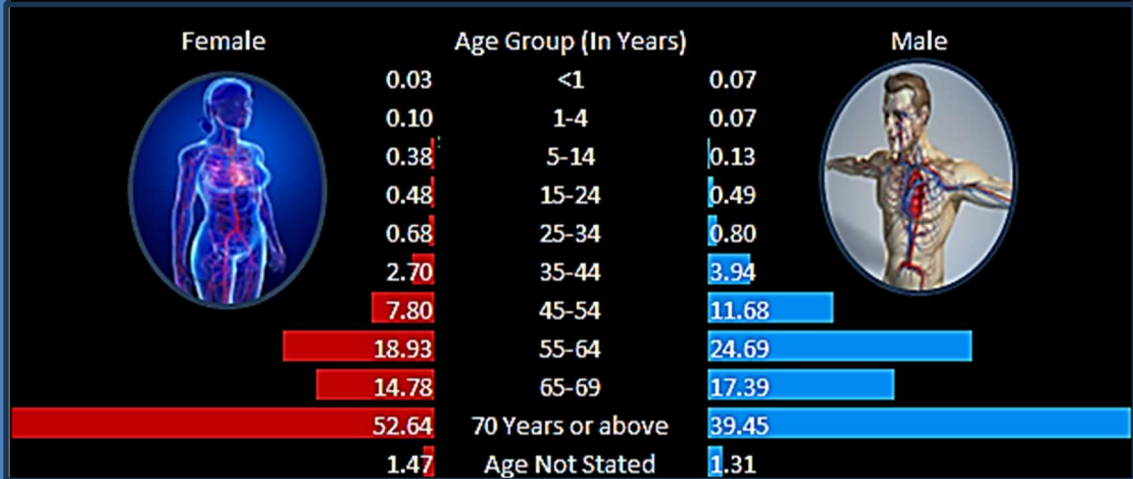
DISEASES OF THE CIRCULATORY SYSTEM



In Kerala during 2021, Diseases of the Circulatory System constituted 20.69% of all medically certified deaths, ranking as the second leading major disease group. Within this category, most of the deaths, accounting for 36.99%, were attributed to Ischaemic Heart diseases, followed by Cerebrovascular diseases at 28.61%, Hypertensive Diseases at 15.56%, and diseases of Pulmonary Circulation and other forms of heart diseases at 15.51%. Other causes contributed to 3.33% of the total medically certified deaths associated with Diseases of the Circulatory System.

DISEASE OF CIRCULATORY SYSTEM IN 2021 UNDER MCCD BY SEX AND AGE GROUP

Age and sex-wise distribution of deaths due to diseases of the Circulatory System



In Kerala, during 2021, over 90% of the individuals who passed away due to diseases of the circulatory system were aged 45 years and older, for both males and females. Furthermore, the mortality rate attributed to diseases of the circulatory system within the age group of 45-69 years was higher for males compared to females.

3

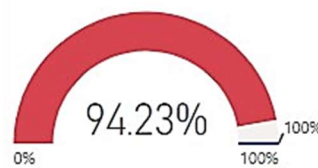
ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES

% of Endocrine, Nutritional, and metabolic diseases to total MCCD deaths in 2021



11.57%

Distribution of Major causes of deaths due to Endocrine, Nutritional and Metabolic diseases under MCCD – 2021



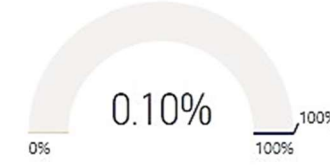
Diabetes mellitus



All other endocrine and metabolic diseases



Disorders of thyroid gland



Malnutrition

In the year 2021, Endocrine, Nutritional, and Metabolic Diseases stood as the third most prevalent cause of death, contributing to 11.57% of all medically certified deaths. Of these fatalities, a substantial 94.23% were specifically attributed to Diabetes Mellitus.

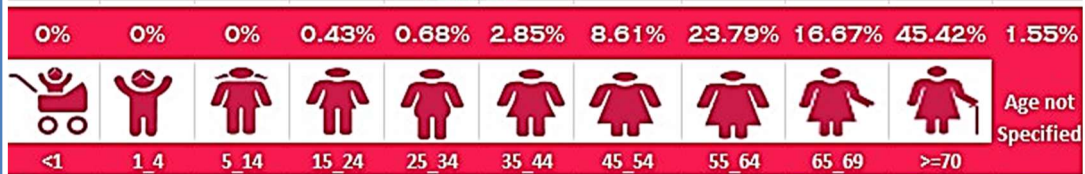
ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES BY SEX AND AGE GROUP

Age Group and Sex wise distribution of deaths due to Diabetes Mellitus under MCCD – 2021

MALE



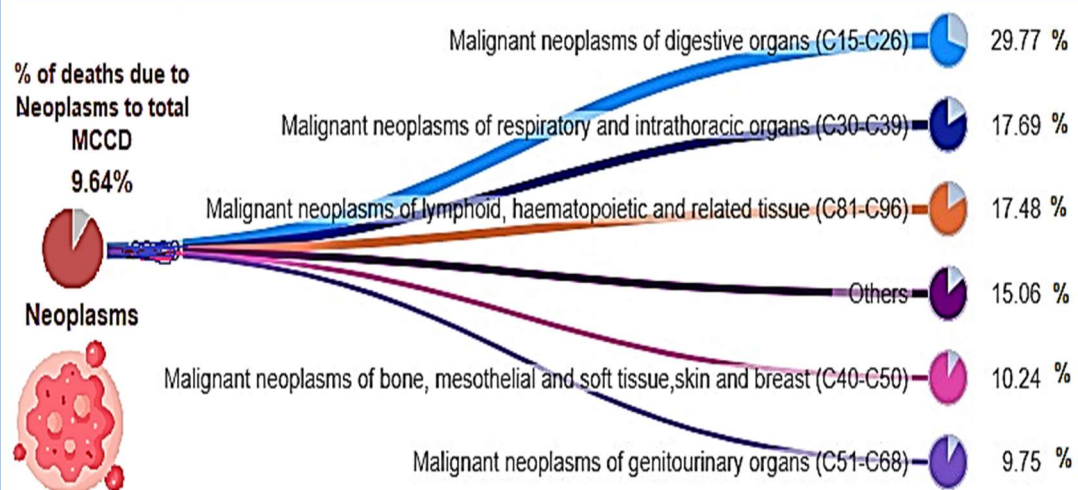
FEMALE



Deaths due to Diabetes Mellitus predominantly affected individuals aged 45 years and above. The percentage of deaths attributed to Diabetes Mellitus among the age groups 45-54, 55-64, and 65-69 was higher for males than females. However, for the age group above 70 years, a reverse trend was observed, with females experiencing a higher percentage of deaths due to Diabetes Mellitus compared to males.

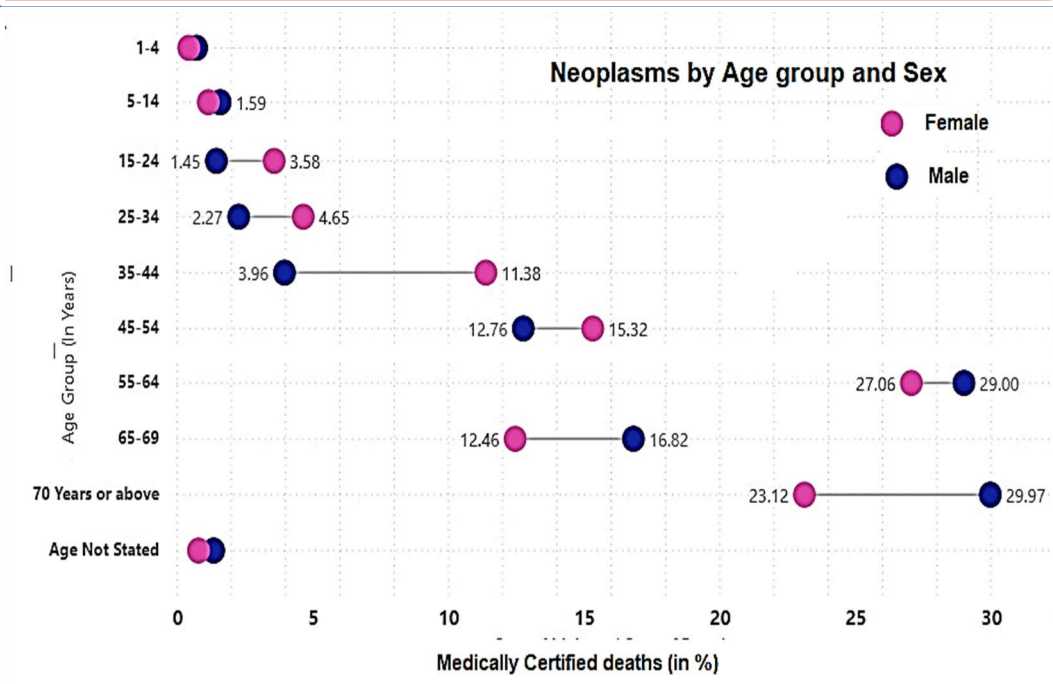
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NEOPLASMS



Neoplasms ranked as the fourth leading cause of death among all medically certified deaths in Kerala in 2021, contributing to 9.64% of all deaths under MCCD. Within the category of deaths due to Neoplasms, 29.77% were attributed to Malignant neoplasms of digestive organs. Following this were Malignant Neoplasms of respiratory and intrathoracic organs (17.69%), Malignant neoplasms of lymphoid (17.48%), Malignant neoplasms of bone (10.24%), and Malignant neoplasms of genitourinary organs (9.75%). Other causes accounted for 15.06% of deaths due to neoplasms under MCCD.

NEOPLASMS BY SEX AND AGE GROUP

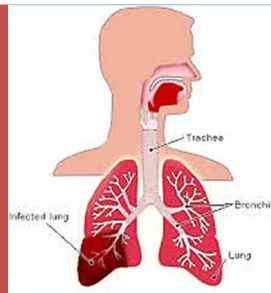


The incidence of neoplasm-related deaths was higher among individuals in the age groups of 55-64 and '70 and above'. A significant gender disparity was observed in the 35-44 age group, where the proportion of deaths due to neoplasms was 3.96 for males and 11.38 for females.

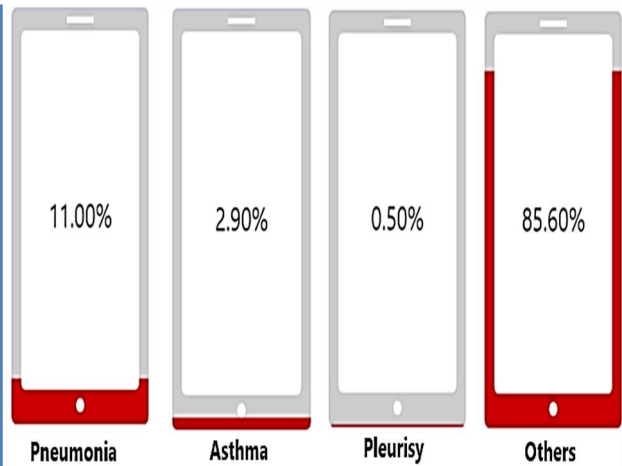
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DISEASES OF RESPIRATORY SYSTEM

% of respiratory diseases to total MCCD deaths in 2021



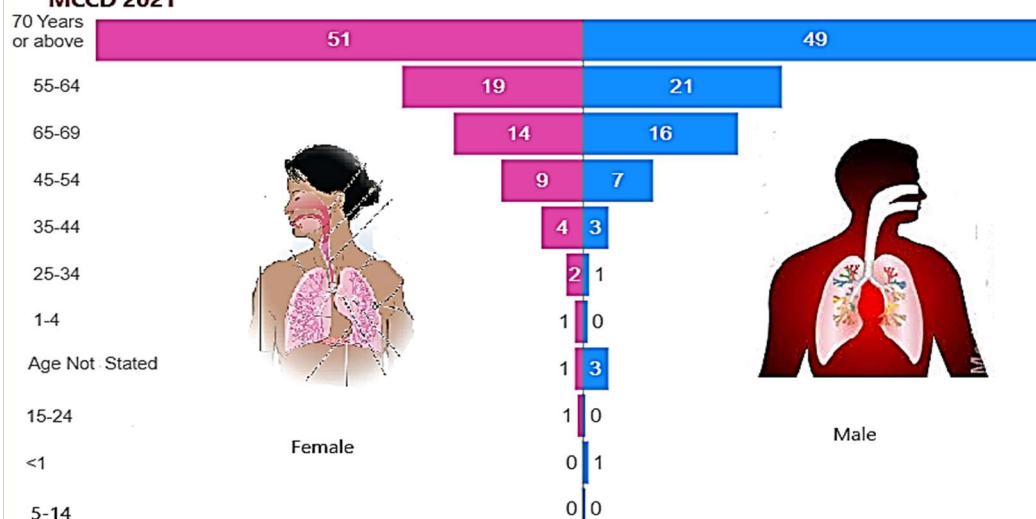
4.83
%



In 2021, respiratory system diseases were the fourth most common cause of death among all medically certified deaths in Kerala, accounting for 4.83% of all deaths under MCCD. Among deaths attributed to respiratory diseases, Pneumonia accounted for 11%, Asthma contributed 2.90%, Pleurisy contributed 0.50%, with the remaining attributed to other types of respiratory diseases.

RESPIRATORY DISEASES BY AGE GROUP AND SEX

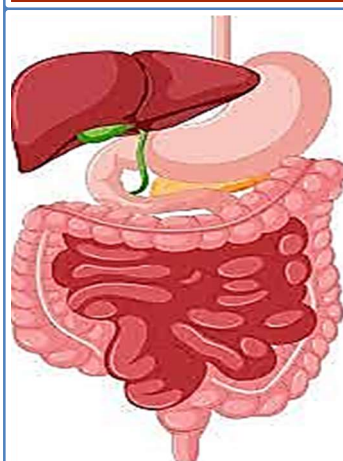
Age group and sex wise distribution of deaths due to diseases digestive system under MCCD 2021



The age group '70 Years or above' has recorded the highest incidence of deaths for both males and females within this major cause group, followed by the age groups '55-64 years' and '65-69 years'. No significant gender difference was observed in any age group.

6

DISEASES OF DIGESTIVE SYSTEM



% of diseases of digestive system to total MCCD in 2021

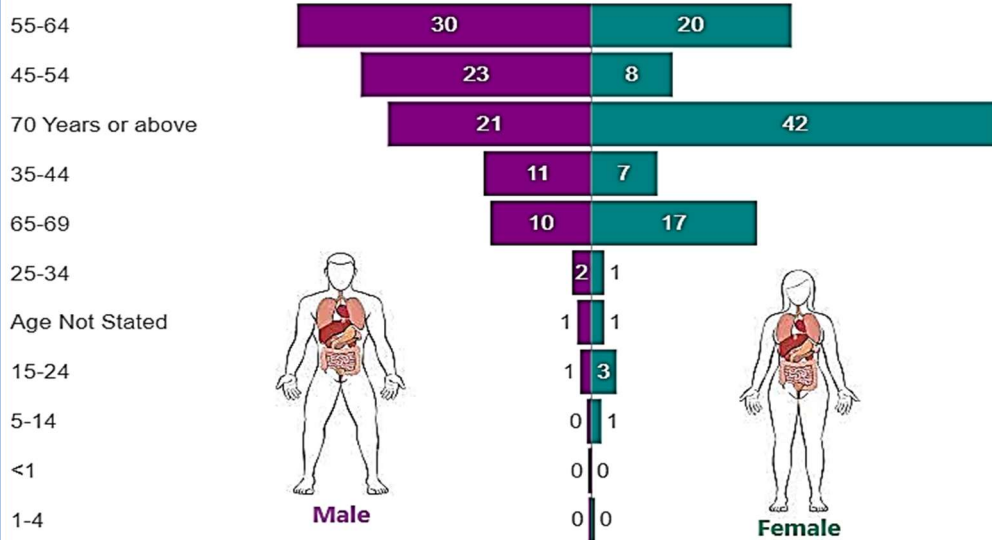
4.12%

Disease	% to total deaths due to diseases of digestive system	
Diseases of the liver (K70-K76)	81.93	82%
Others	12.07	12%
Disorders of the pancreas (K85-K86)	2.76	3%
Paralytic ileus and intestinal obstruction without ...	1.89	2%
Peritonitis (K65)	0.67	1%
Hernia (K40-K46)	0.67	1%

Liver diseases accounted for the majority, approximately 82%, of deaths related to digestive system disorders. Pancreatic disorders contributed to 2.7% of such deaths, while other diseases in this category made up 15.37%

DISEASES OF DIGESTIVE SYSTEM BY AGE GROUP AND SEX

Age group and sex wise distribution of deaths due to diseases of digestive system under MCCD 2021



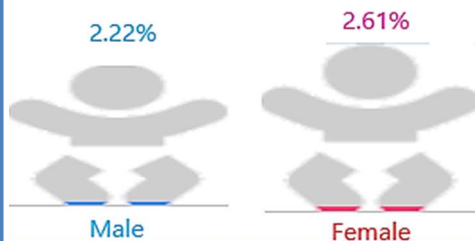
In the male population, the age group of 55-64 recorded the highest percentage of deaths (30%) attributed to diseases of the digestive system. Conversely, among females, the highest percentage was observed in the age group of 70 years and above, accounting for 42% of deaths in this category. In addition to the 55-64 age group, notable occurrences of deaths due to digestive system diseases were observed in the age groups of 45-54 (23%) and 70 years and above (21%) for males. Among females, the 55-64 age group contributed to 20% of total deaths from digestive system diseases, with the age group of 65-69 following closely with a contribution of 17%.

*Details of other major causes of death were given in chapter 3

SPECIFIC CAUSE OF MORTALITY IN DIFFERENT AGE GROUPS

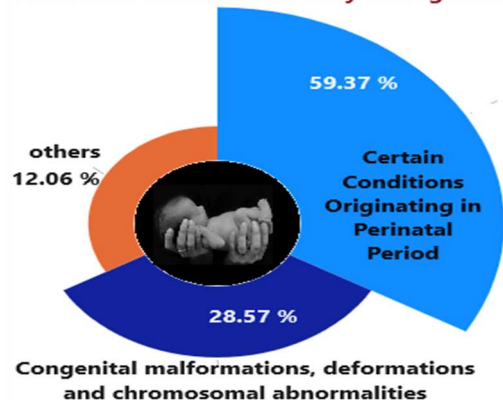
INFANTS (AGE <1 YEAR)

% of infant deaths to the total deaths under MCCD



2.37%

Prominent Causes of Mortality among Infants



- Out of the total medically certified deaths, around 2.37 per cent has been reported for infants (children who could not complete their first birthday)
- The highest incidence of deaths under this age-group are reported under Certain Conditions Originating in the Perinatal Period (59.37 per cent).

CHILDREN AGED 1-4 YEARS.

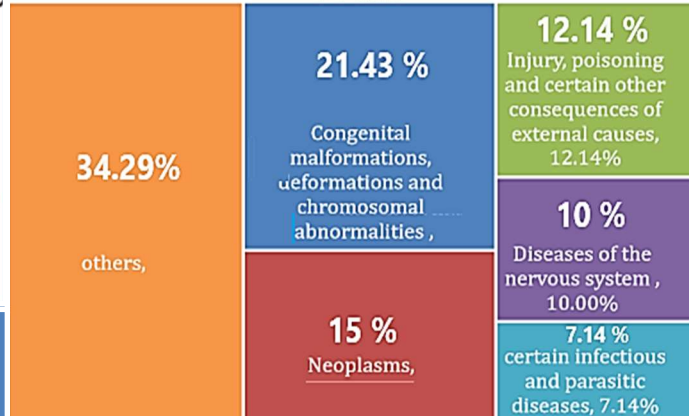
% of deaths of children aged 1-4 years to total deaths under MCCD

0.37 0.42



0.39 %

The prominent Causes of Mortality among Children in the Age Group 1-4 Years



- Among the total medically certified deaths, 0.39 percent were attributed to the age group 1-4 years.
- The majority of deaths within this age group were attributed to congenital malformations, deformations, and chromosomal abnormalities, accounting for 21.43 percent.
- Neoplasms account for a substantial share, specifically 15 %, of the causes of death in the 1-4 years age group.

CHILDREN AGED 5-14 YEARS.

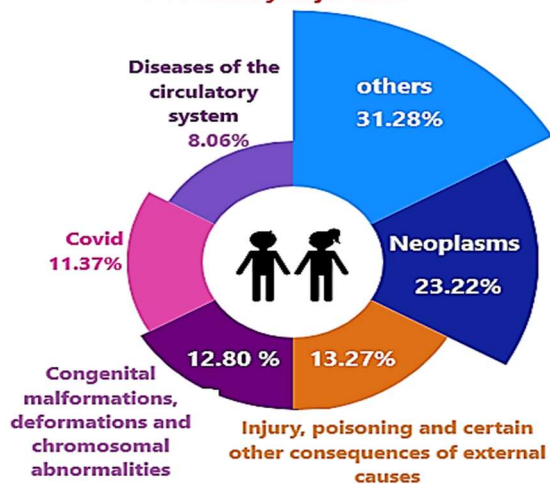
% of deaths for the age group 5-14 to the total deaths under MCCD

0.48 0.76



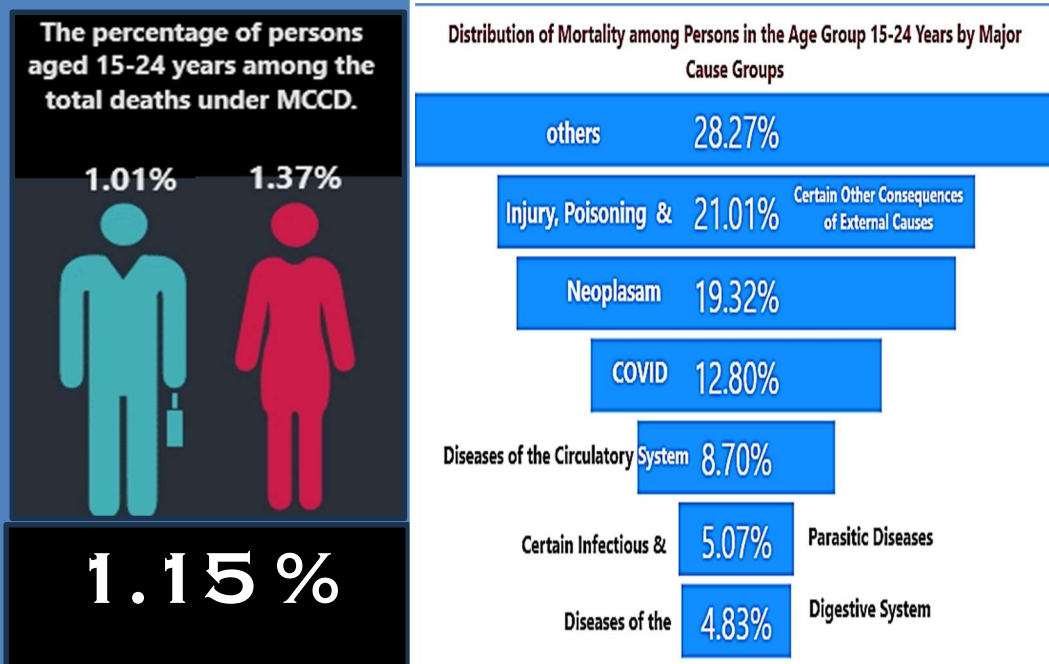
0.59 %

Distribution of Mortality among Children in the Age Group 5-14 Years by Major Cause



- ❖ The share of the 5-14 years age group in the total medically certified deaths was 0.59 percent.
- ❖ A significant portion of deaths among children aged 5-14 years, accounting for 23.22%, is attributed to neoplasms.
- ❖ The share of Injury, poisoning and certain other consequences of external causes is 13,27% followed by Congenital malformations, deformations and chromosomal abnormalities (12.80%) and Covid (11.37%)

PERSONS AGED 15-24 YEARS.



- The age-group 15-24 has contributed to 1.15 per cent of the total medically certified deaths.
- The cause group Injury, Poisoning and Certain Other Consequences of External Causes has caused highest deaths of 21.01 per cent of total deaths.
- Neoplasms are the second major cause in the age group 15-24 years, contributing 19.32% of the total deaths within this demographic.
- The other notable causes include Covid and Diseases of the circulatory system, contributing 12.8% and 8.7%, respectively, to the total deaths in this age group.

PERSONS AGED 25-34 YEARS.

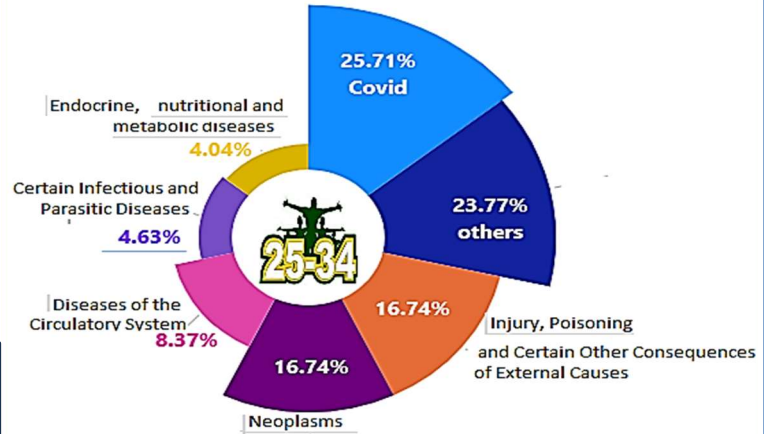
The share of the age group 25-34 in the total deaths recorded under MCCD.

1.77% 2.01%



1.86%

Distribution of Mortality among Persons in the Age Group 25-34 Year by Major Cause Groups



- The age group 25-34 years constitutes 1.86 per cent of total medically certified deaths
- The most prominent cause of death in this age group is Covid-19 (including post covid), constituting a significant share of 25.71%.
- Both Neoplasms and Injury, Poisoning, and Certain Other Consequences of External Causes equally contribute a significant share, each accounting for 16.74%.

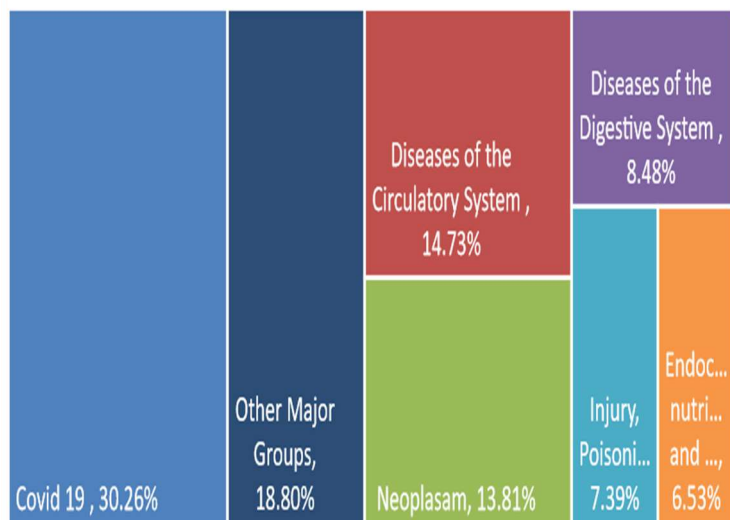
PERSONS AGED 35-44 YEARS.

The share of age group 35-44 in the total deaths recorded under MCCD

4.94 % 4.71%

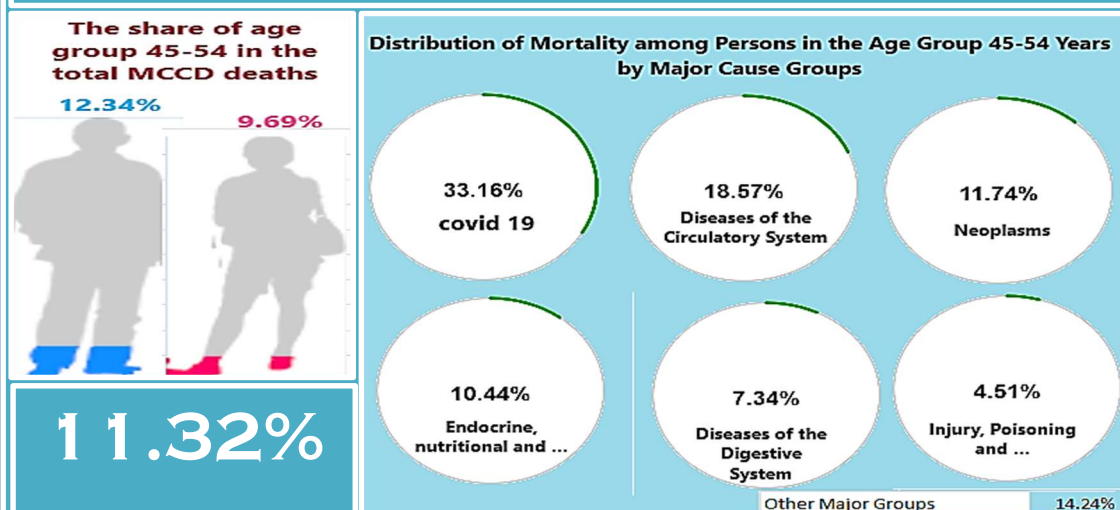


4.85 %



- ❖ The overall contribution of the age-group 35-44 years in total medically certified deaths is 4.85 per cent.
- ❖ Covid-19 is the leading cause of death, constituting a substantial percentage of 30.26%
- ❖ Diseases of the Circulatory System and Neoplasms follow, contributing 14.73% and 13.81%, respectively.
- ❖ Diseases of the Digestive System and Injury, Poisoning, and Certain Other Consequences of External Causes contribute 8.48% and 7.39% respectively, while Endocrine, Nutritional, and Metabolic Diseases account for 6.53%.

PERSONS AGED 45-54 YEARS.



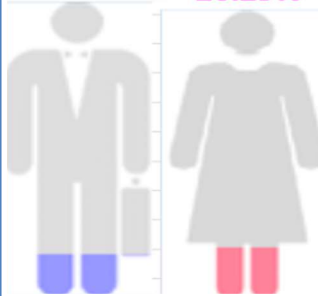
- The age group 45-54 has contributed to 11.32 per cent of the total medically certified deaths.
- The distribution of causes of death presents a notable impact of Covid-19, constituting the highest percentage at 33.16%.
- Diseases of the Circulatory System follow closely, contributing 18.57%, emphasizing the importance of addressing cardiovascular health.
- The other major determinants of deaths in this age group are Neoplasms(11.74%), Endocrine, nutritional and metabolic diseases (10.44%), Diseases of digestive system (7.34%) and Injury, Poisoning and Certain Other Consequences of External Causes(4.51%).

PERSONS AGED 55-64 YEARS.

share of age group 55-64 to the total deaths under MCCD

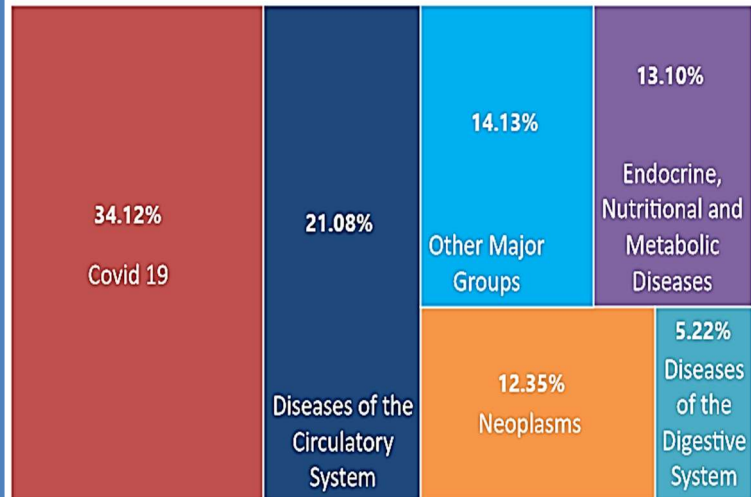
23.10%

20.29%



22.02%

Distribution of Mortality among Persons in the Age Group 55-64 Years by Major Cause Groups



- The age-group 55-64 years has a share of 22.02 per cent in the total medically certified deaths.
- The data on mortality distribution within the 55-64 age group highlights a noteworthy influence of Covid-19, representing the predominant factor with a substantial percentage of 34.12%.
- Diseases of the Circulatory System closely trail behind, making a significant contribution of 21.08%.
- Neoplasms, at 12.35%, highlight the presence of cancer-related fatalities, while Endocrine, Nutritional, and Metabolic Diseases contribute 13.10%

PERSONS AGED 65-69 YEARS.

Share of age group 65-69 to total deaths under MCCD

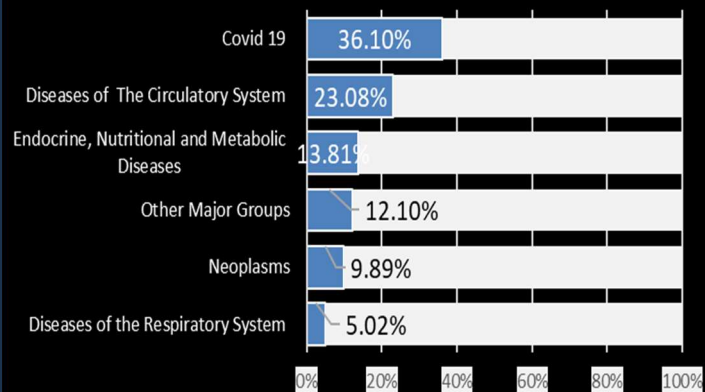
15.01%

14.12%



14.67%

Chart Distribution of Mortality among Persons in the Age Group 65-69 Years by Major Cause Groups

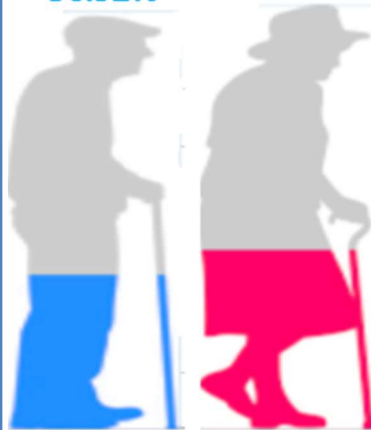


- The age-group 65-69 years has a share of 14.67 per cent in the total medically certified deaths.
- The distribution of mortality within the 65-69 age group reveals a substantial impact of Covid-19(including post covid), constituting the highest percentage at 36.10%. Diseases of The Circulatory System and Endocrine, Nutritional, and Metabolic Diseases also make notable contributions at 23.08% and 13.81%, respectively.
- Neoplasms, accounting for 9.89%, indicate the presence of cancer-related fatalities,

PERSONS AGED 70 YEARS OR ABOVE

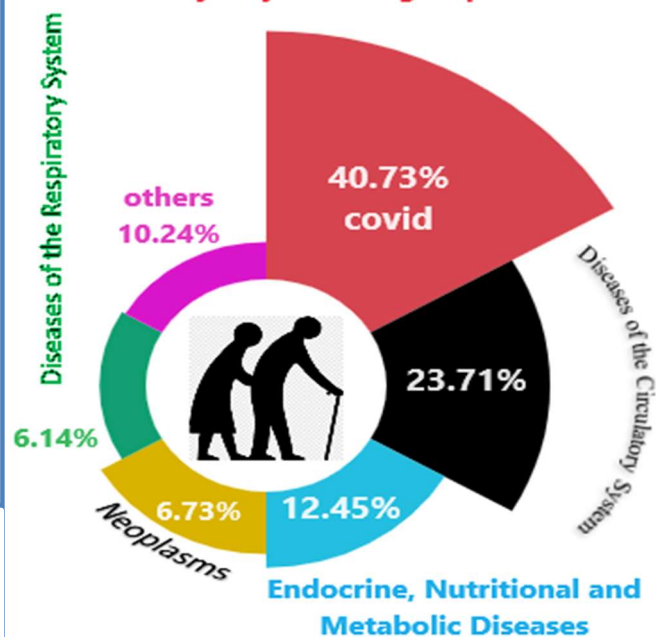
share of persons aged 70 years and above to total deaths under MCCD

36.92% 42.19%



38.95%

Distribution of Mortality among old aged persons (70 years or above) by major cause groups



- The age-group 70 years and above , as expected, has reported the maximum incidences (38.95 per cent) of total medically certified deaths.
- Covid-19 stands out as the leading cause, constituting a substantial percentage of 40.73%, underscoring the severe impact of the pandemic on the elderly population.
- Diseases of the Circulatory System follow closely at 23.71%
- he other prominent causes include Endocrine, Nutritional, and Metabolic Diseases (12.45%), Neoplasms (6.73%), and Diseases of the Respiratory System (6.15%).

List of Abbreviations used in the Report

Abbreviations	Description
MCCD	Medical Certification of Cause of Death
WHO	World Health Organization
RGI	Registrar General of India
ORGI	Office of Registrar General of India
DES	Department of Economics and Statistics
ICD	International Classification of Diseases
RBD Act 1969	Registration of Birth and Death Act 1969
TIA	Transient Ischemic Attack
CHD	Coronary Heart Disease

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Chapter

1

Introduction

Medical Certification of Cause of Death

1.1 Introduction

Accurate cause-specific mortality statistics are an indispensable requirement for administrators, policy planners, researchers, and various professionals engaged in public health. These statistics serve as a foundational resource for evidence-based decision-making, influencing critical aspects such as resource allocation, monitoring of key indicators, and identification of priority areas for public health programs and related activities. It also plays an important role in furtherance of medical research and is fundamental for monitoring as well as improving the methods of diagnosis and analysis. Under the system of Registration of Births & Deaths, the scheme of Medical Certification of Cause of Death (MCCD) – an integral part of the Vital Statistics System, aims at providing a reliable and temporal database for generating cause-specific mortality statistics. The Office of the Registrar General, India, (ORGI) obtains data on causes of death from the Chief Registrar of Births and Deaths of different States and Union Territories, under the Registration of Births & Deaths Act, 1969. In Kerala the scheme is presently implemented only in four Corporations viz. – Thiruvananthapuram, Kollam, Ernakulum and Kozhikode and in Alappuzha Municipality.



Amidst the formidable challenges posed by the devastating COVID-19 pandemic in 2021, India experienced a profound impact on public health, resulting in a considerable loss of lives. In this critical context, the role of the Medical Certification of Cause of Death (MCCD) becomes pivotal, serving as a crucial instrument for understanding and analysing the dynamic trends and evolving mortality patterns associated with various diseases.

1.2 Legal Provisions

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.

1.3 MCCD Forms

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 then the underlying cause. 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.

1.4 International Classification of Diseases (ICD) Coding.

The International Classification of Diseases (ICD) plays a pivotal global role by offering comprehensive insights into the prevalence, causes, and repercussions of human diseases and mortality on a worldwide scale. Utilized for reporting and coding data, ICD forms the primary foundation for health records and disease statistics across various levels of care, including primary, secondary, and tertiary healthcare. It significantly contributes to cause-of-death certificates, facilitating crucial information for payment systems, service planning, quality and safety administration, and health services research. The diagnostic guidance associated with ICD categories not only standardizes data collection but also enables extensive and standardized research on a large scale.



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.

1.5 Contents of the Report.

Comprising four chapters and nine appendices, this report delves into various aspects of the Medical Certification of Cause of Death (MCCD) scheme. After the introductory chapter, Chapter 2 provides a comprehensive update on the status of MCCD scheme implementation. In Chapter 3, the distribution of deaths based on major causes is detailed, while Chapter 4 focuses on age-specific cause of mortality categorized by gender.

The statistics presented in this report offer insights into cause-specific mortality, cross-classified by sex and broad age-groups. It is important to note that the report is derived from medically certified deaths that occurred in hospitals, whether public or private, covered under the MCCD Scheme. However, as the scheme currently covers only selected hospitals, primarily from urban areas, the presented profile may not fully represent the reliable pattern of cause-specific mortality prevalent in the state. Keeping this in view, the data users may take due caution while deducing the mortality pattern.

Chapter

2

**Scheme of MCCD:
Status of Implementation**

Scheme of MCCD: Status of Implementation

2.1 Scheme of MCCD

The RBD Act, 1969, mandates the compulsory registration of births and deaths in the country, effective since April 1, 1970. Despite being a Central Act, its implementation falls under the purview of the States and Union Territories (UTs). At the national level, the Registrar General, India, appointed under Section 3 of the Act, unifies and coordinates the activities of Chief Registrars, offering general direction and guidance for the registration of births and deaths and the Act's implementation. Chief Registrars of Births and Deaths, appointed by State Governments under Section 4 of the Act, act as the Chief Executive Authority to ensure effective implementation and report on its functioning. Under the Civil Registration System, the implementation of the MCCD scheme is required to be notified under Section 10(2) of the RBD Act, 1969, by respective States and UTs, contingent upon the availability of necessary facilities therein. In Kerala, Joint Director of panchayats is the chief Registrar of Births and Deaths.

2.2 Status of Implementation in Kerala

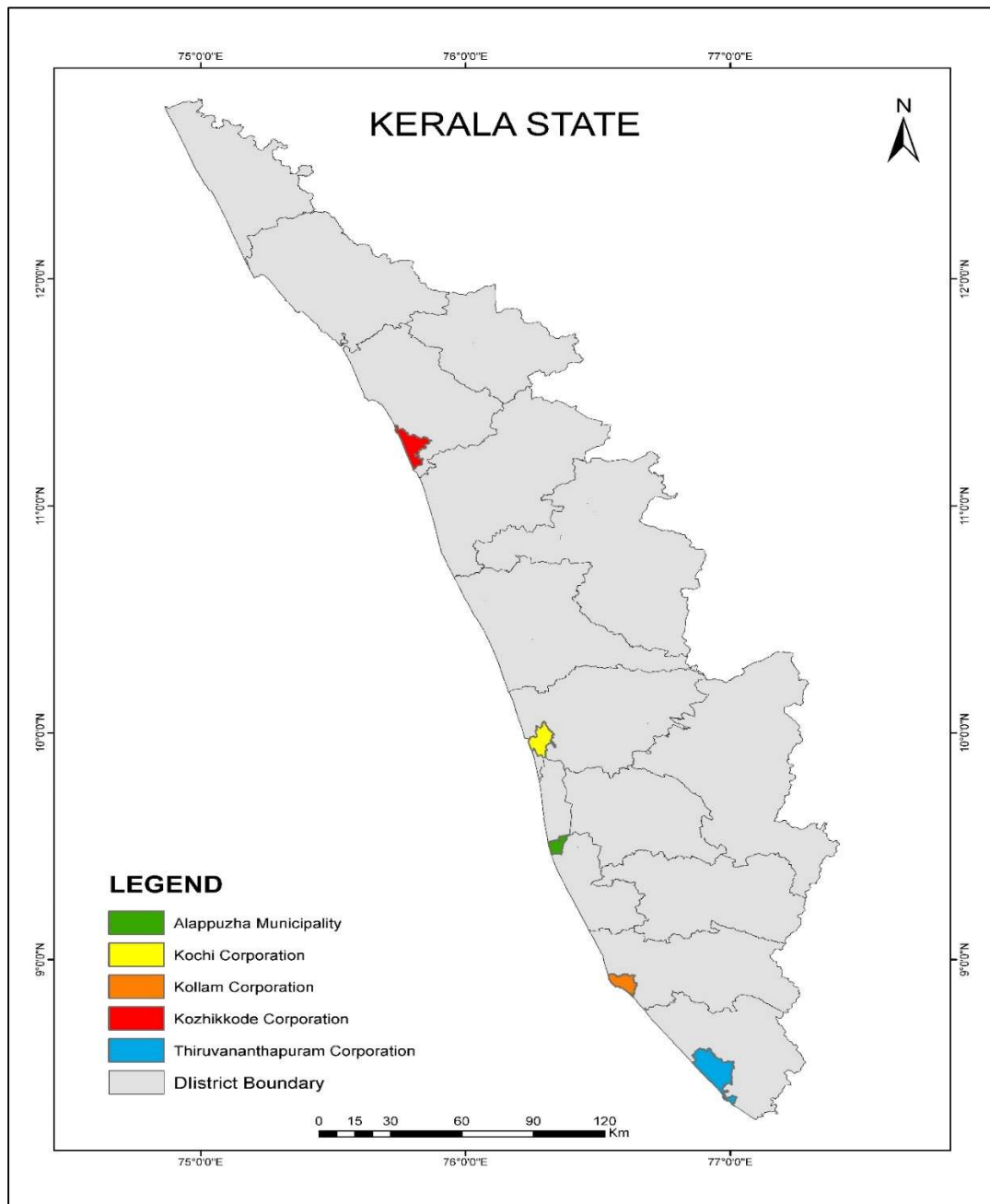
Until 2021, the scheme was implemented in five urban local bodies, namely Thiruvananthapuram Corporation, Kollam Corporation, Ernakulum Corporation, Kozhikode Corporation, and Alappuzha Municipality. The geographical coverage is depicted in chart 2.2.1. Data is systematically collected from 150 selected hospitals in these areas using the prescribed Form No.4. Centre wise number of hospitals covered under MCCD are presented in table 2.2.1 and the list of such hospitals are given in appendix I.

Table 2.2.1. Number of hospitals covered under MCCD.

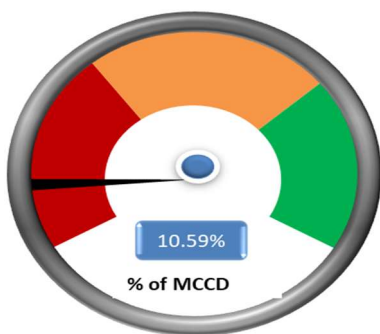
Sl. No.	Centre	Number of hospitals covered under MCCD		
		Govt	Private	Total
1	Thiruvananthapuram corporation	11	33	44
2	Kollam Corporation	6	11	17
3	Alappuzha Municipality	7	1	8
4	Cochin Corporation	4	36	40
5	Kozhikode Corporation	9	32	41
6	Total	37	113	150

It is noteworthy that non-institutional deaths, although addressed by a separate Form No.4A, are not included in this report. Deputy Health Officers in the local bodies are entrusted for the data collection and coding of cause of death as per ICD-10. As mentioned in para 2.1 Joint Director of panchayaths is the chief Registrar of Births and Deaths while Additional Director (General) of Economics and Statistics Department act as the additional Chief Registrar of Births and Deaths. Further, a post of Nosologist is created in 2009 for the smooth functioning of the Scheme. Nosologist cross tabulates the data by cause of death, age and sex and prepares consolidation statement in prescribed format. The State subsequently send it to the Office of RGI in the form of Statistical Table-11 for consolidation at the National level.

chart 2.2.1. Geographical Coverage of MCCD in Kerala



2.3 Percentage of medically certified deaths to total registered deaths in Kerala in 2021



In the year 2021, the state of Kerala witnessed a total of 339,648 registered deaths. Out of this figure, 35,965 deaths, constituting 10.59% of the total, were officially documented with medical certification. Year wise percentage medically certified deaths to total registered deaths in Kerala is presented in chart 2.3.1.

Chart 2.3.1. Time series on medically certified deaths to total registered deaths.



In Chart 2.3.1, we delve into the nuanced dynamics of medically certified deaths in relation to total registered deaths in Kerala over the years. The data paints a vivid picture, showcasing a consistent trend where the percentage of medically certified deaths to total registered deaths generally maintains an approximate 11% mark, experiencing a slight dip in 2021. Meanwhile, a broader perspective reveals a compelling narrative of overall mortality, with a discernible upward trajectory in total registered deaths spanning the years 2012 to 2021. The zenith of this trend is particularly evident in 2021, marked by a substantial spike, tallying up to 339,648 deaths.

While these statistics provide valuable insights, a cautionary note arises regarding the potential limitations of relying solely on the analysis of causes of death based on the comparatively modest percentage of medically certified deaths. This data point may not adequately capture the true distribution of causes within the entire field of registered deaths. Consequently, the imperative to expand the existing scheme becomes apparent, as doing so promises a more nuanced and comprehensive understanding of the intricate factors influencing mortality patterns in the region.

Chapter

3

Distribution of Deaths by Cause

Distribution of Deaths by Cause

3.1 Introduction

Understanding the distribution of deaths by cause is paramount for informed public health planning and resource allocation. It enables targeted interventions and preventive measures by identifying prevalent health issues, guiding the development of policies, and fostering research and innovation. This knowledge not only assists in disease prevention and control but also allows for monitoring health trends and identifying emerging challenges. Moreover, communicating information about the leading causes of death promotes public awareness and education, empowering individuals to make informed choices for healthier lifestyles and proactive healthcare-seeking behaviour. This chapter aims to summarize the findings of the data reported on medically certified causes of deaths for Kerala in 2021 by age, sex, and major cause groups, contributing to a comprehensive understanding of mortality patterns that enhances the effectiveness of healthcare systems and contributes to the overall well-being of communities.

3.2 Age and sex-wise distribution of Medically Certified Deaths–2021

During 2021, a total of 35965 medically certified deaths have been reported, of which 22074 and 13891 pertains to males and females respectively. The age and sex distribution of such deaths is presented in the following Table 3.2.1 and is highlighted in Chart 3.2.1

Chart 3.2.1 Age and sex-wise distribution of Medically Certified Deaths–2021

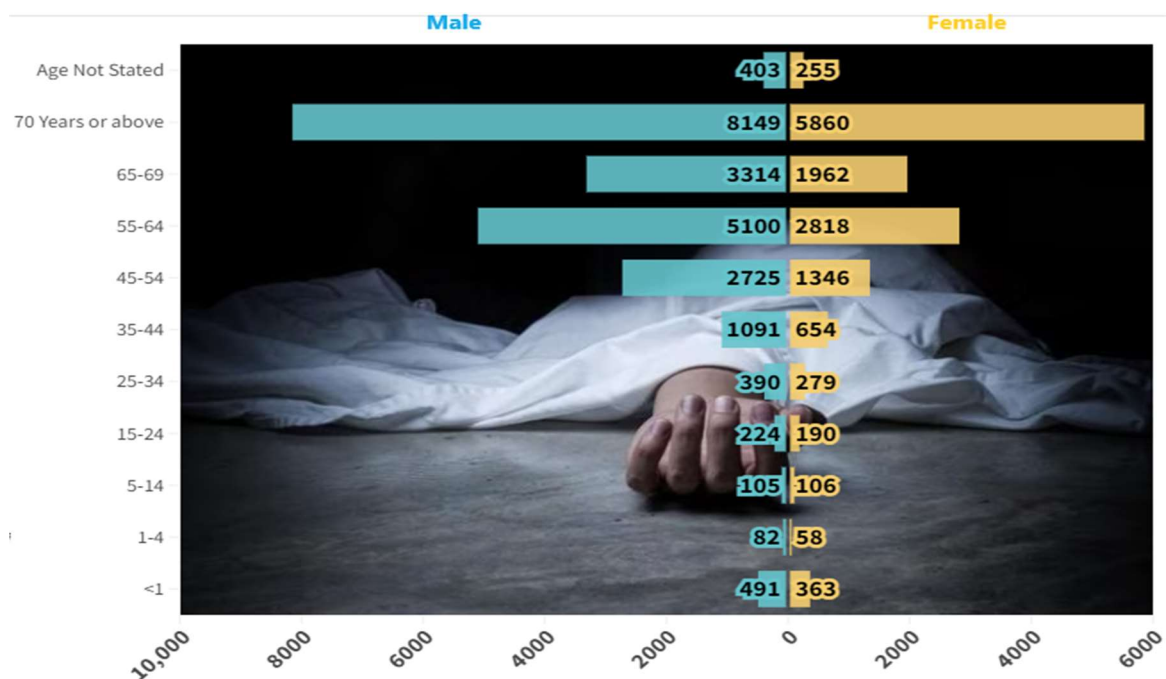
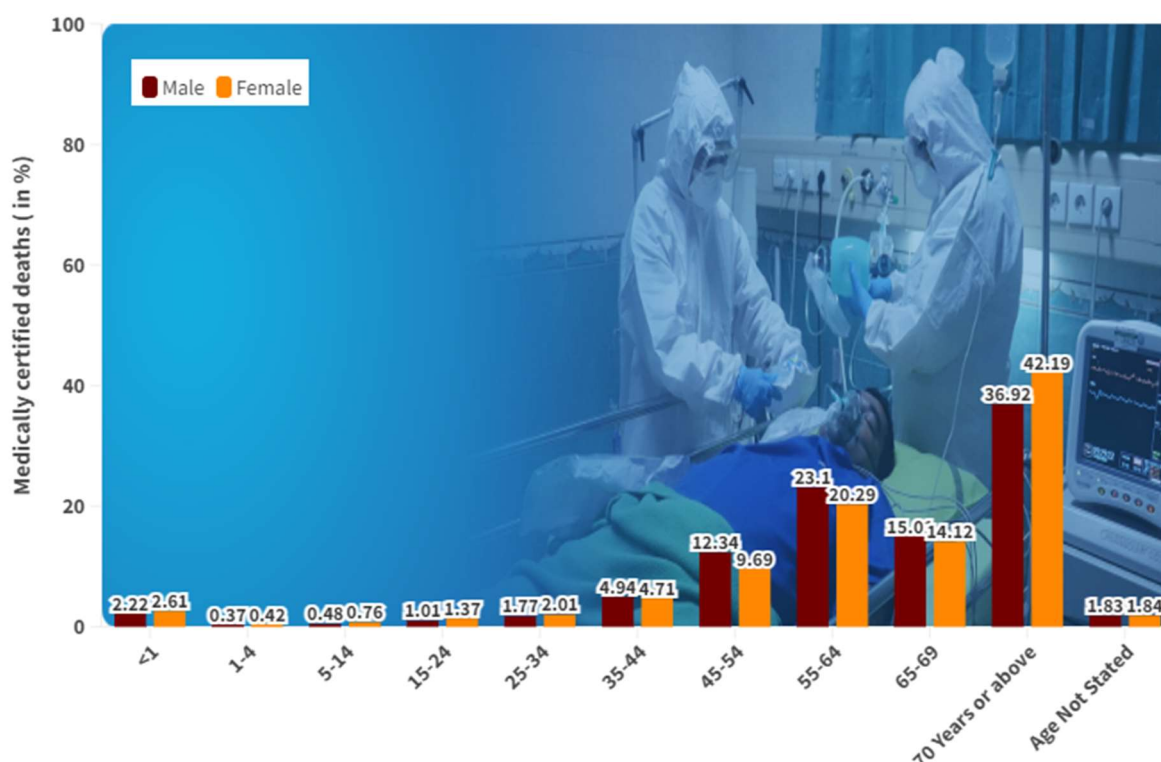


Table 3.2.1: Age and sex-wise distribution of Medically Certified Deaths–2021

Age Group (In Years)	Male			Female			Total	
	Number of Medically Certified Deaths	Percentage to		Number of Medically Certified Deaths			Number of Medically Certified Deaths	Percentage to total medically certified deaths
		Total male deaths under MCD	Total medically certified deaths		Total female deaths under MCD	Total medically certified deaths		
1	2	3	4	5	6	7	8	9
<1	491	2.22	1.37	363	2.61	1.01	854	2.37
1-4	82	0.37	0.23	58	0.42	0.16	140	0.39
5-14	105	0.48	0.29	106	0.76	0.29	211	0.59
15-24	224	1.01	0.62	190	1.37	0.53	414	1.15
25-34	390	1.77	1.08	279	2.01	0.78	669	1.86
35-44	1091	4.94	3.03	654	4.71	1.82	1745	4.85
45-54	2725	12.34	7.58	1346	9.69	3.74	4071	11.32
55-64	5100	23.10	14.18	2818	20.29	7.84	7918	22.02
65-69	3314	15.01	9.21	1962	14.12	5.46	5276	14.67
70 Years or above	8149	36.92	22.66	5860	42.19	16.29	14009	38.95
Age Not Stated	403	1.83	1.12	255	1.84	0.71	658	1.83
TOTAL	22074	100	61.38	13891	100.	38.62	35965	100

Table 3.2.1 and chart 3.2.1 shows that the contribution of male and female deaths in the total medically certified cases were reported to be 61.38 per cent and 38.62 per cent respectively, with a sex ratio of female deaths to male deaths to be 629 per thousand. It seems that more males availed the medical facilities during the time of terminal illness as compared to females. It is also observed that 38.95% of the total medically certified deaths are attributed to individuals aged 70 years and above, with a sex-specific breakdown revealing a higher percentage among females (42.19%) compared to males (36.92%). The age group 55-64 also shows a significant percentage (22.02%), with 23.1% for males and 20.29% for females. Sex wise percentage distribution of medically certified deaths among different age groups is depicted in Chart 3.2.2.

Chart 3.2.2. Age and sex distribution of medically certified deaths 2021



3.3 Major Groups of Diseases as per ICD -10

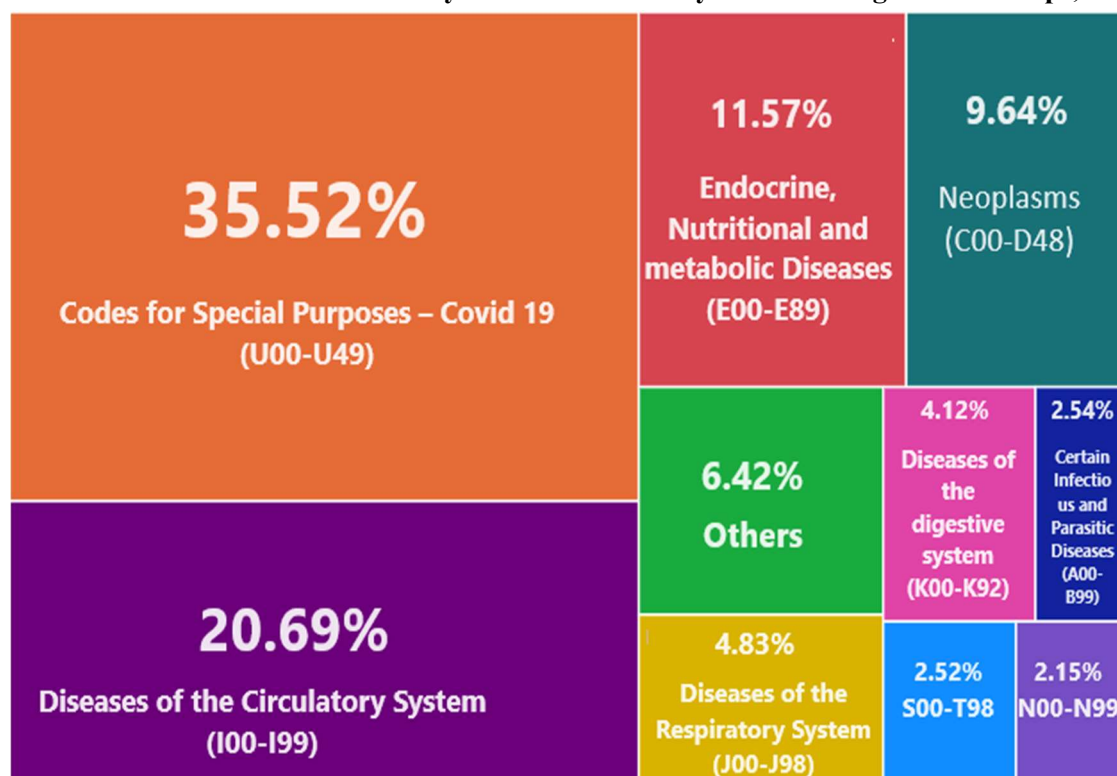
The data on MCCD has been presented as per the National List based on 10th revision of International Classification of Diseases (ICD-10), to facilitate meaningful comparison and drawing valid conclusions thereof. Causes of deaths were categorized into 21 major groups according to the ICD-10 classification system as follows.

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	Codes for special purposes (U00-U49)

In 2021, nine major groups of causes of deaths were identified, namely Codes for Special Purposes – Covid 19 (U00-U49), Diseases of the Circulatory System (I00-I99), Endocrine, Nutritional and Metabolic Diseases (E00-E89), Neoplasms (C00-D48), Diseases of the Respiratory System (J00-J98), Diseases of the Digestive System (K00-K92), Certain Infectious and Parasitic Diseases (A00-B99), and Injury, Poisoning, and Certain Other Consequences of External Causes (S00-T98), collectively contributing to approximately 94% of total medically certified deaths. The analysis of these major groups is detailed in the following sections.

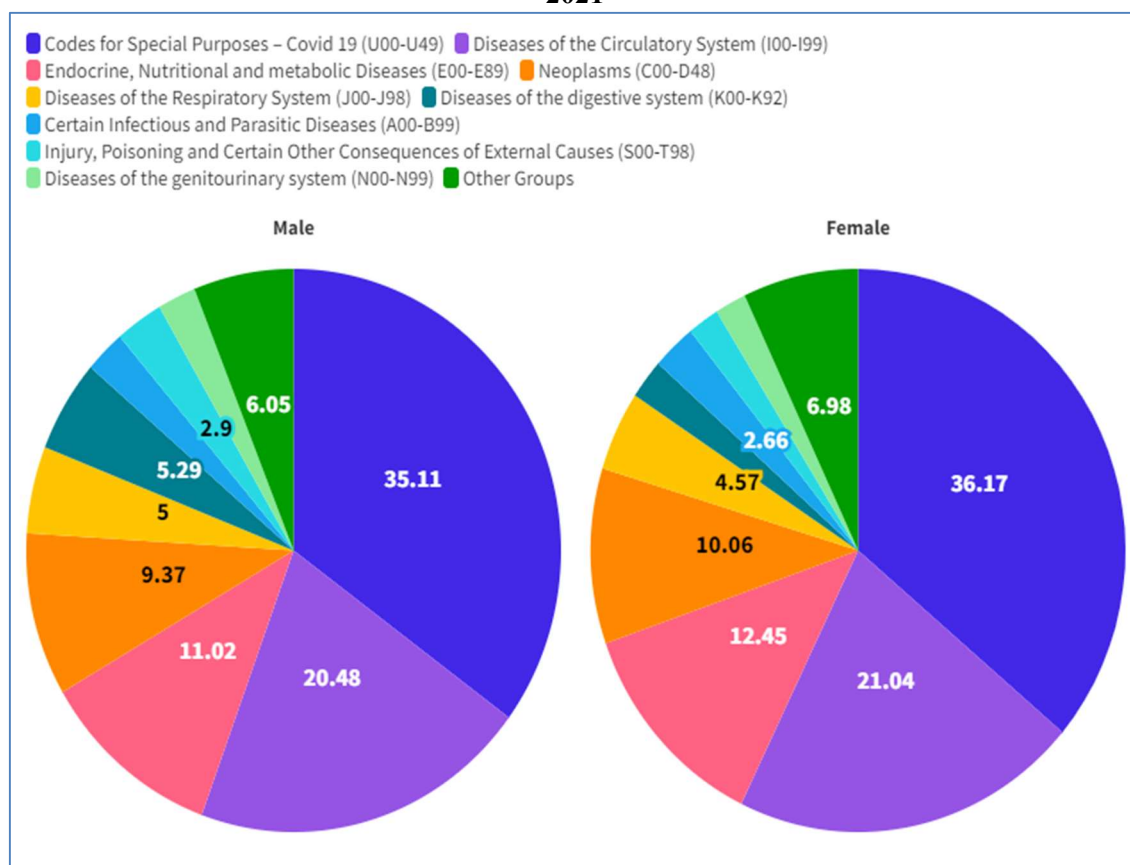
Chart 3.3.1 Distribution of Medically Certified Deaths by Nine Leading Cause Groups, 2021



(S00-T98)-Injury, Poisoning and Certain Other Consequences of External Causes
(N00-N99)-Diseases of the genitourinary system

Chart 3.3.1 illustrates the distribution of Medically Certified Deaths by Nine Leading causes in Kerala for the year 2021. Notably, among the leading cause groups, Codes for Special Purposes – Covid 19 (U00-U49) constitute the highest percentage (35.52%) of total medically certified deaths, expectedly reflecting the severe impact of the pandemic on the state during 2021. The second major cause group is Diseases of the Circulatory System (I00-I99), contributing to 20.69% of total medically certified deaths. Subsequent causes include Endocrine, Nutritional and Metabolic Diseases (E00-E89) (11.57%), Neoplasms (C00-D48) (9.64%), Diseases of the Respiratory System (J00-J98) (4.83%), Diseases of the Digestive System (K00-K92) (4.12%), Certain Infectious and Parasitic Diseases (A00-B99) (2.54%), Injury, Poisoning, and Certain Other Consequences of External Causes (S00-T98) (2.52%), and Diseases of the Genitourinary System (N00-N99) (2.15%).

Chart 3.3.2 Distribution of Medically Certified Deaths by Sex and Nine Leading Cause Groups, 2021



The sex-wise distribution of medically certified deaths is depicted in Chart 3.3.2 and explained in Table 3.3.1. A nearly identical distribution is observed for male and female deaths across major cause groups. However, a notable gender difference is evident in the case of Diseases of the Digestive System (K00-K92), where males exhibit a higher percentage (5.29%) compared to females (2.27%). Another significant gender difference is observed in the cases

of Covid-19 and Endocrine, Nutritional, and Metabolic Diseases (E00-E89). In both instances, the percentage is slightly higher among females compared to males. This nuanced analysis provides insights into specific areas of gender disparity within the distribution of medically certified deaths, contributing to a more comprehensive understanding of healthcare outcomes.

Table 3.3.1 Distribution of Medically Certified Deaths by Sex and Nine Leading Cause Groups, 2021

Sl. No.	Major Cause Group	Male		Female		Total	
		Number	%	Number	%	Number	%
1	Codes for Special Purposes – Covid 19 (U00-U49)	7750	35.11	5024	36.17	12774	35.52
2	Diseases of the Circulatory System (I00-I99)	4520	20.48	2922	21.04	7442	20.69
3	Endocrine, Nutritional and metabolic Diseases (E00-E89)	2433	11.02	1729	12.45	4162	11.57
4	Neoplasms (C00-D48)	2069	9.37	1397	10.06	3466	9.64
5	Diseases of the Respiratory System (J00-J98)	1103	5.00	635	4.57	1738	4.83
6	Diseases of the digestive system (K00-K92)	1168	5.29	315	2.27	1483	4.12
7	Certain Infectious and Parasitic Diseases (A00-B99)	544	2.46	370	2.66	914	2.54
8	Injury, Poisoning and Certain Other Consequences of External Causes (S00-T98)	640	2.90	267	1.92	907	2.52
9	Diseases of the genitourinary system (N00-N99)	512	2.32	262	1.89	774	2.15
	Other Groups	1335	6.05	970	6.98	2305	6.42
	Total	22074	100.00	13891	100.00	35965	100.00

The comparison between the distribution of medically certified deaths by top leading cause groups reported in Kerala for the years 2021 and 2020 is presented in Chart 3.3.3 and Table 3.3.2.

Chart 3.3.3. Distribution of medically certified deaths by top leading cause groups over the years 2020 and 2021

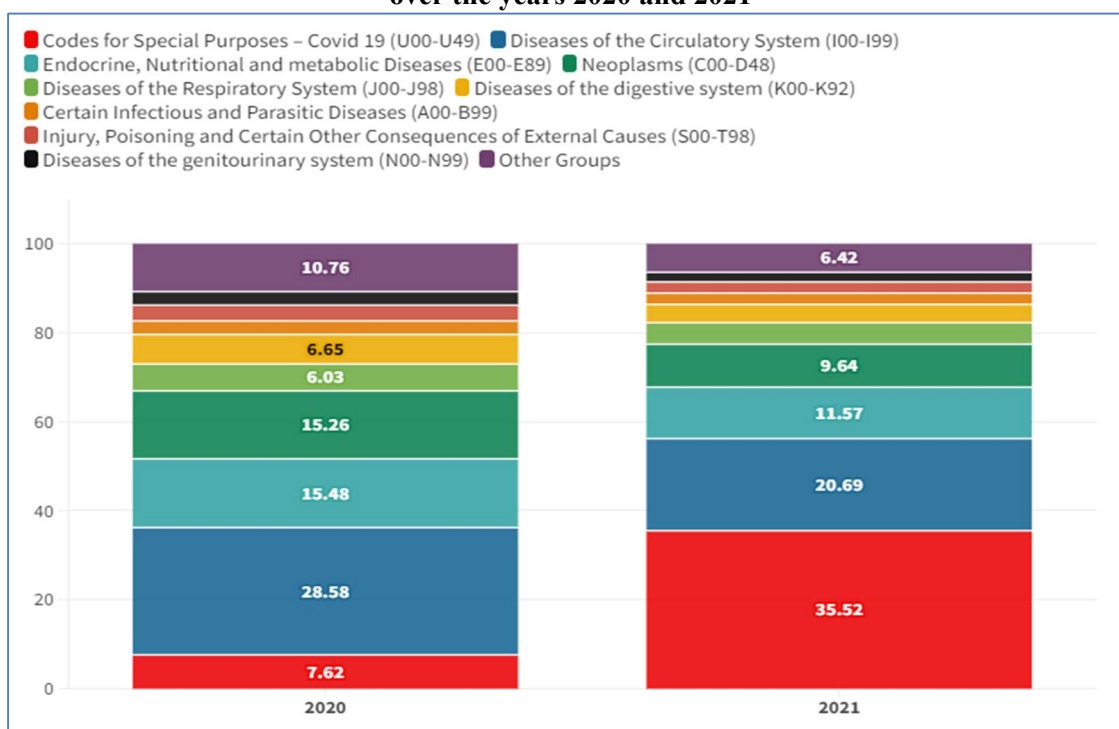
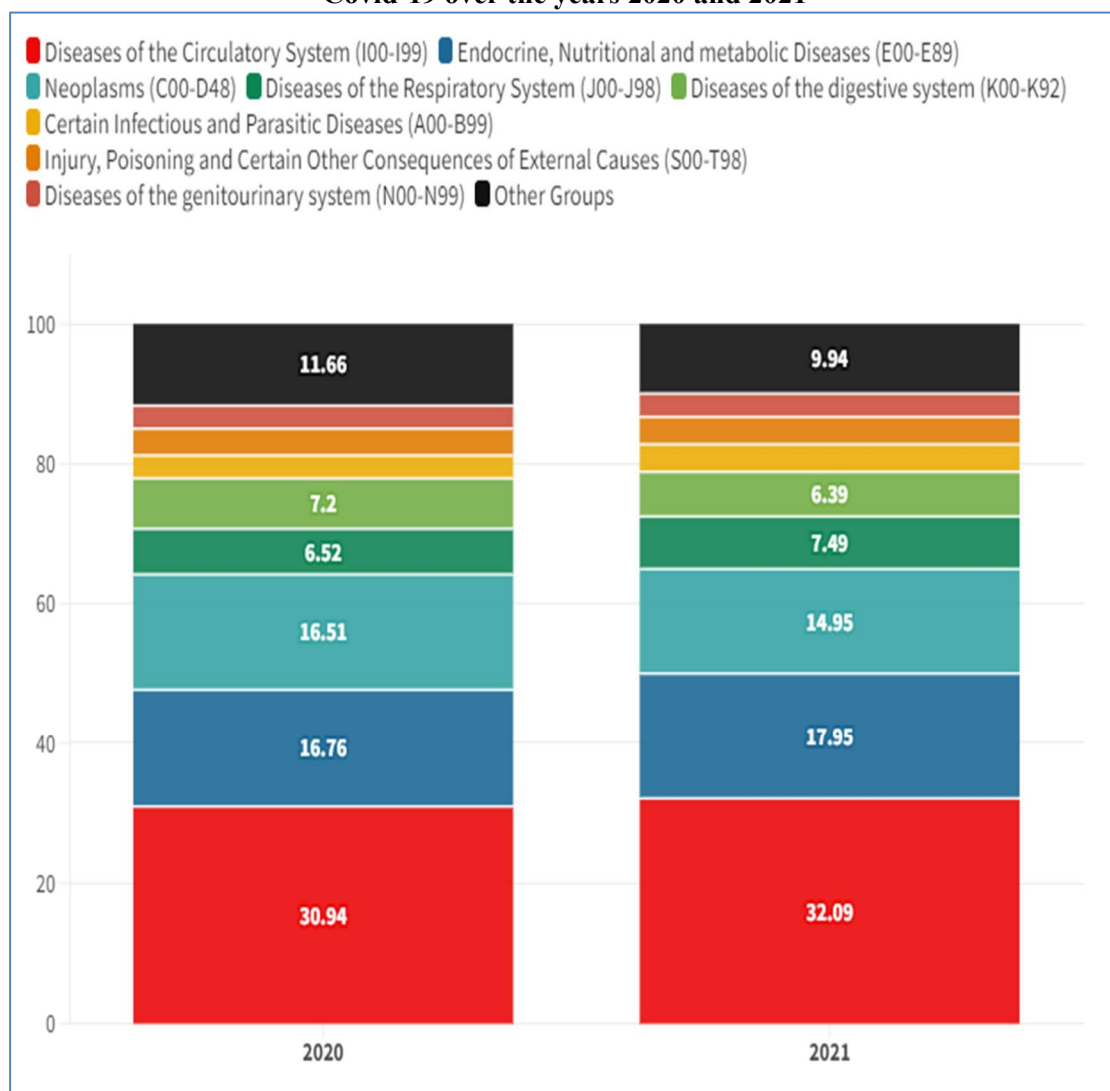


Table 3.3.2: Distribution of Medically Certified Deaths by Nine Leading Cause Groups

SL.NO	Major Cause Group	2020		2021	
		Number	%	Number	%
1	Codes for Special Purposes – Covid 19 (U00-U49)	2148	7.62	12774	35.52
2	Diseases of the Circulatory System (I00-I99)	8058	28.58	7442	20.69
3	Endocrine, Nutritional, and Metabolic Diseases (E00-E89)	4364	15.48	4162	11.57
4	Neoplasms (C00-D48)	4301	15.26	3466	9.64
5	Diseases of the Respiratory System (J00-J98)	1699	6.03	1738	4.83
6	Diseases of the digestive system (K00-K92)	1875	6.65	1483	4.12
7	Certain Infectious and Parasitic Diseases (A00-B99)	858	3.04	914	2.54
8	Injury, Poisoning and Certain Other Consequences of External Causes (S00-T98)	998	3.54	907	2.52
9	Diseases of the genitourinary system (N00-N99)	856	3.04	774	2.15
	Other Groups	3035	10.76	2305	6.42
	Total	28192	100.00	35965	100.00

The most notable difference, as observed in Chart 3.3.3 and Statement 3.3.2, is the substantial increase in the percentage of deaths attributed to Codes for Special Purposes – Covid 19 (U00-U49), surging from 7.62% in 2020 to 35.52% in 2021. In contrast, Diseases of the Circulatory System (I00-I99) experienced a decline from 28.58% in 2020 to 20.69% in 2021. Similar reductions in percentages are evident for other major cause groups as well. When COVID-related deaths are excluded from both years, an almost identical distribution emerges, as depicted in Chart 3.3.4. Consequently, it can be inferred that the reduction in the percentage for major cause groups in 2021 is primarily attributable to the significant increase in COVID-related deaths during that year.

Chart 3.3.4. Distribution of medically certified deaths by top leading cause group excluding Covid-19 over the years 2020 and 2021



The percentage distribution of nine major cause groups of death for the period 2012 to 2021 is presented in the Statement 3.3.3, chart 3.3.5 and chart 3.3.6.

Table 3.3.3 Percentage distribution of nine major cause groups of death for the period 2012 to 2021

Year	Leading Major Cause Group of Deaths										
	Codes for Special Purposes – Covid 19 (U00-U49)	Diseases of the Circulatory System (I00-I99)	Endocrine, Nutritional and metabolic Diseases (E00-E89)	Neoplasms (C00-D48)	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)	Other Groups	Total
2012	0	29.9	12.4	14.54	10.94	7.37	6.93	3.76	2.65	11.51	100
2013	0	29.79	10.9	15.2	10.44	8.14	5.93	5.03	4.23	10.34	100
2014	0	28.81	10.82	16.22	10.75	8.1	5.59	5.18	3.57	10.96	100
2015	0	29.57	10.57	16.99	11.42	7.61	5.57	4.51	3.48	10.28	100
2016	0	30.78	9.06	15.89	10.61	8.66	4.05	4.19	6.09	10.67	100
2017	0	27.36	11	16.44	10.21	7.31	4.87	3.8	7.4	11.61	100
2018	0	27.96	13.06	16.39	10	6.45	3.64	3.74	7.21	11.55	100
2019	0	31.03	14.88	16.21	9.83	6.61	3.61	3.53	3.01	11.29	100
2020	7.62	28.58	15.48	15.26	6.03	6.65	3.04	3.54	3.04	10.76	100
2021	35.52	20.69	11.57	9.64	4.83	4.12	2.54	2.52	2.15	6.42	100

Chart 3.3.5 Percentage distribution of nine major cause groups of death for the period 2012 to 2021

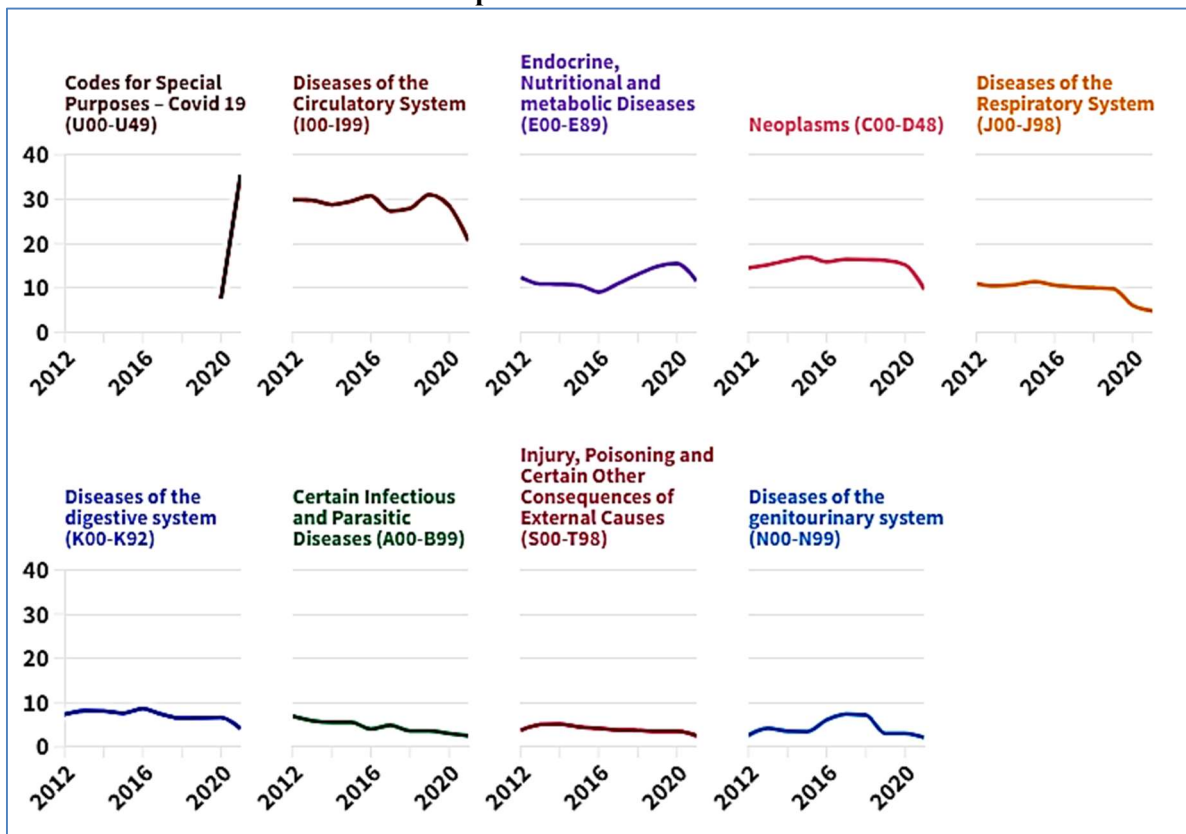
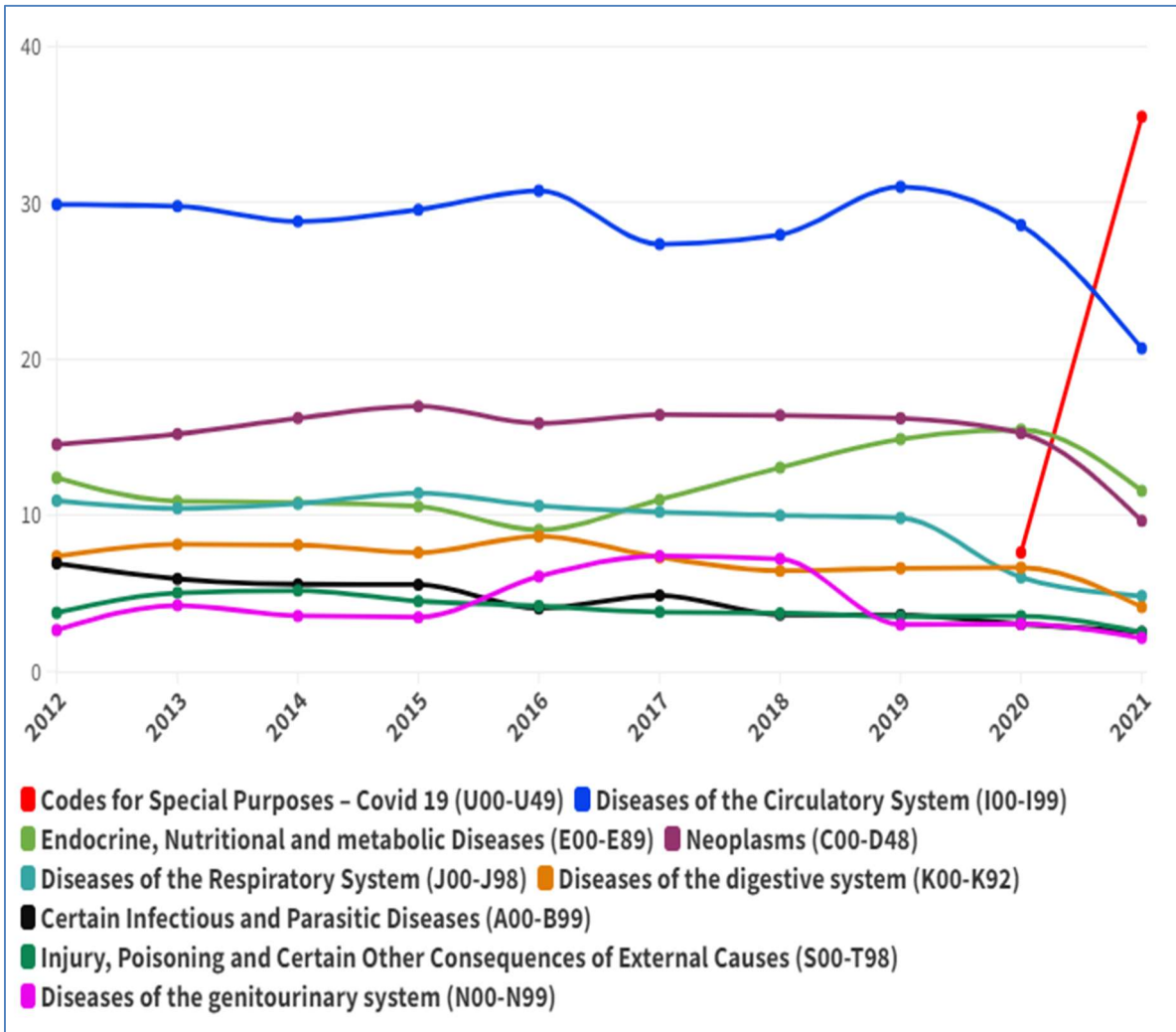


Chart 3.3.6 Percentage distribution of nine major cause groups of death for the period 2012 to 2021



Diseases of the Circulatory System consistently ranked as the leading cause of death from 2012 to 2021, except in 2021 when Covid-19-related deaths reached their highest percentage. The devastating impact of the second wave of Covid-19 in 2021 resulted in an overall increase in both deaths due to Covid-19 and the total number of deaths in Kerala. Consequently, this surge led to a decrease in the proportional share of other major cause groups relative to the total medically certified deaths. While the percentage share of specific cause groups decreased in 2021, it does not necessarily indicate a reduction in the actual number of deaths for those causes. Instead, it reflects a redistribution among different causes, underscoring the complexity of assessing disease-specific trends solely based on percentage changes. For instance, Chart 3.3.5 depicts a percentage decrease for diseases of the circulatory system in 2021 compared to 2020. However, excluding Covid-19 deaths from both 2020 and 2021 reveals a notable 1.15 percentage point increase for the same category, as shown in Chart 3.3.4.

LEADING CAUSES OF DEATHS 2021

3.4 Deaths reported under Codes for Special Purposes (Covid-19 Deaths)

This major cause group was introduced in 2020 as per the recommendation of the Indian Council of Medical Research. It is the topmost ranking major group of diseases in Kerala for the year 2021, constituting 35.52 per cent of total medically certified deaths. It accounts for 35.11 and 36.17 per cent respectively in males and female deaths.



Chart 3.4.1. distribution of major components under the major cause group Covid-19

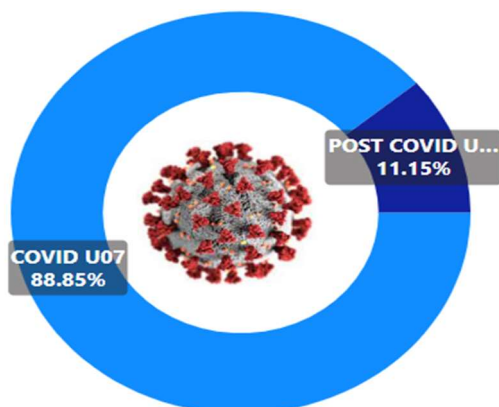


Chart 3.4.1 provides an overview of the major components within the Covid-19 cause group. It shows that approximately 89% of total medically certified deaths in this category are directly attributed to Covid-19 (U07), while the remaining deaths are attributed to post-Covid diseases (U09)

The distribution of major components within the major cause group is depicted in Chart 3.4.2 and Table 3.4.1, showing sex-specific breakdowns. Among male deaths attributed to the Covid-19 cause group, 88.01% are due to Covid-19 itself, with the remainder attributed to post-Covid deaths. Conversely, among female deaths, the percentage attributed to Covid-19 is slightly higher than males, at 90.15%.

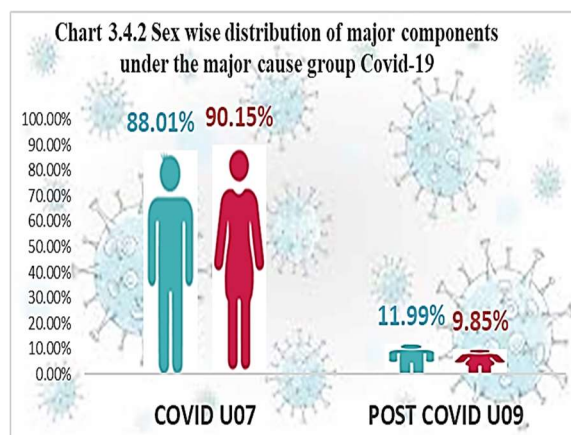


Table 3.4.1 Percentage distribution of major causes of deaths among medically certified deaths due to major cause group Covid-19

Sl No	Cause of Death	Male		Female		Total		% to total medically certified deaths
		Number	%	Number	%	Number	%	
1	Covid-19	6821	88.01%	4529	90.15%	11350	88.85%	31.56%
2	Post Covid-19	929	11.99%	495	9.85%	1424	11.15%	3.96%

The funnel chart shown in chart 3.4.3 provides age distribution of medically certified deaths due to Covid-19 related diseases. The data indicates a clear trend of increased mortality with advancing age, with the highest death rates observed in older age groups. Specifically, individuals aged 70 and above account for the largest proportion of Covid-19 fatalities, comprising 44.67% of deaths, followed by the 55-64 age group with 21.15%, the 65-69 age group with 14.91%, and the 45-54 age group with 10.57%. Notably, individuals under 45 years old contribute to a relatively smaller percentage of Covid-19 deaths, with the <1, 1-4, 5-14, and 15-24 age groups collectively accounting for less than 2% of fatalities.

Chart 3.4.3 Age and sex-wise distribution of deaths due to Covid-19 related diseases under MCCD-2021

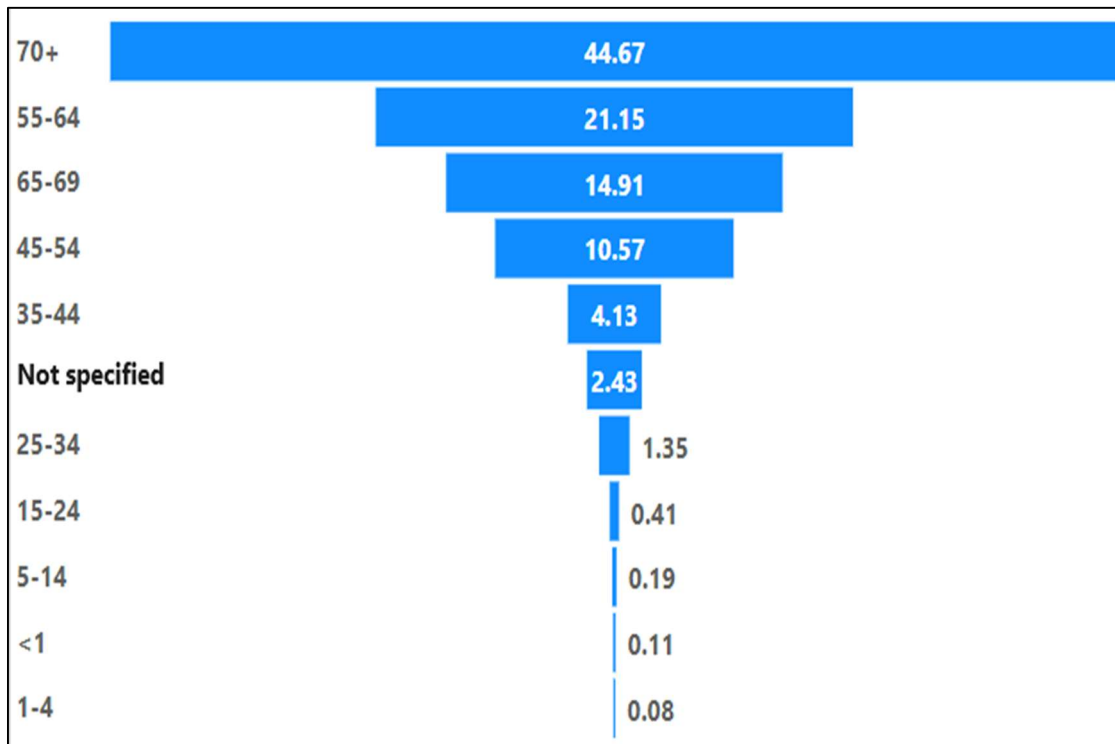
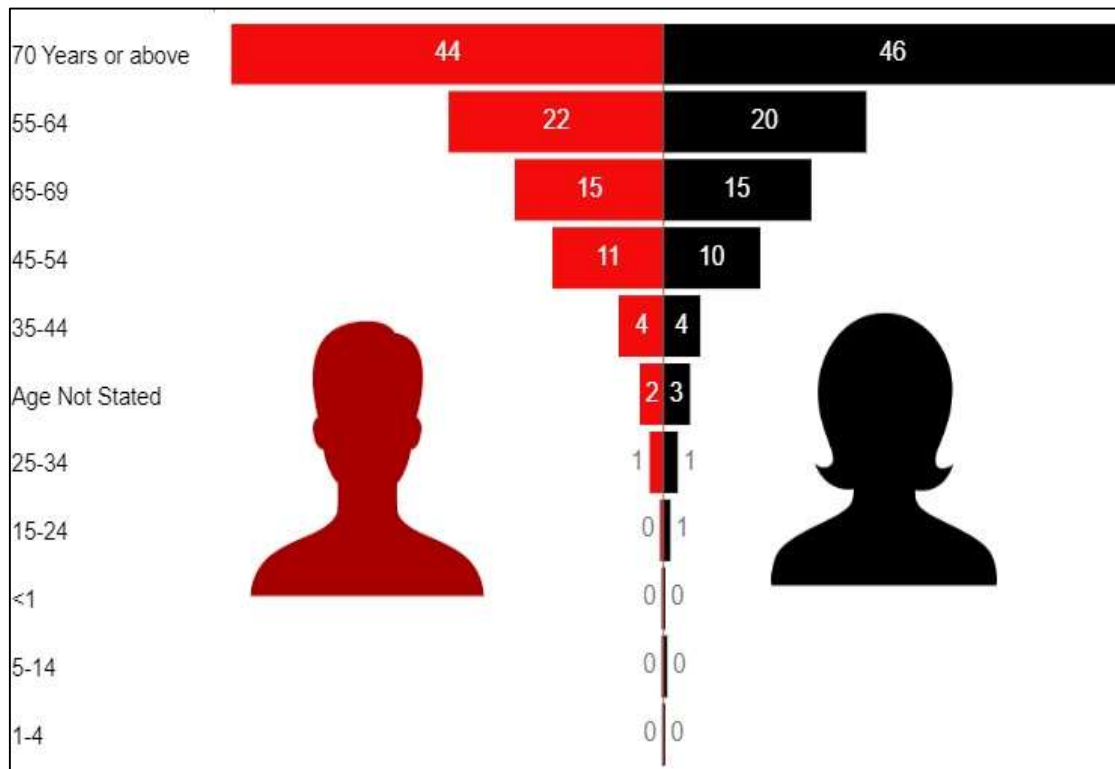


Chart 3.4.4 Age and sex distribution of deaths due to COVID 19 (Codes for Special Purposes) under MCCD-2021



**Table 3.4.2 Age and sex distribution of deaths due to COVID 19
(Codes for Special Purposes) under MCCD-2021**

Sl no	Age Group	Male		Female		Total	
		Number	%	Number	%	Number	%
1	<1	9	0.12	5	0.10	14	0.11
2	1-4	6	0.08	4	0.08	10	0.08
3	5-14	9	0.12	15	0.30	24	0.19
4	15-24	22	0.28	31	0.62	53	0.41
5	25-34	103	1.33	69	1.37	172	1.35
6	35-44	345	4.45	183	3.64	528	4.13
7	45-54	863	11.14	487	9.69	1350	10.57
8	55-64	1676	21.63	1026	20.42	2702	21.15
9	65-69	1159	14.95	746	14.85	1905	14.91
10	70 Years or above	3379	43.60	2327	46.32	5706	44.67
11	Age Not Stated	179	2.31	131	2.61	310	2.43
	Total	7750	100	5024	100	12774	100

Chart 3.4.4 and Table 3.4.2 provides insight into how the distribution of deaths due to major causes of Covid-19 across different age groups varies between males and females. Overall, the distribution is almost similar between sexes across most age brackets. However, notable disparities of over one percentage point are observed in the 45-54, 55-64, and 70 years and above age groups. In the former two age groups, a higher percentage of deaths is recorded among males compared to females, while in the latter age group, females show a slightly higher percentage.

3.5 Diseases of the Circulatory System

Diseases of the Circulatory System are a group of disorders of the heart and blood vessels and include coronary heart disease, cerebrovascular disease, rheumatic heart disease and other conditions. Previously, this category ranked as the primary cause of death, but in 2021, owing to the profound impact of the Covid-19 pandemic, it now holds the second position, accounting for 20.69% of all medically certified deaths. This figure comprises 20.48% of male deaths and 21.04% of female deaths.

Table 3.5.1. Distribution of major causes of deaths among diseases of the Circulatory System under MCCD –2021

S.NO	Cause of Deaths	Male		Female		Total		% to Total Medically Certified Deaths
		Number	%	Number	%	Number	%	
1	Ischaemic heart diseases (I20-I25)	1812	40.09	941	32.20	2753	36.99	7.65
2	Cerebrovascular diseases (I60-I69)	1258	27.83	871	29.81	2129	28.61	5.92
3	Hypertensive diseases (I10-I15)	639	14.14	519	17.76	1158	15.56	3.22
4	Diseases of pulmonary circulation and other forms of heart disease (I26-I51)	669	14.80	485	16.60	1154	15.51	3.21
5	Others	142	3.14	106	3.63	248	3.33	0.69
	Deaths due to Diseases of the Circulatory System	4520	100.00	2922	100.00	7442	100.00	20.69
	Deaths due to Diseases of the Circulatory System as Percentage to total Medically Certified Deaths		20.48		21.04		20.69	

Chart 3.5.1 Distribution of Medically certified deaths due to Diseases of the Circulatory System - 2021

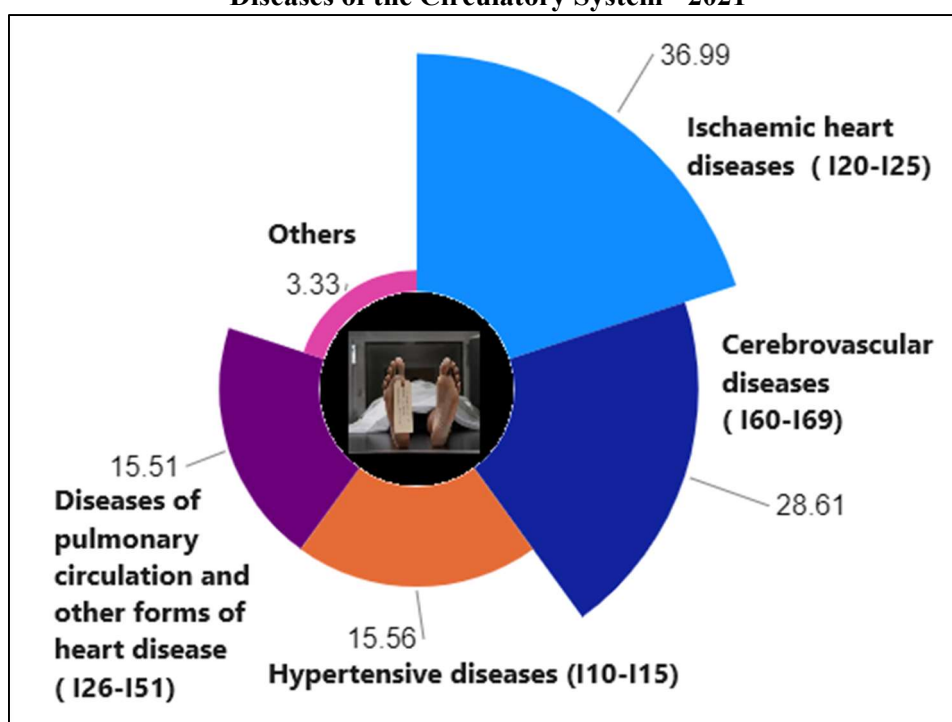
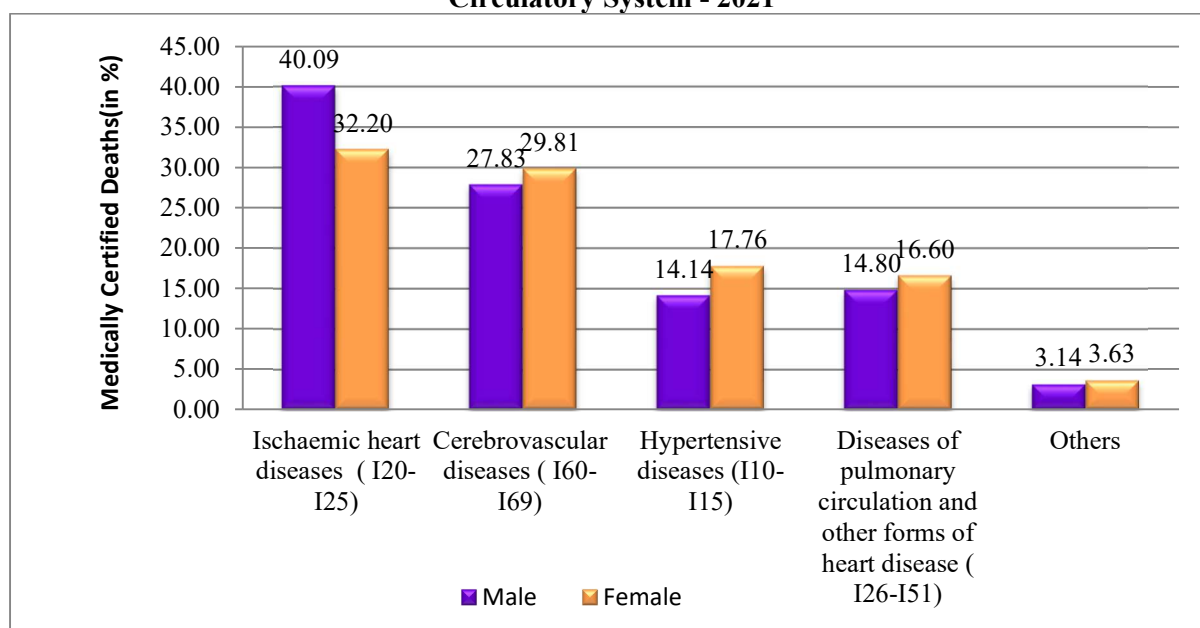


Chart 3.5.2. Sex wise distribution of Medically certified deaths due to Diseases of the Circulatory System - 2021



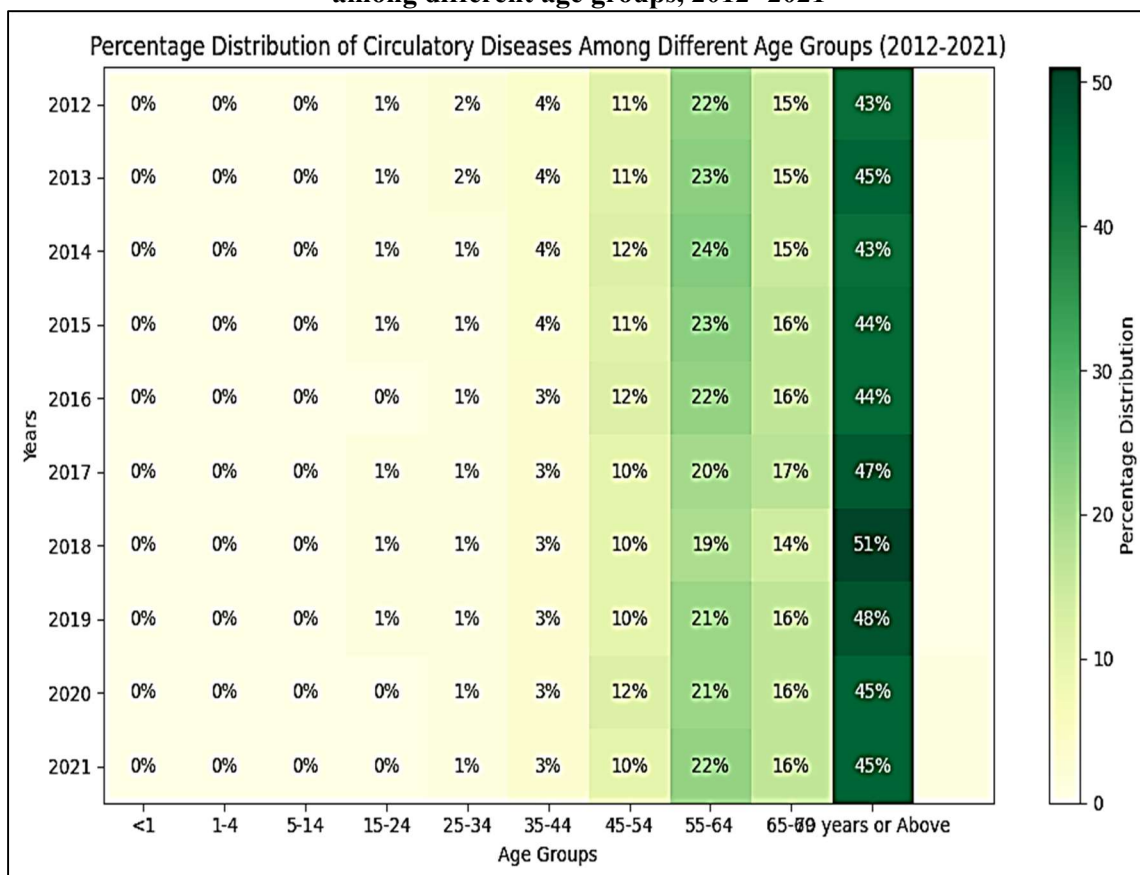
The distribution of major components under this cause group is presented in Table 3.5.1 and is depicted in Chart 3.5.1 and Chart 3.5.2. Ischaemic heart diseases, Cerebrovascular diseases, Hypertensive diseases and diseases of pulmonary circulation and other forms of heart disease are the major components in the diseases of circulatory system. Ischaemic heart diseases (I20-I25) refer to a group of heart-related conditions caused by reduced blood flow to the heart muscle. The reduction in blood flow is typically due to the narrowing or blockage of coronary arteries, which supply blood to the heart. Cerebrovascular diseases refer to a group of medical conditions that affect the blood vessels supplying the brain. These conditions include stroke, transient ischemic attack (TIA), cerebral haemorrhage, and subarachnoid haemorrhage. Hypertensive diseases refer to a range of conditions caused by high blood pressure. Diseases of pulmonary circulation and other forms of heart disease" encompass a broad category of medical conditions affecting the heart and the pulmonary (lung) circulation. This category includes various disorders such as pulmonary hypertension, pulmonary embolism, heart failure, congenital heart diseases, valvular heart diseases, cardiomyopathies, and arrhythmias.

Ischaemic heart diseases (I20-I25) represent the highest percentage at 36.99%, followed by cerebrovascular diseases (I60-I69) at 28.61%. Hypertensive diseases (I10-I15) and diseases of pulmonary circulation and other forms of heart disease (I26-I51) both contribute notably, accounting for 15.56% and 15.51% respectively. The remaining causes of death fall under the category of 'Others,' representing 3.33% collectively. Sex wise distribution of major causes of deaths among medically certified deaths due to circulatory diseases can be viewed in chart

3.5.2. Across all categories females exhibits higher percentages of deaths compared to males, except for Ischaemic heart diseases (I20-I25, which show a higher prevalence among males (40.09%) compared to females (32.20%), indicating a narrow gender disparity to this condition.

Chart 3.5.3 displays the percentage distribution of medically certified deaths attributed to the Circulatory System across various age groups from 2012 to 2021. The data reveals a consistent pattern where the highest number of deaths is consistently associated with the age group of 70 years and above throughout the years analysed. Additionally, age groups such as 65-69 years, 55-64 years, and 45-54 years contribute significantly to the total deaths caused by Circulatory System issues. Interestingly, there is no discernible increasing or decreasing trend observed in the share of total deaths for any specific age group over the years, indicating a stable distribution of mortality across age brackets related to Circulatory System-related causes.

Chart 3.5.3. Percentage distribution of medically certified deaths due Circulatory System among different age groups, 2012- 2021



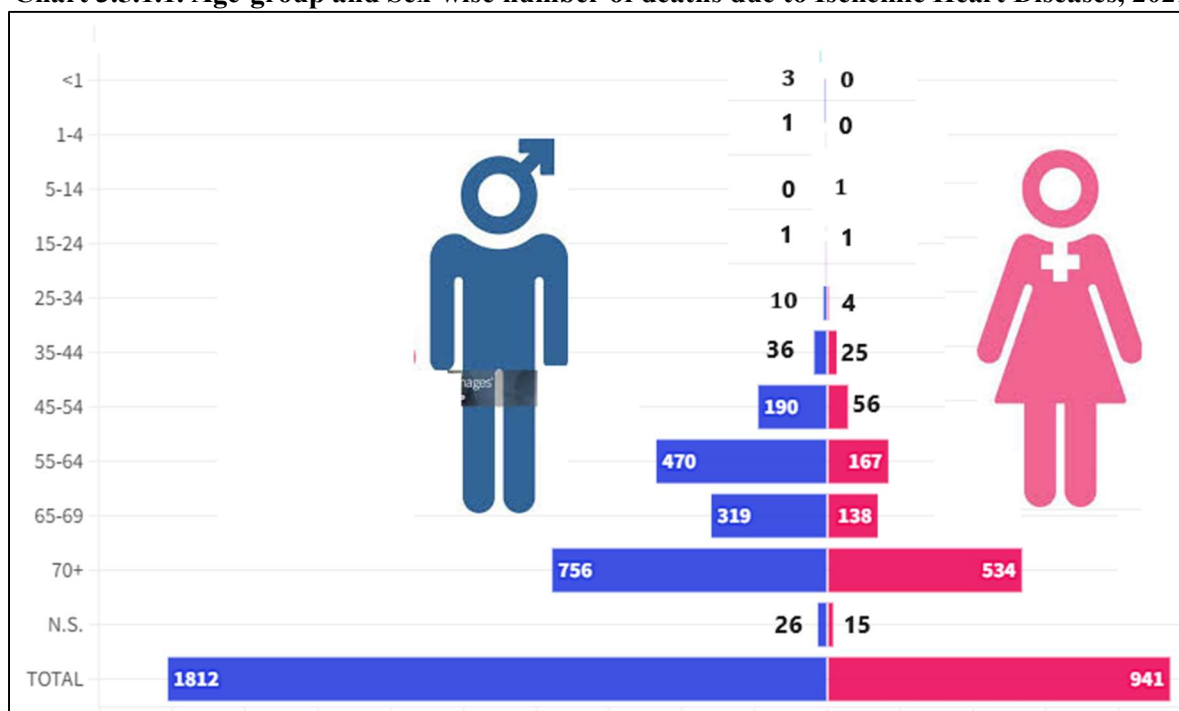
3.5.1. Ischaemic Heart Diseases

Ischaemic heart disease, also called coronary heart disease (CHD) or coronary artery disease, is the term given to heart problems caused by narrowed heart (coronary) arteries that supply blood to the heart muscle. As discussed in Section 3.5, it constitutes the largest share, accounting for 36.99% of all circulatory system-related deaths in 2021. The table 3.5.1.1 presents the age-group and sex-wise number and percentage distribution of deaths due to ischemic heart diseases. Out of the total deaths attributed to ischemic heart diseases, males dominated with 65.82%, while females accounted for 34.18%. The table also highlights a notable disparity in death counts between males and females across various age groups. In the youngest age groups (<1 and 1-4), male deaths are reported in small numbers, while female deaths are notably absent. As age increases, the number of deaths for both sexes rise, with males consistently comprising a higher percentage of total deaths compared to females. The largest discrepancy is observed in the 70+ age group, where male deaths significantly outnumber female deaths, contributing to a substantial portion of the total deaths recorded.

Table 3.5.1.1. Age-group and Sex-wise number and percentage distribution of deaths due to Ischemic Heart Diseases, 2021

SI No	Age Group	SEX					
		Male		Female		Total	
		Number	%	Number	%	Number	%
1	<1	3	0.17	0	0	3	0.11
2	1-4	1	0.06	0	0	1	0.04
3	5-14	0	0	1	0.11	1	0.04
4	15-24	1	0.06	1	0.11	2	0.07
5	25-34	10	0.55	4	0.43	14	0.51
6	35-44	36	1.99	25	2.66	61	2.22
7	45-54	190	10.49	56	5.95	246	8.94
8	55-64	470	25.94	167	17.75	637	23.14
9	65-69	319	17.6	138	14.67	457	16.6
10	70+	756	41.72	534	56.75	1290	46.86
11	N.S.	26	1.43	15	1.59	41	1.49
	TOTAL	1812	100	941	100	2753	100

Chart 3.5.1.1. Age-group and Sex-wise number of deaths due to Ischemic Heart Diseases, 2021



If we analyse the data on percentage distribution of deaths due to ischemic heart diseases among different age groups for male and female, then we can realize significant disparities in the distribution. In younger age groups (<1, 1-4, 5-14, and 15-24), the percentages are relatively low for both males and females. However, as age increases, there is a noticeable increase in the percentage distribution, with the largest disparities observed in older age groups. For instance, in the 55-64 age group, males account for 25.94% of total deaths due to ischemic heart diseases, while females account for 17.75%. This trend continues with even wider gaps in the 70+ age group, where males constitute 41.72% compared to females at 56.75%. This indicates that while women predominantly experience deaths from ischemic heart disease after the age of 70, men between 45 and 70 years are also significantly more affected compared to women, with the highest impact observed in the age group of 70 years and above.

3.5.2. Cerebrovascular Diseases

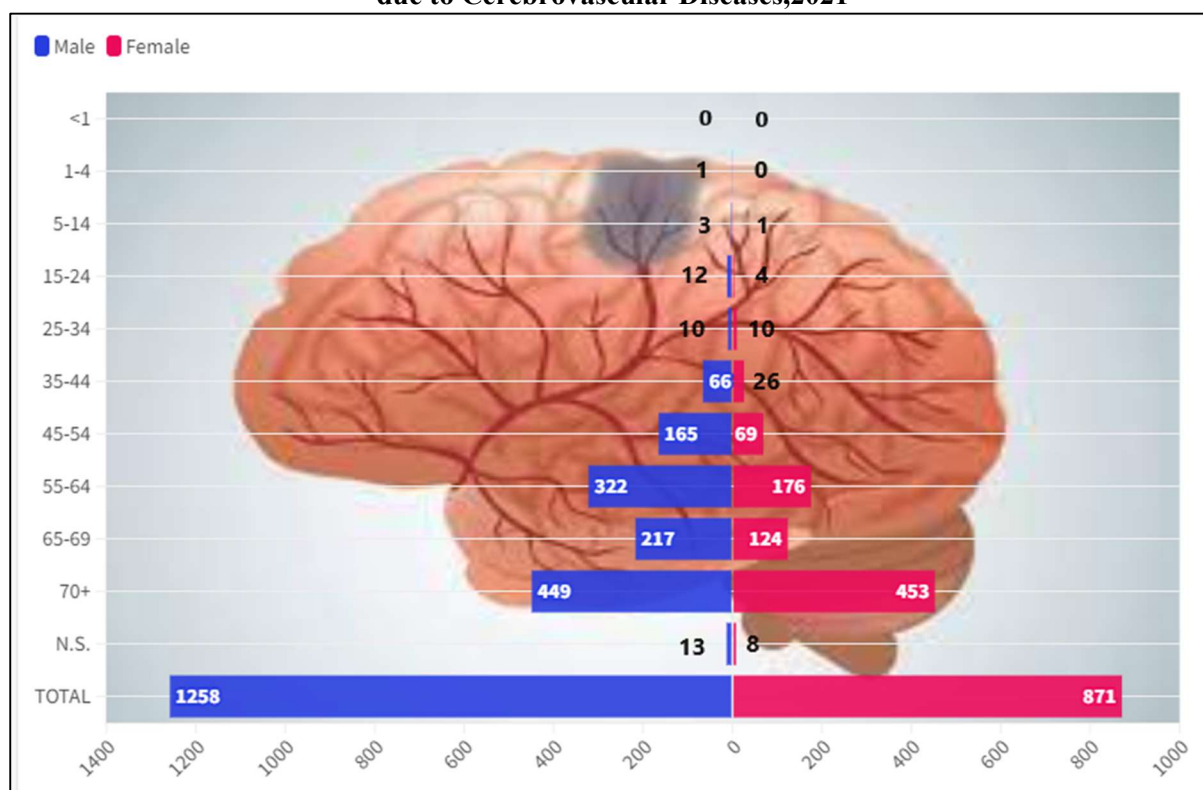
Cerebrovascular diseases refer to a group of medical conditions that affect blood vessels supplying the brain, leading to disruptions in blood flow. It is the second leading cause of death among deaths due to circulatory diseases, account for 28.61% of total deaths in this category. Table 3.5.2.1 presents the age-group and sex-wise distribution of deaths due to Cerebrovascular Diseases, showing a clear pattern of higher mortality rates in older age groups and among males. In the younger age categories (<1, 1-4, 5-14, and 15-24), the number of deaths is relatively low, with percentages ranging from 0% to 1%. However, as age advances, there is a significant increase in both the number of deaths and the percentage distribution, with the highest numbers observed in the 70+ age group for both males and females. Males consistently account for a higher percentage of deaths across all age groups compared to

females, with the widest gap seen in the 70+ age group, where males constitute 36% of total deaths compared to females at 52%.

Table 3.5.2.1 Age-group and Sex wise distribution of deaths due to Cerebrovascular Diseases,2021

Sl,No	Age Group	SEX					
		Male		Female		Total	
		Number	%	Number	%	Number	%
1	<1	0	0	0	0	0	0
2	1-4	1	0	0	0	1	5
3	5-14	3	0	1	0	4	0
4	15-24	12	1	4	0	16	1
5	25-34	10	1	10	1	20	1
6	35-44	66	5	26	3	92	4
7	45-54	165	13	69	8	234	11
8	55-64	322	26	176	20	498	23
9	65-69	217	17	124	14	341	16
10	70+	449	36	453	52	902	42
11	N.S.	13	1	8	1	21	1
	TOTAL	1258	100	871	100	2129	100

Chart 3.5.2.1 Age-group and Sex wise number of deaths due to Cerebrovascular Diseases,2021



3.5.3 Hypertensive Diseases

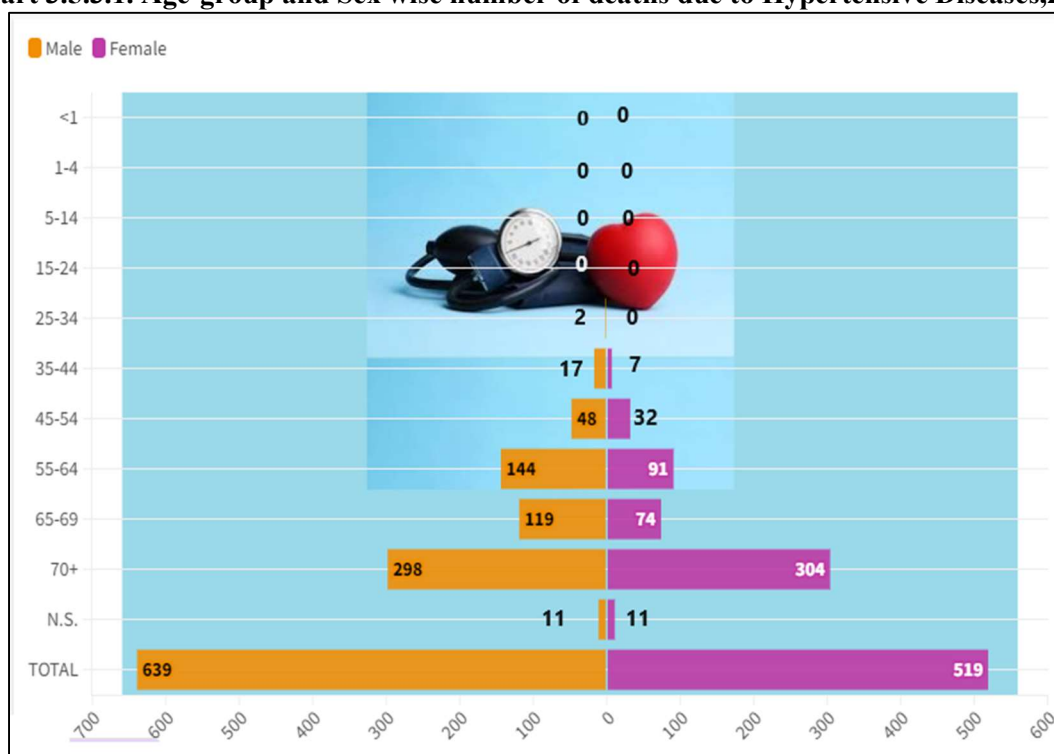
Hypertensive diseases refer to a group of medical conditions caused by high blood pressure. These conditions can affect various organs and systems in the body, leading to complications such as heart disease, stroke, kidney damage, and vascular disorders. Hypertension, or high blood pressure, occurs when the force of blood against the artery walls is consistently elevated, which can result in long-term damage to blood vessels and organs.

Table 3.5.3.1 presents the distribution of deaths due to Hypertensive Diseases by age group and sex for the year 2021. Hypertensive diseases accounted for 15.56% of total deaths attributed to Circulatory system diseases during this period. Specifically, out of the 1158 medically certified deaths due to Hypertensive Diseases, 55% were male and 45% were female. The data indicates a higher number of deaths in males across all age groups except for individuals aged 70 years and above, where females predominate. Notably, in younger age groups (<1 to 15-24), there were relatively fewer deaths, indicating a lower incidence of hypertensive diseases in these age groups. However, as age increases, there is a notable increase in both the absolute number of deaths and the percentage distribution, with the highest numbers observed in the 70+ age group for both males and females.

Table 3.5.3.1. Age-group and Sex wise distribution of deaths due to Hypertensive Diseases,2021.

Sl,No	Age Group	SEX					
		Male		Female		Total	
		Number	%	Number	%	Number	%
1	<1	0	0	0	0	0	0
2	1-4	0	0	0	0	0	0
3	5-14	0	0	0	0	0	0
4	15-24	0	0	0	0	0	0
5	25-34	2	0.31	0	0	2	0.17
6	35-44	17	2.66	7	1.35	24	2.07
7	45-54	48	7.51	32	6.17	80	6.91
8	55-64	144	22.54	91	17.53	235	20.29
9	65-69	119	18.62	74	14.26	193	16.67
10	70+	298	46.64	304	58.57	602	51.99
11	N.S.	11	1.72	11	2.12	22	1.9
	TOTAL	639	100	519	100	1158	100

Chart 3.5.3.1. Age-group and Sex wise number of deaths due to Hypertensive Diseases,2021.



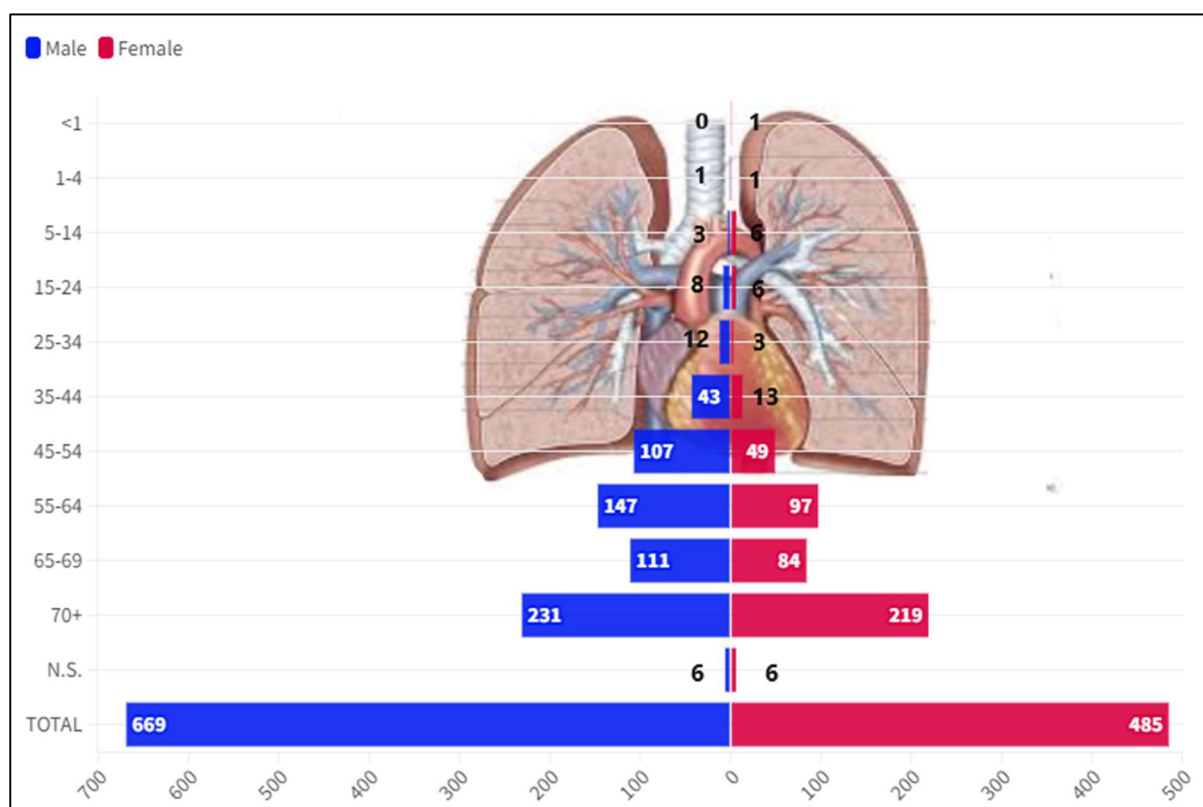
3.5.4. Diseases of Pulmonary Circulation and other forms of Heart Diseases.

Pulmonary heart disease is a term used to describe conditions that affect the right side of the heart due to issues related to the lungs or their blood vessels. This includes diseases like pulmonary hypertension, where the blood pressure in the pulmonary arteries is abnormally high, leading to strain on the right ventricle of the heart.

Table 3.5.4.1. Age-group and Sex wise distribution of deaths due to Diseases of Pulmonary Circulation and other forms of heart diseases ,2021.

Sl,No	Age Group	SEX					
		Male		Female		Total	
		Number	%	Number	%	Number	%
1	<1	0	0	1	0.21	1	0.09
2	1-4	1	0.15	1	0.21	2	0.17
3	5-14	3	0.45	6	1.24	9	0.78
4	15-24	8	1.2	6	1.24	14	1.21
5	25-34	12	1.79	3	0.62	15	1.3
6	35-44	43	6.43	13	2.68	56	4.85
7	45-54	107	15.99	49	10.1	156	13.52
8	55-64	147	21.97	97	20	244	21.14
9	65-69	111	16.59	84	17.32	195	16.9
10	70+	231	34.53	219	45.15	450	38.99
11	N.S.	6	0.9	6	1.24	12	1.04
	TOTAL	669	100	485	100	1154	100

Chart 3.5.4.2 Age-group and Sex wise number of deaths due to Diseases of Pulmonary Circulation and other forms of heart diseases, 2021



Age-group and Sex wise distribution of deaths due to Diseases of Pulmonary Circulation and other forms of heart diseases are presented in table 3.5.4.1. In 2021, Diseases of Pulmonary Circulation and other Heart Diseases accounted for 15.51% of total deaths attributed to Circulatory system disorders. Specifically, there were 1154 reported deaths due to these conditions in the areas of Kerala covered by the MCCD scheme, with males comprising 58% and females 42% of these fatalities. The data reveals a clear trend of increasing mortality with advancing age, with the 70+ age group recording the highest number of deaths for both genders. While males generally had more deaths across age groups, females exhibited a slightly higher percentage of deaths in the 70+ age bracket compared to males.

3.6 Endocrine, Nutritional and Metabolic Diseases

Endocrine, Nutritional, and Metabolic Diseases encompass a wide range of medical conditions that affect the endocrine system, metabolism, and nutritional processes in the body. These diseases often involve hormonal imbalances, disturbances in metabolic pathways, and issues related to nutrient absorption, utilization, and storage.

Table 3.6.1. Distribution of Major causes of deaths due to Endocrine, Nutritional and Metabolic diseases under MCCD – 2021

S.NO	Cause of Deaths	Male		Female		Total		% to Total Medically Certified Deaths
		Number	%	Number	%	Number	%	
1	Diabetes mellitus (E10-E14)	2308	94.86	1614	93.35	3922	94.23	10.91
2	All other endocrine and metabolic diseases (E15-E34 & E65-E89)	116	4.77	108	6.25	224	5.38	0.62
3	Disorders of thyroid gland (E00-E07)	7	0.29	5	0.29	12	0.29	0.03
4	Malnutrition (E40-E46)	2	0.08	2	0.12	4	0.10	0.01
5	All other nutritional deficiencies (E50-E64)	0	0.00	0	0.00	0	0.00	0.00
	Total Medically Certified Deaths due to Endocrine, Nutritional & Metabolic Diseases	2433	100.00	1729	100.00	4162	100.00	11.57
	Deaths due to Endocrine, Nutritional & Metabolic Diseases as Percentage to total Medically Certified Deaths	-	11.02	-	12.45	-	11.57	-

The group of Endocrine, Nutritional, and Metabolic diseases stands as the third leading cause, contributing to 11.57% of total medically certified deaths, with a slightly higher percentage in females (12.45%) compared to males (11.02%). Among these, 'Diabetes mellitus' is the primary cause, responsible for serious health complications like renal failure, heart disease, stroke, and blindness, among others, accounting for 94.23% of total deaths in this group and 10.91% of all medically certified deaths. Other endocrine and metabolic diseases contribute to a lesser extent, comprising 5.38% of total deaths under this group. Disorders of the thyroid gland and malnutrition have minimal impacts, each representing less than 1% of total deaths within this category. The distribution of major causes of deaths under this group is given in Table 3.6.1 and depicted in the Chart 3.6.1.

Chart 3.6.1. Percentage Distribution of Medically Certified Deaths due to Endocrine, Nutritional & Metabolic Diseases – 2021

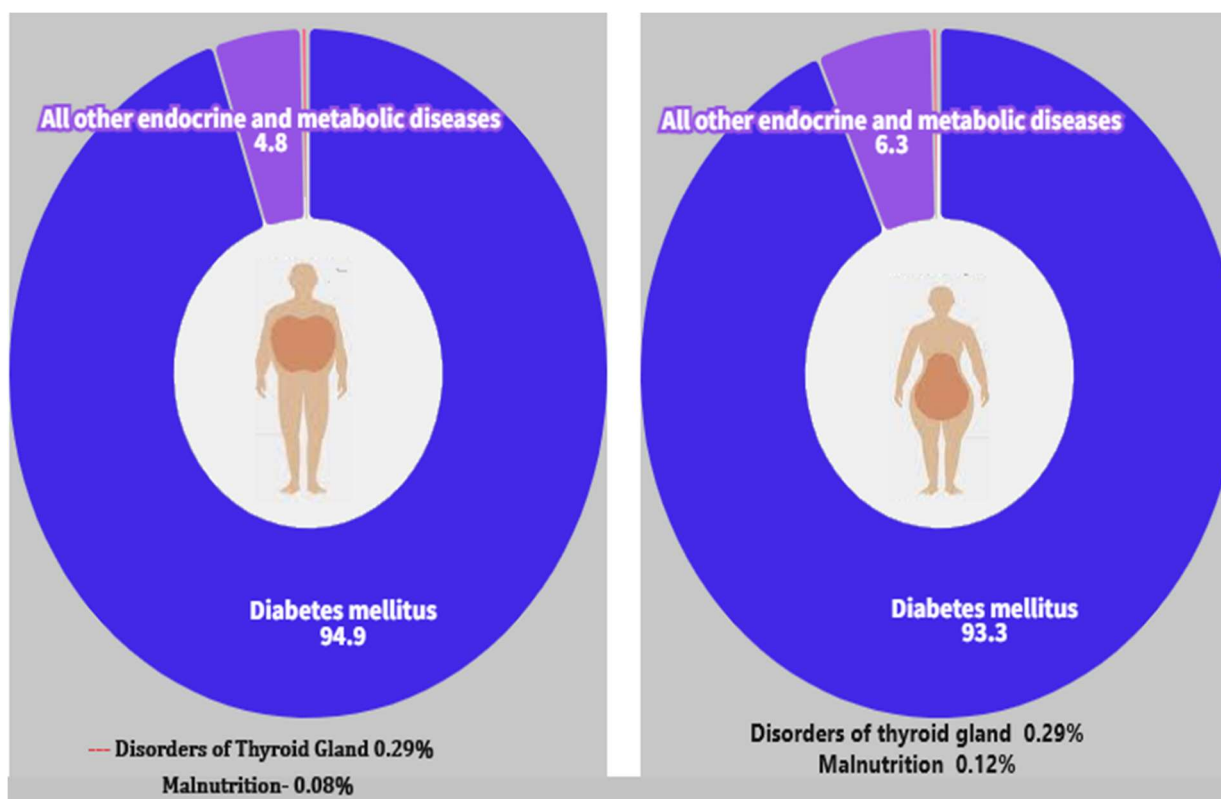


Table 3.6.2 presents the age distribution of deaths due to Diabetes Mellitus under MCCD for the year 2021. A total of 3922 deaths were reported under MCCD, with males accounting for 59% and females for 41%. The data reveals a notable increase in deaths with advancing age, particularly in the 70+ age group, where both males and females experience the highest number of deaths, representing 39.51% and 45.42% of the total deaths for each sex category respectively. Additionally, the 55-64 age group also shows a significant percentage of deaths, accounting for 26.34% for males and 23.79% for females. In contrast, younger age groups (<1 to 15-24) exhibit minimal to no deaths, indicating a lower incidence of diabetes-related fatalities in these age groups.

Table 3.6.2. Age distribution of deaths due to Diabetes Mellitus under MCCD – 2021

Sl, No	Age Group	SEX					
		Male		Female		Total	
		Number	%	Number	%	Number	%
1	<1	0	0	0	0	0	0
2	1-4	0	0	0	0	0	0
3	5-14	0	0	0	0	0	0
4	15-24	4	0.17	7	0.43	11	0.28
5	25-34	11	0.48	11	0.68	22	0.56
6	35-44	58	2.51	46	2.85	104	2.65
7	45-54	265	11.48	139	8.61	404	10.3
8	55-64	608	26.34	384	23.79	992	25.29
9	65-69	418	18.11	269	16.67	687	17.52
10	70+	912	39.51	733	45.42	1645	41.94
11	N.S.	32	1.39	25	1.55	57	1.45
	TOTAL	2308	100	1614	100	3922	100

Chart 3.6.2. Age distribution of deaths due to Diabetes Mellitus under MCCD – 2021

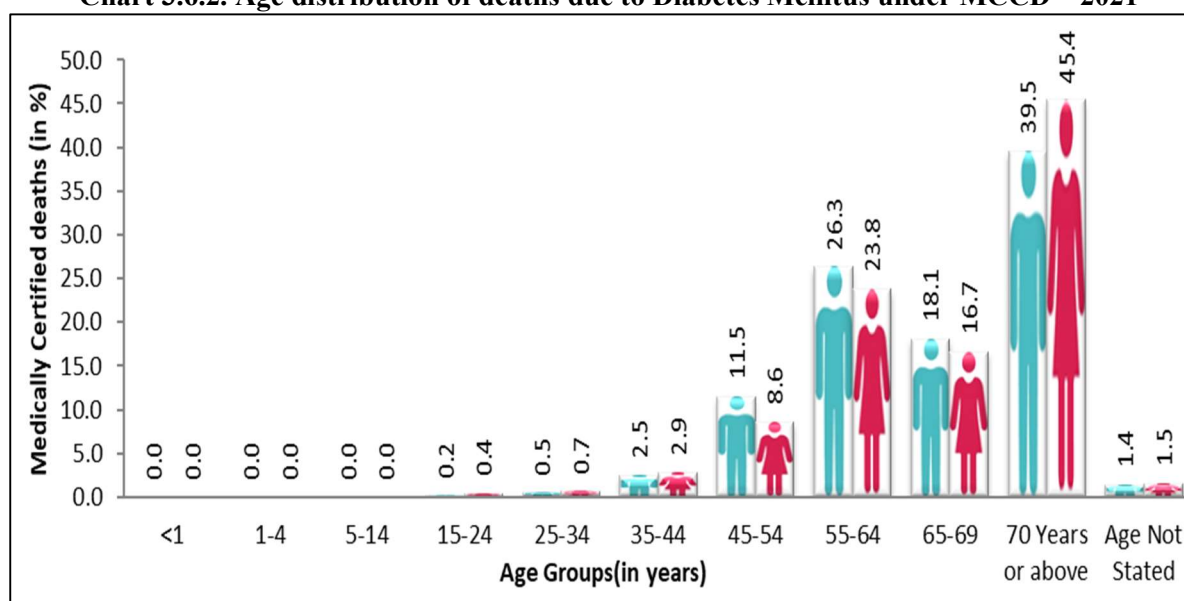
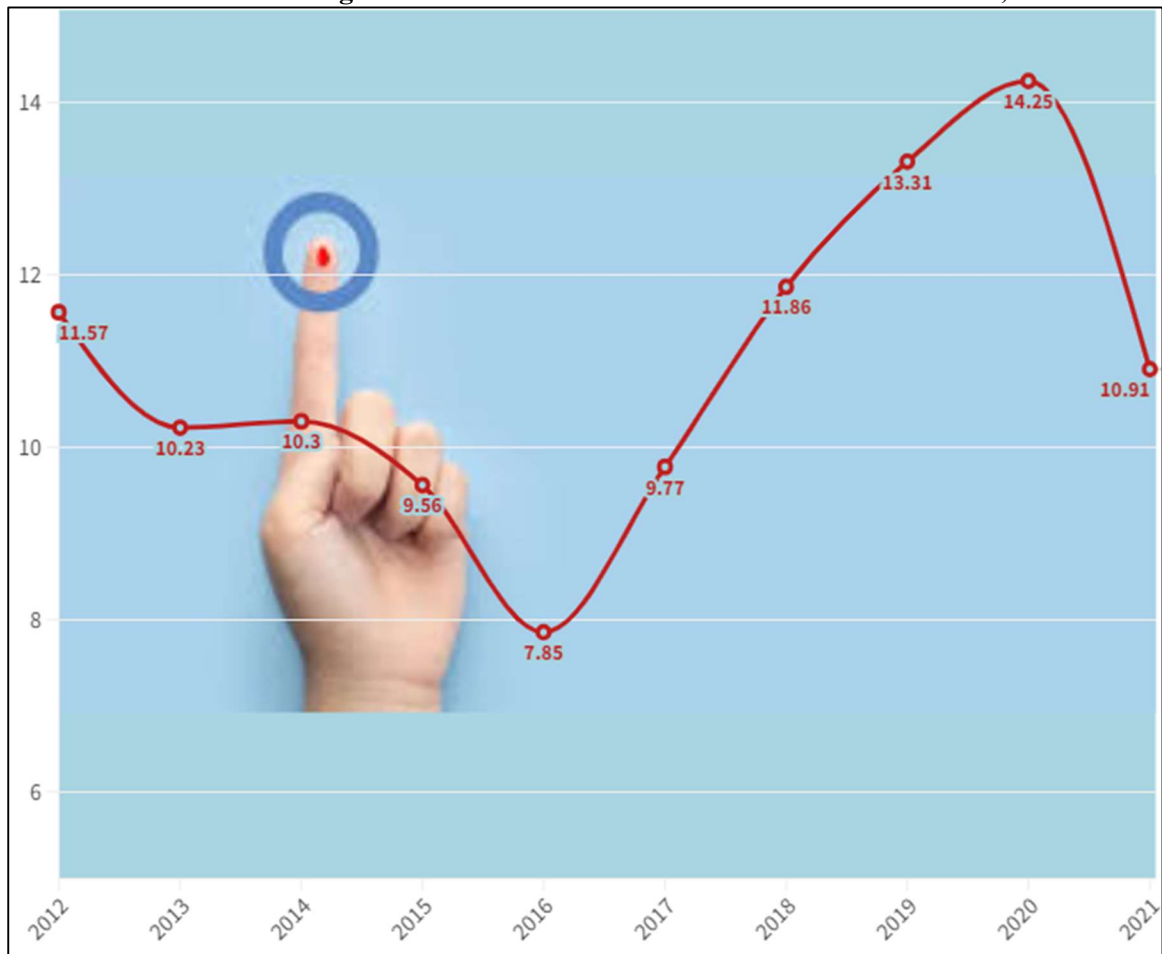


Table 3.6.3 showcases the number of deaths attributed to Diabetes Mellitus as recorded in the MCCD data from 2012 to 2021. Additionally, Chart 3.6.3 illustrates the time series graph depicting the percentage of Diabetes Mellitus-related deaths during the same period. Notably, there's a noticeable upward trend in the percentage of Diabetes Mellitus-related deaths concerning the total MCCD deaths from 2016 to 2020, with a subsequent decrease observed in 2021. This decline can be attributed to the significant impact of Covid-19, which contributed to approximately 35% of the total MCCD deaths, leading to a dip in the percentage of Diabetes Mellitus-related deaths.

Table 3.6.3. Diabetes Mellitus death under MCCD, 2012-2021

Year	Total MCCD Deaths due to Diabetes Mellitus	Total MCCD Deaths	Percentage of Diabetes Mellitus deaths to total MCCD Deaths
2012	3624	31333	11.57
2013	3282	32096	10.23
2014	3135	30437	10.30
2015	3099	32416	9.56
2016	2162	27535	7.85
2017	2861	29280	9.77
2018	3664	30894	11.86
2019	4195	31511	13.31
2020	4017	28192	14.25
2021	3922	35965	10.91

Chart 3.6.3. Percentage of Diabetes Mellitus deaths to total MCCD Deaths, 2012-2021



3.7 Neoplasms

Neoplasms refer to abnormal growths of tissue resulting from uncontrolled, rapid, and abnormal cell division. These growths can be benign or malignant (cancerous), with malignant neoplasms having the potential to invade nearby tissues and spread to other parts of the body.

Neoplasms, commonly known as cancer, ranked as the fourth leading cause of death in Kerala in 2021, constituting 9.64% of total medically certified deaths, with 9.37% for males and 10.06% for females. The distribution of major causes of deaths under this group is given in the table 3.7.1 and is depicted in Chart 3.7.1. Total medically certified deaths due to Neoplasms in 2021 were 3466, with males contributing 60% and females 40%. Among specific types, 'Malignant neoplasms of digestive organs' stood out as the primary contributor, accounting for 29.77% of Neoplasms-related deaths, followed by 'Malignant neoplasms of respiratory and intrathoracic organs' at 17.69%, and 'Malignant neoplasms of lymphoid, haematopoietic, and related tissue' at 17.48%. Moreover, 'Malignant neoplasms of bone, mesothelial and soft tissue, skin, and breast' contributed 10.24% to Neoplasms-related deaths. Noteworthy gender disparities were evident, especially in 'Malignant neoplasms of digestive organs,' where males accounted for 35.77% compared to females at 20.90%. For males, 'Malignant neoplasms of digestive organs' ranked as the leading cause of death in this category, while 'Malignant neoplasms of bone, mesothelial and soft tissue, skin, and breast' were the top causes for females.

Table 3.7.1. Distribution of Major causes of deaths due to Neoplasms under MCCD 2021

S. No	Cause of Death	MALE		FEMALE		TOTAL		% to Total Medically Certified Deaths
		Number	%	Number	%	Number	%	
1	Malignant neoplasms of digestive organs (C15-C26)	740	35.77	292	20.90	1032	29.77	2.87
2	Malignant neoplasms of respiratory and intrathoracic organs (C30-C39)	476	23.01	137	9.81	613	17.69	1.70
3	Malignant neoplasms of lymphoid, haematopoietic and related tissue (C81-C96)	329	15.90	277	19.83	606	17.48	1.68
4	Malignant neoplasms of bone, mesothelial and soft tissue, skin and breast (C40-C50)	38	1.84	317	22.69	355	10.24	0.99
5	Malignant neoplasms of genitourinary organs (C51-C68)	155	7.49	183	13.10	338	9.75	0.94
6	Others	331	16.00	191	13.67	522	15.06	1.45
	Total Medically Certified Deaths due to Neoplasms	2069	100.00	1397	100.00	3466	100.00	9.64
	Deaths due to Neoplasms as Percentage to total Medically Certified Deaths		9.37		10.06		9.64	

Chart 3.7.1. Percentage Distribution of Medically Certified Deaths due to Neoplasms 2021

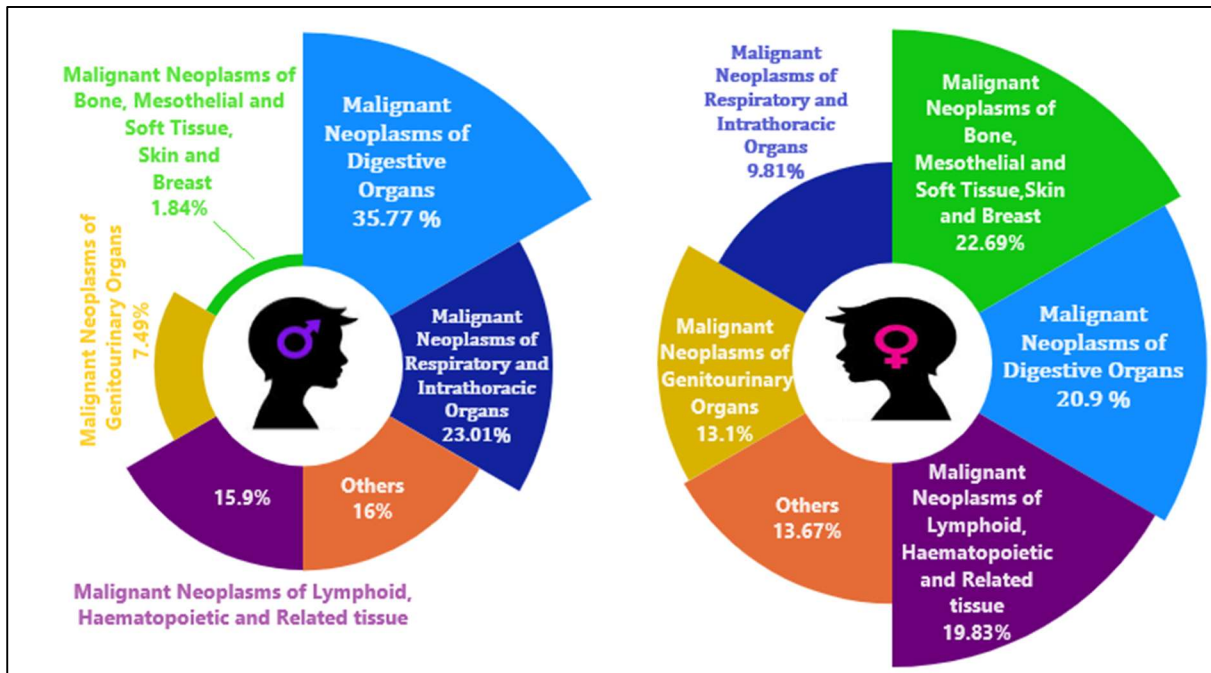


Table 3.7.2. Age distribution of deaths due to Neoplasm under MCCD – 2021

S.NO	Age Group (In Years)	Male		Female		Total	
		Number	%	Number	%	Number	%
1	<1	2	0.10	1	0.07	3	0.09
2	1-4	15	0.72	6	0.43	21	0.61
3	5-14	33	1.59	16	1.15	49	1.41
4	15-24	30	1.45	50	3.58	80	2.31
5	25-34	47	2.27	65	4.65	112	3.23
6	35-44	82	3.96	159	11.38	241	6.95
7	45-54	264	12.76	214	15.32	478	13.79
8	55-64	600	29.00	378	27.06	978	28.22
9	65-69	348	16.82	174	12.46	522	15.06
10	70 Years or above	620	29.97	323	23.12	943	27.21
11	Age Not Stated	28	1.35	11	0.79	39	1.13
	TOTAL	2069	100.00	1397	100.00	3466	100.00

Table 3.7.2. provides a comprehensive breakdown of mortality rates across different age groups for both males and females, with a total of 3,466 deaths recorded. Notably, the highest number of deaths for males is in the 70+ age group (620), followed closely by those aged 55-64 age group (600). At the same time highest number of deaths for females is in the 55-64 age group (978), followed by those aged 70 years or above (943). This data indicates a significant increase in mortality rates with advancing age for both sex groups.

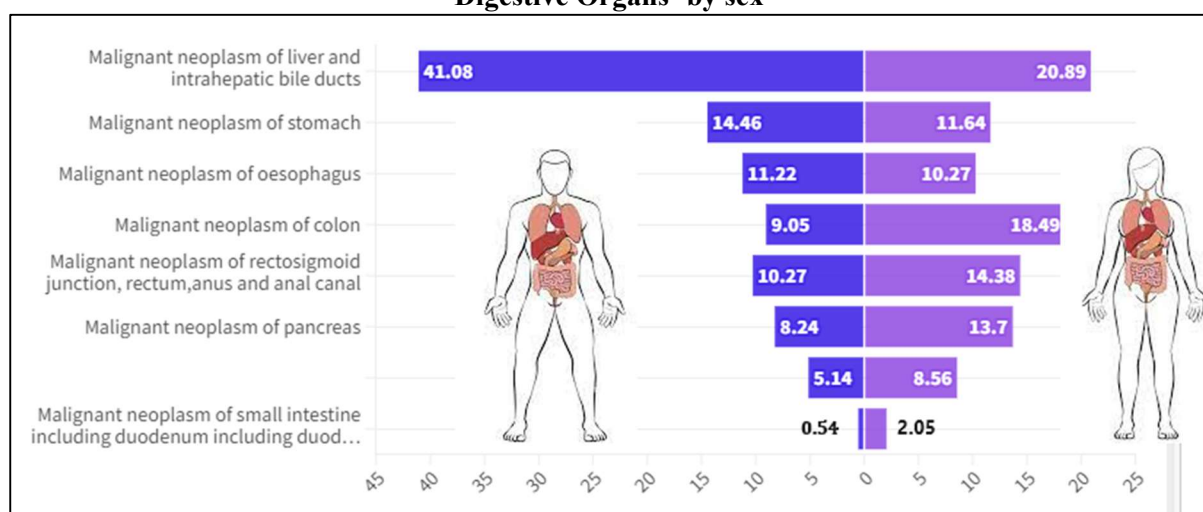
3.7.1. Malignant Neoplasms of Digestive Organs

Malignant neoplasms of digestive organs refer to cancerous growths or tumours that develop in the organs involved in the digestive system. These organs include the oesophagus, stomach, liver, pancreas, gallbladder, small intestine, large intestine (colon and rectum), and anus.

Table 3.7.1.1 Distribution of major causes of deaths among 'Malignant Neoplasms of Digestive Organs', 2021

Sl.No	Cause Of Death	Male		Female		Total	
		Number	%	Number	%	Number	%
1	Malignant neoplasm of liver and intrahepatic bile ducts (C22)	304	41.08	61	20.89	365	35.37
2	Malignant neoplasm of stomach (C16)	107	14.46	34	11.64	141	13.66
3	Malignant neoplasm of recto sigmoid junction, rectum, anus and anal canal (C19-C21)	76	10.27	42	14.38	118	11.43
4	Malignant neoplasm of colon (C18)	67	9.05	54	18.49	121	11.72
5	Malignant neoplasm of oesophagus(C15)	83	11.22	30	10.27	113	10.95
6	Malignant neoplasm of pancreas (C25)	61	8.24	40	13.70	101	9.79
7	Other malignant neoplasms of digestive organs (C23-C24,C26)	38	5.14	25	8.56	63	6.10
8	Malignant neoplasm of small intestine including duodenum (C17)	4	0.54	6	2.05	10	0.97
	Total Medically Certified Deaths due to 'Malignant neoplasms of digestive organs '	740	100	292	100	1032	100
	Deaths due to 'Malignant neoplasms of digestive organs' as percentage to total Neoplasm deaths.	2069	35.77	1397	20.90	3466	29.77

Chart 3.7.1.1. Percentage distribution of major causes of deaths due to ‘Malignant Neoplasms of Digestive Organs’ by sex



As discussed in section 3.7 , 29.77 percentage of Medically certified deaths due to Neoplasms were attributed to Malignant Neoplasms of Digestive Organs. The distribution of major causes of deaths under the group is given in the in table 3.7.1.1 and chart 3.7.1.1.

Among all malignant neoplasms of digestive organs, liver cancer emerges as the primary cause of death, accounting for 35.37% of total deaths. Following are stomach cancer and colon cancer, contributing 13.66% and 11.72% of deaths, respectively. For males, liver cancer, stomach cancer, and oesophageal cancer are the top three causes within this group, while for females, the top three causes are liver cancer, colon cancer, and neoplasms of the rectosigmoid junction, rectum, anus, and anal canal. The gender disparity in liver cancer deaths is striking, with 41.08% of males and 20.89% of females, indicating a significant gap in its impact between genders. Colon cancer also reveals a notable gender difference, affecting 18.49% of females compared to 9.05% of males, underscoring a significant discrepancy in its prevalence. Additionally, pancreatic cancer demonstrates a gender divide, with 13.7% of females affected versus 8.24% of males, highlighting the importance of gender-specific considerations in understanding and addressing digestive organ neoplasms.

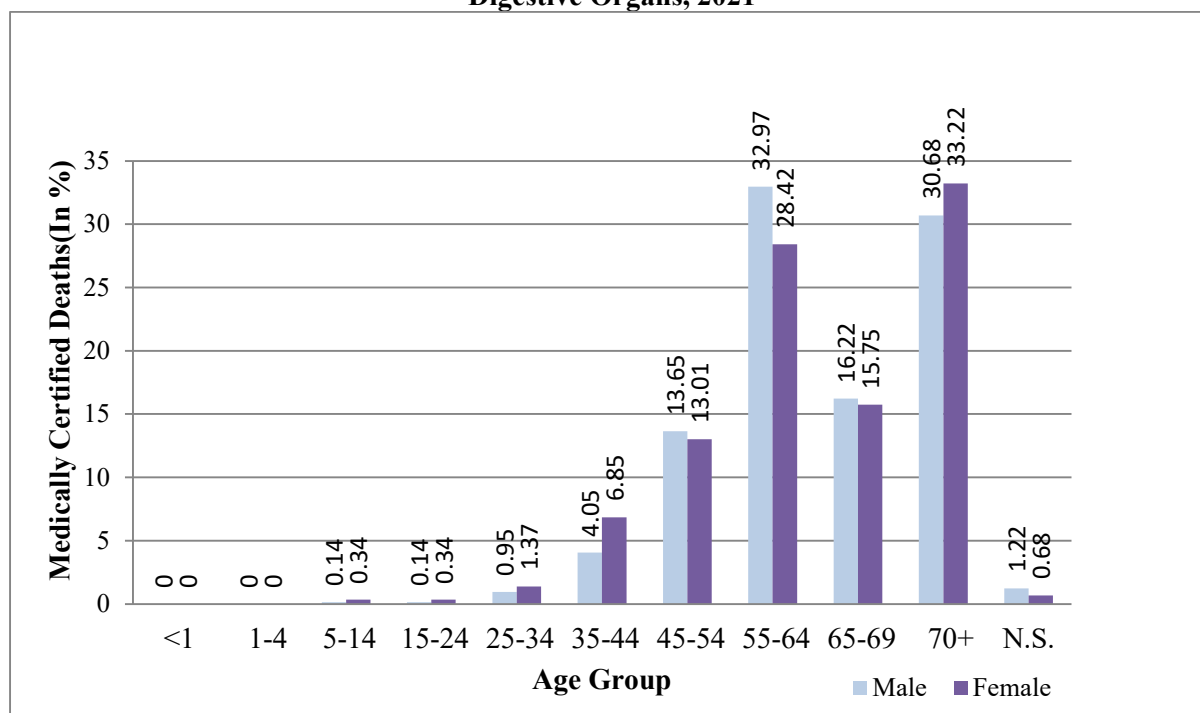
The age-wise distribution of major causes of deaths under 'Malignant Neoplasms of Digestive Organs' is presented in Table 3.7.1.2 and illustrated in Chart 3.7.1.2. Both the table and chart provide an insightful breakdown of deaths attributed to 'Malignant Neoplasms of Digestive Organs' across different age groups and genders. It's notable that the majority of deaths occur in older age groups, particularly in individuals aged 55 and above, which collectively account for about 79.18% of all deaths due to these neoplasms. Among males, the highest number of deaths occurs in the 55-64 age group (32.97%), followed closely by those aged 70 and above (30.68%). Conversely, among females, while the trend is similar with the highest percentage of deaths in the 55-64 age group (28.42%), the second-highest percentage occurs in the 70+ age group (33.22%), indicating a slightly higher impact in older females compared to males in the same age category. The age-wise distribution also reveals a relatively

low number of deaths in younger age groups, with negligible percentages in the <1, 1-4, and 5-14 age groups. This pattern aligns with the general understanding that malignant neoplasms of digestive organs are more prevalent and consequential in older populations.

Table 3.7.1.2. Age distribution of deaths due to ‘Malignant Neoplasms of Digestive Organs’, 2021

Sl,No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	0	0	0	0	0	0
2	1-4	0	0	0	0	0	0
3	5-14	1	0.14	1	0.34	2	0.19
4	15-24	1	0.14	1	0.34	2	0.19
5	25-34	7	0.95	4	1.37	11	1.07
6	35-44	30	4.05	20	6.85	50	4.84
7	45-54	101	13.65	38	13.01	139	13.47
8	55-64	244	32.97	83	28.42	327	31.69
9	65-69	120	16.22	46	15.75	166	16.09
10	70+	227	30.68	97	33.22	324	31.4
11	N.S.	9	1.22	2	0.68	11	1.07
	TOTAL	740	100	292	100	1032	100

Chart 3.7.1.2 Age group wise Percentage distribution of deaths due to Malignant Neoplasms of Digestive Organs, 2021



3.7.2. Malignant Neoplasm of Respiratory and Intra Thoracic Organs

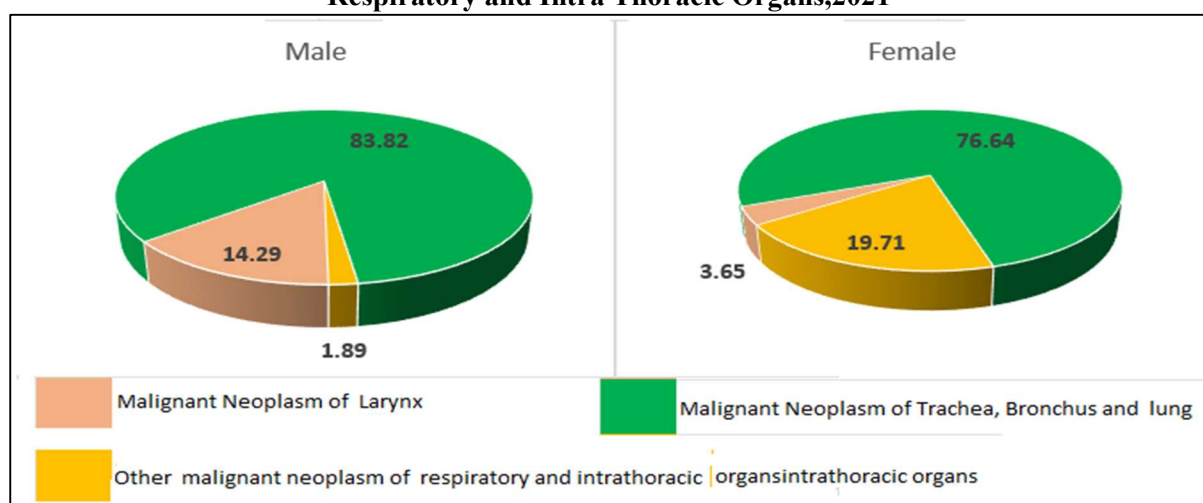
Malignant neoplasms of respiratory and intrathoracic organs refer to cancerous tumors located in the respiratory system and the intrathoracic region, which includes the organs within the thoracic cavity. This category encompasses various types of cancers such as those affecting the bronchus, lung, pleura, mediastinum, and other related structures.

Table 3.7.2.1. Distribution of major causes of deaths among ‘Malignant Neoplasms of Respiratory and Intra Thoracic Organs,2021

Sl, No	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	Malignant neoplasm of larynx	68	14.29	5	3.65	73	11.91
2	Malignant neoplasm of trachea, bronchus and lung	399	83.82	105	76.64	504	82.22
3	Other malignant neoplasm of respiratory and intrathoracic organs	9	1.89	27	19.71	36	5.87
	Total Medically Certified Deaths due to Malignant neoplasms of respiratory and intrathoracic organs	476	100	137	100	613	100
	Deaths due to 'Malignant neoplasms of respiratory and intrathoracic organs' as percentage to total Neoplasm deaths.	2069	23.01	1397	9.81	3466	17.69

A detailed breakdown of deaths due to malignant neoplasms of respiratory and intrathoracic organs, categorized by sex, is presented in Table 3.7.2.1 and Chart 3.7.2.1. It is seen that 17.69% of deaths due to neoplasms are attributed to malignant neoplasms of respiratory and intrathoracic organs. Among the total 613 deaths due to these malignant neoplasms, males dominate with 77.65%, while females contribute 22.35%. The majority of these deaths were caused by malignant neoplasms of the trachea, bronchus, and lung, accounting for 83.82% of male deaths and 76.64% of female deaths, totaling 82.22% overall. Malignant neoplasm of the larynx caused 14.29% of male deaths and 3.65% of female deaths, making up 11.91% of the total. Other malignant neoplasms of respiratory and intrathoracic organs were relatively rare, constituting 1.89% of male deaths and 19.71% of female deaths, with an overall percentage of 5.87%.

Chart 3.7.2.2 Percentage distribution of major causes of deaths among ‘Malignant Neoplasms of Respiratory and Intra Thoracic Organs,2021

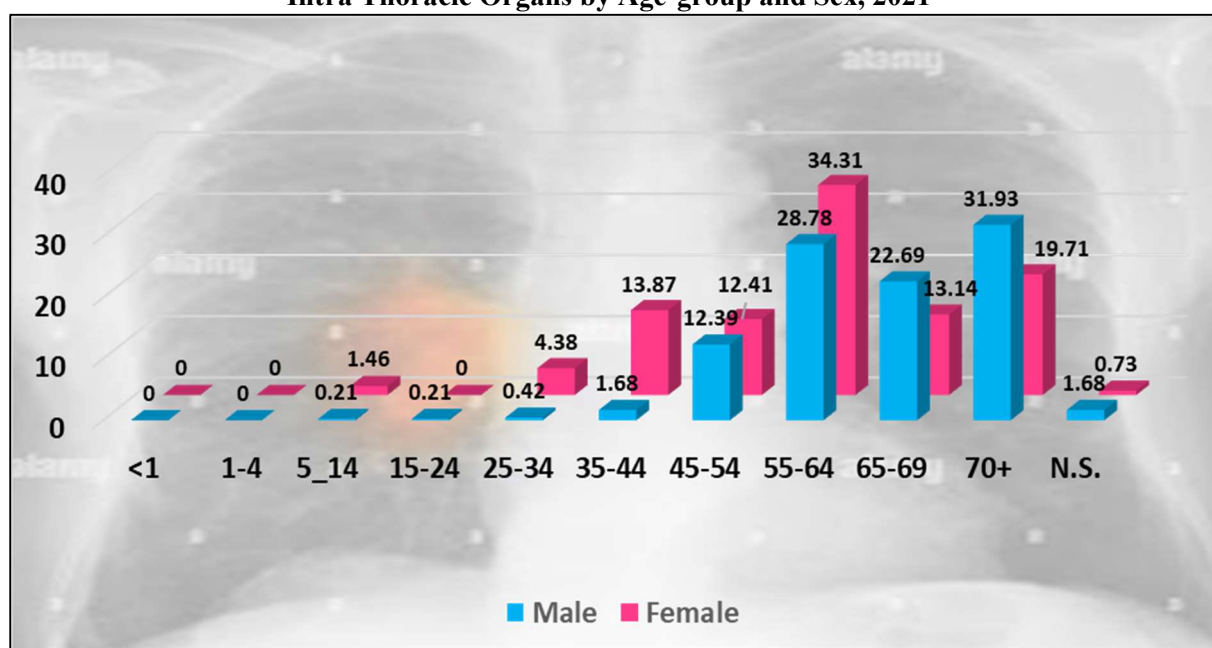


Age-group distribution of deaths due to Malignant Neoplasms of Respiratory and Intra Thoracic Organs are presented in table 3.7.2.3 and chart 3.7.2.3. The highest incidence of these deaths is in the 55-64 age group, accounting for 30.02%. Significant rates are also observed in the 70+ age group (29.2%) and the 65-69 age group (20.55%). No deaths were reported for those under 5 years old, and the number of deaths in the 5-44 age group is considerably lower compared to those aged 45 and above. A noticeable sex difference is evident in the distribution: for males, the majority of deaths occur in the 70+ age group, while for females, the highest incidence is in the 55-64 age group.

Table 3.7.2.3. Age-group and Sex wise distribution of deaths due to Malignant Neoplasms of Respiratory and Intra Thoracic Organs, 2021

Sl,No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	0	0	0	0	0	0
2	1-4	0	0	0	0	0	0
3	5-14	1	0.21	2	1.46	3	0.49
4	15-24	1	0.21	0	0	1	0.16
5	25-34	2	0.42	6	4.38	8	1.31
6	35-44	8	1.68	19	13.87	27	4.4
7	45-54	59	12.39	17	12.41	76	12.4
8	55-64	137	28.78	47	34.31	184	30.02
9	65-69	108	22.69	18	13.14	126	20.55
10	70+	152	31.93	27	19.71	179	29.2
11	N.S.	8	1.68	1	0.73	9	1.47
	TOTAL	476	100	137	100	613	100

Chart 3.7.2.3. Percentage distribution of deaths due to Malignant Neoplasms of Respiratory and Intra Thoracic Organs by Age-group and Sex, 2021



3.7.3. Malignant Neoplasms of Lymphoid, Haematopoietic and Related Tissue

Malignant neoplasms of lymphoid, haematopoietic, and related tissue refer to cancers that originate in the cells of the lymphatic system, bone marrow, and blood-forming tissues. This group includes lymphomas (cancers of lymphocytes, such as Hodgkin and non-Hodgkin lymphoma), leukaemia's (cancers starting in the bone marrow leading to abnormal blood cells in the bloodstream), multiple myeloma (cancer of plasma cells in the bone marrow), myelodysplastic syndromes (disorders caused by poorly formed or dysfunctional blood cells), and myeloproliferative neoplasms (diseases causing overproduction of blood cells in the bone marrow). These malignancies are characterized by uncontrolled cell growth and proliferation, disrupting normal blood cell production and function, and leading to a variety of symptoms and health complications.

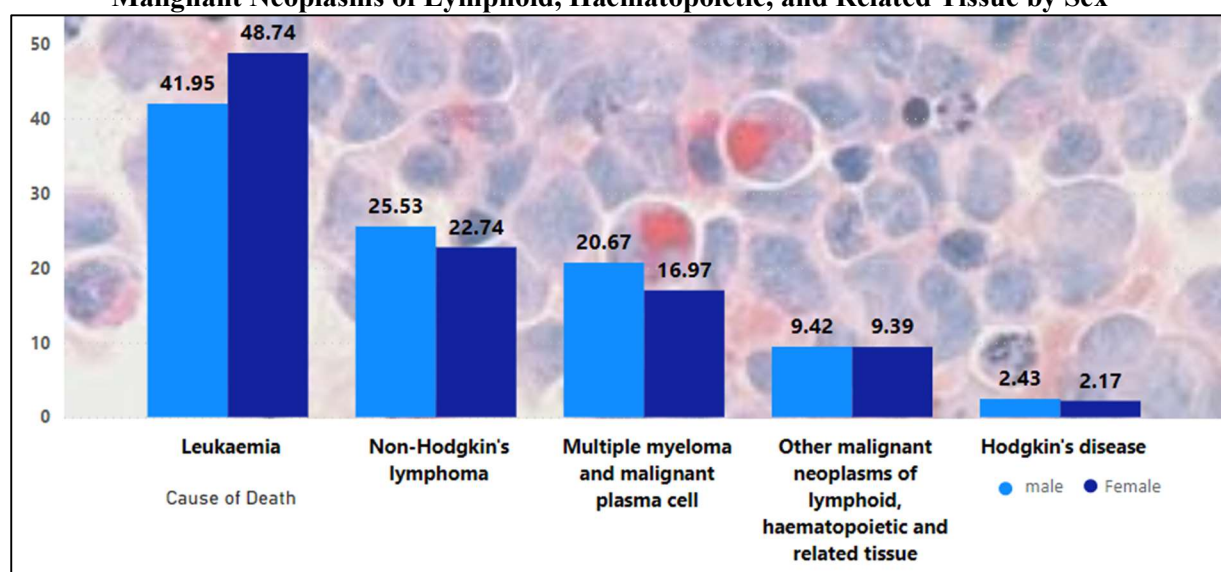
Table 3.7.3.1 and Chart 3.7.3.1 presents the distribution of medically certified deaths due to malignant neoplasms of lymphoid, haematopoietic, and related tissue, categorized by sex. Leukaemia is the leading cause, accounting for 45.05% of total deaths, with a slightly higher percentage in females (48.74%) compared to males (41.95%). Non-Hodgkin's lymphoma is the second most common cause, representing 24.26% of total deaths, with a higher incidence in males (25.53%) than females (22.74%). Multiple myeloma and malignant plasma cell neoplasms account for 18.98% of the total deaths, with males at 20.67% and females at 16.97%. Other malignant neoplasms of lymphoid, haematopoietic, and related tissue contribute to 9.41% of deaths, with nearly equal distribution between males (9.42%) and females (9.39%). Hodgkin's disease is the least common, causing 2.31% of total deaths, slightly more in males (2.43%) than females (2.17%). Overall, males constitute 54.29% of these deaths,

while females account for 45.71%, totalling 606 deaths from these specific malignant neoplasms.

Table 3.7.3.1. Distribution of Major Causes of Medically Certified Deaths Due to Malignant Neoplasms of Lymphoid, Haematopoietic, and Related Tissue by Sex, 2021

Sl,No	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	Leukaemia	138	41.95	135	48.74	273	45.05
2	Non-Hodgkin's lymphoma	84	25.53	63	22.74	147	24.26
3	Multiple myeloma and malignant plasma cell	68	20.67	47	16.97	115	18.98
4	Other malignant neoplasms of lymphoid, haematopoietic and related tissue	31	9.42	26	9.39	57	9.41
5	Hodgkin's disease	8	2.43	6	2.17	14	2.31
	Total Medically Certified Deaths due to Malignant neoplasms of lymphoid, haematopoietic and related tissue	329	100	277	100	606	100

Chart 3.7.3.1. Percentage Distribution of Major Causes of Medically Certified Deaths Due to Malignant Neoplasms of Lymphoid, Haematopoietic, and Related Tissue by Sex

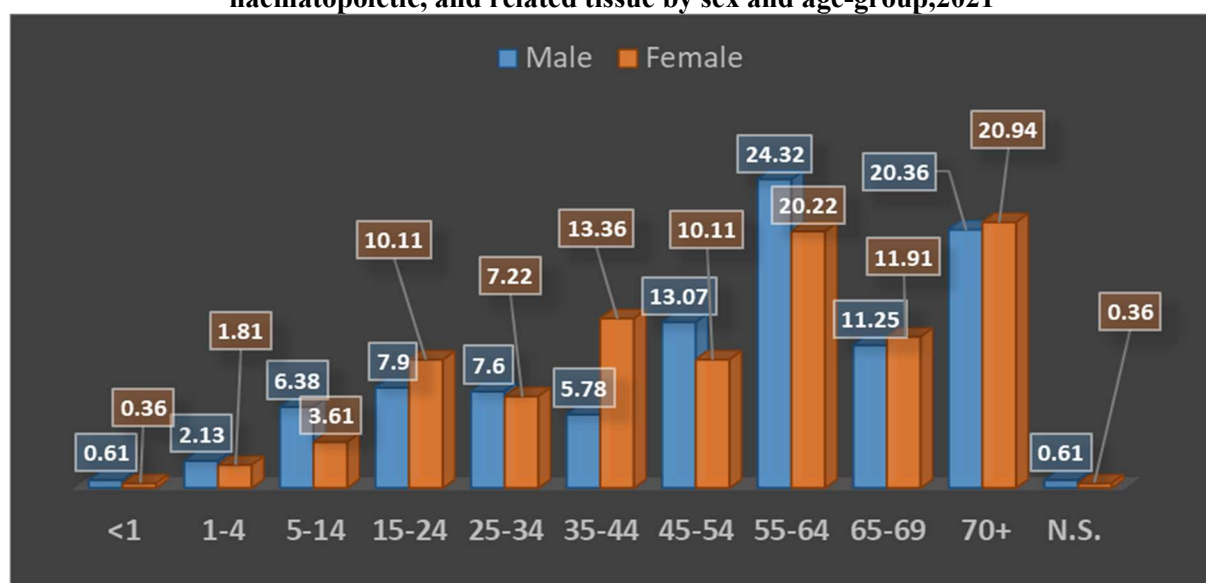


Age-group and sex wise distribution of Malignant neoplasms of lymphoid, haematopoietic, and related tissue is shown in table 3.7.3.2 and chart 3.7.3.2. The highest incidence of these deaths is seen in the age group 55-64, which accounts for 22.44% of the total deaths, followed by the 70+ age group at 20.63%. Notably, there is a male predominance in the 55-64 age group (24.32%) compared to females (20.22%). Conversely, females dominate in the 35-44 age group, constituting 13.36% compared to 5.78% of males. The age group 45-54 also shows a higher male representation (13.07%) compared to females (10.11%). Additionally, the age groups under 15 years show a very low incidence of these deaths, with only 7.6% of the total deaths occurring in this group.

Table 3.7.3.2. Age-group and sex wise distribution of Malignant neoplasms of lymphoid, haematopoietic, and related tissue, 2021

Sl,No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	2	0.61	1	0.36	3	0.5
2	1-4	7	2.13	5	1.81	12	1.98
3	5-14	21	6.38	10	3.61	31	5.12
4	15-24	26	7.9	28	10.11	54	8.91
5	25-34	25	7.6	20	7.22	45	7.43
6	35-44	19	5.78	37	13.36	56	9.24
7	45-54	43	13.07	28	10.11	71	11.72
8	55-64	80	24.32	56	20.22	136	22.44
9	65-69	37	11.25	33	11.91	70	11.55
10	70+	67	20.36	58	20.94	125	20.63
11	N.S.	2	0.61	1	0.36	3	0.5
	TOTAL	329	100	277	100	606	100

Chart 3.7.3.2 percentage distribution of deaths due Malignant neoplasms of lymphoid, haematopoietic, and related tissue by sex and age-group,2021



3.7.4. Malignant Neoplasms of Bone, Mesothelial and Soft Tissue, Skin and Breast

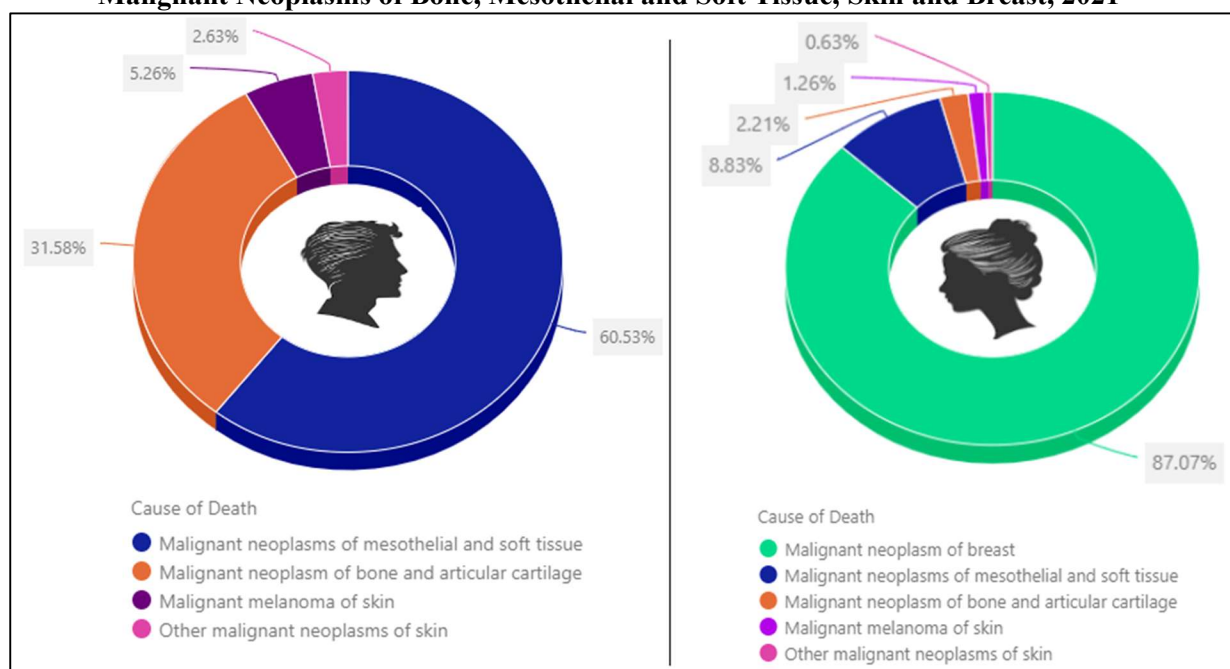
Malignant neoplasms of the bone, mesothelial and soft tissue, skin, and breast accounted for 10.24% of all medically certified deaths due to neoplasms in Kerala in 2021. Among the 355 total deaths, the vast majority (77.75%) are attributed to malignant neoplasms of the breast, with 87.07% of these occurring in females. Although malignant neoplasms of the breast can rarely affect males, no such cases were reported in 2021. Malignant neoplasms of mesothelial and soft tissue account for the second-highest proportion at 14.37%, affecting both males (60.53%) and females (8.83%). Malignant neoplasms of bone and articular cartilage

constitute 5.35% of the deaths, with a higher incidence in males (31.58%) compared to females (2.21%). Malignant melanoma of the skin and other malignant neoplasms of the skin are less common, comprising 1.69% and 0.85% of the total deaths, respectively.

Table 3.7.4.1. Distribution of Major Causes of Medically Certified Deaths Due to Malignant Neoplasms of Bone, Mesothelial and Soft Tissue, Skin and Breast, 2021

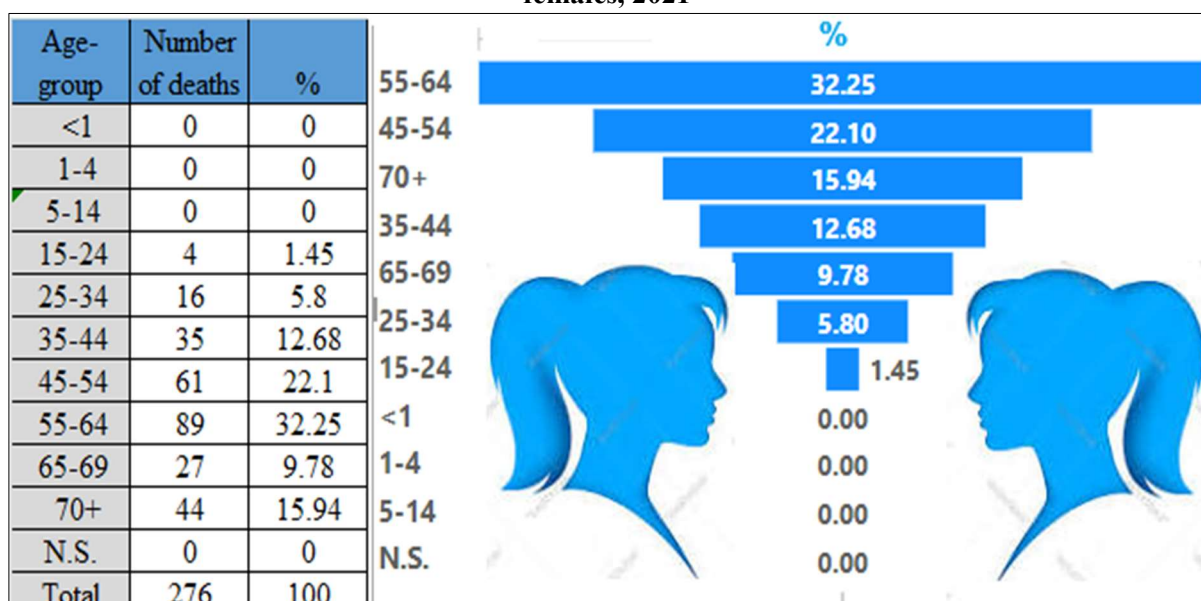
Sl,No	CAUSE OF DEATH	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	Malignant neoplasm of bone and articular cartilage	12	31.58	7	2.21	19	5.35
2	Malignant melanoma of skin	2	5.26	4	1.26	6	1.69
3	Other malignant neoplasms of skin	1	2.63	2	0.63	3	0.85
4	Malignant neoplasms of mesothelial and soft tissue	23	60.53	28	8.83	51	14.37
5	Malignant neoplasm of breast	0	0	276	87.07	276	77.75
	Total Medically Certified Deaths due to Malignant neoplasms of lymphoid, haematopoietic and related tissue	38	100	317	100	355	100

Chart 3.7.4.1. Percentage Distribution of Major Causes of Medically Certified Deaths Due to Malignant Neoplasms of Bone, Mesothelial and Soft Tissue, Skin and Breast, 2021



As shown in Table 3.7.4.1, approximately 78% of the total medically certified deaths under this group were due to malignant neoplasms of the breast, occurring exclusively among females. Therefore, the age-group and sex-wise analysis focuses on female breast cancer cases, as presented in Chart 3.7.4.2. The highest incidence of these deaths was in the 55-64 age group at 32.25%, followed by the 45-54 age group at 22.10% and those aged 70 and above at 15.94%. Other significant age groups included 35-44 at 12.68%, 65-69 at 9.78%, and 25-34 at 5.80%.

Chart 3.7.4.2. Age-group distribution of deaths due to malignant neoplasms of breast among females, 2021



3.7.5. Malignant Neoplasms of Genitourinary Organs

Malignant neoplasms of genitourinary organs refer to cancerous tumours that originate in the organs of the genitourinary system. This system includes the organs involved in the production and excretion of urine, as well as the reproductive organs. Specifically, these malignancies can affect the kidneys, ureters, bladder, urethra, prostate, testicles, and penis in males, as well as the ovaries, fallopian tubes, uterus, cervix, vagina, and vulva in females. These cancers are characterized by uncontrolled cell growth, the potential to invade surrounding tissues, and the ability to metastasize to other parts of the body.

Considering the biological differences between males and females, the distribution of major causes of medically certified deaths due to Malignant Neoplasms of Genitourinary Organs is presented separately for each gender in Table 3.7.5.1, Chart 3.7.5.1, and Chart 3.7.5.2. For males, the leading cause of death within this category was Malignant Neoplasm of the Prostate, accounting for 50.32% of the total deaths. Malignant Neoplasm of the Bladder and Other Malignant Neoplasms of the Urinary Tract also represented significant portions, with 25.16% and 18.71% respectively. For females, the predominant cause of death was Malignant Neoplasm of the Ovary, contributing 42.62% of the total deaths. This was followed by Malignant Neoplasm of the Cervix Uteri at 24.59%, and Malignant Neoplasm of Other and Unspecified types at 16.94%. Other Malignant Neoplasms of the Urinary Tract also played a notable role, comprising 10.93% of the deaths.

Table 3.7.5.1. Distribution of Major Causes of Medically Certified Deaths due to Malignant Neoplasms of Genitourinary Organs,2021

Sl,No	CAUSE OF DEATH	Female		CAUSE OF DEATH	Male	
		No.	%		No.	%
1	Malignant Neoplasm of Cervix Uteri	45	24.59	Malignant Neoplasm of Prostate	78	50.32
2	Malignant Neoplasm of Other and Unspecified	31	16.94	Other Malignant Neoplasms of Male	9	5.81
3	Malignant Neoplasm of Ovary	78	42.62	Malignant Neoplasm of Bladder	39	25.16
4	Other Malignant Neoplasms of Urinary tract	20	10.93	Other Malignant Neoplasms of Urinary tract	29	18.71
5	Others	9	4.92	Total	155	100
	Total	183	100			

Chart 3.7.5.1 . Percentage Distribution of Major Causes of Medically Certified deaths among males due to Malignant Neoplasms of Genitourinary Organs,2021

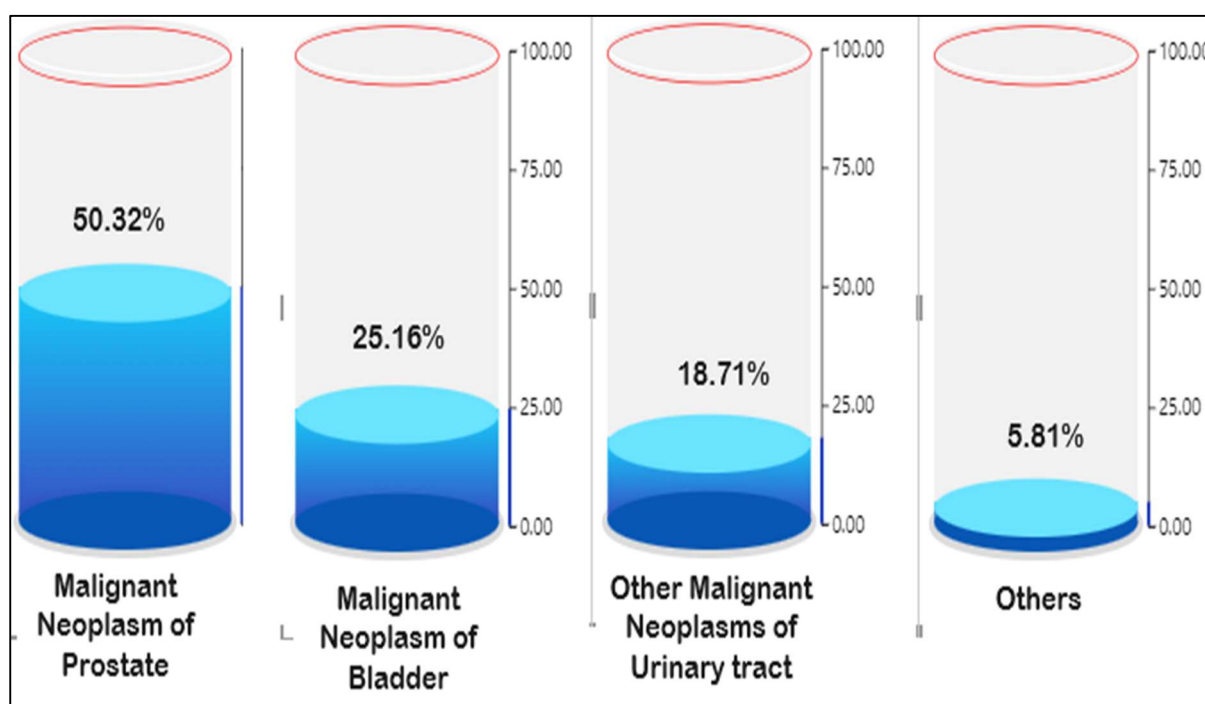


Chart 3.7.5.2. Percentage Distribution of Major Causes of Medically Certified deaths among females due to Malignant Neoplasms of Genitourinary Organs,2021

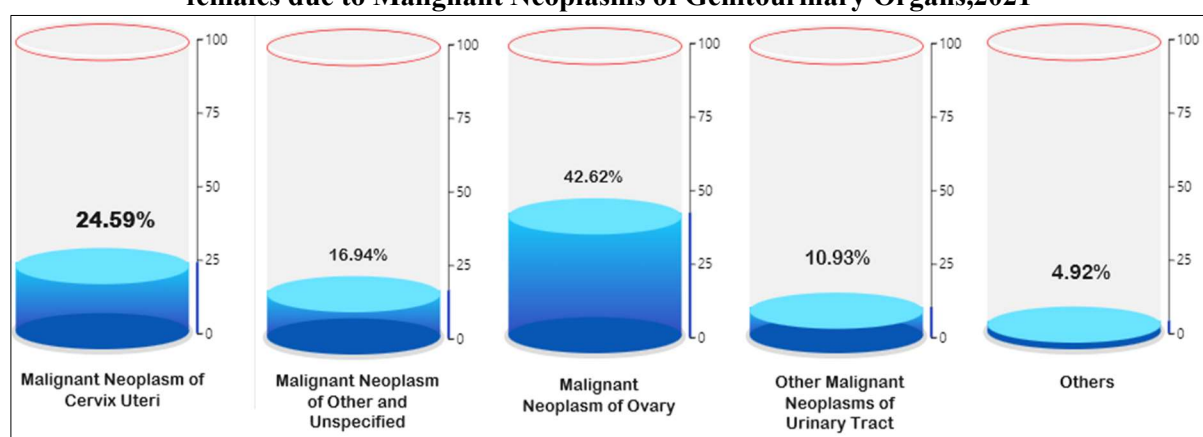
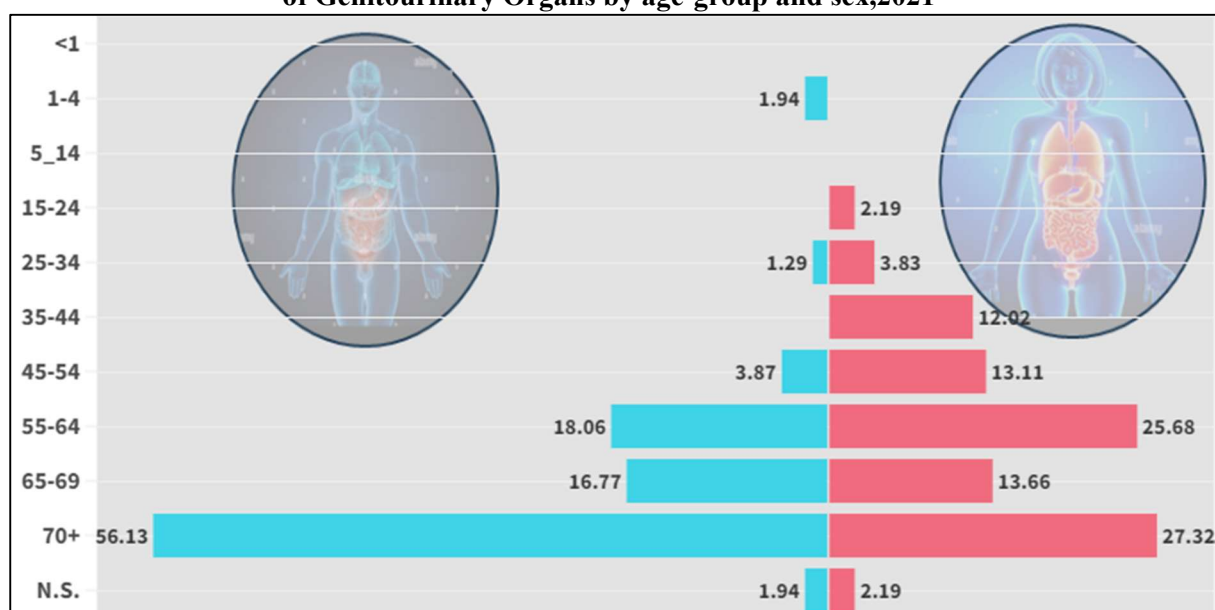


Table 3.7.5.3 presents the age-group and sex-wise distribution of medically certified deaths due to Malignant Neoplasms of Genitourinary Organs. Among males, the highest number of deaths occurred in the 70+ age group, accounting for 56.13% of total male deaths, with the 55-64 and 65-69 age groups contributing 18.06% and 16.77% respectively. For females, the highest percentage of deaths was in the 70+ age group at 27.32%, followed closely by the 55-64 age group at 25.68% and the 45-54 age group at 13.11%. Combined data reveals that the majority of deaths (40.53%) occurred in the 70+ age group, followed by the 55-64 age group (22.19%) and the 65-69 age group (15.09%). Deaths in younger age groups (under 25) were minimal for both sexes. The distribution indicates a higher mortality rate due to these neoplasms in older age groups, particularly those aged 55 and above. While males exhibit a higher mortality rate in these older age groups, a significant number of deaths among females occurred from the age group 35-44 years onwards.

Table 3.7.5.3. Age-group and sex-wise distribution of medically certified deaths due to Malignant Neoplasms of Genitourinary Organs,2021

Sl,No	Age Group	SEX					
		Male		Female		Total	
		No.	%	No.	%	No.	%
1	<1	0	0	0	0	0	0
2	1-4	3	1.94	0	0	3	0.89
3	5-14	0	0	0	0	0	0
4	15-24	0	0	4	2.19	4	1.18
5	25-34	2	1.29	7	3.83	9	2.66
6	35-44	0	0	22	12.02	22	6.51
7	45-54	6	3.87	24	13.11	30	8.88
8	55-64	28	18.06	47	25.68	75	22.19
9	65-69	26	16.77	25	13.66	51	15.09
10	70+	87	56.13	50	27.32	137	40.53
11	N.S.	3	1.94	4	2.19	7	2.07
	TOTAL	155	100	183	100	338	100

Chart 3.7.5.3 Percentage distribution of medically certified deaths due to Malignant Neoplasms of Genitourinary Organs by age-group and sex,2021



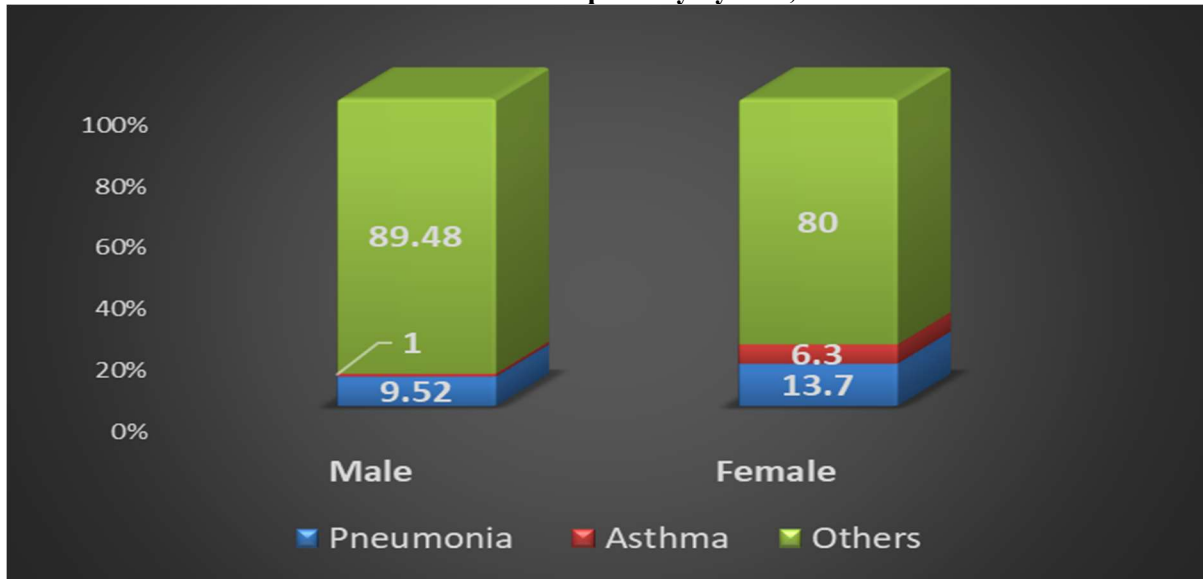
3.8 Diseases of the Respiratory System

Respiratory diseases are a type of illness that affect the lungs and other parts of the respiratory system. These diseases can be caused by various factors, including infections, smoking tobacco, inhaling second-hand smoke, and exposure to radon, asbestos, or other forms of air pollution. Common respiratory diseases include asthma, chronic obstructive pulmonary disease (COPD), pulmonary fibrosis, pneumonia, and lung cancer. These conditions are also referred to as lung disorders or pulmonary diseases.

Table 3.8.1. Distribution of Major Causes of Medically Certified Deaths due to diseases of the Respiratory System,2021.

S.NO	Cause of Deaths	Male		Female		Total		% to Total Medically Certified Deaths
		Number	%	Number	%	Number	%	
1	Pneumonia	105	9.52	87	13.70	192	11.05	0.53
2	Asthma	11	1.00	40	6.30	51	2.93	0.14
3	Pleurisy	5	0.45	4	0.63	9	0.52	0.03
4	Bronchitis, chronic and unspecified, emphysema	1	0.09	2	0.31	3	0.17	0.01
5	Acute bronchitis and acute bronchiolitis	1	0.09	0	0.00	1	0.06	0.00
6	Others	980	88.85	502	79.06	1482	85.27	4.12
	Total Medically Certified Deaths due to Diseases of the Respiratory	1103	100.00	635	100.00	1738	100.00	4.83
	Respiratory System as Percentage to total Medically Certified Deaths		5.00		4.57		4.83	

Chart 3.8.1. Percentage distribution of Major Causes of Medically Certified Deaths due to diseases of the Respiratory System, 2021



Diseases of the Respiratory System ranked as the fifth leading cause of medically certified deaths in Kerala for the year 2021, accounting for 4.83% of the total. This includes 5.00% of male deaths and 4.57% of female deaths. Table 3.8.1 and Chart 3.8.1 provide a detailed breakdown of the main components of this major cause group. Pneumonia is the leading cause of death, accounting for 11.05% of total respiratory-related deaths, with a higher percentage in females (13.70%) than in males (9.52%). Asthma is the second most common cause, responsible for 2.93% of the deaths, again showing a higher impact on females (6.30%) compared to males (1.00%). Other causes like pleurisy, chronic bronchitis, and acute bronchitis have significantly lower percentages, collectively contributing less than 1% to the total. Most deaths (85.27%) fall under the 'Others' category, indicating a wide range of less common respiratory conditions.

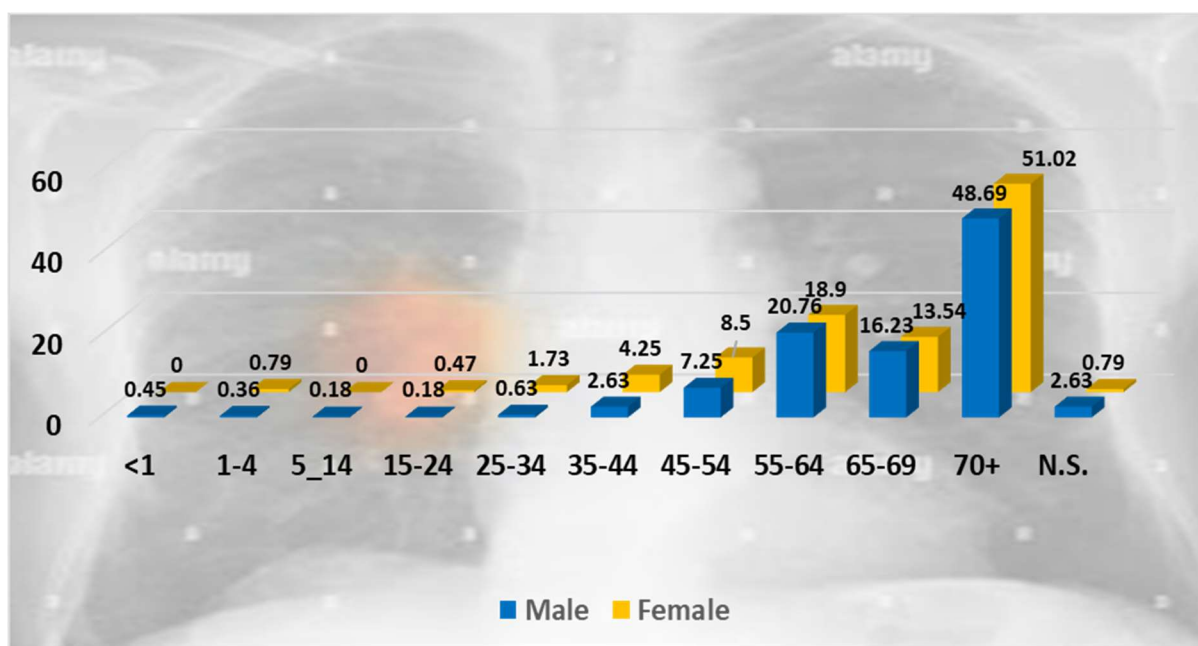
Age distribution of Medically Certified Deaths due to diseases of the Respiratory System for the year 2021 is given in table 3.8.2. and chart 3.8.2. The data highlights that the majority of deaths occur in older age groups, with individuals aged 70 years or above accounting for 49.54% of total deaths, comprising 48.69% of male and 51.02% of female deaths. This trend underscores the vulnerability of the elderly population to respiratory diseases. The 55-64 and 65-69 age groups also show significant mortality rates at 20.08% and 15.25%, respectively. In contrast, younger age groups (below 45 years) show markedly lower death rates, with the under-1-year group accounting for just 0.29% of total deaths. Additionally,

there are some unclassified age deaths (1.96%), indicating a minor fraction where age data wasn't recorded. No significant gender disparity is observed across different age groups.

Table 3.8.2 Age distribution of deaths due to diseases of Respiratory System under MCCD –2021

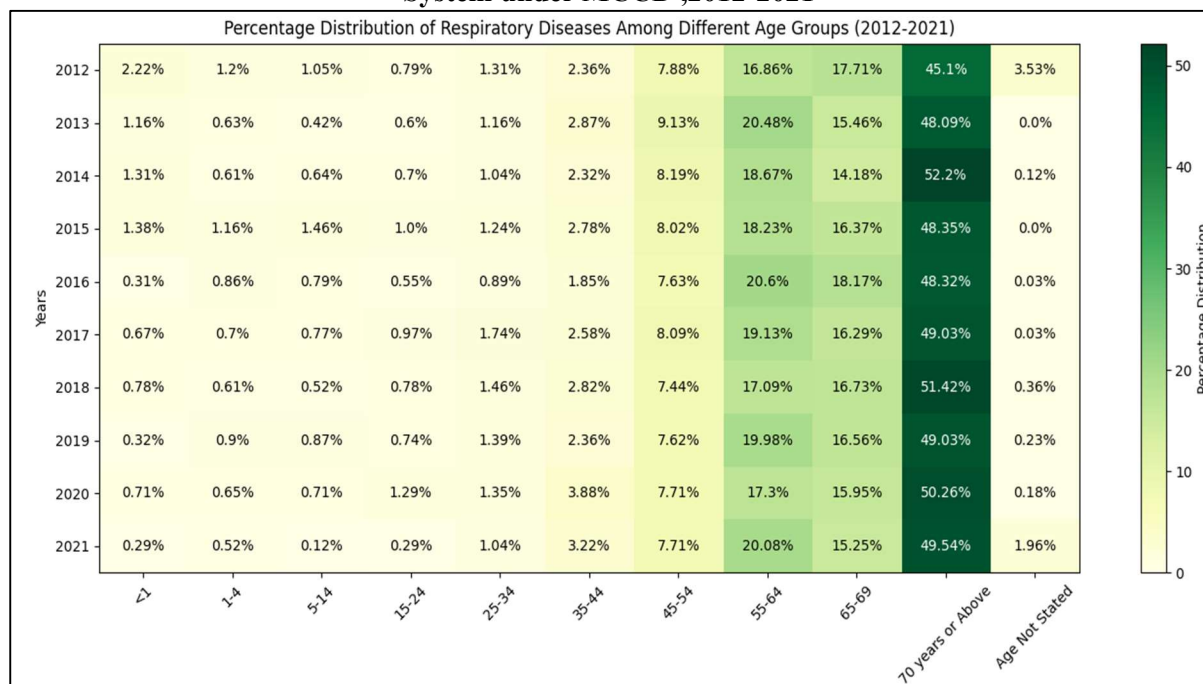
Sl.NO	Age Group (In Years)	Male		Female		Total	
		Number	%	Number	%	Number	%
1	<1	5	0.45	0	0.00	5	0.29
2	1-4	4	0.36	5	0.79	9	0.52
3	5-14	2	0.18	0	0.00	2	0.12
4	15-24	2	0.18	3	0.47	5	0.29
5	25-34	7	0.63	11	1.73	18	1.04
6	35-44	29	2.63	27	4.25	56	3.22
7	45-54	80	7.25	54	8.50	134	7.71
8	55-64	229	20.76	120	18.90	349	20.08
9	65-69	179	16.23	86	13.54	265	15.25
10	70 Years or above	537	48.69	324	51.02	861	49.54
11	Age Not Stated	29	2.63	5	0.79	34	1.96
	TOTAL	1103	100.00	635	100.00	1738	100.00

Chart 3.8.2. Age group wise percentage distribution of deaths due to diseases of Respiratory System under MCCD –2021



Age-group wise percentage distribution of deaths due to respiratory diseases for the years from 2012 to 2021 is depicted in chart 3.8.3. The data on deaths due to diseases of the respiratory system from 2012 to 2021 reveals that the highest percentage of deaths consistently occurs in the age group of 70 years or above. The next significant age groups are 55-64 and 65-69, showing substantial mortality rates throughout the years. In contrast, younger age groups (below 45 years) consistently show much lower death rates, with the under-1-year group demonstrating the least percentage of deaths each year.

Chart 3.8.3. Age group wise percentage distribution of deaths due to diseases of Respiratory System under MCCD ,2012-2021



3.9 Diseases of the Digestive System

Diseases of the digestive system encompass a variety of conditions that affect different parts of the digestive tract, including the oesophagus, stomach, small and large intestines, liver, pancreas, and biliary tract. The cause group of diseases of digestive system is the sixth leading cause and has contributed to 4.12 per cent of the total medically certified deaths with 5.29 per cent of male and 2.27 per cent of female deaths. This data underscores a significant gender disparity, with males experiencing more than double the mortality rate compared to females. The distribution of major causes of deaths under this group is given in the table 3.9.1 and is highlighted in Chart 3.9.1.

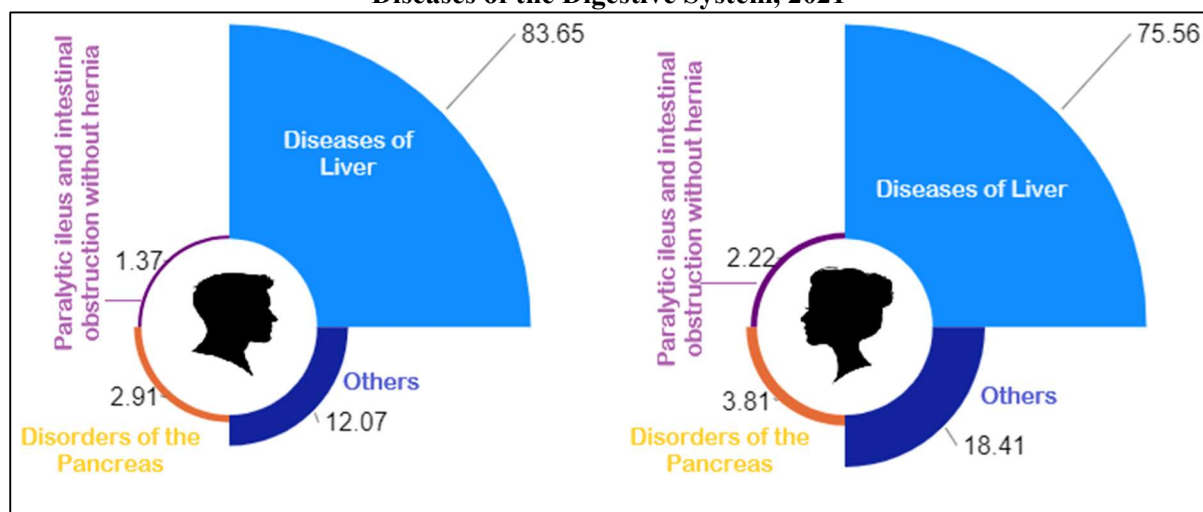
Diseases of the liver were the primary cause of death within the digestive system category, accounting for 81.93% of total deaths, with a higher prevalence in males (83.65%) compared to females (75.56%). Disorders of the pancreas and paralytic ileus and intestinal obstruction without hernia also contributed to mortality, though to a much lesser extent, at 2.76% and 1.89%, respectively. Other causes, such as hernia and peritonitis, were relatively rare, each accounting for around 0.67% of the total deaths. The "other" category represented

12.07% of deaths, with a higher percentage in females (15.56%) compared to males (11.13%). This distribution highlights the significant impact of liver diseases within the digestive system category and underscores the gender disparity in mortality rates from these diseases.

Table 3.9.1. Distribution of Major Causes of Medically Certified Deaths due to Diseases of the Digestive System,2021.

Cause of Death	Male		Female		Total		% to Total Medically Certified Deaths
	Number	%	Number	%	Number	%	
Diseases of the liver	977	83.65	238	75.56	1215	81.93	3.38
Disorders of the pancreas	34	2.91	7	2.22	41	2.76	0.11
Paralytic ileus and intestinal obstruction without hernia	16	1.37	12	3.81	28	1.89	0.08
Hernia	5	0.43	5	1.59	10	0.67	0.03
Peritonitis	6	0.51	4	1.27	10	0.67	0.03
Others	130	11.13	49	15.56	179	12.07	0.50
Total Medically Certified Deaths due to Diseases of Digestive System	1168	100.00	315	100.00	1483	100.00	4.12
Deaths due to Diseases of Digestive System as Percentage to total Medically Certified Deaths		5.29		2.27		4.12	

Chart 3.9.1. Percentage distribution of Major Causes of Medically Certified Deaths due to Diseases of the Digestive System, 2021

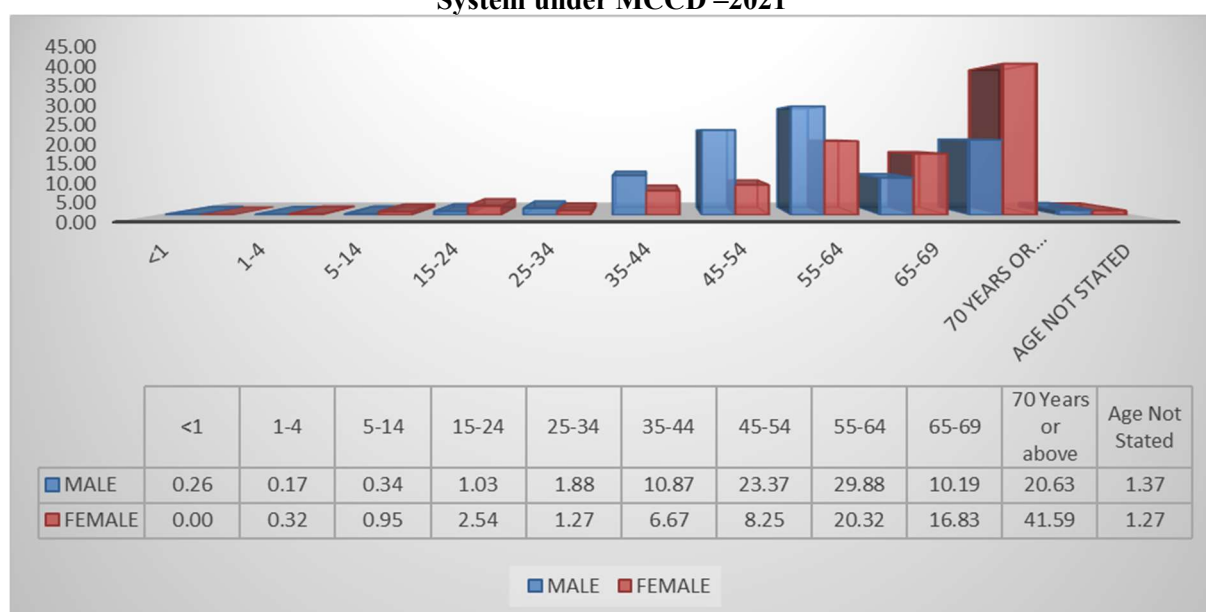


Age distribution of Medically Certified Deaths due to diseases of the Digestive System for the year 2021 is given in table 3.9.2. and chart 3.9.2. Most deaths occur in the older age groups, particularly those aged 55-64 years (27.85%) and 70 years or above (25.08%). Notably, males in the 55-64 age group account for the highest percentage (29.88%) of deaths among males, while females aged 70 years or above have the highest percentage (41.59%) among females. The age groups 45-54 and 65-69 also have significant percentages, with 20.16% and 11.60% of total deaths, respectively. The distribution across younger age groups is considerably lower, with the under 1 year, 1-4 years, and 5-14 years categories each contributing less than 1% to the total deaths.

Table 3.9.2. Age distribution of deaths due to diseases of Digestive System under MCCD –2021

Age Group (in Years)	Male		Female		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
<1	3	0.26	0	0.00	3	0.20
1-4	2	0.17	1	0.32	3	0.20
5-14	4	0.34	3	0.95	7	0.47
15-24	12	1.03	8	2.54	20	1.35
25-34	22	1.88	4	1.27	26	1.75
35-44	127	10.87	21	6.67	148	9.98
45-54	273	23.37	26	8.25	299	20.16
55-64	349	29.88	64	20.32	413	27.85
65-69	119	10.19	53	16.83	172	11.60
70 Years or above	241	20.63	131	41.59	372	25.08
Age Not Stated	16	1.37	4	1.27	20	1.35
TOTAL	1168	100	315	100	1483	100

Chart 3.9.2. Age group wise percentage distribution of deaths due to diseases of Digestive System under MCCD –2021



3.10 Certain Infectious and Parasitic Diseases

Infectious diseases are caused by pathogenic microorganisms, which can spread directly or indirectly from one person to another. Parasitic diseases are caused by parasites, which are organisms that live on or in a host organism and derive nutrients at the host's expense. These diseases accounted for 2.54% of total medically certified deaths reported in the state for the year 2021, which is the seventh leading cause of death. It constitutes 2.46 per cent of male and 2.66 per cent of female deaths of their respective totals.

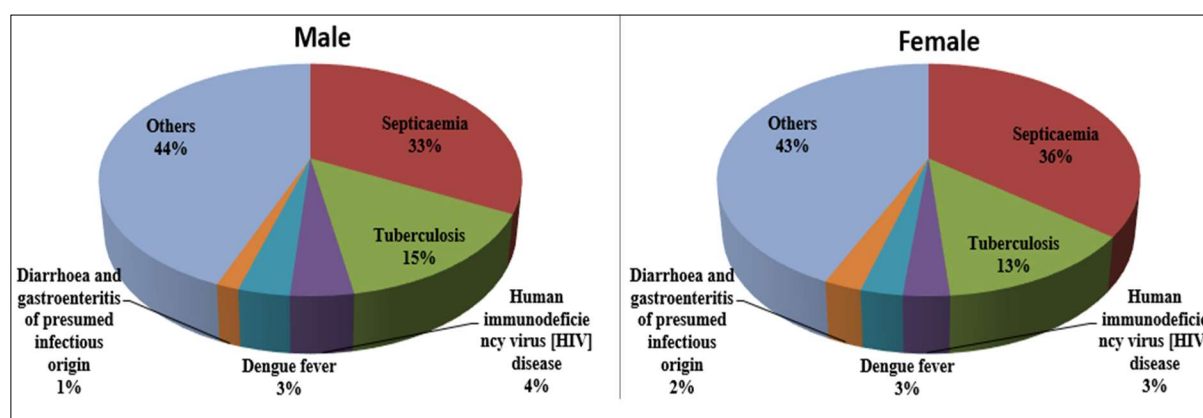
The distribution of the major components under this cause group is illustrated in Table 3.10.1 and Chart 3.10.1. The data reveals that septicaemia, also known as sepsis, was the

predominant cause of death, accounting for 33.81% of the total deaths attributed to Certain Infectious and Parasitic Diseases. This serious bloodstream infection occurs when bacteria enter the bloodstream and spread throughout the body. Notably, the percentage of female deaths due to septicaemia (35.68%) exceeds that of males (32.54%). Tuberculosis is the second leading cause, contributing to 14.00% of the deaths, with 14.71% of male deaths and 12.97% of female deaths. HIV disease accounts for 3.61% of the deaths, with a higher percentage among males (4.04%) compared to females (2.97%). Dengue fever and Diarrhoea and Gastroenteritis of presumed infectious origin (A09) are fewer common causes, each accounting for 3.06% and 1.86% of the deaths respectively, with slight gender differences.

Table 3.10.1 Distribution of Major Causes of Medically Certified Deaths due to Certain Infectious and Parasitic Diseases,2021.

Cause of Deaths	Male		Female		Total		% to Total Medically Certified Deaths
	Number	%	Number	%	Number	%	
Septicaemia (A40-A41)	177	32.54	132	35.68	309	33.81	0.86
Tuberculosis (A15-A19)	80	14.71	48	12.97	128	14.00	0.36
Human immunodeficiency virus [HIV] disease (B20-B24)	22	4.04	11	2.97	33	3.61	0.09
Dengue fever (A90)	18	3.31	10	2.70	28	3.06	0.08
Diarrhoea and gastroenteritis of presumed infectious origin (A09)	8	1.47	9	2.43	17	1.86	0.05
Others	239	43.93	160	43.24	399	43.65	1.11
Total Medically Certified Deaths due to Infectious & Parasitic Disease	544	100.00	370	100.00	914	100.00	2.54
Deaths due to Infectious & Parasitic Diseases as Percentage to total Medically Certified Deaths		2.46		2.66		2.54	

Chart 3.10.1 Percentage distribution of Major Causes of Medically Certified Deaths due to Certain Infectious and Parasitic Diseases, 2021

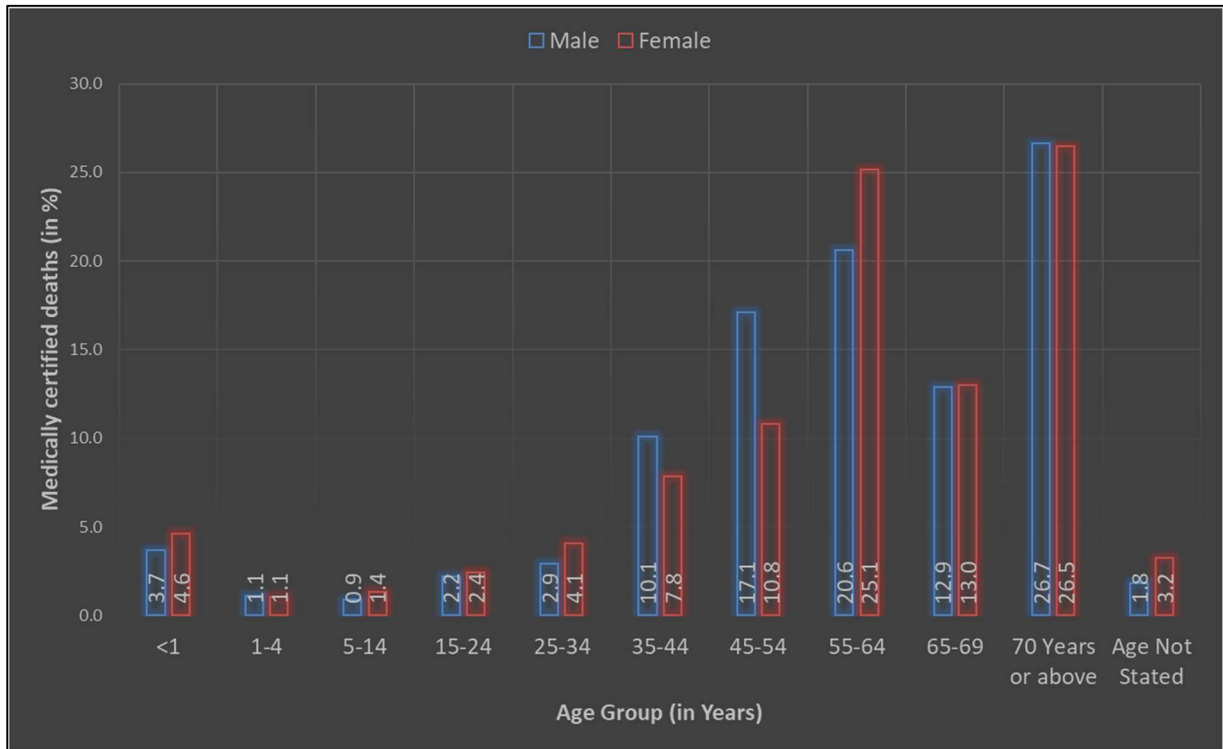


Age-group and sex wise distribution of medically certified deaths due to certain infectious and parasitic diseases is presented in table 3.10.2 and chart 3.10.2. The highest percentage of deaths occurs in individuals aged 70 years or above, accounting for 26.59% of the total, with a slight difference between males (26.65%) and females (26.49%). The 55-64 age group also has a significant proportion, making up 22.43% of the total deaths, with a higher percentage among females (25.14%) compared to males (20.59%). The age group 45-54 years contributes 14.55% of the total deaths, again with more male deaths (17.10%) compared to females (10.81%). Deaths in younger age groups are relatively less frequent, with those under 1 year making up 4.05% of the total, and the 1-4 and 5-14 age groups each accounting for 1.09%.

Table 3.10.2 Age distribution of deaths due to Certain Infectious and Parasitic Diseases under MCCD –2021

Age Group (In Years)	Male		Female		Total	
	Number	%	Number	%	Number	%
<1	20	3.68	17	4.59	37	4.05
1-4	6	1.10	4	1.08	10	1.09
5-14	5	0.92	5	1.35	10	1.09
15-24	12	2.21	9	2.43	21	2.30
25-34	16	2.94	15	4.05	31	3.39
35-44	55	10.11	29	7.84	84	9.19
45-54	93	17.10	40	10.81	133	14.55
55-64	112	20.59	93	25.14	205	22.43
65-69	70	12.87	48	12.97	118	12.91
70 Years or above	145	26.65	98	26.49	243	26.59
Age Not Stated	10	1.84	12	3.24	22	2.41
TOTAL	544	100.00	370	100.00	914	100.00

Chart 3.10.2 Age group wise percentage distribution of deaths due to Certain Infectious and Parasitic Diseases under MCCD –2021



3.11 Injury, Poisoning and Certain Other Consequences of External Causes

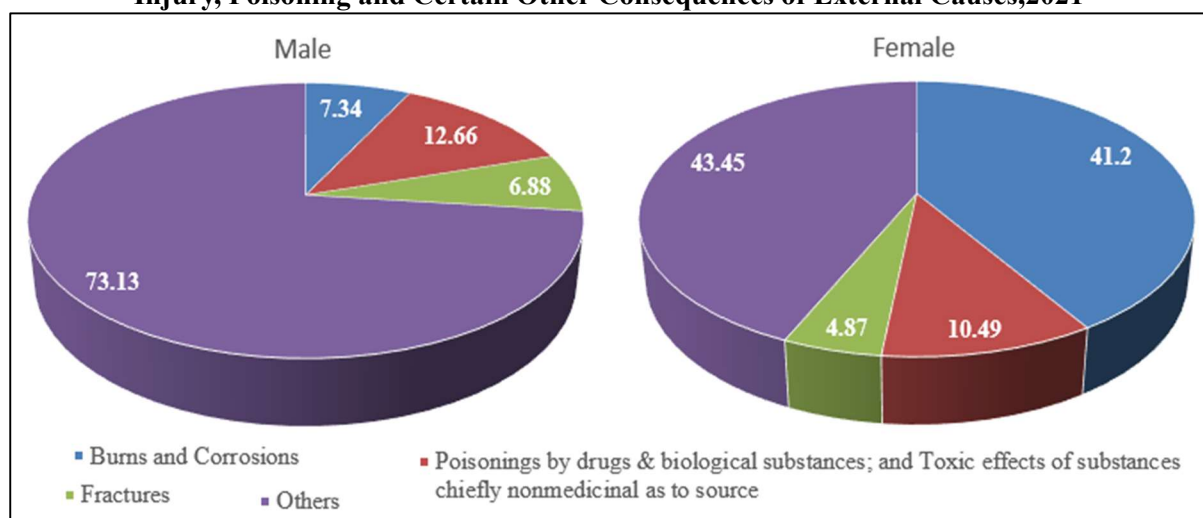
It is the eighth leading cause group, responsible for 2.52 percent of total medically certified deaths. This group accounted for 2.90 percent of male deaths and 1.92 percent of female deaths. Furthermore, of the total medically certified deaths in this group, 70 percent were males and 30 percent were females.

The table 3.11.1 and chart 3.11.1 present the distribution of deaths due to injury, poisoning, and certain other external causes according to the Medical Certification of Cause of Death (MCCD) for 2021. Burns and corrosions were the leading cause, accounting for 17.31% of deaths in this category, with a notable gender disparity: 41.20% of these deaths were among females, compared to 7.34% among males. Poisonings by drugs, biological substances, and the toxic effects of chiefly nonmedicinal substances were responsible for 12.02% of the deaths, affecting males (12.66%) slightly more than females (10.49%). Fractures accounted for 6.28% of deaths, with a higher percentage among males (6.88%) than females (4.87%). Most of the deaths fell into the "others" category, making up 64.39%, with males (73.13%) again experiencing a higher percentage than females (43.45%). This distribution underscores significant gender differences, particularly in deaths due to burns and corrosions, where females are disproportionately affected.

Table 3.11.1. Distribution of Major Causes of Medically Certified Deaths due to Injury, Poisoning and Certain Other Consequences of External Causes,2021.

Cause of Death	Male		Female		Total		% to Total Medically Certified Deaths
	Number	%	Number	%	Number	%	
Burns and Corrosions	47	7.34	110	41.20	157	17.31	0.44
Poisonings by drugs & biological substances; and Toxic effects of substances chiefly nonmedicinal as to source	81	12.66	28	10.49	109	12.02	0.30
Fractures	44	6.88	13	4.87	57	6.28	0.16
Others	468	73.13	116	43.45	584	64.39	1.62
Total Medically Certified Deaths due to Injury, Poisoning & other consequences of external causes	640	100.00	267	100.00	907	100.00	2.52
Deaths due to Injury, Poisoning & other consequences of external causes as Percentage to total Medically Certified Deaths		2.90		1.92		2.52	

Chart 3.11.1 Percentage distribution of Major Causes of Medically Certified Deaths due to Injury, Poisoning and Certain Other Consequences of External Causes,2021



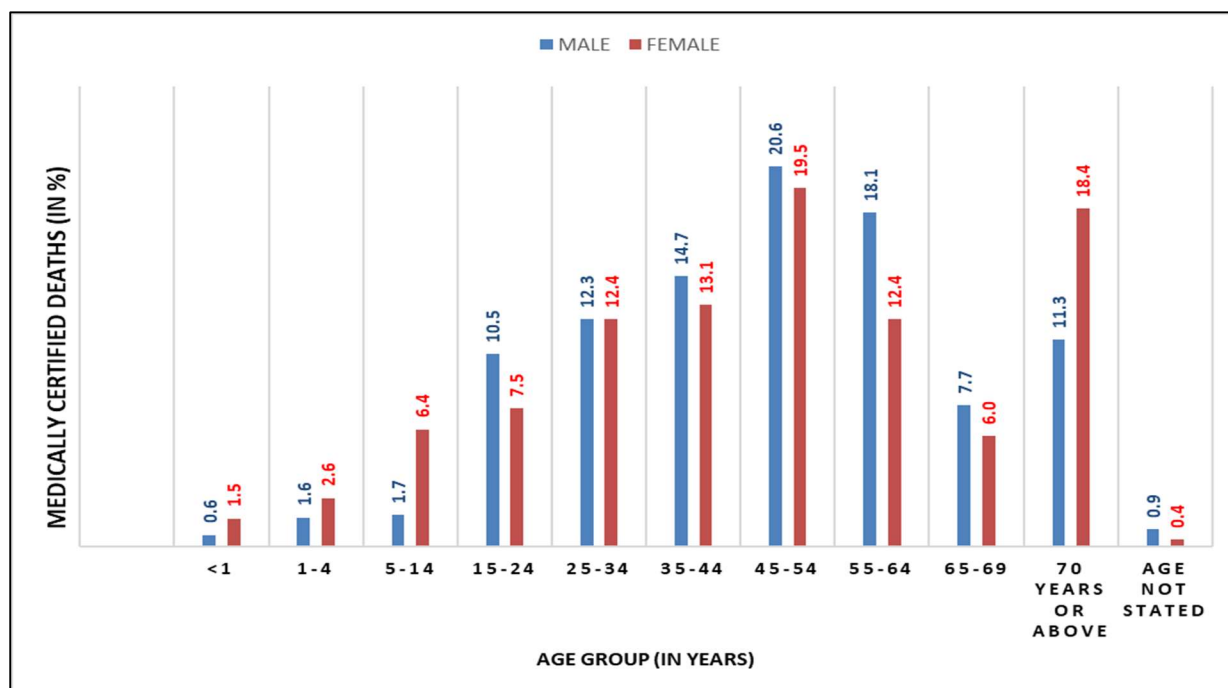
Age-group and sex wise distribution of medically certified deaths due to Injury, Poisoning and Certain Other Consequences of External Causes for the year 2021 is presented in table 3.11.2 and chart 3.11.2. The highest percentage of deaths occurred in the 45-54 age group, accounting for 20.6% of male deaths and 19.5% of female deaths, contributing to 20.3% of the total deaths. This is followed by the 55-64 age group, which represents 18.1% of male deaths and 12.4% of female deaths, making up 16.4% of the total deaths. The 35-44 age group also has a significant proportion, with 14.7% of deaths for males and 13.1% for females. Deaths in older age groups (70 years or above) accounted for 13.3% of the total, with females (18.4%) having a higher percentage than males (11.3%). In contrast, the youngest age groups (<1 year,

1-4 years, and 5-14 years) had the lowest percentages of deaths, each constituting less than 2% of the total. This distribution highlights that middle-aged adults are most affected by deaths due to injuries, poisoning, and other external causes, with notable gender differences in the older and younger age groups.

Table 3.11.2. Age distribution of deaths due to Injury, Poisoning and Certain Other Consequences of External Causes, 2021

Age Group(in Years)	Male		Female		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
<1	4	0.6	4	1.5	8	0.9
1-4	10	1.6	7	2.6	17	1.9
5-14	11	1.7	17	6.4	28	3.1
15-24	67	10.5	20	7.5	87	9.6
25-34	79	12.3	33	12.4	112	12.3
35-44	94	14.7	35	13.1	129	14.2
45-54	132	20.6	52	19.5	184	20.3
55-64	116	18.1	33	12.4	149	16.4
65-69	49	7.7	16	6.0	65	7.2
70 Years or above	72	11.3	49	18.4	121	13.3
Age Not Stated	6	0.9	1	0.4	7	0.8
TOTAL	640	100.0	267	100.0	907	100.0

Chart 3.11.2. Age group wise percentage distribution of deaths due to Injury, Poisoning and Certain Other Consequences of External Causes,2021



3.12 Diseases of the Genitourinary System

Diseases of the Genitourinary System covers a range of conditions affecting the kidneys, urinary tract, male and female genital organs, and breasts. This category ranks as the 9th leading cause of death, contributing to 2.15% of total medically certified deaths, with 2.32% of male and 1.89% of female deaths. Notably, 66.15% of deaths in this group are males, while the remaining 33.85% are females. Glomerular diseases, including nephritic syndrome, Renal failure and Renal tubulo-interstitial disease were the major causes of death under this group. Glomerular diseases, including nephritic syndrome, refer to a group of kidney disorders that affect the glomeruli, which are tiny structures in the kidneys responsible for filtering blood. Nephritic syndrome is characterized by inflammation of the glomeruli, leading to haematuria (blood in the urine), proteinuria (protein in the urine), reduced kidney function, and hypertension. These conditions can result from various causes, including infections, autoimmune diseases, and systemic illnesses. Renal tubulo-interstitial disease refers to a group of disorders that affect the kidney's tubules and the surrounding interstitial tissue. These diseases can be caused by infections, toxins, drugs, autoimmune conditions, or other underlying health issues. Symptoms may include reduced urine output, blood in the urine, flank pain, and signs of kidney dysfunction such as increased blood urea and creatinine levels.

Table 3.12.1. Distribution of Major Causes of Medically Certified Deaths due Diseases of the Genitourinary System,2021.

Cause of Death	Male		Female		Total		% to Total Medically Certified Deaths
	Number	%	Number	%	Number	%	
Glomerular diseases (including Nephritic Synodrome)	254	49.61	129	49.24	383	49.48	1.06
Renal failure	205	40.04	90	34.35	295	38.11	0.82
Renal tubulo-interstitial diseases	11	2.15	4	1.53	15	1.94	0.04
Others	42	8.20	39	14.89	81	10.47	0.23
Total Medically Certified Deaths due to Diseases of Genitourinary System	512	100.00	262	100.00	774	100.00	2.15
Deaths due to Diseases of Genitourinary System as Percentage to total Medically Certified Deaths		2.32		1.89		2.15	

Table 3.12.1 and chart 3.12.1. display the distribution of major causes of deaths due to diseases of the genitourinary system in 2021. Glomerular diseases (including nephritic syndrome) were the leading cause under this group, accounting for 49.48% of the total deaths, with a slightly higher percentage in males (49.61%) than females (49.24%). Renal failure was the second leading cause, contributing to 38.11% of the deaths, with 40.04% in males and 34.35% in females. Renal tubulo-interstitial diseases accounted for 1.94% of the deaths, and other causes made up 10.47%. In total, 2.15% of all medically certified deaths were due to diseases of the genitourinary system, with a higher percentage of males (2.32%) compared to females (1.89%).

Chart 3.12.1. Percentage distribution of Major Causes of Medically Certified Deaths due Diseases of the Genitourinary System,2021

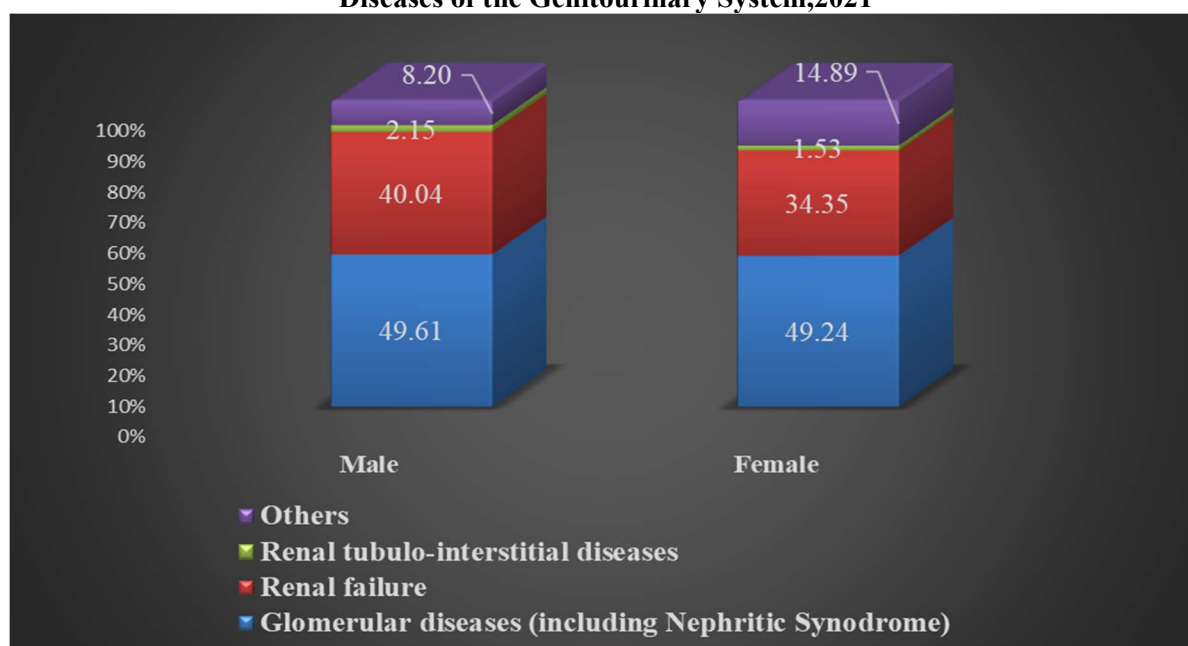


Table 3.12.2. Age distribution of deaths due to Diseases of the Genitourinary System,2021

S. NO	Age Group (In Years)	Male		Female		Total	
		Number	%	Number	%	Number	%
1	<1	0	0.00	1	0.38	1	0.13
2	1-4	0	0.00	1	0.38	1	0.13
3	5-14	5	0.98	3	1.15	8	1.03
4	15-24	5	0.98	5	1.91	10	1.29
5	25-34	15	2.93	9	3.44	24	3.10
6	35-44	22	4.30	12	4.58	34	4.39
7	45-54	70	13.67	28	10.69	98	12.66
8	55-64	105	20.51	43	16.41	148	19.12
9	65-69	73	14.26	46	17.56	119	15.37
10	70 Years or above	203	39.65	107	40.84	310	40.05
11	Age Not	14	2.73	7	2.67	21	2.71
	TOTAL	512	100	262	100	774	100

Age-group and sex wise distribution of medically certified deaths due Diseases of the Genitourinary System, the highest number of deaths occurred in the 70+ age group, comprising 40.05% of the total, with females (40.84%) having a higher percentage than males (39.65%). The next highest percentage is in the 55-64 age group at 19.12%, followed by the 65-69 age group at 15.37%. Females accounted for a larger proportion of deaths across all age groups except for ages 45-54 and 55-64. The lowest percentage of deaths was recorded in the <1 and 1-4 age groups, each at 0.13%.

Chapter

4

**Specific Cause of Mortality in
Different Age Groups**

Specific Cause of Mortality in Different Age Groups

4.1. Introduction

Mortality rates and the causes of death vary significantly across different age groups, reflecting distinct health risks and environmental factors that affect individuals at various stages of life. The impact of external factors, such as pandemics, can also vary by age. For example, COVID-19 had a disproportionate effect on older adults, significantly increasing mortality rates in this age group compared to younger populations. This variability in causes and rates of mortality across age groups highlights the need for age-specific health interventions and policies to effectively address the distinct health challenges faced by each demographic. Thus, this chapter analyses the specific cause of mortality among different age groups by Sex.

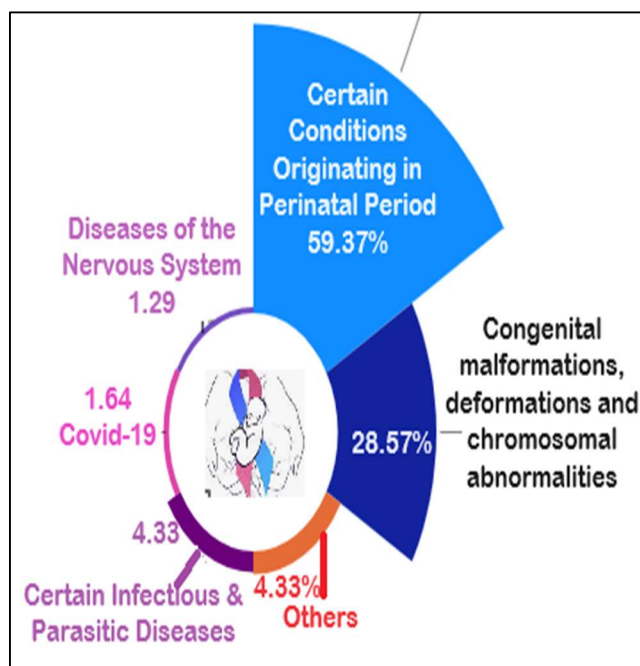
4.2. Infants

The prominent causes of mortality among infants by Sex are presented in Table 4.2.1 and Chart 4.2.1.

Table 4.1. Prominent Causes of Mortality among Infants -2021

S. No.	Cause of Death	Male		Female		Total	
		Number	%	Number	%	Number	%
1	Certain Conditions Originating in Perinatal Period	291	59.27	216	59.5	507	59.37
i)	Slow fetal growth, fetal malnutrition and immaturity	123	25.05	102	28.1	225	26.35
ii)	Hypoxia, birth asphyxia and other respiratory conditions	73	14.87	58	15.98	131	15.34
2	Congenital malformations, deformations and chromosomal abnormalities	135	27.49	109	30.03	244	28.57
i)	Congenital malformations of the circulatory system	84	17.11	65	17.91	149	17.45
3	Certain Infectious & Parasitic Diseases	20	4.07	17	4.68	37	4.33
i)	Septicaemia	19	3.87	15	4.13	34	3.98
4	Codes for Special Purposes: Covid 19	9	1.83	5	1.38	14	1.64
5	Diseases Of The Nervous System	8	1.63	3	0.83	11	1.29
i)	Meningitis	0	0	3	0.83	3	0.35
	Total medically certified infant deaths in the age <1 Year	491		363		854	
	Infant mortality Age <1 years as percentage to total medically certified deaths		2.22		2.61		2.37

Chart 4.2.1. Percentage distribution of Prominent Causes of Mortality among Infants -2021



Out of the total medically certified deaths, around 2.4 per cent has been reported for infants (children who could not complete their first birthday). The shares of male and female infant deaths to the corresponding totals of medically certified deaths are 2.2 per cent and 2.6 per cent respectively. The highest incidences of deaths under this age-group are reported under Certain Conditions Originating in the Perinatal Period (59.4 per cent). The constituent diseases of this group like slow fetal growth, fetal malnutrition and Immaturity forming one combination and Hypoxia, birth asphyxia and other respiratory conditions forming another combination, caused 26.4 per cent and

15.4 per cent deaths respectively. The next major group accounting for 28.6 per cent deaths is Congenital malformations, deformations and chromosomal abnormalities. Congenital malformations of the circulatory system accounted for 17.5 per cent deaths under this major group. The third in order is Certain Infectious & Parasitic Diseases (A00-B99) which constitutes 4.3 per cent deaths. The constituent disease of this group, Septicaemia alone caused 4 per cent deaths.

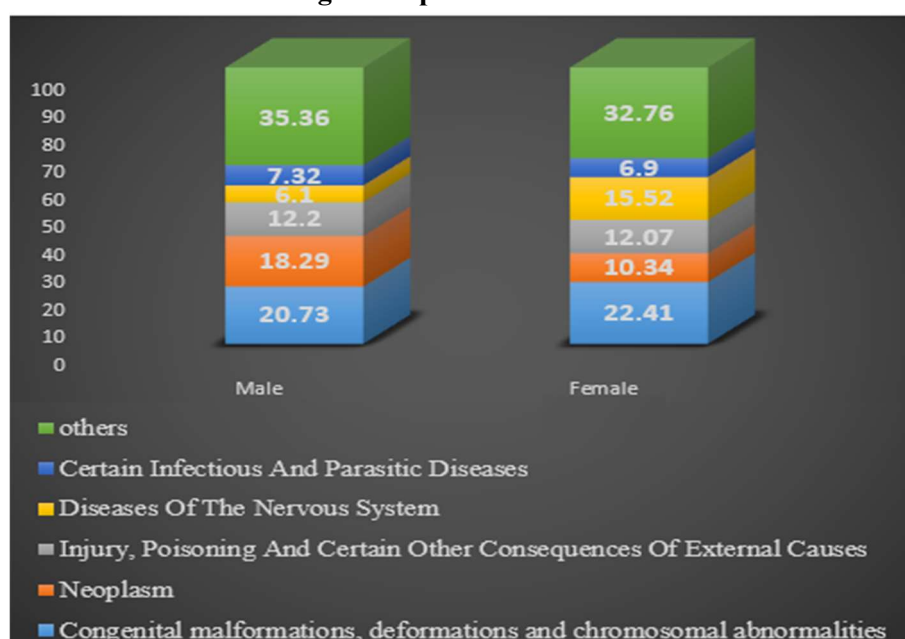
4.3. Children aged 1-4 years

Table 4.3.1 and Chart 4.3.1 highlights the prominent causes of mortality among children aged 1-4 years in 2021, segmented by gender. It shows that congenital malformations, deformations, and chromosomal abnormalities are the leading causes of death, accounting for 21.43% of the total deaths in this age group. This includes congenital malformations of the circulatory system, which alone constitute 12.14% of the deaths. Neoplasms, including leukemia, are the second leading cause, responsible for 15% of the deaths. Injuries, poisoning, and certain other external causes rank third, making up 12.14% of the deaths, with poisoning by drugs and biological substances accounting for 2.86%. Diseases of the nervous system, including epilepsy, are another significant cause, contributing to 10% of the deaths. Certain infectious and parasitic diseases, including septicaemia, account for 7.14% of the deaths.

Table 4.3.1. The prominent Causes of Mortality among Children in the Age Group 1-4 Years -2021

Rank	Cause of Death	Male		Female		Total	
		Number	%	Number	%	Number	%
1	Congenital malformations, deformations and chromosomal abnormalities	17	20.73	13	22.41	30	21.43
i)	Congenital malformations of the circulatory system	9	10.98	8	13.79	17	12.14
2	Neoplasm	15	18.29	6	10.34	21	15
i)	Leukaemia	7	8.54	4	6.9	11	7.86
3	Injury, Poisoning And Certain Other Consequences Of External Causes	10	12.2	7	12.07	17	12.14
i)	Poisonings by drugs & biological substances; and Toxic effects of substances chiefly nonmedicinal as to source	3	3.66	1	1.72	4	2.86
4	Diseases Of The Nervous System	5	6.1	9	15.52	14	10
i)	Epilepsy (G40-G41)	1	1.22	3	5.17	4	2.86
5	Certain Infectious And Parasitic Diseases	6	7.32	4	6.9	10	7.14
i)	Septicaemia	1	1.22	1	1.72	2	1.43
	Total medically certified deaths in the age group 1 - 4 Years	82	100	58	100	140	100
	Deaths in the age group 1 - 4 years as percentage to total medically certified deaths		0.37		0.42		0.39

Chart 4.3.1. Percentage distribution of prominent Causes of Mortality among Children in the Age Group 1-4 Years -2021



The data indicates a gender disparity in mortality causes. For instance, female children have a higher percentage of deaths due to diseases of the nervous system (15.52%) compared to male children (6.1%). Conversely, male children have a higher percentage of deaths due to neoplasms (18.29%) compared to female children (10.34%).

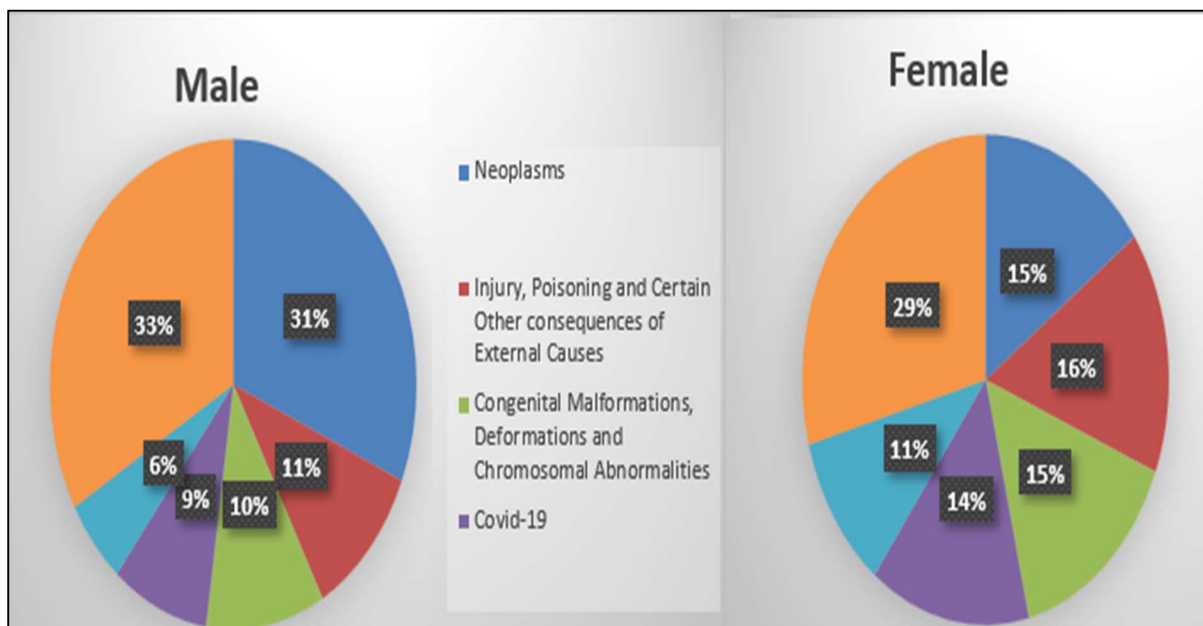
4.4. Children aged 5-14 years

The share of this age-group in the total medically certified death is 0.6 per cent, constituting 0.5 per cent and 0.8 per cent of total male and female medically certified deaths respectively. The leading cause of mortality is neoplasms, which account for 23.22% of the total deaths, with a higher percentage observed in males (31.43%) compared to females (15.09%). Injury, poisoning, and certain other consequences of external causes are the second major cause, making up 13.27% of the deaths, with a higher incidence in females (16.04%) than males (10.48%). Congenital malformations, deformations, and chromosomal abnormalities rank third, contributing to 12.80% of the deaths, equally affecting both genders. COVID-19 is the fourth leading cause, responsible for 11.37% of the deaths, with females (14.15%) more affected than males (8.57%). Diseases of the circulatory system account for 8.06% of the deaths, with a higher incidence in females (10.38%) compared to males (5.71%). Other major groups account for 31.28% of the deaths, with a relatively balanced distribution between males (33.33%) and females (29.25%).

Table 4.4.1. Distribution of Mortality among Children in the Age Group 5-14 Years by Major Cause Groups-2021

S.No	Major Cause Group	Male		Female		Total	
		Number	%	Number	%	Number	%
1	Neoplasms	33	31.43	16	15.09	49	23.22
2	Injury, Poisoning and Certain Other consequences of External Causes	11	10.48	17	16.04	28	13.27
3	Congenital Malformations, Deformations and Chromosomal Abnormalities	11	10.48	16	15.09	27	12.80
4	Covid-19	9	8.57	15	14.15	24	11.37
5	Diseases of the Circulatory system	6	5.71	11	10.38	17	8.06
6	Other Major Groups	35	33.33	31	29.25	66	31.28
	Total medically certified deaths in the age group 5-14 Years	105	100	106	100	211	100
	Deaths in the age group 5 - 14 years as percentage to total medically certified deaths		0.48		0.76		0.59

Chart 4.4.1. .Percentage Distribution of Mortality among Children in the Age Group 5-14 Years by Major Cause Groups-2021



4.5. Persons aged 15-24 years

This age-group has contributed to 1.2 per cent of the total medically certified deaths with the share of male and female deaths to the corresponding total deaths being 1 per cent and 1.4 per cent respectively.

Table 4.5.1. Distribution of Mortality among Persons in the Age Group 15-24 Years by Major Cause Groups-2021

Sl.No	Major Cause Group	Male		Female		Total	
		Number	%	Number	%	Number	%
1	Injury, Poisoning and Certain Other Consequences of External Causes	67	29.91	20	10.53	87	21.01
2	Neoplasam	30	13.39	50	26.32	80	19.32
3	Covid-19	22	9.82	31	16.32	53	12.80
4	Diseases of the Circulatory System	22	9.82	14	7.37	36	8.70
5	Certain Infectious and Parasitic Diseases	12	5.36	9	4.74	21	5.07
6	Diseases of the Digestive System	12	5.36	8	4.21	20	4.83
7	Other Major Groups	59	26.34	58	30.53	117	28.26
	Total medically certified deaths in the age group 15-24 Years	224	100.00	190	100.00	414	100.00
	Deaths in the age group 15 - 24 years as percentage to total medically certified deaths		1.01		1.37		1.15

Chart 4.5.1 Percentage Distribution of Mortality among Males in the Age Group 15-24 Years by Major Cause Groups-2021

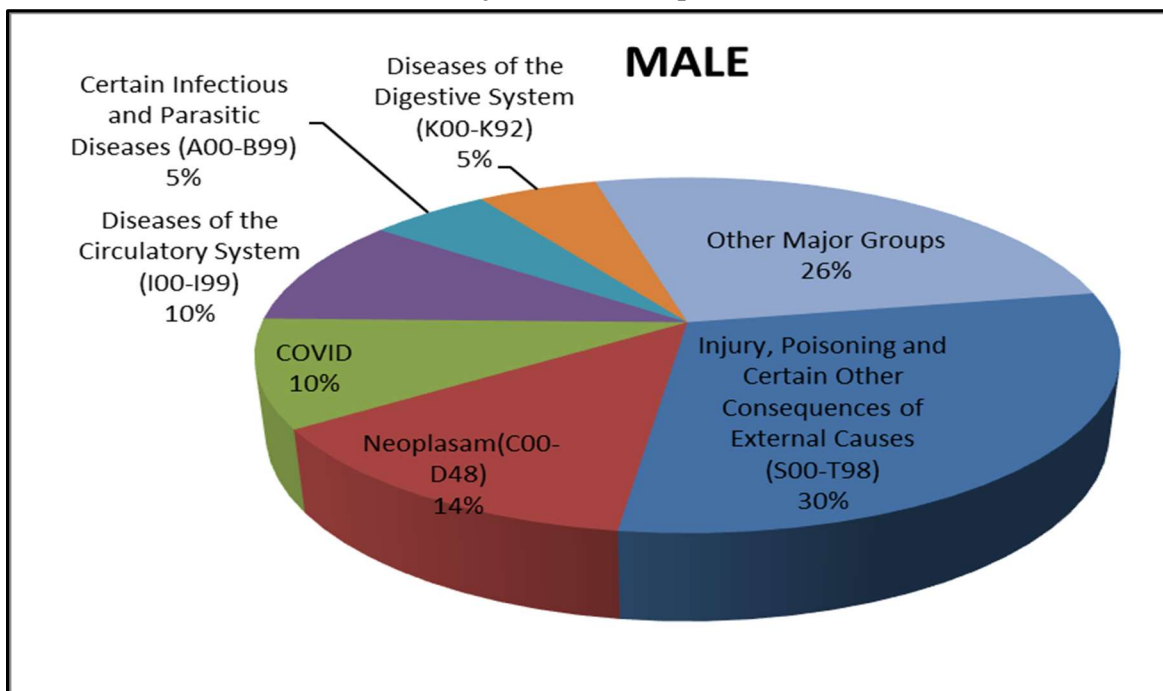


Chart 4.5.2 Percentage Distribution of Mortality among Females in the Age Group 15-24 Years by Major Cause Groups-2021

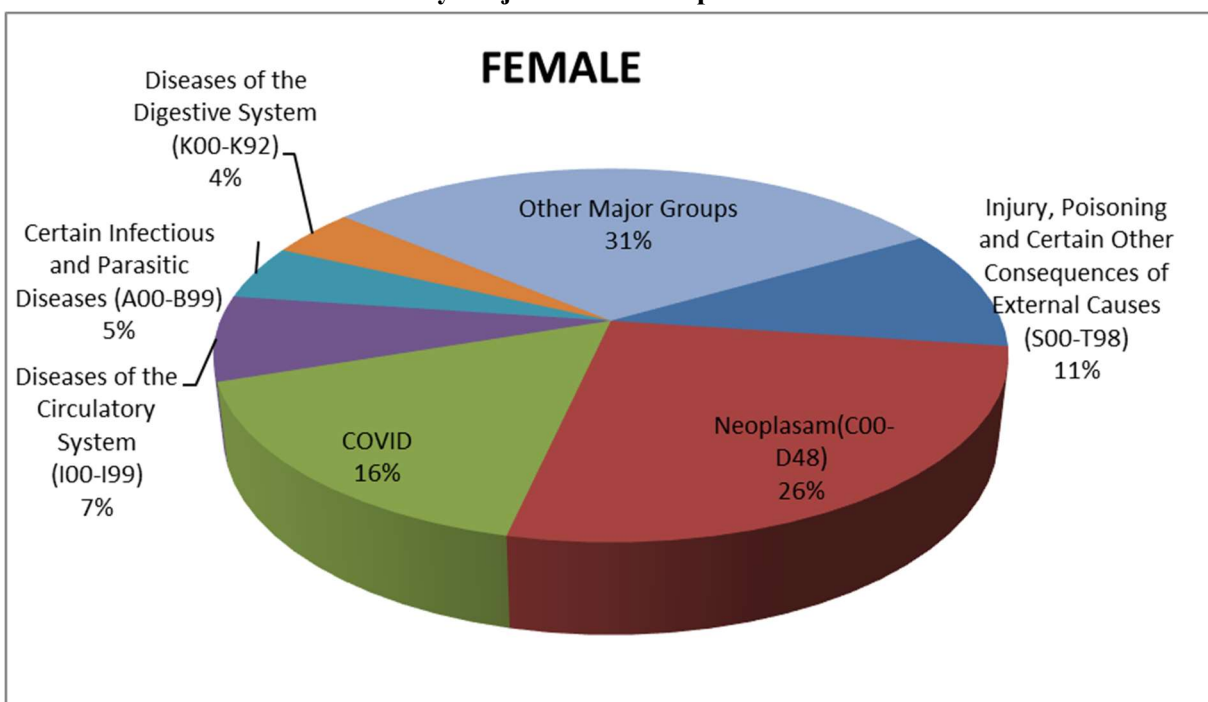


Table 4.5.1, Chart 4.5.1 and Chart 4.5.2 provide a detailed breakdown of the causes of death among individuals aged 15-24, categorized by Sex. The leading cause of mortality in this age group is "Injury, Poisoning, and Certain Other Consequences of External Causes (S00-T98)," which accounts for 21.01% of total deaths. This cause significantly affects males more

than females, with 29.91% of male deaths compared to 10.53% of female deaths. Neoplasms are the second leading cause of death, responsible for 19.32% of total deaths. Interestingly, this cause has a higher impact on females (26.32%) than males (13.39%). COVID-19 is the third leading cause, contributing to 12.80% of the deaths, with females (16.32%) being more affected than males (9.82%). Diseases of the circulatory system account for 8.70% of the deaths, with a slightly higher incidence in males (9.82%) compared to females (7.37%). Certain infectious and parasitic diseases and diseases of the digestive system are also notable causes, representing 5.07% and 4.83% of the deaths, respectively.

The leading causes of mortality among individuals aged 15-24 years exhibit distinct patterns between males and females. Among males, the top cause of death is external causes and injuries, accounting for 29.91% of male deaths. This category includes injuries, poisoning, and other consequences of external causes, highlighting the high risk of accidental and traumatic events in young males. Neoplasms are the second leading cause among males, representing 13.39% of deaths. COVID-19 ranks third, contributing to 9.82% of male deaths, indicating a significant impact of the pandemic on this age group. For females, the primary cause of death is neoplasms, accounting for 26.32% of female deaths. This indicates a higher prevalence of cancers among young females compared to their male counterparts. COVID-19 is the second leading cause of death among females, responsible for 16.32% of deaths, showing a greater impact of the pandemic on young females compared to males. The third leading cause of death among females is external causes and injuries, contributing to 10.53% of female deaths. This category, which is the leading cause among males, ranks third among females, suggesting differences in risk exposure and behaviour between genders in this age group.

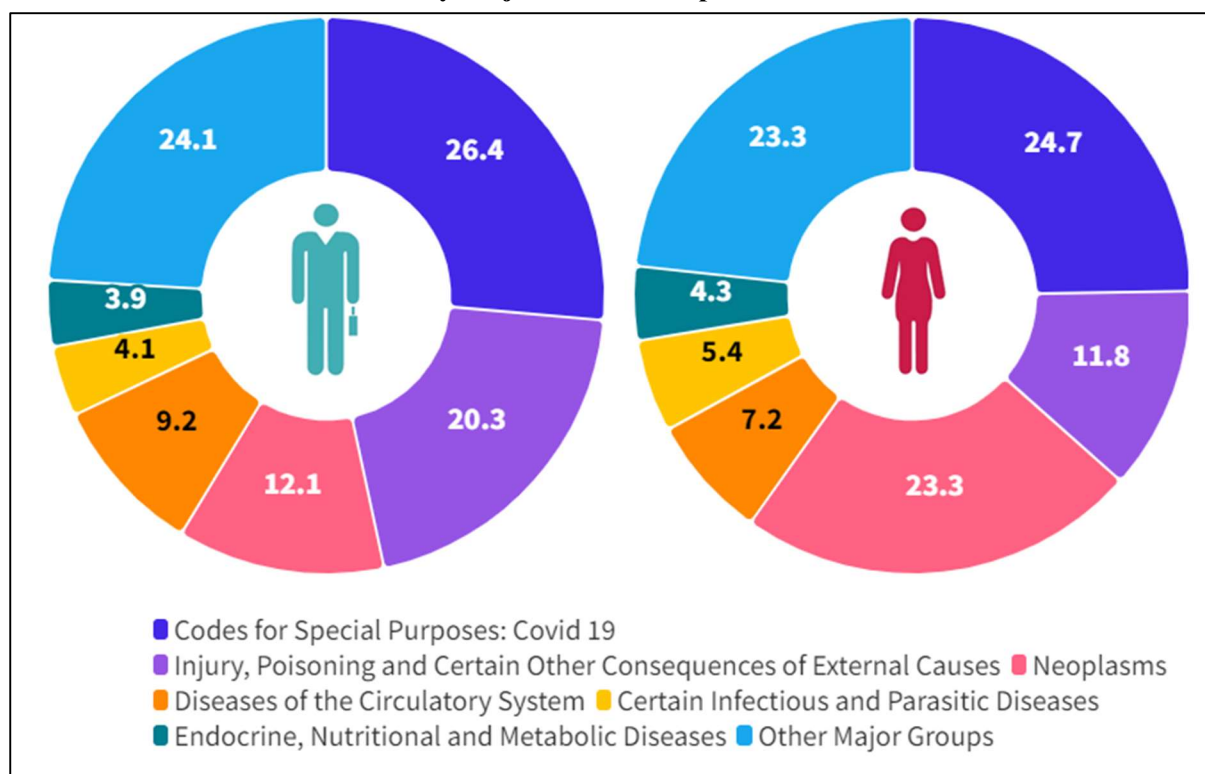
4.6. Persons aged 25-34 years

This age group constitutes around 1.9 per cent of total medically certified deaths with 1.8 per cent male share of death and 2 per cent female share to total male and female medically certified deaths respectively. Table 4.6.1 and Chart 4.6.1 reveals that COVID-19 was the leading cause of death in this age group, accounting for 25.71% of total deaths (26.41% in males and 24.73% in females). The second leading cause of mortality was a tie between "Injury, Poisoning and Certain Other Consequences of External Causes" and "Neoplasms," each responsible for 16.74% of total deaths. However, there is a gender disparity: injuries and external causes accounted for 20.26% of male deaths but only 11.83% of female deaths, whereas neoplasms caused 23.30% of female deaths compared to 12.05% of male deaths. Diseases of the circulatory system were the fourth leading cause, contributing to 8.37% of the deaths, with a slightly higher impact on males (9.23%) than females (7.17%). Certain infectious and parasitic diseases and endocrine, nutritional, and metabolic diseases were responsible for 4.63% and 4.04% of the deaths, respectively, showing an even distribution between genders. Lastly, other major groups accounted for 23.77% of the deaths, evenly distributed among males (24.10%) and females (23.30%).

Table 4.6.1. Distribution of Mortality among Persons in the Age Group 25-34 Year by Major Cause Groups-2021

S.No	Major Cause Group	Male		Female		Total	
		Number	%	Number	%	Number	%
1	Codes for Special Purposes: Covid 19	103	26.41	69	24.73	172	25.71
2	Injury, Poisoning and Certain Other Consequences of External Causes	79	20.26	33	11.83	112	16.74
3	Neoplasms	47	12.05	65	23.30	112	16.74
4	Diseases of the Circulatory System	36	9.23	20	7.17	56	8.37
5	Certain Infectious and Parasitic Diseases	16	4.10	15	5.38	31	4.63
6	Endocrine, Nutritional and Metabolic Diseases	15	3.85	12	4.30	27	4.04
7	Other Major Groups	94	24.10	65	23.30	159	23.77
	Total medically certified deaths in the age group 25-34 Years	390	100	279	100	669	100
	Deaths in the age group 25-34 years as percentage to total medically certified deaths		1.77		2.01		1.86

Chart 4.6.1. Percentage Distribution of Mortality among Persons in the Age Group 25-34 Year by Major Cause Groups-2021



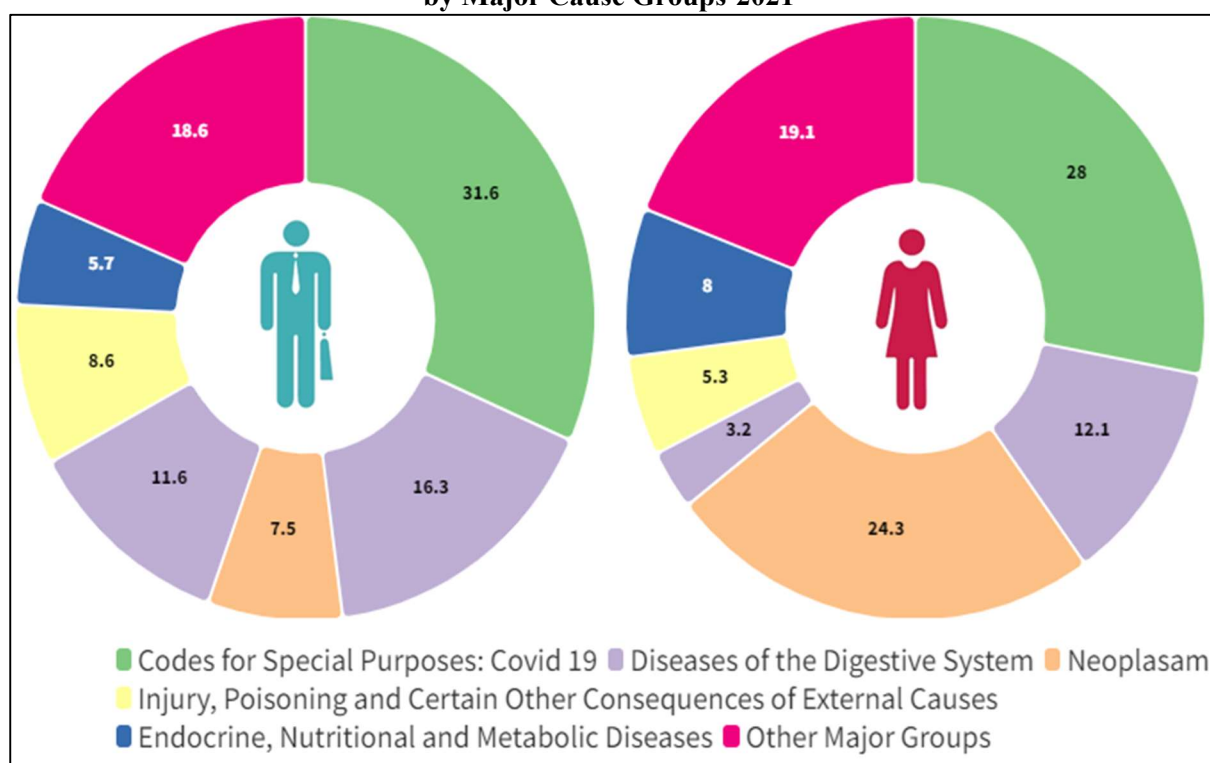
4.7. Persons aged 35-44 years

The overall contribution of this age-group in total medically certified deaths is 4.9 per cent, accounting for 4.9 per cent for male and 4.7 per cent of female deaths. Table 4.7.1. and chart 4.7.1 indicates that COVID-19 was the leading cause of death in this age group, accounting for 30.26% of total deaths (31.62% in males and 27.98% in females). The second leading cause was diseases of the circulatory system, responsible for 14.73% of deaths, with a higher incidence in males (16.32%) than in females (12.08%). Neoplasms were the third leading cause, comprising 13.81% of the deaths, with a significant gender disparity: 24.31% in females and 7.52% in males. Diseases of the digestive system were the fourth leading cause, contributing to 8.48% of deaths, predominantly affecting males (11.64%) compared to females (3.21%). Injury, poisoning, and other external causes ranked fifth, accounting for 7.39% of deaths, with higher male mortality (8.62%) than female (5.35%). Endocrine, nutritional, and metabolic diseases constituted 6.53% of deaths, with a slightly higher percentage in females (7.95%) than males (5.68%). Other major groups accounted for 18.80% of the deaths, almost evenly distributed between males (18.61%) and females (19.11%).

Table 4.7.1 Distribution of Mortality among Persons in the Age Group 35-44 Year by Major Cause Groups-2021

Sl. No	Major Cause Group	Male		Female		Total	
		Number	%	Number	%	Number	%
1	Codes for Special Purposes: Covid 19	345	31.62	183	27.98	528	30.26
2	Diseases of the Circulatory System	178	16.32	79	12.08	257	14.73
3	Neoplasam	82	7.52	159	24.31	241	13.81
4	Diseases of the Digestive System	127	11.64	21	3.21	148	8.48
5	Injury, Poisoning and Certain Other Consequences of External Causes	94	8.62	35	5.35	129	7.39
6	Endocrine, Nutritional and Metabolic Diseases	62	5.68	52	7.95	114	6.53
7	Other Major Groups	203	18.61	125	19.11	328	18.80
	Total medically certified deaths in the age group 35-44 Years	1091	100	654	100	1745	100
	Deaths in the age group 35 – 44 years as percentage to total medically certified deaths		4.94		4.71		4.85

Chart 4.7.1. Percentage Distribution of Mortality among Persons in the Age Group 35-44 Year by Major Cause Groups-2021



4.8. Persons aged 45-54 years

This age group has contributed to 11.3 per cent of the total medically certified deaths, constituting 12.3 per cent and 9.7 per cent of total male and female medically certified deaths respectively.

Table 4.8.1 Distribution of Mortality among Persons in the Age Group 45-54 Year by Major Cause Groups-2021

Sl.No	Major Cause Group	Male		Female		Total	
		Number	%	Number	%	Number	%
1	Codes for Special Purposes: Covid 19	863	31.67	487	36.18	1350	33.16
2	Diseases of the Circulatory System	528	19.38	228	16.94	756	18.57
3	Neoplasms	264	9.69	214	15.90	478	11.74
4	Endocrine, Nutritional and Metabolic Diseases	279	10.24	146	10.85	425	10.44
5	Diseases of the Digestive System	273	10.02	26	1.93	299	7.34
6	Injury, Poisoning and Certain Other Consequences of External Causes	132	4.84	52	3.86	184	4.52
7	Other Major Groups	386	14.17	193	14.34	579	14.22
	Total medically certified deaths in the age group 45-54 Years	2725	100	1346	100	4071	100
	Deaths in the age group 45 - 54 years as percentage to total medically certified deaths		12.34		9.69		11.32

Chart 4.8.1. Percentage Distribution of Mortality among Persons in the Age Group 45-54 Year by Major Cause Groups-2021

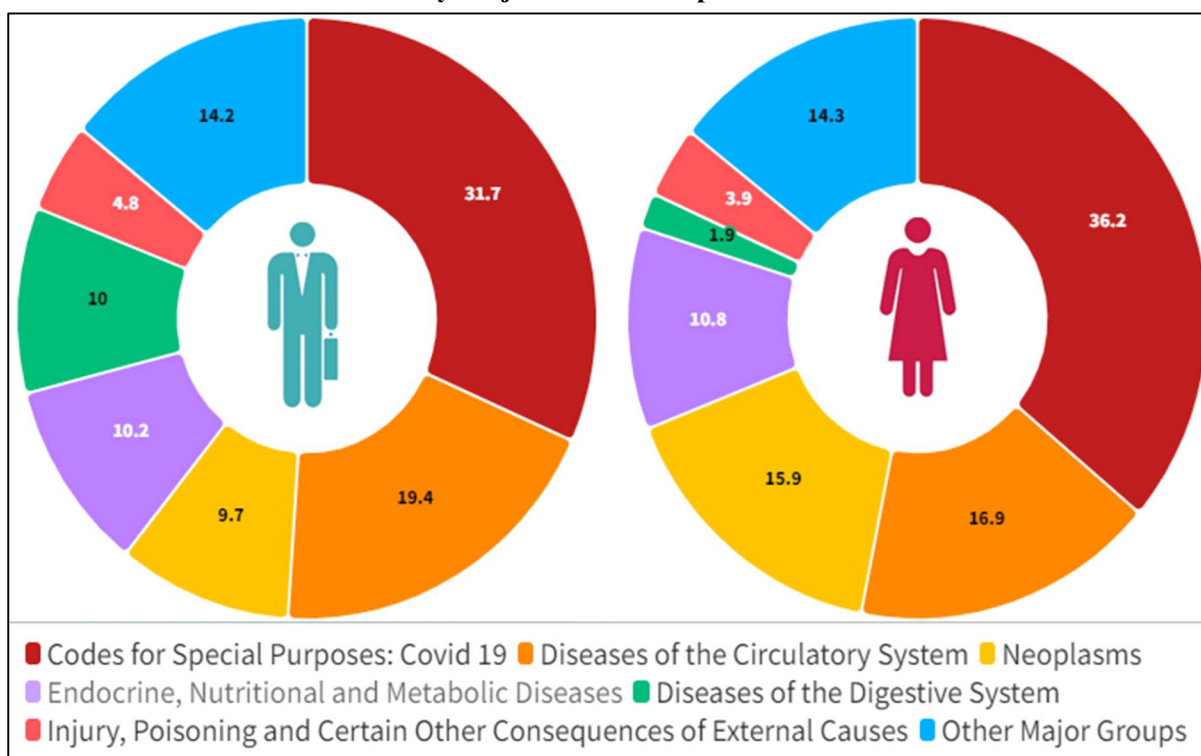


Table 4.8.1 and Chart 4.8.1 present the distribution of mortality among persons in the age group 45-54 years by major cause groups for the year 2021. The leading cause of death in this age group is Covid-19, accounting for 33.16% of total deaths, with a higher percentage of deaths among females (36.18%) compared to males (31.67%). The second major cause is diseases of the circulatory system, responsible for 18.57% of the deaths, with a higher incidence in males (19.38%) than females (16.94%). Neoplasms are the third leading cause, contributing to 11.74% of deaths, with a significant disparity between males (9.69%) and females (15.90%). Endocrine, nutritional, and metabolic diseases rank fourth, causing 10.44% of deaths, with nearly equal impact on males (10.24%) and females (10.85%). Diseases of the digestive system, injury and poisoning, and other major groups also contribute to mortality, though to a lesser extent.

4.9 Persons aged 55-64 years

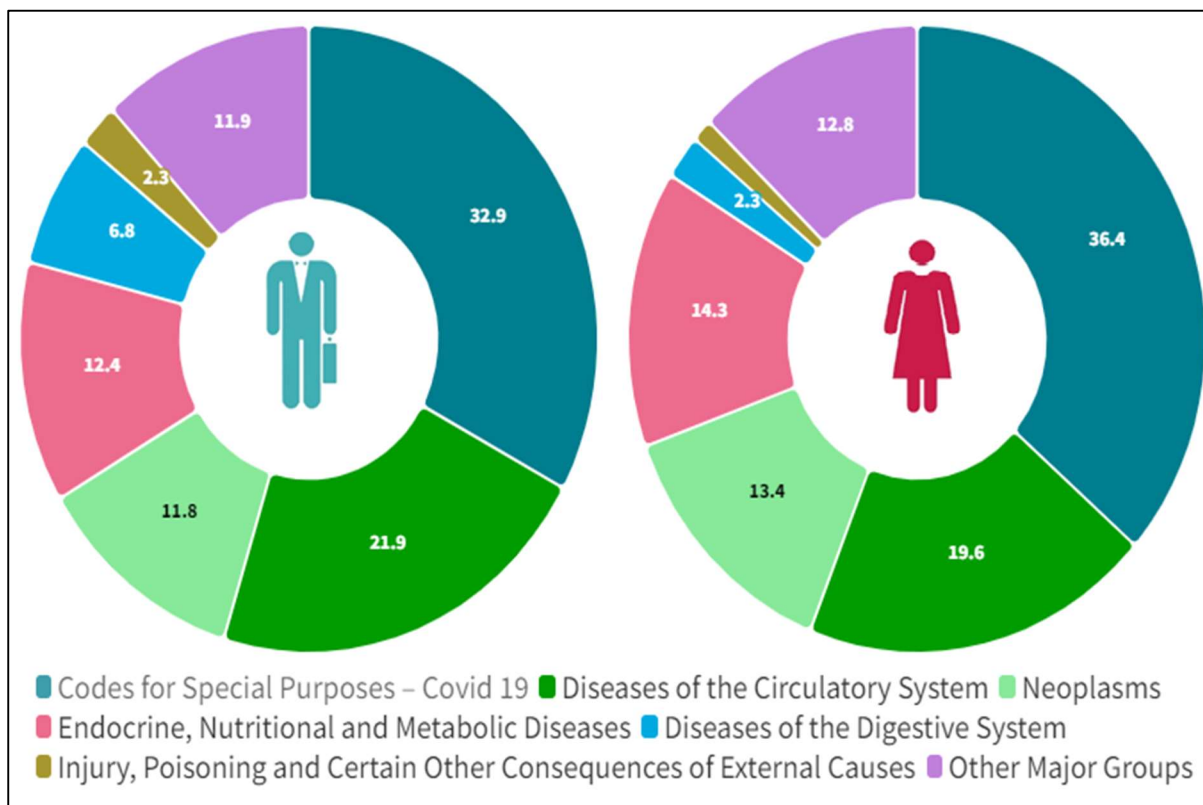
This age-group has a share of 22 per cent in the total medically certified deaths, accounting for 23.1 per cent and 20.3 per cent of total male and female medically certified deaths respectively. Distribution of Mortality among Persons in the Age Group 55-64 Year by Major Cause Groups is presented in table 4.9.1 and chart 4.9.1.

**Table 4.9.1 Distribution of Mortality among Persons in the Age Group 55-64 Year
by Major Cause Groups-2021**

Sl.No	Major Cause Group	Male		Female		Total	
		Number	%	Number	%	Number	%
1	Codes for Special Purposes – Covid 19	1676	32.86	1026	36.41	2702	34.12
2	Diseases of the Circulatory System	1116	21.88	553	19.62	1669	21.08
3	Neoplasms	600	11.76	378	13.41	978	12.35
4	Endocrine, Nutritional and Metabolic Diseases	634	12.43	403	14.30	1037	13.10
5	Diseases of the Digestive System	349	6.84	64	2.27	413	5.22
6	Injury, Poisoning and Certain Other Consequences of External Causes	116	2.27	33	1.17	149	1.88
7	Other Major Groups	609	11.94	361	12.81	970	12.25
	Total medically certified deaths in the age group 55-64 Years	5100	100	2818	100	7918	100
	Deaths in the age group 55 - 64 years as percentage to total medically certified deaths		23.10		20.29		22.02

In the age group 55-64 years, Covid-19 was the leading cause of mortality, accounting for 32.86% of male deaths and 36.41% of female deaths, resulting in a combined total of 34.12%. Following Covid-19, diseases of the circulatory system were the second leading cause, representing 21.88% of male deaths and 19.62% of female deaths, making up 21.08% of the total. Neoplasms were the third most significant cause, responsible for 11.76% of male deaths and 13.41% of female deaths, with a combined total of 12.35%. Endocrine, nutritional, and metabolic diseases accounted for 12.43% of male deaths and 14.30% of female deaths, contributing to 13.10% overall. Additionally, diseases of the digestive system and injury, poisoning, and certain other consequences of external causes accounted for 5.22% and 1.88% of deaths, respectively. This data indicates a notable impact of Covid-19 on mortality in this age group, with diseases of the circulatory system and neoplasms also being major contributors.

Chart 4.9.1. Percentage Distribution of Mortality among Persons in the Age Group 55-64 Year by Major Cause Groups-2021



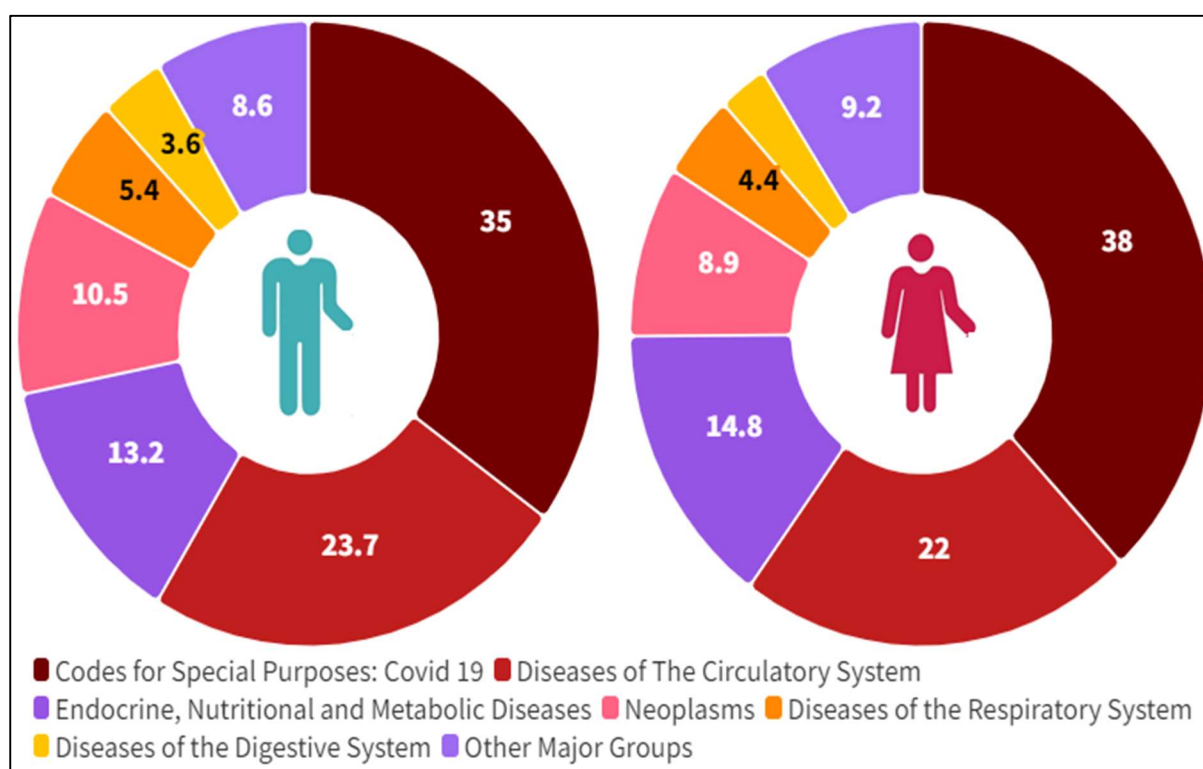
4.10 Persons aged 65-69 years

This age group constitutes 14.7% of the total medically certified deaths, with males accounting for 15% and females for 14.1% of their respective totals. The distribution of mortality among persons aged 55-64 by major cause groups is detailed in Table 4.10.1 and Chart 4.10.1. Covid-19 was the leading cause of death, responsible for 36.11% of the total deaths in this age group. Diseases of the circulatory system and endocrine, nutritional, and metabolic diseases were the second and third leading causes, contributing 23.09% and 13.82%, respectively. Neoplasms, diseases of the respiratory system, and diseases of the digestive system followed, accounting for 9.89%, 5.02%, and 3.26% of the total deaths. The distribution of these causes is similar for both males and females, with the top six leading causes being the same for both genders.

Table 4.10.1 Distribution of Mortality among Persons in the Age Group 65-69 Year by Major Cause Groups-2021

Sl.No	Major Cause Group	Male		Female		Total	
		Number	%	Number	%	Number	%
1	Codes for Special Purposes: Covid 19	1159	34.97	746	38.02	1905	36.11
2	Diseases of The Circulatory System	786	23.72	432	22.02	1218	23.09
3	Endocrine, Nutritional and Metabolic Diseases	438	13.22	291	14.83	729	13.82
4	Neoplasms	348	10.50	174	8.87	522	9.89
5	Diseases of the Respiratory System	179	5.40	86	4.38	265	5.02
6	Diseases of the Digestive System	119	3.59	53	2.70	172	3.26
7	Other Major Groups	285	8.60	180	9.17	465	8.81
	Total medically certified deaths in the age group 65-69 Years	3314	100	1962	100	5276	100
	Deaths in the age group 65 - 69 years as percentage to total medically certified deaths		15.01		14.12		14.67

Chart 4.10.1. Percentage Distribution of Mortality among Persons in the Age Group 65-69 Year by Major Cause Groups-2021



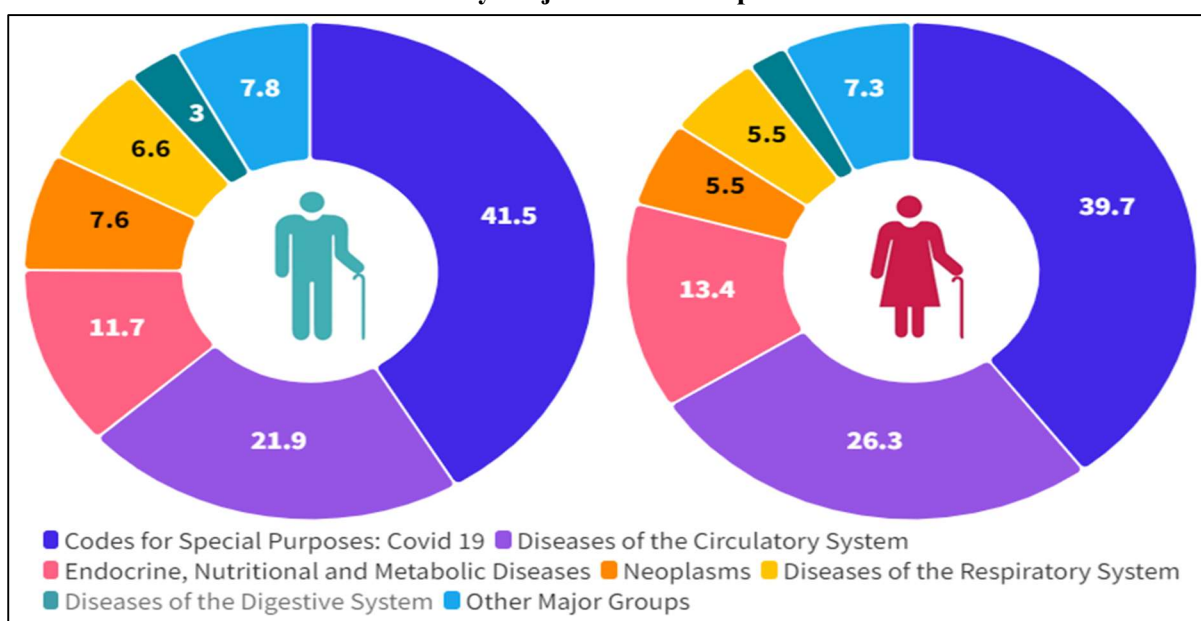
4.11. Persons aged of 70 years or above

This age-group, as expected, has reported the maximum incidences (38.9 per cent) of total medically certified deaths. As high as 36.9 per cent and 42.2 per cent of total male and female medically certified deaths have respectively been reported from this age- group. Distribution of Mortality among Persons in the Age Group 70 Years or above by Major Cause Groups-2021 is presented in table 4.11.1 and chart 4.11.1.

Table 4.11.1 Distribution of Mortality among Persons in the Age Group 70 Years or above by Major Cause Groups-2021

Sl.No	Major Cause Group	Male		Female		Total	
		Number	%	Number	%	Number	%
1	Codes for Special Purposes: Covid 19	3379	41.47	2327	39.71	5706	40.73
2	Diseases of the Circulatory System	1783	21.88	1538	26.25	3321	23.71
3	Endocrine, Nutritional and Metabolic Diseases	957	11.74	787	13.43	1744	12.45
4	Neoplasms	620	7.61	323	5.51	943	6.73
5	Diseases of the Respiratory System	537	6.59	324	5.53	861	6.15
6	Diseases of the Digestive System	241	2.96	131	2.24	372	2.66
7	Other Major Groups	632	7.76	430	7.34	1062	7.58
	Total medically certified deaths in the age group 70 years or Above	8149	100	5860	100	14009	100
	Deaths in the age group 70 years or Above as percentage to total medically certified deaths		36.92		42.19		38.95

Chart 4.11.1 Percentage Distribution of Mortality among Persons in the Age Group 70 Years or above by Major Cause Groups-2021



In 2021, Covid-19 was the leading cause of mortality among individuals aged 70 years or older, accounting for 41.47% of male deaths and 39.71% of female deaths, contributing to a total of 40.73%. Diseases of the circulatory system followed as the second leading cause, responsible for 21.88% of male deaths and 26.25% of female deaths, making up 23.71% of the total deaths in this age group. Endocrine, nutritional, and metabolic diseases were the third major cause, representing 11.74% of male deaths and 13.43% of female deaths, totalling 12.45%. Neoplasms accounted for 7.61% of male deaths and 5.51% of female deaths, leading to 6.73% of the total. Diseases of the respiratory system, digestive system, and other major groups also contributed to mortality, with respective totals of 6.15%, 2.66%, and 7.58%. The data indicates that Covid-19 had a significant impact on mortality in this age group, with circulatory and endocrine diseases also being major contributors.

Appendix

- I. List of Hospitals under MCCD**
- II. Form – 4**
- III. Form – 4A**
- IV. Major Groups and the Description of ICD-10 Codes**
- V. National List for Tabulation of Mortality & Morbidity based on The Tenth Revision of International Classification of Diseases (ICD)**
- VI. Cause of Death (Age wise and Sex wise)**

Appendix I

List of Hospitals under MCCD

LIST OF HOSPITALS UNDER 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	SreeChithiraThirunal Institute of Medical Science& Technology	Govt
12	AJ Hospital, Kazhakkootam	Pvt
13	Al Areef Hospital ,Ambalathara	Pvt
14	Anadiyil Hospital, Thekkummoody	Pvt
15	AnanthapuriHospital&Research Centre, Chakka	Pvt
16	Arumana Hospital,	Pvt
17	Attukal Devi Institute of medical Sciences Ltd , Attukal	Pvt
18	BNV Hospital, Thiruvallam.	Pvt
19	BeemaMahim 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	SreeRamakrishnaAshramam Hospital, Shasthamangalam	Pvt
38	St.Anns Nursing Home Pallimukku	Pvt
39	SUT Hospital, Pattom	Pvt

Sl No	Name of Hospital	Govt/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.)

Sl. No	Name of Hospital	Govt/Pvt
1	AARM District Hospital	Govt
2	AGC Nursing Home	Pvt
3	Bishop Benziger Hospital	Pvt
4	Dr.KDamodaran 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	SankarShashtyabdapoorthy 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.)

SI No	Name of Hospital	Govt/Pvt
1	General Hospital, Ernakulam	Govt
2	LisieHospital,Ernakulam	Pvt
3	LourdeHospital,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	SreeSudheendra 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 RenaiMedicity	Pvt
40	V.G.Saraf Memorial Hospital	Pvt

Kozhikode (41 Nos)

SlNo	Name of Hospital	Govt/Pvt
1	Alzheimer'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.IsmailSait 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

Appendix II

FORM 4

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	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					Interval between onset and death approx.
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)					
Morbidity conditions, if any,					
Giving rise to the above cause					
Stating underlying conditions last					
(c).....					
II	Others significant conditions				
contributing to the death					
but not related to the disease or					
Condition causing it.....					

Manner of Death

How did the injury occur?

1. Natural 2. Accident 2. Suicide 3. 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)

Appendix III

Form 4A

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				Interval between onset and death approx.
<p>I (a)..... Immediate cause Due to (or as a consequences of) Statedisease,injuryorcomplication Whichcauseddeath,not themodeofdying such as heart failure, asthenia, etc</p> <p>Antecedent cause (b)..... Due to (or as a consequences of) Morbidconditions,ifany, Givingrisetotheabovecause, Statingunderlyingconditions last (c).....</p> <p>II Othersignificantconditions Contributing to the death But not related to the diseaseor Condition causing it.</p>				

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)

Appendix IV

MAJOR GROUPS AND THE DESCRIPTION OF ICD-10 CODES

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. Earlier the letter U was not used and kept blank for use in future. Codes U00-U49 was kept reserved to be used for the provisional assignment of new diseases of uncertain etiology. The World Health Organisation created two emergency codes for COVID-19 in ICD-10 to collect data on COVID-19 deaths when pandemic broke-out. The Codes were assigned as follows i) Code – U07.1 COVID-19 virus identified ii) Code – U07.2 COVID- 19 virus not identified. 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-10has 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

2. Categories-11 (Group of three-character categories)
3. 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)
XXII	Codes for Special Purposes- Covid 19(U00-U49)

* Not in use in India.

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

**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
4 Other viral encephalitis	A82.1-A82.9, 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	B16
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
6 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, V87.7-87.9, 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

Appendix VI
Cause of Death (Age wise
and Sex wise)

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021														
M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
I.	CERTAIN INFECTIOUS AND PARASITIC DISEASES (A00-B99)	M	20	6	5	12	16	55	93	112	70	145	10	544
		F	17	4	5	9	15	29	40	93	48	98	12	370
		T	37	10	10	21	31	84	133	205	118	243	22	914
1	Intestinal infectious diseases (A00-A09)	M	0	1	0	0	1	2	1	1	0	4	0	10
		F	1	0	1	0	1	0	0	1	1	6	0	11
		T	1	1	1	0	2	2	1	2	1	10	0	21
1	Cholera (A00)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
2	Typhoid fever and paratyphoid fevers (A01)	M	0	0	0	0	1	0	0	0	0	0	0	1
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	1	0	0	0	0	0	0	1
3	Food poisoning (A02, A05)	M	0	0	0	0	0	0	0	0	0	1	0	1
		F	0	0	0	0	0	0	0	0	1	0	0	1
		T	0	0	0	0	0	0	0	0	1	1	0	2
4	Shigellosis (A03)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
5	Amoebiasis (A06)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
6	Diarrhoea and gastroenteritis of presumed infectious origin (A09)	M	0	1	0	0	0	2	1	1	0	3	0	8
		F	1	0	1	0	1	0	0	1	0	5	0	9
		T	1	1	1	0	1	2	1	2	0	8	0	17
7	Other intestinal infectious diseases (A04,A07-A08)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	1	0	1
		T	0	0	0	0	0	0	0	0	0	1	0	1
2	Tuberculosis (A15-A19)	M	0	1	0	1	2	13	13	22	10	16	2	80
		F	1	0	2	4	2	3	6	11	5	13	1	48
		T	1	1	2	5	4	16	19	33	15	29	3	128
1	Respiratory tuberculosis (A15-A16)	M	0	1	0	0	1	6	6	19	9	13	2	57
		F	1	0	1	0	1	0	0	4	1	5	1	14
		T	1	1	1	0	2	6	6	23	10	18	3	71
2	Tuberculosis of nervous system (A17)	M	0	0	0	0	0	4	3	2	0	0	0	9
		F	0	0	1	2	0	1	4	2	0	0	0	10
		T	0	0	1	2	0	5	7	4	0	0	0	19
3	Tuberculosis of other organs & miliarytuberculosis (A18-A19)	M	0	0	0	1	1	3	4	1	1	3	0	14
		F	0	0	0	2	1	2	2	5	4	8	0	24
		T	0	0	0	3	2	5	6	6	5	11	0	38
3	Other bacterial diseases (A20-A49)	M	19	1	1	7	6	25	45	50	30	62	4	250
		F	15	2	1	4	9	18	19	64	33	61	9	235
		T	34	3	2	11	15	43	64	114	63	123	13	485
1	Plague (A20)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										TOTAL	
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		N.S.
2	Leprosy (A30)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
3	Neonatal tetanus (A33)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
4	Other tetanus (A34-A35)	M	0	0	0	0	0	0	0	0	1	0	0	1
		F	0	0	0	0	0	1	0	0	0	0	0	1
		T	0	0	0	0	0	1	0	0	1	0	0	2
5	Diphtheria (A36)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
6	Whooping cough (A37)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
7	Meningococcal infection (A39)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
8	Septicaemia (A40-A41)	M	19	1	0	4	3	9	27	36	25	50	3	177
		F	15	1	1	3	7	9	7	32	18	34	5	132
		T	34	2	1	7	10	18	34	68	43	84	8	309
9	All other types of bacterial diseases (A21-A28,A31-A32,A38, A42-A49)	M	0	0	1	3	3	16	18	14	4	12	1	72
		F	0	1	0	1	2	8	12	32	15	27	4	102
		T	0	1	1	4	5	24	30	46	19	39	5	174

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										TOTAL		
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		N.S.	
4	Infections with a predominantly sexual mode of transmission (A50-A64)	M	0	0	0	0	0	0	0	0	0	1	0	0	1
		F	0	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	1	0	0	1
1	Syphilis (A50-A53)	M	0	0	0	0	0	0	0	0	0	1	0	0	1
		F	0	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	1	0	0	1
2	Other types of infections with a predominantly sexual mode of transmission (A54-A64)	M	0	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Viral diseases (A70-A74 & A80-B34)	M	0	1	4	2	5	12	23	18	5	9	1	80	
		F	0	0	0	1	1	7	8	7	5	5	2	36	
		T	0	1	4	3	6	19	31	25	10	14	3	116	
1	Acute poliomyelitis (A80)	M	0	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Rabies (A82)	M	0	0	1	0	3	1	0	1	0	0	1	7	
		F	0	0	0	0	0	2	0	0	0	0	0	2	
		T	0	0	1	0	3	3	0	1	0	0	1	9	
3	Japanese encephalitis (A83.0)	M	0	0	0	0	0	0	0	0	0	0	0	0	
		F	0	0	0	0	0	0	0	0	0	0	0	0	
		T	0	0	0	0	0	0	0	0	0	0	0	0	
4	Other viral encephalitis (A83.1-A83.9,A84-A86)	M	0	0	1	0	0	1	1	0	0	0	0	3	
		F	0	0	0	0	0	0	0	0	0	1	0	1	
		T	0	0	1	0	0	1	1	0	0	1	0	4	

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										TOTAL	
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		N.S.
5	Dengue fever (A90)	M	0	0	1	1	0	2	4	3	2	5	0	18
		F	0	0	0	0	0	0	2	4	1	2	1	10
		T	0	0	1	1	0	2	6	7	3	7	1	28
6	Other arthropod-borne viral fevers and viral haemorrhagic fevers (A91-A94, A96-A99)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	1	1
		T	0	0	0	0	0	0	0	0	0	0	1	1
7	Smallpox (Covid-19) (B03)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
8	Measles (B05)	M	0	1	0	0	0	0	0	0	0	0	0	1
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	1	0	0	0	0	0	0	0	0	0	1
9	Acute Hepatitis B (B16)	M	0	0	0	0	0	2	3	5	0	2	0	12
		F	0	0	0	0	0	2	1	1	0	0	0	4
		T	0	0	0	0	0	4	4	6	0	2	0	16
10	Other viral hepatitis (B15, B17-B19)	M	0	0	0	0	1	0	2	0	1	2	0	6
		F	0	0	0	0	0	0	0	0	1	0	0	1
		T	0	0	0	0	1	0	2	0	2	2	0	7
11	Human immunodeficiency virus [HIV] disease (B20-B24)	M	0	0	0	0	0	3	10	8	1	0	0	22
		F	0	0	0	1	1	2	4	1	2	0	0	11
		T	0	0	0	1	1	5	14	9	3	0	0	33
12	All other types of viral diseases (A70-A74,A81, A87-A89,A95,B00-B02,B04,B06-B09 & B25-B34)	M	0	0	1	1	1	3	3	1	1	0	0	11
		F	0	0	0	0	0	1	1	1	1	2	0	6
		T	0	0	1	1	1	4	4	2	2	2	0	17

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL	
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+			
6	Protozoal diseases (B50-B64)	M	0	0	0	0	0	0	0	0	0	0	0	0	
		F	0	0	0	0	0	0	0	0	0	0	0	0	
		T	0	0	0	0	0	0	0	0	0	0	0	0	
1	Malaria (B50-B54)	M	0	0	0	0	0	0	0	0	0	0	0	0	
		F	0	0	0	0	0	0	0	0	0	0	0	0	
		T	0	0	0	0	0	0	0	0	0	0	0	0	
2	All other types of protozoal diseases (B55-B64)	M	0	0	0	0	0	0	0	0	0	0	0	0	
		F	0	0	0	0	0	0	0	0	0	0	0	0	
		T	0	0	0	0	0	0	0	0	0	0	0	0	
7	Other certain infectious & parasitic diseases and late effects of infectious & parasitic diseases (A65-A69 & A75-A79,B35-B49,B65-B99)	M	1	2	0	2	2	3	11	21	24	54	3	123	
		F	0	2	1	0	2	1	7	10	4	13	0	40	
		T	1	4	1	2	4	4	18	31	28	67	3	163	
1	Filariasis (B74)	M	0	0	0	0	0	0	0	0	0	1	0	1	
		F	0	0	0	0	0	0	0	0	0	0	0	0	
		T	0	0	0	0	0	0	0	0	0	1	0	1	
2	Other helminthiasis (B65-B73,B75,B77-B83)	M	0	0	0	0	0	0	0	0	0	0	0	0	
		F	0	0	0	0	0	0	0	0	0	0	0	0	
		T	0	0	0	0	0	0	0	0	0	0	0	0	
3	Other spirochaetal diseases and Rickettsioses (A65-A69 & A75-A79)	M	0	0	0	0	0	0	0	0	0	0	0	0	
		F	0	0	0	0	0	0	0	0	1	0	1	0	2
		T	0	0	0	0	0	0	0	0	1	0	1	0	2
4	All other infectious & parasitic diseases and late effects of infectious & parasitic diseases (B35-B49,B76, B85-B99)	M	1	2	0	2	2	3	11	21	24	53	3	122	
		F	0	2	1	0	2	1	7	9	4	12	0	38	
		T	1	4	1	2	4	4	18	30	28	65	3	160	

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
II.	NEOPLASMS (C00-D48)	M	2	15	33	30	47	82	264	600	348	620	28	2069
		F	1	6	16	50	65	159	214	378	174	323	11	1397
		T	3	21	49	80	112	241	478	978	522	943	39	3466
8	Malignant neoplasms of lip, oral cavity and pharynx (C00-C14)	M	0	0	0	0	2	11	28	45	23	42	3	154
		F	0	0	0	0	2	9	9	12	7	8	0	47
		T	0	0	0	0	4	20	37	57	30	50	3	201
1	Malignant neoplasms of lip, oral cavity and pharynx (C00-C14)	M	0	0	0	0	2	11	28	45	23	42	3	154
		F	0	0	0	0	2	9	9	12	7	8	0	47
		T	0	0	0	0	4	20	37	57	30	50	3	201
9	Malignant neoplasms of digestive organs (C15-C26)	M	0	0	1	1	7	30	101	244	120	227	9	740
		F	0	0	1	1	4	20	38	83	46	97	2	292
		T	0	0	2	2	11	50	139	327	166	324	11	1032
1	Malignant neoplasm of oesophagus (C15)	M	0	0	0	0	0	3	11	28	17	24	0	83
		F	0	0	0	0	1	3	2	6	5	13	0	30
		T	0	0	0	0	1	6	13	34	22	37	0	113
2	Malignant neoplasm of stomach (C16)	M	0	0	0	0	2	2	17	30	18	38	0	107
		F	0	0	0	0	1	1	7	12	2	11	0	34
		T	0	0	0	0	3	3	24	42	20	49	0	141
3	Malignant neoplasm of small intestine including duodenum (C17)	M	0	0	0	0	0	0	1	0	0	3	0	4
		F	0	0	0	0	0	0	3	0	3	0	0	6
		T	0	0	0	0	0	0	4	0	3	3	0	10
4	Malignant neoplasm of colon (C18)	M	0	0	1	1	2	4	7	16	9	25	2	67
		F	0	0	1	1	0	3	5	16	9	19	0	54
		T	0	0	2	2	2	7	12	32	18	44	2	121

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
5	Malignant neoplasm of rectosigmoid junction, rectum,anus and anal canal (C19-C21)	M	0	0	0	0	0	7	13	19	14	22	1	76
		F	0	0	0	0	0	3	5	12	5	17	0	42
		T	0	0	0	0	0	10	18	31	19	39	1	118
6	Malignant neoplasm of liver and intrahepatic bile ducts (C22)	M	0	0	0	0	3	8	34	121	44	90	4	304
		F	0	0	0	0	1	3	7	13	14	22	1	61
		T	0	0	0	0	4	11	41	134	58	112	5	365
7	Malignant neoplasm of pancreas (C25)	M	0	0	0	0	0	4	15	19	10	13	0	61
		F	0	0	0	0	0	4	6	16	6	8	0	40
		T	0	0	0	0	0	8	21	35	16	21	0	101
8	Other malignant neoplasms of digestive organs (C23-C24,C26)	M	0	0	0	0	0	2	3	11	8	12	2	38
		F	0	0	0	0	1	3	3	8	2	7	1	25
		T	0	0	0	0	1	5	6	19	10	19	3	63
10	Malignant neoplasms of respiratory and intrathoracic organs (C30-C39)	M	0	0	1	1	2	8	59	137	108	152	8	476
		F	0	0	2	0	6	19	17	47	18	27	1	137
		T	0	0	3	1	8	27	76	184	126	179	9	613
1	Malignant neoplasm of larynx (C32)	M	0	0	0	0	1	0	14	14	11	28	0	68
		F	0	0	0	0	0	1	0	1	1	2	0	5
		T	0	0	0	0	1	1	14	15	12	30	0	73
2	Malignant neoplasm of trachea, bronchus and lung (C33-C34)	M	0	0	1	1	1	8	45	120	95	120	8	399
		F	0	0	2	0	3	16	12	41	11	19	1	105
		T	0	0	3	1	4	24	57	161	106	139	9	504
3	Other malignant neoplasm of respiratory and intrathoracic organs (C30-C31, C37-C39)	M	0	0	0	0	0	0	0	3	2	4	0	9
		F	0	0	0	0	3	2	5	5	6	6	0	27
		T	0	0	0	0	3	2	5	8	8	10	0	36

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021														
M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
11	Malignant neoplasms of bone, mesothelial and soft tissue,skin and breast (C40-C50)	M	0	0	5	2	5	2	4	8	7	5	0	38
		F	0	0	0	11	20	38	70	99	28	50	1	317
		T	0	0	5	13	25	40	74	107	35	55	1	355
1	Malignant neoplasm of bone and articular cartilage (C40-C41)	M	0	0	3	2	2	1	0	2	2	0	0	12
		F	0	0	0	4	1	0	1	0	0	1	0	7
		T	0	0	3	6	3	1	1	2	2	1	0	19
2	Malignant melanoma of skin (C43)	M	0	0	0	0	0	0	1	1	0	0	0	2
		F	0	0	0	0	0	0	1	0	0	2	1	4
		T	0	0	0	0	0	0	2	1	0	2	1	6
3	Other malignant neoplasms of skin (C44)	M	0	0	0	0	0	0	0	0	0	1	0	1
		F	0	0	0	0	1	0	0	0	0	1	0	2
		T	0	0	0	0	1	0	0	0	0	2	0	3
4	Malignant neoplasms of mesothelial and soft tissue (C45-C49)	M	0	0	2	0	3	1	3	5	5	4	0	23
		F	0	0	0	3	2	3	7	10	1	2	0	28
		T	0	0	2	3	5	4	10	15	6	6	0	51
5	Malignant neoplasm of breast (C50)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	4	16	35	61	89	27	44	0	276
		T	0	0	0	4	16	35	61	89	27	44	0	276

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS											
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+	N.S.	TOTAL
12	Malignant neoplasms of genitourinary organs (C51-C68)	M	0	3	0	0	2	0	6	28	26	87	3	155
		F	0	0	0	4	7	22	24	47	25	50	4	183
		T	0	3	0	4	9	22	30	75	51	137	7	338
1	Malignant neoplasm of cervix uteri (C53)	F	0	0	0	0	1	5	4	13	5	14	3	45
		T	0	0	0	0	1	5	4	13	5	14	3	45
2	Malignant neoplasm of other and unspecified parts of uterus (C54-C55)	F	0	0	0	0	1	2	7	10	5	5	1	31
		T	0	0	0	0	1	2	7	10	5	5	1	31
3	Malignant neoplasm of ovary (C56)	F	0	0	0	4	4	13	11	18	9	19	0	78
		T	0	0	0	4	4	13	11	18	9	19	0	78
4	Malignant neoplasm of placenta (C58)	F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
5	Other malignant neoplasms of female genital organs (C51-C52,C57)	F	0	0	0	0	0	1	1	1	1	1	0	5
		T	0	0	0	0	0	1	1	1	1	1	0	5
6	Malignant neoplasm of prostate (C61)	M	0	0	0	0	0	0	0	10	16	50	2	78
		T	0	0	0	0	0	0	0	10	16	50	2	78
7	Other malignant neoplasms of male genital organs (C60,C62-C63)	M	0	2	0	0	1	0	1	1	1	3	0	9
		T	0	2	0	0	1	0	1	1	1	3	0	9
8	Malignant neoplasm of bladder (C67)	M	0	0	0	0	0	0	1	10	3	25	0	39
		F	0	0	0	0	1	0	0	1	0	2	0	4
		T	0	0	0	0	1	0	1	11	3	27	0	43
9	Other malignant neoplasms of urinary tract (C64-C66,C68)	M	0	1	0	0	1	0	4	7	6	9	1	29
		F	0	0	0	0	0	1	1	4	5	9	0	20
		T	0	1	0	0	1	1	5	11	11	18	1	49

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										TOTAL	
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		N.S.
13	Malignant neoplasms of eye, brain and other parts of central nervous system (C69-C72)	M	0	4	4	0	2	1	4	9	4	2	0	30
		F	0	0	2	2	4	7	5	6	3	2	1	32
		T	0	4	6	2	6	8	9	15	7	4	1	62
1	Malignant neoplasm of eye & adnexa (C69)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
2	Malignant neoplasm of meninges, brain and other parts of central nervous system (C70-C72)	M	0	4	4	0	2	1	4	9	4	2	0	30
		F	0	0	2	2	4	7	5	6	3	2	1	32
		T	0	4	6	2	6	8	9	15	7	4	1	62
14	Malignant neoplasms of other and unspecified sites (C73-C80 & C97)	M	0	1	1	0	1	7	16	32	19	25	1	103
		F	0	1	1	4	2	7	19	20	9	24	0	87
		T	0	2	2	4	3	14	35	52	28	49	1	190
1	Malignant neoplasm of other, ill-defined, secondary, unspecified and multiple sites (C73-C80 & C97)	M	0	1	1	0	1	7	16	32	19	25	1	103
		F	0	1	1	4	2	7	19	20	9	24	0	87
		T	0	2	2	4	3	14	35	52	28	49	1	190
15	Malignant neoplasms of lymphoid, haematopoietic and related tissue (C81-C96)	M	2	7	21	26	25	19	43	80	37	67	2	329
		F	1	5	10	28	20	37	28	56	33	58	1	277
		T	3	12	31	54	45	56	71	136	70	125	3	606
1	Hodgkin's disease (C81)	M	0	0	0	1	1	0	1	2	1	2	0	8
		F	0	0	0	1	2	1	0	1	0	1	0	6
		T	0	0	0	2	3	1	1	3	1	3	0	14
2	Non-Hodgkin's lymphoma (C82-C85)	M	0	0	1	5	3	3	10	32	9	20	1	84
		F	0	0	2	6	5	6	8	14	13	9	0	63
		T	0	0	3	11	8	9	18	46	22	29	1	147

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
3	Multiple myeloma and malignant plasma cell neoplasms (C90)	M	0	0	0	0	2	2	5	16	18	24	1	68
		F	0	0	0	0	0	4	2	13	12	16	0	47
		T	0	0	0	0	2	6	7	29	30	40	1	115
4	Leukaemia (C91-C95)	M	2	7	20	17	15	12	22	22	6	15	0	138
		F	1	4	7	20	11	23	17	24	6	21	1	135
		T	3	11	27	37	26	35	39	46	12	36	1	273
5	Other malignant neoplasms of lymphoid,haematopoietic and related tissue (C88 & C96)	M	0	0	0	3	4	2	5	8	3	6	0	31
		F	0	1	1	1	2	3	1	4	2	11	0	26
		T	0	1	1	4	6	5	6	12	5	17	0	57
16	Carcinoma in situ (D00-D09)	M	0	0	0	0	0	1	0	0	0	0	0	1
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	1	0	0	0	0	0	1
1	Carcinoma in situ (D00-D09)	M	0	0	0	0	0	1	0	0	0	0	0	1
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	1	0	0	0	0	0	1
17	Benign neoplasms(D10-D36)	M	0	0	0	0	1	1	2	13	4	5	2	28
		F	0	0	0	0	0	0	4	8	2	4	1	19
		T	0	0	0	0	1	1	6	21	6	9	3	47
1	Leiomyoma of uterus (D25)	F	0	0	0	0	0	0	0	0	0	1	1	2
		T	0	0	0	0	0	0	0	0	0	1	1	2
2	All other benign neoplasms (D10-D24 & D26-D36)	M	0	0	0	0	1	1	2	13	4	5	2	28
		F	0	0	0	0	0	0	4	8	2	3	0	17
		T	0	0	0	0	1	1	6	21	6	8	2	45

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										TOTAL	
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		N.S.
18	Other and unspecified neoplasm (D37-D48)	M	0	0	0	0	0	2	1	4	0	8	0	15
		F	0	0	0	0	0	0	0	0	3	3	0	6
		T	0	0	0	0	0	2	1	4	3	11	0	21
1	Other and unspecified neoplasm (D37-D48)	M	0	0	0	0	0	2	1	4	0	8	0	15
		F	0	0	0	0	0	0	0	0	3	3	0	6
		T	0	0	0	0	0	2	1	4	3	11	0	21
III.	DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS AND CERTAIN DISORDERS INVOLVING THE IMMUNE MECHANISM (D50-D89)	M	4	5	4	9	9	7	10	13	9	30	0	100
		F	0	0	8	4	7	9	8	17	6	33	3	95
		T	4	5	12	13	16	16	18	30	15	63	3	195
19	Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (D50-D89)	M	4	5	4	9	9	7	10	13	9	30	0	100
		F	0	0	8	4	7	9	8	17	6	33	3	95
		T	4	5	12	13	16	16	18	30	15	63	3	195
1	Thalassaemia (D56)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
2	Other anaemias (D50-D55,D57-D64)	M	0	2	1	4	5	4	5	9	7	27	0	64
		F	0	0	5	1	5	6	5	13	5	26	1	67
		T	0	2	6	5	10	10	10	22	12	53	1	131
3	All other diseases of blood and blood-forming organs (D65-D76)	M	2	3	3	5	4	3	4	4	2	3	0	33
		F	0	0	2	2	2	3	3	4	0	6	2	24
		T	2	3	5	7	6	6	7	8	2	9	2	57
4	Certain disorders involving the immunemechanism (D80-D89)	M	2	0	0	0	0	0	1	0	0	0	0	3
		F	0	0	1	1	0	0	0	0	1	1	0	4
		T	2	0	1	1	0	0	1	0	1	1	0	7

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
IV.	ENDOCRINE, NUTRITIONAL AND METABOLIC DISEASES (E00-E89)	M	2	5	3	5	15	62	279	634	438	957	33	2433
		F	2	2	1	8	12	52	146	403	291	787	25	1729
		T	4	7	4	13	27	114	425	1037	729	1744	58	4162
20	Malnutrition (E40-E46)	M	1	0	0	0	0	1	0	0	0	0	0	2
		F	1	0	0	0	0	0	0	0	0	1	0	2
		T	2	0	0	0	0	1	0	0	0	1	0	4
1	Kwashiorkor (E40)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
2	Nutritional marasmus (E41)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
3	Other protein-energy malnutrition (E42-E46)	M	1	0	0	0	0	1	0	0	0	0	0	2
		F	1	0	0	0	0	0	0	0	0	1	0	2
		T	2	0	0	0	0	1	0	0	0	1	0	4
21	Endocrine, other nutritional and metabolic diseases (E00-E34 & E50-E89)	M	1	5	3	5	15	61	279	634	438	957	33	2431
		F	1	2	1	8	12	52	146	403	291	786	25	1727
		T	2	7	4	13	27	113	425	1037	729	1743	58	4158
1	Disorders of thyroid gland (E00-E07)	M	0	0	0	0	0	1	0	1	1	4	0	7
		F	1	0	0	0	0	0	0	0	2	2	0	5
		T	1	0	0	0	0	1	0	1	3	6	0	12
2	Diabetes mellitus (E10-E14)	M	0	0	0	4	11	58	265	608	418	912	32	2308
		F	0	0	0	7	11	46	139	384	269	733	25	1614
		T	0	0	0	11	22	104	404	992	687	1645	57	3922

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021														
M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
3	All other nutritional deficiencies(E50-E64)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
4	All other endocrine and metabolic diseases (E15-E34 & E65-E89)	M	1	5	3	1	4	2	14	25	19	41	1	116
		F	0	2	1	1	1	6	7	19	20	51	0	108
		T	1	7	4	2	5	8	21	44	39	92	1	224
V.	MENTAL AND BEHAVIOURAL DISORDERS (F01-F99)	M	0	0	0	0	0	1	0	1	1	2	0	5
		F	0	0	0	0	0	0	0	0	0	1	0	1
		T	0	0	0	0	0	1	0	1	1	3	0	6
22	Mental and behavioural disorders (F01-F99)	M	0	0	0	0	0	1	0	1	1	2	0	5
		F	0	0	0	0	0	0	0	0	0	1	0	1
		T	0	0	0	0	0	1	0	1	1	3	0	6
1	Mental and behavioural disorders due topsychoactive substance use (F10-F19)	M	0	0	0	0	0	1	0	0	0	0	0	1
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	1	0	0	0	0	0	1
2	Schizophrenia, schizotypal & delusional disorders (F20-F29)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
3	All other mental and behavioural disorders (F01-F09,F30-F99)	M	0	0	0	0	0	0	0	1	1	2	0	4
		F	0	0	0	0	0	0	0	0	0	1	0	1
		T	0	0	0	0	0	0	0	0	1	1	3	0

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										TOTAL	
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		N.S.
VI.	DISEASES OF THE NERVOUS SYSTEM (G00-G98)	M	8	5	8	8	11	20	35	34	17	72	7	225
		F	3	9	5	8	8	11	15	29	16	56	5	165
		T	11	14	13	16	19	31	50	63	33	128	12	390
23	Inflammatory diseases of the centralnervous system (G00-G09)	M	1	0	0	2	3	8	6	5	7	6	2	40
		F	3	0	1	2	2	2	7	5	1	4	0	27
		T	4	0	1	4	5	10	13	10	8	10	2	67
1	Meningitis (G00 & G03)	M	0	0	0	1	1	2	1	2	3	2	1	13
		F	3	0	0	0	0	0	2	1	0	0	0	6
		T	3	0	0	1	1	2	3	3	3	2	1	19
2	Encephalitis,myelitis and encephalomyelitis'(G04)	M	1	0	0	0	2	6	3	2	4	3	1	22
		F	0	0	1	2	2	2	4	4	1	4	0	20
		T	1	0	1	2	4	8	7	6	5	7	1	42
3	Other inflammatory diseases of the centralnervous system (G06,G08-G09)	M	0	0	0	1	0	0	2	1	0	1	0	5
		F	0	0	0	0	0	0	1	0	0	0	0	1
		T	0	0	0	1	0	0	3	1	0	1	0	6
24	Other diseases of the nervous system (G10-G98)	M	7	5	8	6	8	12	29	29	10	66	5	185
		F	0	9	4	6	6	9	8	24	15	52	5	138
		T	7	14	12	12	14	21	37	53	25	118	10	323
1	Alzheimer's disease (G30)	M	0	0	0	0	0	0	0	0	0	1	0	1
		F	0	0	0	0	0	0	0	0	0	3	0	3
		T	0	0	0	0	0	0	0	0	0	4	0	4
2	Epilepsy (G40-G41)	M	0	1	0	3	1	0	3	3	0	3	2	16
		F	0	3	0	1	0	1	0	1	0	2	1	9
		T	0	4	0	4	1	1	3	4	0	5	3	25

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
3	All other diseases of the nervous system (G10-G25,G31,G35-G37,G43-G98)	M	7	4	8	3	7	12	26	26	10	62	3	168
		F	0	6	4	5	6	8	8	23	15	47	4	126
		T	7	10	12	8	13	20	34	49	25	109	7	294
VII.	DISEASES OF THE EYE AND ADNEXA (H00-H59)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
25	Disease of the eye and adnexa (H00-H59)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
1	Disease of the eye and adnexa (H00-H59)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
VIII.	DISEASES OF THE EAR AND MASTOID PROCESS (H60-H95)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
26	Diseases of the ear and mastoid process (H60-H93)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
1	Diseases of the ear and mastoid process (H60-H93)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021														
M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
IX.	DISEASES OF THE CIRCULATORY SYSTEM (I00-I99)	M	3	3	6	22	36	178	528	1116	786	1783	59	4520
		F	1	3	11	14	20	79	228	553	432	1538	43	2922
		T	4	6	17	36	56	257	756	1669	1218	3321	102	7442
27	Acute rheumatic fever and chronic rheumatic heart diseases (I00-I09)	M	0	0	0	0	1	5	6	9	0	4	0	25
		F	0	0	2	1	2	5	16	15	6	14	2	63
		T	0	0	2	1	3	10	22	24	6	18	2	88
1	Acute rheumatic fever (I00-I02)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
2	Chronic rheumatic heart diseases (I05-I09)	M	0	0	0	0	1	5	6	9	0	4	0	25
		F	0	0	2	1	2	5	16	15	6	14	2	63
		T	0	0	2	1	3	10	22	24	6	18	2	88
28	Hypertensive diseases (I10-I15)	M	0	0	0	0	2	17	48	144	119	298	11	639
		F	0	0	0	0	0	7	32	91	74	304	11	519
		T	0	0	0	0	2	24	80	235	193	602	22	1158
1	Hypertensive heart disease (I11)	M	0	0	0	0	1	7	25	85	79	188	5	390
		F	0	0	0	0	0	4	13	57	39	199	9	321
		T	0	0	0	0	1	11	38	142	118	387	14	711
2	All other hypertensive diseases (I10, I12-I15)	M	0	0	0	0	1	10	23	59	40	110	6	249
		F	0	0	0	0	0	3	19	34	35	105	2	198
		T	0	0	0	0	1	13	42	93	75	215	8	447

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										TOTAL	
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		N.S.
29	Ischaemic heart diseases (I20-I25)	M	3	1	0	1	10	36	190	475	319	751	26	1812
		F	0	0	1	1	4	25	56	167	138	534	15	941
		T	3	1	1	2	14	61	246	642	457	1285	41	2753
1	Acute myocardial infarction (I21-I22)	M	0	0	0	0	4	8	28	41	32	76	1	190
		F	0	0	0	0	0	3	5	16	15	66	0	105
		T	0	0	0	0	4	11	33	57	47	142	1	295
2	All other ischaemic heart diseases (I20 & I23-I25)	M	3	1	0	1	6	28	162	434	287	675	25	1622
		F	0	0	1	1	4	22	51	151	123	468	15	836
		T	3	1	1	2	10	50	213	585	410	1143	40	2458
30	Diseases of pulmonary circulation and other forms of heart disease (I26-I51)	M	0	1	3	8	12	43	107	147	111	231	6	669
		F	1	1	6	6	3	13	49	97	84	219	6	485
		T	1	2	9	14	15	56	156	244	195	450	12	1154
1	Pulmonary heart disease and diseases of pulmonary circulation (I26-I28)	M	0	0	0	0	1	0	2	8	3	4	0	18
		F	0	0	0	1	0	2	3	4	3	8	0	21
		T	0	0	0	1	1	2	5	12	6	12	0	39
2	Other forms of heart diseases (I30-I51)	M	0	1	3	8	11	43	105	139	108	227	6	651
		F	1	1	6	5	3	11	46	93	81	211	6	464
		T	1	2	9	13	14	54	151	232	189	438	12	1115
31	Cerebrovascular diseases (I60-I69)	M	0	1	3	12	10	66	165	322	217	449	13	1258
		F	0	0	1	4	10	26	69	176	124	453	8	871
		T	0	1	4	16	20	92	234	498	341	902	21	2129
1	Cerebrovascular diseases (I60-I69)	M	0	1	3	12	10	66	165	322	217	449	13	1258
		F	0	0	1	4	10	26	69	176	124	453	8	871
		T	0	1	4	16	20	92	234	498	341	902	21	2129

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021														
M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
32	Other diseases of the circulatory system (I70-I99)	M	0	0	0	1	1	11	12	19	20	50	3	117
		F	0	2	1	2	1	3	6	7	6	14	1	43
		T	0	2	1	3	2	14	18	26	26	64	4	160
1	Atherosclerosis (I70)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
2	Arterial embolism and thrombosis (I74)	M	0	0	0	0	0	0	0	0	0	1	0	1
		F	0	0	0	0	0	1	0	0	0	0	0	1
		T	0	0	0	0	0	1	0	0	0	1	0	2
3	Other diseases of arteries, arterioles & capillaries (I71-I73 & I77-I78)	M	0	0	0	1	1	11	10	17	18	45	3	106
		F	0	2	1	2	0	1	5	6	5	11	1	34
		T	0	2	1	3	1	12	15	23	23	56	4	140
4	Phlebitis, thrombophlebitis, venous embolism and thrombosis (I80-I82)	M	0	0	0	0	0	0	1	2	1	3	0	7
		F	0	0	0	0	1	1	0	1	1	1	0	5
		T	0	0	0	0	1	1	1	3	2	4	0	12
5	All other diseases of the circulatory system (I83-I99)	M	0	0	0	0	0	0	1	0	1	1	0	3
		F	0	0	0	0	0	0	1	0	0	2	0	3
		T	0	0	0	0	0	0	2	0	1	3	0	6
X.	DISEASES OF THE RESPIRATORY SYSTEM (J00-J98)	M	5	4	2	2	7	29	80	229	179	537	29	1103
		F	0	5	0	3	11	27	54	120	86	324	5	635
		T	5	9	2	5	18	56	134	349	265	861	34	1738

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										TOTAL		
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		N.S.	
33	Diseases of the upper respiratory tract (J00-J06 & J30-J39)	M	0	0	0	0	0	1	1	1	1	0	0	4	
		F	0	0	0	0	0	0	0	0	0	1	1	0	2
		T	0	0	0	0	0	1	1	1	2	1	0	0	6
1	Acute pharyngitis and acute tonsillitis (J02-J03)	M	0	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0	0
2	Acute laryngitis and tracheitis (J04)	M	0	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Other acute upper respiratory infections (J00-J01 & J05-J06)	M	0	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	1	0	1
		T	0	0	0	0	0	0	0	0	0	0	1	0	1
4	All other diseases of upper respiratory tract (J30-J39)	M	0	0	0	0	0	1	1	1	1	0	0	4	
		F	0	0	0	0	0	0	0	0	0	1	0	0	1
		T	0	0	0	0	0	1	1	1	2	0	0	0	5
34	Lower respiratory diseases (J20-J22 & J40-J47)	M	1	0	0	0	1	12	51	162	130	404	22	783	
		F	0	0	0	0	8	7	34	71	58	224	3	405	
		T	1	0	0	0	9	19	85	233	188	628	25	1188	
1	Acute bronchitis and acute bronchiolitis (J20-J21)	M	0	0	0	0	0	0	0	0	0	1	0	1	
		F	0	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	1	0	1
2	Bronchitis, chronic and unspecified, emphysema (J40-J43)	M	0	0	0	0	0	0	1	0	0	0	0	1	
		F	0	0	0	0	0	0	1	0	0	1	0	2	
		T	0	0	0	0	0	0	2	0	0	1	0	3	

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021														
M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
3	Asthma (J45-J46)	M	1	0	0	0	0	1	2	1	2	4	0	11
		F	0	0	0	0	0	2	7	8	3	19	1	40
		T	1	0	0	0	0	3	9	9	5	23	1	51
4	Other lower respiratory disorders (J22, J44 & J47)	M	0	0	0	0	1	11	48	161	128	399	22	770
		F	0	0	0	0	8	5	26	63	55	204	2	363
		T	0	0	0	0	9	16	74	224	183	603	24	1133
35	Other diseases of the respiratory system (J10-J18,J60-J98)	M	4	4	2	2	6	16	28	66	48	133	7	316
		F	0	5	0	3	3	20	20	49	27	99	2	228
		T	4	9	2	5	9	36	48	115	75	232	9	544
1	Influenza (J10-J11)	M	0	1	0	0	0	0	0	0	0	0	0	1
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	1	0	0	0	0	0	0	0	0	0	1
2	Pneumonia (J12-J18)	M	2	3	1	1	2	7	11	23	9	43	3	105
		F	0	4	0	0	1	6	5	21	7	42	1	87
		T	2	7	1	1	3	13	16	44	16	85	4	192
3	Pleurisy (J90)	M	0	0	0	0	0	1	0	3	1	0	0	5
		F	0	0	0	0	0	0	1	1	0	1	1	4
		T	0	0	0	0	0	1	1	4	1	1	1	9
4	All other diseases of the respiratory system (J60-J86,J92-J98.)	M	2	0	1	1	4	8	17	40	38	90	4	205
		F	0	1	0	3	2	14	14	27	20	56	0	137
		T	2	1	1	4	6	22	31	67	58	146	4	342

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										TOTAL	
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		N.S.
XI.	DISEASES OF THE DIGESTIVE SYSTEM (K00-K92)	M	3	2	4	12	22	127	273	349	119	241	16	1168
		F	0	1	3	8	4	21	26	64	53	131	4	315
		T	3	3	7	20	26	148	299	413	172	372	20	1483
36	Diseases of oral cavity, salivary glands and jaws (K00-K14)	M	0	0	0	1	1	0	0	0	0	0	0	2
		F	0	0	0	0	0	1	0	0	0	0	0	1
		T	0	0	0	1	1	1	0	0	0	0	0	3
1	Diseases of oral cavity, salivary glands and jaws (K00-K14)	M	0	0	0	1	1	0	0	0	0	0	0	2
		F	0	0	0	0	0	1	0	0	0	0	0	1
		T	0	0	0	1	1	1	0	0	0	0	0	3
37	Diseases of the other parts of digestive system (K20-K92)	M	3	2	4	11	21	127	273	349	119	241	16	1166
		F	0	1	3	8	4	20	26	64	53	131	4	314
		T	3	3	7	19	25	147	299	413	172	372	20	1480
1	Gastric and duodenal ulcer (K25-K27)	M	0	0	0	0	0	0	0	2	0	2	0	4
		F	0	0	0	0	0	0	1	0	0	0	0	1
		T	0	0	0	0	0	0	1	2	0	2	0	5
2	Gastritis and duodenitis (K29)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	1	0	0	0	0	0	1
		T	0	0	0	0	0	1	0	0	0	0	0	1
3	Diseases of appendix (K35-K38)	M	0	0	0	0	0	1	1	3	0	1	0	6
		F	0	0	0	0	0	1	0	0	0	1	0	2
		T	0	0	0	0	0	2	1	3	0	2	0	8
4	Hernia (K40-K46)	M	0	0	0	0	0	0	0	1	1	3	0	5
		F	0	0	1	0	0	0	0	0	1	3	0	5
		T	0	0	1	0	0	0	0	1	2	6	0	10

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021														
M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
5	Paralytic ileus and intestinal obstruction without hernia (K56)	M	1	1	1	0	0	4	1	2	1	5	0	16
		F	0	0	0	1	0	2	1	1	1	6	0	12
		T	1	1	1	1	0	6	2	3	2	11	0	28
6	Peritonitis (K65)	M	0	0	0	1	0	0	1	1	1	2	0	6
		F	0	0	0	0	0	0	0	2	1	1	0	4
		T	0	0	0	1	0	0	1	3	2	3	0	10
7	Diseases of the liver (K70-K76)	M	1	0	2	7	17	106	248	304	98	179	15	977
		F	0	0	1	5	3	13	20	54	41	97	4	238
		T	1	0	3	12	20	119	268	358	139	276	19	1215
8	Cholelithiasis and cholecystitis (K80-K81)	M	0	0	0	0	0	0	0	1	2	2	0	5
		F	0	0	0	0	1	0	1	0	0	3	0	5
		T	0	0	0	0	1	0	1	1	2	5	0	10
9	Disorders of the pancreas (K85-K86)	M	0	0	1	1	2	8	8	5	3	5	1	34
		F	0	0	1	1	0	1	1	1	0	2	0	7
		T	0	0	2	2	2	9	9	6	3	7	1	41
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)	M	1	1	0	2	2	8	14	30	13	42	0	113
		F	0	1	0	1	0	2	2	6	9	18	0	39
		T	1	2	0	3	2	10	16	36	22	60	0	152

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
XII.	DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE (L00-L98)	M	0	0	0	0	0	4	3	4	3	7	0	21
		F	1	0	1	0	2	1	2	3	2	11	0	23
		T	1	0	1	0	2	5	5	7	5	18	0	44
38	Diseases of the skin and subcutaneous tissue (L00-L98)	M	0	0	0	0	0	4	3	4	3	7	0	21
		F	1	0	1	0	2	1	2	3	2	11	0	23
		T	1	0	1	0	2	5	5	7	5	18	0	44
1	Infections of the skin and subcutaneous tissue (L00-L08)	M	0	0	0	0	0	3	3	4	3	3	0	16
		F	0	0	1	0	1	0	1	2	0	2	0	7
		T	0	0	1	0	1	3	4	6	3	5	0	23
2	All other diseases of the skin and subcutaneous tissue (L10-L98)	M	0	0	0	0	0	1	0	0	0	4	0	5
		F	1	0	0	0	1	1	1	1	2	9	0	16
		T	1	0	0	0	1	2	1	1	2	13	0	21
XIII.	DISEASES OF THE MUSCULOSKELETAL SYSTEM AND CONNECTIVE TISSUE (M00-M99)	M	0	1	1	1	0	0	1	3	5	13	0	25
		F	0	0	0	5	2	7	6	7	0	15	0	42
		T	0	1	1	6	2	7	7	10	5	28	0	67
39	Diseases of the musculoskeletal system and connective tissue (M00-M99)	M	0	1	1	1	0	0	1	3	5	13	0	25
		F	0	0	0	5	2	7	6	7	0	15	0	42
		T	0	1	1	6	2	7	7	10	5	28	0	67
1	Rheumatoid arthritis and other inflammatory polyarthropathies (M05-M13)	M	0	0	0	0	0	0	0	0	2	0	0	2
		F	0	0	0	1	0	2	2	1	0	2	0	8
		T	0	0	0	1	0	2	2	1	2	2	0	10
2	Osteomyelitis (M86)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
3	All other diseases of the musculoskeletal system and connective tissue (M00-M02, M15-M85,M87-M99)	M	0	1	1	1	0	0	1	3	3	13	0	23
		F	0	0	0	4	2	5	4	6	0	13	0	34
		T	0	1	1	5	2	5	5	9	3	26	0	57

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
XIV.	DISEASES OF THE GENITOURINARY SYSTEM (N00-N99)	M	0	0	5	5	15	22	70	105	73	203	14	512
		F	1	1	3	5	9	12	28	43	46	107	7	262
		T	1	1	8	10	24	34	98	148	119	310	21	774
40	Diseases of urinary system (N00-N39)	M	0	0	5	5	14	22	70	104	72	197	14	503
		F	1	1	2	5	9	11	28	43	46	105	7	258
		T	1	1	7	10	23	33	98	147	118	302	21	761
1	Glomerular diseases (including Nephritic Syndrome) (N00-N07)	M	0	0	5	4	9	16	30	46	36	106	2	254
		F	1	0	2	2	6	8	16	26	18	48	2	129
		T	1	0	7	6	15	24	46	72	54	154	4	383
2	Renal tubulo-interstitial diseases (N10-N15)	M	0	0	0	0	0	0	2	2	2	5	0	11
		F	0	0	0	0	0	1	1	1	0	1	0	4
		T	0	0	0	0	0	1	3	3	2	6	0	15
3	Renal failure (N17-N19)	M	0	0	0	1	2	6	34	54	31	67	10	205
		F	0	0	0	1	2	1	10	13	26	32	5	90
		T	0	0	0	2	4	7	44	67	57	99	15	295
4	Urolithiasis (N20-N23)	M	0	0	0	0	1	0	0	0	0	0	0	1
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	1	0	0	0	0	0	0	1
5	Other disorders of kidney and ureter (N25-N28)	M	0	0	0	0	0	0	1	0	0	0	0	1
		F	0	1	0	0	0	0	0	0	0	1	0	2
		T	0	1	0	0	0	0	1	0	0	1	0	3
6	All other diseases of urinary system (N30-N39)	M	0	0	0	0	2	0	3	2	3	19	2	31
		F	0	0	0	2	1	1	1	3	2	23	0	33
		T	0	0	0	2	3	1	4	5	5	42	2	64

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021														
M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
41	Other diseases of the genitourinary system (N40-N99)	M	0	0	0	0	1	0	0	1	1	6	0	9
		F	0	0	1	0	0	1	0	0	0	2	0	4
		T	0	0	1	0	1	1	0	1	1	8	0	13
1	Hyperplasia of prostate (N40)	M	0	0	0	0	0	0	0	0	1	0	4	5
		T	0	0	0	0	0	0	0	0	1	0	4	5
2	All other diseases of male genital organs (N41-N50)	M	0	0	0	0	1	0	0	0	1	2	0	4
		T	0	0	0	0	1	0	0	0	1	2	0	4
3	Salpingitis and oophoritis (N70)	F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
4	All other diseases of female genital organs (N60-N64 & N71-N99)	F	0	0	1	0	0	1	0	0	0	2	0	4
		T	0	0	1	0	0	1	0	0	0	2	0	4
XV.	PREGNANCY, CHILDBIRTH AND THE PUERPERIUM (O00-O99)	F	0	0	0	5	5	2	0	0	0	0	0	12
		T	0	0	0	5	5	2	0	0	0	0	0	12
42	Pregnancy with abortive outcome (O00-O08)	F	0	0	0	0	1	0	0	0	0	0	0	1
		T	0	0	0	0	1	0	0	0	0	0	0	1
1	Spontaneous abortion (O03)	F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
2	Medical abortion (O04)	F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
3	Other pregnancies with abortive outcome (O00-O02 & O05-O08)	F	0	0	0	0	1	0	0	0	0	0	0	1
		T	0	0	0	0	1	0	0	0	0	0	0	1

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										TOTAL	
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		N.S.
43	Other direct obstetric deaths (O10-O92)	F	0	0	0	5	4	1	0	0	0	0	0	10
		T	0	0	0	5	4	1	0	0	0	0	0	10
1	Oedema, proteinuria and hypertensive disorders in pregnancy, childbirth and the puerperium (O10-O16)	F	0	0	0	1	1	0	0	0	0	0	0	2
		T	0	0	0	1	1	0	0	0	0	0	0	2
2	Infections of genitourinary tract in pregnancy (O23)	F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
3	Obstructed labour (O64-O66)	F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
4	Complications pre-dominantly related to the puerperium (O85-O92)	F	0	0	0	1	1	0	0	0	0	0	0	2
		T	0	0	0	1	1	0	0	0	0	0	0	2
5	Other complications of pregnancy and delivery (O20, O22, O24-O63 & O67-O84)	F	0	0	0	3	2	1	0	0	0	0	0	6
		T	0	0	0	3	2	1	0	0	0	0	0	6
44	Other obstetric conditions, not elsewhere classified (O95-O99)	F	0	0	0	0	0	1	0	0	0	0	0	1
		T	0	0	0	0	0	1	0	0	0	0	0	1
1	Indirect obstetric deaths (O98-O99)	F	0	0	0	0	0	1	0	0	0	0	0	1
		T	0	0	0	0	0	1	0	0	0	0	0	1
2	All other obstetric conditions, not elsewhere classified (O95-O97)	F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
XVI.	CERTAIN CONDITIONS ORIGINATING IN THE PERINATAL PERIOD (P00-P96)	M	291	0	0	0	0	0	0	0	0	0	0	291
		F	216	0	0	0	0	0	0	0	0	0	0	216
		T	507	0	0	0	0	0	0	0	0	0	0	507
45	Certain conditions originating in the perinatal period (P00-P96)	M	291	0	0	0	0	0	0	0	0	0	0	291
		F	216	0	0	0	0	0	0	0	0	0	0	216
		T	507	0	0	0	0	0	0	0	0	0	0	507
1	Slow fetal growth, fetal malnutrition and immaturity (P05-P07)	M	123	0	0	0	0	0	0	0	0	0	0	123
		F	102	0	0	0	0	0	0	0	0	0	0	102
		T	225	0	0	0	0	0	0	0	0	0	0	225

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										TOTAL	
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		N.S.
2	Birth trauma (P10-P15)	M	1	0	0	0	0	0	0	0	0	0	0	1
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	1	0	0	0	0	0	0	0	0	0	0	1
3	Hypoxia, birth asphyxia and other respiratory conditions (P20-P28)	M	73	0	0	0	0	0	0	0	0	0	0	73
		F	58	0	0	0	0	0	0	0	0	0	0	58
		T	131	0	0	0	0	0	0	0	0	0	0	131
4	Haemolytic disease of fetus and new-born (P55)	M	1	0	0	0	0	0	0	0	0	0	0	1
		F	2	0	0	0	0	0	0	0	0	0	0	2
		T	3	0	0	0	0	0	0	0	0	0	0	3
5	Other perinatal jaundice (P58-P59)	M	7	0	0	0	0	0	0	0	0	0	0	7
		F	1	0	0	0	0	0	0	0	0	0	0	1
		T	8	0	0	0	0	0	0	0	0	0	0	8
6	All other conditions originating in the perinatal period (P00-P04,P08,P29-P54,P56-P57,P60-P96.)	M	86	0	0	0	0	0	0	0	0	0	0	86
		F	53	0	0	0	0	0	0	0	0	0	0	53
		T	139	0	0	0	0	0	0	0	0	0	0	139
XVII.	CONGENITAL MALFORMATIONS, DEFORMATIONS AND CHROMOSOMAL ABNORMALITIES (Q00-Q99)	M	135	17	11	5	3	4	3	1	2	2	1	184
		F	109	13	16	6	4	3	7	3	2	0	1	164
		T	244	30	27	11	7	7	10	4	4	2	2	348
46	Congenital malformations, deformations and chromosomal abnormalities (Q00-Q99)	M	135	17	11	5	3	4	3	1	2	2	1	184
		F	109	13	16	6	4	3	7	3	2	0	1	164
		T	244	30	27	11	7	7	10	4	4	2	2	348
1	Spina bifida (Q05)	M	0	0	0	0	1	0	0	0	0	0	0	1
		F	1	1	0	0	0	0	0	0	0	0	0	2
		T	1	1	0	0	1	0	0	0	0	0	0	3

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										TOTAL	
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		N.S.
2	Congenital malformations of the circulatory system (Q20-Q28)	M	84	9	9	3	1	2	1	0	2	1	0	112
		F	65	8	12	3	3	2	5	2	1	0	0	101
		T	149	17	21	6	4	4	6	2	3	1	0	213
3	Cleft lip and cleft palate (Q35-Q37)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	1	0	0	0	0	0	0	0	0	0	1
		T	0	1	0	0	0	0	0	0	0	0	0	1
4	All other congenital malformations, deformations and chromosomal abnormalities, not elsewhere classified (Q00-Q04,Q06-Q18,Q30-Q34 & Q38-Q99)	M	51	8	2	2	1	2	2	1	0	1	1	71
		F	43	3	4	3	1	1	2	1	1	0	1	60
		T	94	11	6	5	2	3	4	2	1	1	2	131
XVIII.	SYMPTOMS, SIGNS AND ABNORMAL CLINICAL AND LABORATORY FINDINGS,NOT ELSEWHERE CLASSIFIED (R00-R99)	M	5	3	3	24	27	61	91	107	56	86	21	484
		F	3	3	5	14	13	24	33	46	44	60	7	252
		T	8	6	8	38	40	85	124	153	100	146	28	736
47	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99)	M	5	3	3	24	27	61	91	107	56	86	21	484
		F	3	3	5	14	13	24	33	46	44	60	7	252
		T	8	6	8	38	40	85	124	153	100	146	28	736
1	Abdominal and pelvic pain (R10)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
2	Ascites (R18)	M	0	0	0	0	0	0	0	2	1	0	0	3
		F	0	0	0	0	0	0	0	1	1	0	0	2
		T	0	0	0	0	0	0	0	3	2	0	0	5
3	Somnolence, stupor and coma (R40)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021														
M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
4	Fever of unknown origin (R50)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
5	Senility (R54)	M	0	0	0	0	0	0	0	0	0	1	0	1
		F	0	0	0	0	0	0	0	0	0	2	0	2
		T	0	0	0	0	0	0	0	0	0	3	0	3
6	Syncope and collapse (R55)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
7	Convulsions, not elsewhere classified (R56)	M	0	0	0	0	0	1	1	1	0	1	0	4
		F	0	0	0	0	0	0	0	1	0	0	0	1
		T	0	0	0	0	0	1	1	2	0	1	0	5
8	Shock, not elsewhere classified (R57)	M	0	0	0	0	0	0	0	2	1	1	0	4
		F	0	0	0	0	0	0	0	0	0	1	0	1
		T	0	0	0	0	0	0	0	2	1	2	0	5
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)	M	5	3	3	24	27	60	90	102	54	83	21	472
		F	3	3	5	14	13	24	33	44	43	57	7	246
		T	8	6	8	38	40	84	123	146	97	140	28	718

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
XIX.	INJURY, POISONING AND CERTAIN OTHER CONSEQUENCES OF EXTERNAL CAUSES (S00-T98)	M	4	10	11	67	79	94	132	116	49	72	6	640
		F	4	7	17	20	33	35	52	33	16	49	1	267
		T	8	17	28	87	112	129	184	149	65	121	7	907
48	Fractures (S02,S12,S22,S32,S42,S52, S62,S72,S82,S92,T02,T08,T10 & T12)	M	0	0	0	4	5	6	10	6	6	7	0	44
		F	0	0	0	0	1	2	2	1	1	5	1	13
		T	0	0	0	4	6	8	12	7	7	12	1	57
1	Fracture of skull and facial bones (S02)	M	0	0	0	2	2	2	2	1	0	1	0	10
		F	0	0	0	0	1	1	1	0	0	0	0	3
		T	0	0	0	2	3	3	3	1	0	1	0	13
2	Fracture of neck, thorax or pelvis (S12,S22,S32 & T08)	M	0	0	0	1	0	0	1	1	0	1	0	4
		F	0	0	0	0	0	0	0	0	1	2	0	3
		T	0	0	0	1	0	0	1	1	1	3	0	7
3	Fracture of upper limb (S42,S52,S62 & T10)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
4	Fractures of lower limb (S72,S82,S92 & T12)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
5	Fractures involving multiple body regions , and of unspecified body region (T02)	M	0	0	0	1	3	4	7	4	6	5	0	30
		F	0	0	0	0	0	1	1	1	0	3	1	7
		T	0	0	0	1	3	5	8	5	6	8	1	37

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS											
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+	N.S.	TOTAL
49	Dislocations, sprains and strains of specified and multiple body regions (S03,S13,S23,S33,S43,S53,S63,S73,S83,S93,T03)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
50	Intracranial and internal injuries, including nerves (S04,S06,S14,S24,S26-S27,S34,S36-S37,S44,S54,S64,S74,S84 & S94)	M	0	1	0	16	20	9	32	26	7	12	1	124
		F	0	3	0	0	0	3	8	6	2	8	0	30
		T	0	4	0	16	20	12	40	32	9	20	1	154
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)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
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)	M	1	1	0	26	37	35	55	45	23	26	2	251
		F	0	1	4	3	0	3	8	8	4	7	0	38
		T	1	2	4	29	37	38	63	53	27	33	2	289
53	Effects of foreign body entering through natural orifice (T15-T19)	M	1	1	0	0	0	1	0	0	0	1	0	4
		F	0	1	0	0	0	0	0	0	0	0	0	1
		T	1	2	0	0	0	1	0	0	0	1	0	5
54	Burns and Corrosions (T20-T32)	M	0	2	2	6	3	8	8	8	2	7	1	47
		F	1	0	6	10	17	18	22	10	4	22	0	110
		T	1	2	8	16	20	26	30	18	6	29	1	157

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										TOTAL		
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		N.S.	
55	Poisonings by drugs & biological substances; and Toxic effects of substances chiefly nonmedicinal as to source (T36-T50 & T51-T65)	M	0	3	1	7	10	17	11	15	7	8	2	81	
		F	0	1	2	2	8	4	6	2	1	2	0	28	
		T	0	4	3	9	18	21	17	17	8	10	2	109	
56	Other and unspecified effects of external causes and certain early complications of trauma (T33-T35,T66-T79)	M	0	1	8	4	1	6	4	3	0	1	0	28	
		F	0	0	4	4	5	0	0	0	1	0	0	14	
		T	0	1	12	8	6	6	4	3	1	1	0	42	
57	Complications of Surgical and Medical care, not elsewhere classified (T80-T88)	M	2	1	0	4	2	12	10	12	2	10	0	55	
		F	3	1	1	1	2	5	6	6	3	5	0	33	
		T	5	2	1	5	4	17	16	18	5	15	0	88	
58	Late effects of injuries, of poisoning and of other consequences of external causes (T90-T98)	M	0	0	0	0	1	0	2	1	2	0	0	6	
		F	0	0	0	0	0	0	0	0	0	0	0	0	
		T	0	0	0	0	1	0	2	1	2	0	0	6	
XX.	EXTERNAL CAUSES OF MORBIDITY AND MORTALITY (V01-Y89)	M	5	13	14	76	98	111	141	134	53	75	4	724	
		F	4	9	14	25	33	39	51	39	17	39	0	270	
		T	9	22	28	101	131	150	192	173	70	114	4	994	
E48	Transport accidents (V01-V99)	M	0	2	1	46	65	56	94	79	34	35	2	414	
		F	0	3	3	6	4	13	18	14	5	11	0	77	
		T	0	5	4	52	69	69	112	93	39	46	2	491	
	1	Railway accidents (V05,V15,V80.6,V81, V82.2, V87.6 & V88.6)	M	0	0	0	0	0	1	0	0	0	0	0	1
			F	0	0	0	0	0	0	0	0	0	0	0	0
			T	0	0	0	0	0	1	0	0	0	0	0	1
	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-	M	0	2	1	46	65	55	94	79	34	34	2	412
			F	0	3	3	6	4	13	18	14	5	11	0	77
			T	0	5	4	52	69	68	112	93	39	45	2	489

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021

M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										TOTAL		
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		N.S.	
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)	M	0	0	0	0	0	0	0	0	0	0	0	0	
		F	0	0	0	0	0	0	0	0	0	0	0	0	
		T	0	0	0	0	0	0	0	0	0	0	0	0	
	4	Water transport accidents (V90-V94)	M	0	0	0	0	0	0	0	0	0	0	0	0
			F	0	0	0	0	0	0	0	0	0	0	0	0
			T	0	0	0	0	0	0	0	0	0	0	0	0
	5	Air & Space transport accidents (V95-V97)	M	0	0	0	0	0	0	0	0	0	0	0	0
			F	0	0	0	0	0	0	0	0	0	0	0	0
			T	0	0	0	0	0	0	0	0	0	0	0	0
	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)	M	0	0	0	0	0	0	0	0	0	1	0	1
			F	0	0	0	0	0	0	0	0	0	0	0	0
			T	0	0	0	0	0	0	0	0	0	1	0	1
E49	Accidental Falls (W00-W19)	M	0	0	1	4	6	5	7	10	3	4	0	40	
		F	0	1	1	0	0	0	0	2	2	2	0	8	
		T	0	1	2	4	6	5	7	12	5	6	0	48	
E50	Accidental drowning and submersion (W65-W74)	M	0	1	1	0	0	0	0	0	0	1	0	3	
		F	0	0	0	0	0	0	0	0	0	0	0	0	
		T	0	1	1	0	0	0	0	0	0	1	0	3	
E51	Exposure to smoke, fire and flames (X00-X09)	M	0	2	2	6	4	8	6	8	2	7	0	45	
		F	0	0	4	8	11	14	17	10	4	18	0	86	
		T	0	2	6	14	15	22	23	18	6	25	0	131	
E52	Accidental poisoning by and exposure to noxious substances (X40-X49)	M	0	1	0	0	0	0	0	0	1	0	0	2	
		F	0	0	0	0	0	0	1	0	0	0	0	1	
		T	0	1	0	0	0	0	1	0	1	0	0	3	

TABLE:- MEDICALLY CERTIFIED DEATHS BY AGE AND SEX ACCORDING TO NATIONAL LIST OF TENTH REVISION OF ICD DURING THE YEAR 2021														
M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		
E53	Intentional self-harm (Suicide- attempted) (X60-X84)	M	0	0	1	10	13	21	16	15	6	5	1	88
		F	0	0	1	6	13	6	4	3	0	2	0	35
		T	0	0	2	16	26	27	20	18	6	7	1	123
E54	Assault (Homicide) (X85-Y09)	M	0	0	0	1	0	1	1	0	1	0	0	4
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	1	0	1	1	0	1	0	0	4
E55	Other Violence (Y10-Y36)	M	0	2	1	1	1	2	1	1	0	3	1	13
		F	1	1	0	1	2	1	1	0	1	0	0	8
		T	1	3	1	2	3	3	2	1	1	3	1	21
	1 Event of undetermined intent (Y10-Y34)	M	0	2	1	1	1	2	1	1	0	3	1	13
		F	1	1	0	1	2	1	1	0	1	0	0	8
		T	1	3	1	2	3	3	2	1	1	3	1	21
	2 Legal intervention (Y35)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
3 Operations of war (Y36)	M	0	0	0	0	0	0	0	0	0	0	0	0	
	F	0	0	0	0	0	0	0	0	0	0	0	0	
	T	0	0	0	0	0	0	0	0	0	0	0	0	

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M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										TOTAL	
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+		N.S.
E56	Complications of medical and surgical care (Y40-Y84)	M	3	3	1	6	2	8	9	13	4	10	0	59
		F	3	3	2	3	2	4	8	8	5	4	0	42
		T	6	6	3	9	4	12	17	21	9	14	0	101
	1 Drugs,medicaments and biological substances causing adverse effects in therapeutic use (Y40-Y59)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	1	0	0	0	0	1	0	0	2
		T	0	0	0	1	0	0	0	0	1	0	0	2
	2 Misadventures during surgical & medical care,adverse incidents in diagnostic and therapeutic use, abnormal reactions and late complications (Y60-Y69,Y70-Y82 & Y83-Y84)	M	3	3	1	6	2	8	9	13	4	10	0	59
		F	3	3	2	2	2	4	8	8	4	4	0	40
		T	6	6	3	8	4	12	17	21	8	14	0	99
E57	Other external causes of accidental injury, not elsewhere classified (W20-W64,W75-W99, X10-X39,X50-X59)	M	2	2	6	2	7	10	7	8	1	10	0	55
		F	0	1	3	1	1	1	2	1	0	2	0	12
		T	2	3	9	3	8	11	9	9	1	12	0	67
	1 Accidents caused by machinery, and by cutting & piercing instruments (W24-W31)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
	2 Accidents caused by firearm missile (W32-W34)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0
	3 Bites of snakes & other venomous animals (X20-X27)	M	1	0	0	0	5	6	5	8	1	9	0	35
		F	0	0	0	0	0	1	0	1	0	1	0	3
		T	1	0	0	0	5	7	5	9	1	10	0	38
	4 Sun stroke (X32)	M	0	0	0	0	0	0	0	0	0	0	0	0
		F	0	0	0	0	0	0	0	0	0	0	0	0
		T	0	0	0	0	0	0	0	0	0	0	0	0

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M.G/CAT./S.C	CAUSE OF DEATH	SEX	AGE GROUPS										N.S.	TOTAL	
			<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-69	70+			
5	All other accidents including late effects(W20-W23,W35-W64, W75-W99,X10-X19,X28-X31, X33-X39 & X50-X59)	M	1	2	6	2	2	4	2	0	0	1	0	20	
		F	0	1	3	1	1	0	2	0	0	1	0	9	
		T	1	3	9	3	3	4	4	4	0	0	2	0	29
E58	Late effects of external causes of morbidity and mortality (Y85-Y89)	M	0	0	0	0	0	0	0	0	0	1	0	0	1
		F	0	0	0	0	0	0	0	0	1	0	0	0	1
		t	0	0	0	0	0	0	0	0	1	1	0	0	2
	COVID (U07)	M	9	6	7	18	92	292	742	1446	1011	3042	156	6821	
		F	3	3	13	28	60	159	440	915	665	2127	116	4529	
		T	12	9	20	46	152	451	1182	2361	1676	5169	272	11350	
	POST COVID (U09)	M	0	0	2	4	11	53	121	230	148	337	23	929	
		F	2	1	2	3	9	24	47	111	81	200	15	495	
		T	2	1	4	7	20	77	168	341	229	537	38	1424	
	ALL CAUSES (MAJOR GROUP I to XIX) WITH OUT COVID AND POST COVID	M	482	76	96	202	287	746	1862	3424	2155	4770	224	14324	
		F	358	54	91	159	210	471	859	1792	1216	3533	124	8867	
		T	840	130	187	361	497	1217	2721	5216	3371	8303	348	23191	
	ALL CAUSES (MAJOR GROUP I to XIX) INCLUDING COVID AND POST COVID	M	491	82	105	224	390	1091	2725	5100	3314	8149	403	22074	
		F	363	58	106	190	279	654	1346	2818	1962	5860	255	13891	
		T	854	140	211	414	669	1745	4071	7918	5276	14009	658	35965	
	ALL CAUSES (MAJOR GROUP I TO XX) +COVID AND POST COVID DATA	M	496	95	119	300	488	1202	2866	5234	3367	8224	407	22798	
		F	367	67	120	215	312	693	1397	2857	1979	5899	255	14161	
		T	863	162	239	515	800	1895	4263	8091	5346	14123	662	36959	