



GOVERNMENT OF KERALA

# report on medical certification of cause of death

1980, 81, 82

DEPARTMENT OF ECONOMICS & STATISTICS  
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**MEDICAL CERTIFICATION OF  
CAUSE OF DEATH**

**1980, 1981 & 1982**

## **PREFACE**

The scheme 'Medical Certification of cause of Death' is in operation in the city corporations of Cochin and Calicut and in 2 major Municipalities Quilon and Alleppey. The scheme envisages the collection of data relating to causes of death certified by the attending physician in the hospitals.

This report dealing with mortality by causes occurred in the state during the period 1980-82 was prepared by the Vital Statistics Unit of this Department.

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## CONTENTS

	<i>Page</i>
1. Introduction	1
2. Cochin corporation	3
3. Calicut corporation	6
4. Quilon municipality	9
5. Alleppey municipality	11
6. Inter-municipality comparision	14
7. Appendix	16-33

## 1. INTRODUCTION

1.1 In modern times the study of mortality is of great importance to public health workers and demographers throughout the world. Not only health planning but planning for improvement of Socio-Economic conditions depends to a great extent on the current data on mortality and to future trends. Mortality statistics form an integral part of the Vital Statistics System in India. The number of deaths by causes is a key indicator of the health trends of the population of a country.

The scheme on 'Medical Certification of cause of Death' has been introduced in the State in 1969 at the instance of the Government of India with a view to get reliable and accurate statistics on cause of death which occurred in the hospitals in selected cities/towns.

This report deals with the statistical analysis of the medically certified causes of death in Cochin Corporation, Calicut Corporation, Quilon Municipality and Allepey Municipality during the years 1980, 1981 and 1982.

### 1.2 Objectives

The broad objectives of the scheme are to:—

- (i) Obtain reliable information on the underlying causes of deaths.
- (ii) Pin-point the leading causes of death for males and females.
- (iii) identify individual causes of death in certain special groups like infants, mothers and aged persons.
- (iv) Study the mortality pattern of certain important disease like tuberculosis, cancer etc.
- (v) enable public health and medical authorities to undertake specific investigations and studies into the mortality pattern of diseases for the evaluation and planning of health activities.

### 1.3 Methodology

The scheme envisages the collection of relevant data relating to all deaths in the medical institutions within the concerned Municipal/Corporation area having facilities for inpatient treatment. The attending physician is required to furnish the data on cause of death in the prescribed form. The cause of

death certificates received from the medical institutions are scrutinised and the cause of death are identified and coded by the Deputy Health Officer appointed for the purpose. For the purpose of coding the cause of death, the list 'A' of the international classification of diseases (1975 Revision Vol. I) is followed.

### *Cause of death*

Cause of death is defined as the morbid condition or disease process abnormality, injury or poisoning leading directly or indirectly to death. Every death has multiple causes and death occurs only as a result of a chain of causes.

### *Leading causes of death*

In this report, only the causes of death which account for atleast 3 per cent of deaths in any one or more of the four centres mentioned earlier are analysed in detail. The causes of death which are insignificant are grouped under 'others'. The following are considered as the prominent causes of death.

- (i) Intestinal infectious disease—Code I (001-009)
- (ii) Tuberculosis—(010- 018)
- (iii) Other bacterial diseases—I (020-041)
- (iv) Viral diseases—I (045-079)
- (v) Neoplasms—II (140-239)
- (vi) Nutritional and Metabolic diseases and Immunity disorders III (240-279)
- (vii) Diseases of nervous system and sense organs—VI (320-389)
- (viii) Diseases of the Circulatory system—VII (350-459)
- (ix) Diseases of the Respiratory system—VII (450-519)
- (x) Diseases of the Digestive system—IX (520-579)
- (xi) Diseases of Urinary system—X (580-629)
- (xii) Certain conditions originating in the perinatal period—XV (760-779)
- (xiii) Signs, symptoms and ill defined conditions —XVI (780-799)
- (xiv) Injury and poisoning—XVII (800-999)

### 1.5 *Limitations*

The data covers institutional deaths which constitute only a portion of the total deaths in the cities. So the indications on cause of death given in the report cannot be taken as exhaustive evidence.

1.6 In totality of the four centres under study, the major reason of death during the three years is diseases of the circulatory system. Above one fifth of the total deaths is due to this cause. For the age group 15-44 and 45 and above, diseases of the circulatory system predominate as the number one disease. The position in respect of each centre is discussed below.

## 2. COCHIN CORPORATION

2.1 The Cochin Corporation was formed on 1967. According to 1981 Census the population of Cochin Corporation was 5.13 lakhs with an area of 95 sq. km, the density being 5409 per sq. km. In the year 1980, a total of 1031 medical notification forms regarding deaths were received for analysis from Cochin Corporation. The cases reported during 1981 and 1982 were 2242 and 2353 respectively.

### 2.2 Sex-wise distribution of the leading causes of death

The male - female break up of the total mortality cases reported during the years 1980, 1981 and 1982 are shown below.

Year	Male	Female	Total
1980	663(64.31)	368(35.69)	1031(100)
1981	1405(62.67)	837(37.33)	2242(100)
1982	1572(66.81)	781(33.19)	2353(100)

*Note:* Figures in brackets are percentages.

### 2.3. Causes of death

The distribution of deaths due to leading causes are given below.

#### (i) Intestinal infectious disease—I (001-009)

Deaths due to intestinal infectious diseases was 1.94 percent during the year 1980. The percentage of death has increased to 4.24 in 1981. In 1982, it has slightly decreased to 3.61. In all the three years the percentage of deaths due to this cause was higher among females than males.

#### (ii) Tuberculosis

Eventhough the percentage (6.89) of death due to Tuberculosis has shown a declining trend in 1981 (5.04) it has increased to 5.57 in 1982. The disease was more among males during all the three years.

(iii) *Neoplasm*

This disease occupied the second place among the leading causes of death during all the three years 1980 to 1982. The death due to Neoplasms showed a declining trend during the period. Except in 1980, the males outnumbered the females in deaths due to this cause.

(iv) *Diseases of nervous system and sense organs*

The percentage of death due to diseases of nervous system and sense organs has decreased from 5.43 in 1980 to 4.15 in 1981 and then showed a marginal increase in 1982. The percentage of death was higher among females during the three years 1980-82.

(v) *Diseases of the Circulatory system*

This group of diseases continues to be the major cause of deaths in all the three years under study. It is responsible for one-third of the reported deaths. In 1981, the percentage of death due to this cause among males and females was almost equal; during the other years the incidence was higher among males.

(vi) *Diseases of the Respiratory System*

The percentage of death due to this cause of death was more among females during all the three years.

(vii) *Diseases of the digestive system.*

The percentage of death due to this disease has decreased from 5.63 in 1980 to 3.70 in 1981 and 1982. The victims of this disease were more among males than among females.

(viii) *Conditions originating in the perinatal period*

The percentage of death due to perinatal cause has decreased considerably during 1982.

(ix) *Injury and poisoning*

The percentage of death due to injury and poisoning has decreased from 4.36 in 1980 to 3.17 in 1981 and then increased to 3.82 in 1982. Except in 1981 the percentage of death among males was higher.

## 2.4 *Deaths according to age*

The leading causes of death which take their toll from the different segments of the age scale vary considerably. The analysis of age-wise mortality will be helpful to identify these age affinity of diseases. The analysis is attempted in four age groups namely-infants (below 1 year), 1-14 years, 15-44 years and 45 years and above.



*(i) Infant deaths*

Infant deaths accounted for 15.81 percent, 16.01 percent and 15.26 percent of the total deaths studied during the years 1980, 1981 and 1982 respectively. Perinatal cause tops the list of leading cause of death of infants. The percentage of deaths due to this cause were 42.33, 47.63 and 43.59 during the three years. Diseases of the respiratory system was the second major cause of death among the infants. Other outstanding causes of infant deaths were other bacterial diseases and diseases of the circulatory system.

*(ii) 1-14 years*

The percentage of deaths in the age group was less compared to other age groups in all the three years. The figures were 7.17 percent, 10.53 percent and 9.82 percent respectively. During 1980, about 26 percent of the total deaths under this age group was due to diseases of the nervous system and sense organs. The percentage decreased to 17.37 in 1981 and 16.02 in 1982. The other major leading cause of death under this group were diseases of the circulatory system, diseases of the respiratory system and intestinal infectious disease. The percentage of death due to diseases of circulatory system has decreased from 14.28 in 1980 to 12.71 in 1981 and then increased to 20.35 in 1982. The percentage of death due to intestinal infectious disease has increased from 5.19 in 1980 to 16.10 in 1981 and decreased to 14.28 in 1982.

*(iii) 15-44 years*

Deaths under this age group contributed 20.50 percent, 20.52 percent and 20.23 percent of total deaths during the year 1980, 1981 and 1982 respectively. Diseases of the circulatory system was the major cause of death during the three years. Injury and poisoning stands as the second leading cause of death for the years 1981 and 1982. Tuberculosis and Neoplasm are other notable causes of death seen in this age group.

*(iv) 45-years and above*

More than 50 percent of the total deaths reported were in this age group. The figures were 56.16, 52.94 and 56.69 respectively during the year 1980, 1981 and 1982. In this age group also diseases of the circulatory system was the major cause of death. The other major leading causes of death were tuberculosis, diseases of the digestive system etc.

2.5 Details of sex-wise and age-wise deaths are given in table 1.1 & 1.2 of the appendix.

**2.6 Summary**

(i) Disease of the circulatory system is the major cause of death of both among males and females during the years 1980, 1981 and 1982.

(ii) Neoplasm ranked second among the leading causes of death of men and women.

(iii) Intestinal infectious disease, other bacterial diseases, diseases of nervous system and sense organs, diseases of respiratory system and perinatal causes affected females more than males.

(iv) Infant accounted about 15 percent of the total death. More than 42 percent of the infant death is due to perinatal cause.

(v) Disease of the nervous system and sense organs is the major cause of death in the age group 1-14.

(vi) For the age-group 15-44 and 45 and above disease of the circulatory system predomantes.

### 3. CALICUT CORPORATION

As per 1981 Census, the area of the Corporation is 83 sq. km. with a population of 3.94 lakhs. Density of population is 4771 persons per Sq. km. during 1981. The total number of medical notification forms received from Calicut Corporation for 1980, 1981 and 1982 were 3278, 4030 and 1521 respectively.

#### 3.2 Sex-wise distribution of leading causes of death

Distribution of deaths among males and females during the three years 1980, 1981 and 1982 are given in the table below.

<i>Year</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
1980	2156 (65.77)	1122 (34.23)	3278 (100.00)
1981	2668 (66.20)	1362 (33.80)	4030 (100.00)
1982	1030 (67.72)	491 (32.28)	1521 (100.00)

*Note:—*Figures in brackets are percentages)

#### 3.3 The distributuion of deaths due to leading causes are discussed here under

##### (i) *intestinal infectious diseases*

Deaths due to this causes was 4.88 per cent during the year 1980. The percentage of deaths has increased to 5.71 in 1981. In 1982 it has decreased to 4.93. The incidence of death due to this disease is more among females in all the three years.

(ii) *Tuberculosis*

The percentage of death due to Tuberculosis has decreased from 7.08 in 1980 5.19 in 1982. The victims of this disease were among males in all the three years.

(iii) *Other bacterial diseases*

The percentage of deaths due to this cause was 6.31, 6.40 and 6.26 respectively during the three years under review. The percentage of female death was higher in all the three years.

(iv) *Neoplasm*

The greatly feared Neoplasm occupied the second rank next to diseases of the circulatory system on the major cause of death during the year 1980 and 1981. The victims of this disease were more among males during all the years.

(v) *Diseases of the Circulatory system*

About one fourth of the total death reported were due to this disease. Males outnumbered females in all the three years.

(vi) *Disease of the respiratory system.*

The percentage of death due to this disease has decreased from 8.57 in 1980 to 6.80 in 1981 and then increased to 7.82 in 1982. The percentage of death among females are higher than the male deaths.

(vii) *Certain conditions originating in the perinatal period*

Death due to this cause was 8.39 per cent in 1980, 7.39 per cent in 1981 and 9.80 per cent in 1982.

(viii) *Injury and poisoning*

Death due to injury and poisoning has considerably decreased from 8.54 per cent in 1980 to 2.07 per cent in 1982.

### 3.4 *Deaths according to age distribution*

(i) *Infants (below 1 year)*

Infant death forms 20.59 per cent 21.27 percent and 22.62 per cent of the total deaths during the years 1980, 1981 and 1982. Perinatal cause tops the list of leading causes of death of infants. Other bacterial diseases, diseases of the respiratory system and intestinal infectious diseases are the other leading causes a of death of infants.

## (ii) 1-14 years

11.62 percent of total deaths during the year 1980 occurred under this age-group. In the two subsequent years, the percentage of death increased to 12.26 and 13.87. During 1980, 22.84 percent of the total deaths under this age group were due to diseases of nervous system and sense organs. This percentage has decreased to 5.67 percent in 1981 and 3.32 in 1982 respectively. The other major leading causes of death under this age group were intestinal infectious disease, diseases of the respiratory system, viral diseases etc. The percentage of deaths due to intestinal infectious diseases has increased from 19.65 in 1980 to 14.78 in 1981 and then decreased to 12.80 in 1982. Death due to diseases of the respiratory system has decreased from 12.07 percent in 1980 to 10.73 percent in 1981 and then increased to 19.43 percent in 1982.

## (iii) 15-44 year

The percentage of deaths under this age group increased from 22.82 in 1980 to 24.14 in 1981 and then to 25.12 in 1982. Diseases of the circulatory system was the leading causes of death under this age group. The percentage of death due to diseases of the circulatory system were 19.52, 20.76 and 29.58 during the years 1980, 1981 and 1982. The other major leading causes of death under this age group were tuberculosis, Neoplasm, diseases of the respiratory system, other bacterial diseases etc. The death due to tuberculosis showed a decreasing trend under this age group. The percentage of deaths due to Neoplasm has increased from 8.96 in 1980 to 12.95 in 1981 and then decreased to 7.33 in 1982.

## (v) 45 and above

The percentage of deaths in this age group decreased from 44.97 in 1980 to 42.33 in 1981 and then to 38.39. Diseases of the circulatory system proved to be the major cause under this age group. The percentage of death due to diseases of the circulatory system were 40.84, 39.68 and 44.52 during the three years. Neoplasm, Tuberculosis and diseases of the respiratory system are the other leading causes of death in this age group.

3.5 The details of sex wise and age wise deaths are given in Table 2.1 & 2.2 of the appendix.

## 3.6 Summary

(i) Diseases of the circulatory system continues to be the major cause of death in all the three years followed by Neoplasm and disease of the respiratory system.

(ii) Percentage of female deaths is higher in deaths due to intestinal infectious disease, other bacterial diseases, viral diseases, disease of the nervous system and sense organs and diseases of the respiratory system.

(iii) More than 40 per cent of the infant deaths are due to perinatal cause. Even though diseases of the nervous system and sense organs was the major cause of death in 1980, the percentage of death due to this cause decreased considerably during 1981 and 1982.

(iv) Viral diseases was the major cause of death during 1981 whereas disease of the respiratory system occupied the first place among the major killer diseases during 1982.

#### 4. QUILON MUNICIPALITY

As per 1981 census population of Quilon Municipality is 1.38 lakhs with an area of 18 sq. km. The density of population of the town is 7464 per sq. km. The literacy rate is 76.03%.

The total number of deaths reported were 1161, 1227 and 1390 during the three years 1980, 1981 and 1982.

##### 4.2 Sexwise distribution of the leading causes of death:

The percentages of male mortality and female mortality cases reported during the three years are given below:

<i>Year</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
1980	697 (60.03)	464 (39.97)	1161 (100)
1981	735 (59.90)	492 (40.10)	1227 (100)
1982	852 (61.29)	538 (38.71)	1390 (100)

*Note:* Figures in brackets are percentages.

##### 4.3 Sex-wise distribution of deaths due to leading causes is given below:—

###### (i) *Intestinal infectious disease:*

The percentage of deaths due to this disease was 6.55 during the year 1980. It decreased to 3.99 percent in 1981 and then increased to 5.54 in 1982. The percentage of death was fluctuating both among males and females.

*(ii) Tuberculosis:*

This disease caused 4.91 percent, 5.87 percent and 5.76 percent of the total deaths reported in 1980, 1981 and 1982 respectively. The victims of the disease were more among males during all the three years.

*(iii) Diseases of the circulatory system:*

Diseases of the circulatory system caused the highest percentage of deaths during all the three years. This disease was more common among males than females.

*(iv) Diseases of the Respiratory system:*

9.65 percent of the deaths in 1980, 9.05 percent and 10.72 percent of the total deaths were caused due to diseases of the respiratory system. Percentage of female deaths are found to be higher than male deaths during the years 1980 and 1981.

*(v) Perinatal cause:*

The percentage of death due to perinatal cause was 7.58 percent in 1980, 8.88 percent in 1981 and 7.55 percent in 1982. Percentage of female deaths was higher than male deaths.

*(vi) Signs, Symptoms and ill defined conditions:*

The percentage of deaths due to this item showed a decreasing trend. Female deaths are found to be higher than male deaths during the years 1980 and 1982.

*4.4. Deaths according to age groups:**(i) Infant death:*

Infant death accounted for 16.71 percent, 19.56 percent and 17.55 percent of the total deaths during the years 1980, 1981 and 1982. Perinatal cause tops the list of the leading causes of death of infants. Diseases of the respiratory system, intestinal infectious disease and diseases of the nervous system and ill defined conditions are the other leading causes of death.

*(ii) 1-14 years:*

Percentage of deaths is lowest in this age group in all the three years. Intestinal infectious disease was the major cause of deaths during 1980 and 1982. The percentage of deaths due to this cause has increased considerably during 1982. The other major leading causes of death under this age group were diseases of the respiratory system, diseases of the nervous system and sense organs, diseases of the circulatory system and other bacterial diseases.

## (iii) 15-44 years:

Death under this age group contributed 19.90 percent, 20.46 percent and 19.21 percent of total deaths during the years 1980, 1981 and 1982 respectively. Diseases of the circulatory system occupies the first position in all the three years. The respective percentages were 48.07 per cent, 44.89 percent and 46.31 percent. The other major leading causes of death under this age group were tuberculosis and diseases of the respiratory system and ill defined conditions.

## (iv) 45 and above:

About 50 percent of the total deaths reported were under the age-group. In Quilon Municipality also diseases of the circulatory system was the major cause of death. Tuberculosis, diseases of the respiratory system, diseases of the digestive system, and ill defined conditions are the other major leading causes of death under this age group.

4.5 The age-wise and sex-wise distribution of deaths are given in tables 3.1 and 3.2 of the appendix.

## 4.6 Summary

(i) Most significant cause of death during the three years was disease of the circulatory system.

(ii) Mortality due to diseases of the circulatory system and tuberculosis are seen more among males while perinatal causes takes the highest toll of life from female infants.

(iii) The percentage of death due to diseases of nervous system and sense organs are found to be higher in females during the years 1981 and 1982.

(iv) Above 40 percent of the infant deaths are due to perinatal causes. Intestinal infectious disease is the major cause of death in the age group 1-14 during 1980 and 1982.

(v) Diseases of the circulatory system is the major cause of death in the age group 15-44 and 45 and above.

## 5. ALLEPPEY MUNICIPALITY

As per 1981 census, population of Alleppey Municipality is 1.70 lakhs with an area of 47. Sq. Km. The density of population of the city is 3634 persons per Sq. Km.

In the year 1980, a total of 1013 medical notification forms were received from Alleppey Municipality. The cases reported during 1981 and 1982 were 1220 and 1284 respectively.

### 5.2. Sex-wise distribution of the leading causes of death

Table given below shows the distribution of deaths among males and females during the three year 1980, 1981 and 1982.

<i>Year</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
1980	622 (61.40)	391 (38.60)	1013 (100)
1981	769 (63.03)	451 (36.97)	1220 (100)
1982	899 (63.79)	465 (36.21)	1284 (100)

*Note.* \*F.igures in brackets are percentages.

*Distribution of deaths due to leading causes is discussed hereunder.*

#### (i) *Intestinal infectious disease*

The percentage of death due to this disease was 3.46 during the year 1980. It decreased to 2.95 in 1981 and then increased to 3.43 in 1982. The percentage of death was higher among females during the two years 1981 and 1982 due to this cause.

#### (ii) *Tuberculosis*

The percentage of death due to Tuberculosis showed a decreasing trend from 8.88 to 7.30 in 1981, then increased to 8.25 in 1982. The victims of this disease were more among males during the three years.

#### (iii) *Other bacterial diseases*

Other bacterial diseases caused 4.44 per cent, 7.21 per cent and 5.45 percent of the total death during 1980, 1981 and 1982. The percentage of female deaths was higher than male deaths in all the three years.

#### (iv) *Neoplasms*

The percentage of death showed an increasing trend. The victims of this disease were more among males in all the three years.

#### (v) *Diseases of nervous system and sense organs*

The percentage of death due to this disease was 6.02 in 1980. It suddenly decreased to 1.72 in 1981 and went up to 2.57 in 1982. Percentage of female deaths are found to be higher than male deaths during the three years.

#### (vi) *Diseases of the Circulatory system*

Above one fourth of the total deaths is due to this cause. Diseases of circulatory system affected males more than females.



(vii) *Disease of the respiratory system*

The percentage of deaths due to this cause showed a decreasing trend during the three years under review. Male deaths are higher than female deaths in all the three years.

(viii) *Diseases of the digestive system*

The percentage of death due to this cause during the three years were 1.28, 6.89 and 5.06 respectively. In this case also male deaths were higher than female deaths.

(ix) *Certain conditions originating in the perinatal period*

Death due perinatal cause decreased from 3.16 per cent to 0.39 per cent in 1982.

(x) *Signs, Symptoms and ill defined conditions*

The percentage of death on this account has showed a decreasing trend in 1981 and 1982. Male deaths were higher than female deaths in all the three years.

5.4. *Deaths according to age distribution*(i) *Infant death*

Infant death accounted for 13.23 per cent, 10.25 per cent and 12.62 per cent of the total death during the years 1980, 1981 and 1982. Perinatal cause tops, the list of the leading causes of death of infants in 1980. But during 1981 and 1982 the percentage of death due to this cause was very low 4.80 and 2.47 respectively. The other major leading causes of death were other bacterial diseases, diseases of the respiratory system and diseases of the circulatory system.

(ii) *1—14 years*

The percentage of death under this age group increased from 15.00 in 1980 to 20.98 in 1981 and then decreased to 12.85 in 1982. During 1980, about 20 percent of total deaths under this age group were due to diseases of the respiratory system. This percentage decreased to 8.99 and 6.06 in 1981 and 1982 respectively. The other major leading causes of death under this age group were other bacterial diseases, diseases of the circulatory system and intestinal infectious disease.

(iii) *15—44 years*

21.92 per cent of total deaths during the year 1980 occurred under this age group. In 1981 the percentage of death decreased to 20.33 and then

increased to 21.42 in 1982. Diseases of the circulatory system was the major disease under this age group. The percentage of death due to this cause has showed a decreasing trend in all the three years. The other major leading causes of death under this age group were tuberculosis, Neoplasm and diseases of the respiratory system.

(iv) 45 and above

This age group contributed to 49.16 per cent 48.36 per cent and 52.80 per cent of the total deaths studied during the years 1980, 1981 and 1982. Diseases of the circulatory system continues to be the major cause of death in the three years under study. Tuberculosis, diseases of the respiratory system and Neoplasm are the other leading causes of death under this age group.

Age was not reported for 0.69 per cent of total death in 1980, 0.08 per cent in 1981 and 0.31 per cent in 1982.

5.5 The age-wise and sex-wise distribution of deaths due to causes are are given in table 4.1 and 4.2 of the appendix.

*Summary*

(i) Most significant cause of death during the three years are noted to be the diseases of the circulatory system.

(ii) Diseases of the circulatory system, Tuberculosis and Neoplasm are higher among males while the percentage of death due to diseases of the nervous system and sense organs and other bacterial diseases are higher among females.

(iii) There was considerable decrease infant deaths due to perinatal causes in 1981 and 1982. Diseases of the urinary system was the major disease among infants in 1981 and 1982.

(iv) Diseases of the respiratory system occupied the number one position in the age group 1-14.

(v) In the age group 15-44 and 45 (and above) diseases of the Circulatory system was the major cause of death.

## 6. A COMPARATIVE STUDY OF LEADING CAUSES OF DEATH IN COCHIN, CALICT, QUILON AND ALLEPPEY.

6.1 The details of comparison among the four centres are given in table 5 appended.

6.2 The percentage of death due to intestinal disease is comparatively lower in Cochin.

6.3 Deaths due to Tuberculosis are comparatively higher in Alleppey

6.4 The percentage of death due to other bacterial diseases is fluctuating during these years in all the four centres under report.

6.5 The percentage of death due to Neoplasm is comparatively lower in Quilon and Alleppey.

6.6 During the three years diseases of the circulatory system group occupied first rank. Further a continuous rise in the percentage of death is noted in Cochin. In Calicut, Quilon and Alleppey it is fluctuating during 1980, 1981 and 1982.

6.7 The percentage of death due to diseases of the respiratory system is fluctuating in all the four centres.

6.8 In Alleppey Municipality, the percentage of deaths due to perinatal cause is very low compared to other centres.

TABLE 1.1

**Sex-wise details of medically certified deaths in Cochín**

Sl. No.	Code No.	Cause of death	1980		
			Male	Female	Total
1	I (001-009)	Intestinal infectious diseases	9 (1.36)	11 (2.99)	20 (1.94)
2	I (010-018)	Tuberculosis	57 (8.60)	14 (3.80)	71 (6.99)
3	I (020-041)	Other bacterial diseases	24 (3.62)	16 (4.35)	40 (3.88)
4	I (045-079)	Viral diseases	31 (4.68)	13 (3.53)	44 (4.27)
5	II (140-239)	Neoplasms	60 (9.05)	35 (9.51)	126 (8.97)
6	III (240-279)	Nutritional and Metabolic diseases & Immunity disorders	23 (3.47)	13 (3.53)	36 (3.49)
7	VI (320-389)	Diseases of nervous system and sense organs	35 (5.28)	21 (5.71)	56 (5.43)
8	VII (350-459)	Diseases of the circulatory system	227 (34.24)	108 (29.35)	335 (32.49)
9	VIII (460-519)	Diseases of the Respiratory system	52 (7.84)	39 (10.60)	91 (8.83)
10	IX (520-579)	Diseases of the digestive system	47 (7.09)	11 (2.99)	58 (5.63)
11	X (580-629)	Diseases of urinary system	13 (1.96)	13 (3.53)	26 (2.52)
12	XV (760-779)	Certain conditions originating in the perinatal period	36 (5.43)	34 (9.24)	70 (6.79)
13	XVI (780-799)	Signs, symptoms & illdefined conditions	4 (0.60)	4 (1.09)	8 (0.78)
14	XVII (800-999)	Injury & poisoning	29 (4.37)	16 (4.35)	45 (4.36)
15		Others	16 (2.41)	20 (5.43)	36 (3.49)
Total			663 (100.0)	368 (100.0)	1031 (100)

## Corporation during the years 1980, 1981, 1982

1981			1982		
<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Femal</i>	<i>Total</i>
55 (3.91)	40 (4.78)	95 (4.24)	45 (2.86)	40 (5.12)	85 (3.61)
92 (6.55)	21 (2.51)	113 (5.04)	105 (6.68)	26 (9.33)	131 (5.57)
42 (2.99)	34 (4.06)	76 (3.39)	37 (2.35)	42 (5.38)	79 (3.36)
46 (3.27)	17 (2.03)	63 (2.81)	61 (3.88)	22 (2.82)	83 (9.53)
67 (8.00)	193 (8.61)	126 (8.03)	61 (7.81)	61 (7.81)	187 (7.95)
25 (1.78)	16 (1.91)	41 (1.83)	36 (2.29)	19 (2.43)	55 (2.34)
49 (3.49)	44 (5.26)	93 (4.15)	55 (3.50)	43 (5.51)	98 (4.16)
528 (37.58)	314 (37.52)	842 (37.55)	609 (38.74)	282 (36.11)	891 (37.88)
72 (5.12)	58 (6.93)	130 (5.80)	87 (5.53)	62 (7.94)	149 (6.33)
64 (4.56)	19 (2.27)	83 (3.70)	69 (4.39)	18 (2.3)	87 (3.70)
31 (2.21)	12 (1.43)	43 (1.92)	39 (2.48)	23 (2.94)	62 (2.63)
95 (6.76)	76 (9.08)	171 (7.63)	90 (7.63)	90 (5.73)	142 (69.0)
73 (5.20)	39 (4.66)	112 (4.99)	40 (2.54)	20 (2.56)	60 (2.57)
35 (2.49)	36 (4.30)	71 (3.17)	61 (3.88)	29 (3.71)	90 (3.82)
72 (5.12)	44 (5.26)	116 (5.17)	112 (7.12)	42 (5.38)	154 (6.54)
1405 (100)	897 (100)	2242 (100)	1572 (100)	781 (100)	2353 (100)

TABLE

## Statement showing the leading causes of death in

Sl. No.	Code No.	Cause of Death	1980				Total
			1 Year	1-14	15-44	45+	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	I (001-009)	Intestinal Infectious diseases	8 (4.91)	4 (5.19)	1 (0.47)	7 (1.21)	20 (1.94)
2.	I (010-018)	Tuberculosis	1 (0.61)		27 (12.73)	43 (7.34)	71 (6.89)
3.	I (020-041)	Other bacterial diseases	15 (9.62)	10 (12.99)	9 (4.25)	6 (1.04)	40 (3.88)
4.	I (045-079)	Viral diseases	2 (1.23)	9 (11.69)	15 (7.08)	18 (3.11)	44 (4.27)
5.	II (140-239)	Neoplasms		3 (3.90)	20 (9.43)	72 (12.43)	95 (9.21)
6.	III (240-279)	Nutritional & Metabolic diseases & immunity disorders	1 (0.61)	3 (3.90)	3 (1.41)	29 (5.01)	36 (3.49)
7.	VI (320-389)	Diseases of the Nervous system & sense organs	8 (4.91)	20 (25.97)	15 (7.08)	13 (2.25)	56 (5.43)
8.	VII (350-459)	Diseases of the circulatory system	11 (6.75)	11 (14.28)	54 (25.47)	259 (44.73)	335 (32.49)
9.	VIII (460-519)	Diseases of the respiratory system	29 (17.79)	11 (14.28)	9 (4.25)	42 (7.25)	91 (8.83)
10.	IX (520-579)	Diseases of the digestive system	7 (4.36)		8 (3.77)	43 (7.43)	58 (5.63)
11.	X (580-629)	Diseases of Urinary system		2 (2.60)	9 (4.25)	15 (2.59)	26 (0.52)
12.	XV (760-779)	Conditions originating in the natal period	69 (42.33)			1 (0.17)	70 (6.79)
13.	XVI (780-799)	Signs, symptoms & ill defined conditions	2 (1.23)		5 (2.36)	1 (0.17)	8 (0.78)
14.	XVII (800-999)	Injury & Poisoning	1 (0.61)	2 (2.60)	26 (12.26)	16 (2.76)	45 (4.36)
		Others	9 (5.52)	2 (2.6)	11 (5.19)	14 (2.42)	36 (3.49)
15.		Total	163 (100.00)	77 (100.0)	212 (100.0)	579 (100.0)	1031 (100.0)
			(15.81)	(74.7)	(20.56)	(56.16)	(100.0)

Note: Figures in brackets are percentage.

1.2.

**Cochin Corporation according to age Groups**

1981					1982				
<i>1 Year</i>	<i>1-14</i>	<i>15-44</i>	<i>45+</i>	<i>Total</i>	<i>1 Year</i>	<i>1-14</i>	<i>15-44</i>	<i>45+</i>	<i>Total</i>
(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(19)
23	38	10	24	95	17	33	11	24	85
(6.41)	(16.10)	(2.17)	(2.02)	(4.24)	(5.45)	(14.28)	(2.31)	(1.80)	(3.61)
1	4	21	87	113	7	30	94	131	131
(0.28)	(1.69)	(4.56)	(7.33)	(5.04)	(3.03)	(6.30)	(7.05)	(5.57)	(5.57)
28	17	11	20	76	27	13	14	25	79
(7.80)	(7.20)	(2.39)	(1.68)	(3.39)	(8.65)	(5.63)	(2.94)	(1.87)	(3.36)
4	15	20	26	63	4	15	29	35	83
(1.11)	(6.36)	(4.33)	(2.02)	(2.81)	(1.28)	(6.49)	(6.09)	(2.62)	(3.53)
1	6	41	145	193	2	3	37	145	187
(0.28)	(2.54)	(8.91)	(12.22)	(8.61)	(0.64)	(1.30)	(7.77)	(10.87)	(7.95)
3	5	5	28	41	1	4	7	43	55
(0.83)	(2.12)	(1.09)	(2.36)	(1.83)	(0.32)	(1.73)	(1.47)	(3.22)	(2.34)
12	41	22	18	93	16	37	25	20	98
(3.34)	(17.37)	(4.78)	(1.52)	(4.15)	(5.13)	(16.02)	(5.25)	(1.59)	(4.16)
36	30	155	621	842	26	47	135	683	891
(10.03)	(12.71)	(33.70)	(52.32)	(37.55)	(8.34)	(20.35)	(28.37)	(51.20)	(37.88)
36	31	12	51	130	55	16	13	65	149
(10.03)	(13.14)	(2.61)	(4.30)	(5.80)	(17.63)	(6.93)	(2.73)	(4.87)	(6.33)
5	11	23	44	83	3	10	12	62	87
(1.39)	(4.66)	(5.00)	(3.71)	(3.70)	(0.96)	(4.33)	(2.52)	(4.65)	(3.70)
2	2	5	34	43		9	13	40	62
(0.56)	(3.85)	(1.09)	(2.86)	(1.92)		(3.89)	(2.73)	(3.00)	(2.63)
171				171	136	4	1	1	142
(47.69)				(7.63)	(43.59)	(1.73)	(0.21)	(0.03)	(6.03)
14	14	39	45	112	6	6	22	26	60
(3.90)	(5.93)	(8.48)	(3.79)	(4.99)	(1.92)	(2.60)	(4.62)	(1.95)	(2.55)
1	12	45	13	71		4	59	27	90
(0.28)	(5.09)	(9.78)	(1.09)	(3.17)		(1.73)	(12.4)	(2.02)	(3.82)
22	10	51	33	116	19	23	68	44	154
(6.13)	(4.24)	(11.09)	(2.78)	(5.17)	(6.09)	(9.96)	(14.29)	(3.30)	(6.54)
359	236	460	1187	2243	312	231	476	1334	2953
(100.0)	(110.0)	(110.)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)
(16.01)	(10.53)	(20.52)	(52.94)	(100)	(13.26)	(9.82)	(20.23)	(56.69)	(100.0)

**Sex-wise details of Medically Certified Deaths in**

<i>Sl. No.</i>	<i>Code No.</i>	<i>Cause of death</i>	1980		
			<i>Male</i>	<i>Female</i>	<i>Total</i>
(1)	(2)	(3)	(4)	(5)	(6)
1	I (001-009)	Intestinal infections disease	74(3.43)	86(7.66)	160(4.88)
2	I (010-018)	Tuberculosis	169(7.42)	72 (6.42)	232(7.08)
3	I(020-041)	Other bacterial diseases	117(5.43)	90(8.02)	207(6.31)
4	I(045-079)	Viral diseases	42(1.95)	24(2.14)	66(2.01)
5	II(140-239)	Neoplasm	226(10.48)	60(5.35)	286(8.73)
6	III(240-279)	Nutritional & metabolic diseases & Immunity diseases	88 (4.08)	45(4.01)	133 (4.06)
7	VI (320-369)	Diseases of nervous system and sense organs	168(7.79)	100(8.91)	268(8.18)
8	VII(350-459)	Diseases of the Circulatory systems	579(26.96)	211(18.81)	790(24.10)
9	VIII(460-519)	Diseases of the respiratory system	172(7.98)	109(9.71)	281(8.57)
10	IX(520-579)	Diseases of the digestive system	25 (1.16)	6(0.53)	31(0.96)
11	X(580-629)	Diseases of urinary system	4(0.19)	3(0.27)	7(0.21)
12	XV(760-779)	Certain conditions originating in the perinatal period	148(6.86)	127(11.32)	275(8.39)
13	XVII(780-799)	Signs, Symptoms & ill defined conditions	69(3.20)	39(3.48)	108(3.29)
14	XVII(800-999)	Injury & poisoning	217(10.06)	63(5.62)	280(8.54)
15		Others	67(3.11)	87 (7.75)	154(4.70)
Total			2156 (100)	1122(100)	3278(100)



2.1.

**Calicut Corporation during the year 1980, 1981 and 1982.**

1981			1982		
<i>Male</i>	<i>Female</i>	<i>Total</i>	<i>Male</i>	<i>Female</i>	<i>Total</i>
(7)	(8)	(9)	(10)	(11)	(12)
131(4.91)	99(7.27)	230(5.71)	35(3.40)	40(8.15)	75(40.93)
185(6.93)	62(4.55)	247(6.13)	68(6.60)	11(2.24)	79(5.19)
157(5.88)	101(7.42)	258(6.40)	60(5.83)	35(7.13)	95(6.25)
164(6.15)	86(6.31)	250(6.20)	32(3.11)	17(3.46)	49(3.22)
304(11.39)	125(9.18)	429(10.65)	88(8.54)	39(7.94)	127(8.59)
76(2.85)	28(2.06)	104(2.58)	26(2.52)	8(1.63)	34(2.24)
84(3.15)	56(4.11)	140(3.47)	25(2.43)	18(3.67)	43(2.83)
640(23.99)	270(19.82)	910(22.59)	279(27.09)	118(24.03)	397(26.10)
150(5.63)	124(9.10)	274(6.80)	78(7.58)	41(8.95)	119(7.82)
150(5.63)	48(3.52)	198(4.92)	50(4.85)	18(3.67)	68(4.47)
24(0.90)	10(0.73)	34(0.84)	20(1.94)	8(1.63)	28(1.84)
165(6.18)	133(9.77)	298(7.39)	88(8.54)	61(12.42)	149(9.80)
163(6.11)	72(5.29)	235(5.83)	33(2.30)	4(0.81)	737(2.43)
34(1.27)	25(1.84)	59(1.46)	22(2.14)	19(3.87)	41(2.70)
241(9.03)	123(9.03)	364(9.03)	126(12.23)	54(11.00)	180(11.93)
2668(100)	1362(100)	4030(100)	1030(100)	491(100)	1521(100)

TABLE

## Statement showing the leading causes of

Sl. No.	Code No.	Cause of Death	1980				Total
			below 1 year	1-14	15-44	45..	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	I (001-009)	Intestinal infectious diseases	40 (5.93)	52 (13.65)	21 (2.81)	47 (3.19)	160 (4.88)
2	I (010-018)	Tuberculosis	21 (3.11)	20 (3.25)	74 (9.89)	117 (7.94)	232 (7.08)
3	I (020-041)	Other bacterial diseases	89 (13.19)	39 (10.24)	50 (6.63)	29 (1.97)	207 (6.31)
4	I (045-079)	Viral diseases	6 (0.89)	21 (5.51)	25 (3.31)	14 (0.95)	66 (2.01)
5	II (040-239)	Neoplasms	6 (0.89)	12 (0.35)	67 (8.96)	201 (13.64)	286 (8.73)
6	III (240-279)	Nutritional & Metabolic disease & immunity disorders	14 (2.07)	13 (3.41)	23 (3.08)	133 (5.63)	83 (4.06)
7	VI (320-359)	Diseases of Nervous system & sense organs	70 (10.37)	87 (22.84)	59 (7.89)	52 (3.53)	268 (8.18)
8	VII (350-459)	Diseases of the Circulatory system	14 (2.07)	28 (7.35)	146 (19.52)	602 (40.84)	790 (24.10)
9	VIII (460-519)	Diseases of the Respiratory system	87 (12.89)	46 (13.07)	39 (5.21)	109 (7.39)	281 (8.57)
10	IX (520-579)	Diseases of the digestive system	3 (0.44)	1 (0.26)	6 (0.80)	21 (1.42)	31 (0.95)
11	X (580-629)	Diseases of Urinary system	1 (0.15)	2 (0.53)	1 (0.13)	3 (0.20)	7 (0.21)
12	XV (760-779)	Conditions originating in the perinatal period	271 (40.15)	1 (0.26)	2 (0.27)	1 (0.07)	275 (8.39)
13	XVI (780-799)	Signs, Symptoms & ill defined conditions	10 (1.48)	8 (2.10)	27 (3.71)	63 (4.27)	108 (3.29)
14	XVII (800-999)	Injury & Poisoning	2 (0.30)	39 (9.97)	151 (20.19)	89 (6.04)	280 (8.54)
15		Others	41 (6.07)	13 (3.41)	57 (7.62)	43 (2.92)	154 (4.70)
		Total:	675 (100.00)	381 (100.00)	718 (100.00)	1474 (100.00)	3278 (100.00)
			(20.59)	(11.62)	(22.82)	(11.97)	(100.00)

Note: Figures in brackets are percentages.

## 2.2

**Death in Calcut Corporation According to age group**

1981					1982				
<i>below</i>	1-14	15-44	45+	<i>Total</i>	<i>below</i> 1 year	1-14	15-44	45+	<i>Total</i>
(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
94 (10.97)	73 (14.78)	24 (2.47)	39 (2.29)	230 (5.71)	28 (8.14)	27 (12.80)	14 (3.66)	6 (1.03)	75 (4.93)
36 (4.20)	37 (7.49)	77 (7.91)	97 (5.69)	247 (6.13)	6 (1.75)	9 (4.27)	27 (7.07)	37 (6.34)	79 (5.19)
140 (16.34)	37 (7.49)	44 (4.52)	37 (2.17)	258 (6.40)	50 (14.54)	15 (7.11)	17 (4.45)	13 (2.23)	95 (6.25)
65 (7.58)	116 (23.48)	50 (5.14)	9 (1.11)	250 (6.20)	10 (2.91)	30 (14.22)	6 (1.57)	3 (0.51)	49 (3.22)
5 (0.58)	26 (5.26)	126 (12.95)	272 (15.94)	429 (10.65)		15 (7.11)	28 (7.33)	84 (14.38)	127 (8.35)
12 (1.40)	12 (2.43)	15 (1.54)	65 (3.81)	104 (2.58)	5 (1.45)	2 (0.95)	3 (0.79)	24 (4.11)	34 (2.24)
52 (6.07)	28 (5.67)	27 (2.77)	33 (1.94)	140 (3.47)	16 (4.65)	7 (3.32)	11 (2.88)	9 (1.51)	43 (2.83)
11 (1.28)	20 (4.05)	202 (20.76)	677 (39.68)	910 (22.59)	13 (3.78)	11 (5.21)	113 (29.58)	260 (44.52)	390 (26.17)
78 (9.10)	53 (10.73)	42 (4.32)	101 (5.92)	274 (6.80)	30 (8.72)	41 (19.43)	15 (3.93)	33 (5.65)	119 (7.82)
19 (2.22)	14 (2.83)	74 (7.61)	91 (5.33)	198 (4.92)	4 (1.16)	9 (4.26)	31 (8.11)	24 (4.11)	68 (4.47)
4 (0.47)	6 (0.21)	10 (1.03)	14 (0.82)	34 (0.84)	5 (1.45)	6 (2.84)	5 (1.31)	12 (2.05)	28 (2.05)
292 (31.07)	4 (0.81)	2 (0.21)		298 (7.40)	147 (12.23)	1 (0.47)	1 (0.26)		149 (9.80)
25 (2.92)	23 (4.66)	66 (6.78)	121 (7.90)	235 (5.83)	3 (0.87)	3 (1.42)	10 (2.62)	21 (3.60)	37 (2.43)
3 (0.35)	9 (1.82)	32 (3.29)	15 (0.80)	59 (1.47)	2 (0.58)	10 (4.74)	21 (5.50)	8 (1.37)	41 (2.70)
21 (2.45)	36 (7.29)	28 (18.70)	125 (7.33)	364 (9.03)	25 (7.27)	25 (11.85)	80 (20.94)	50 (8.56)	180 (11.83)
857 (100.0)	494 (100.0)	973 (100.0)	1706 (100.0)	4030 (100.0)	344 (100.0)	211 (100.0)	382 (100.0)	584 (100.0)	1521 (100.0)
(21.27)	(12.26)	(24.14)	(42.33)	(100.00)	(22.62)	(13.87)	(25.12)	(33.35)	(100.00)

TABLE

## Sexwise details of Medically Certified deaths in Quilon

<i>Sl. No.</i>	<i>Code No.</i>	<i>Cause of death</i>	<i>Male</i>	<i>1980. Female</i>	<i>Total</i>
(1)	(2)	(3)	(4)	(5)	(6)
1	I	(001-009) Intestinal infectious disease	46 (6.60)	30 (6.46)	76 (5.55)
2	I	(010-018) Tuberculosis	43 (6.17)	14 (3.02)	57 (4.91)
3	I	(020-041) Other bacterial diseases	26 (3.73)	18 (3.88)	44 (3.79)
4	I	(045-079) Viral diseases	13 (1.87)	7 (1.51)	20 (1.72)
5	II	(140-239) Neoplasms-	21 (3.01)	9 (1.94)	30 (2.58)
6	III	(240-279) Nutritional and Metabolic diseases and immunity disorders	23 (3.30)	17 (3.56)	40 (3.45)
7	VI	(320-389) Diseases of the nervous system and sense organs	47 (6.74)	27 (5.82)	74 (6.37)
8	VII	(350-459) Diseases of the Circulatory System	236 (33.86)	123 (26.51)	359 (30.92)
9	VIII	(460-519) Diseases of the Respiratory System	58 (8.32)	54 (11.64)	112 (9.65)
10	IX	(520-579) Diseases of the digestive System	10 (1.43)	2 (0.43)	12 (1.03)
11	X	(580-629) Diseases of Urinary System		2 (0.43)	2 (0.17)
12	XV	(760-779) Certain conditions originated in the Perinatal period	41 (5.88)	47 (10.15)	88 (7.58)
13	XVI	(780-799) Signs, symptoms and ill-defined conditions	89 (12.77)	70 (15.99)	159 (13.70)
14	XVII	(800-999) Injury and Poisoning	2 (0.29)	5 (1.08)	7 (0.60)
15		Others	42 (6.03)	39 (8.40)	81 (6.90)
		Total	697 (100.00)	464 (100.00)	1161 (100.00)

Note: Figures in brackets are percentages.

1.1

## MUNICIPALITY DURING THE YEAR 1980, 1981, 1982.

<i>Male</i>	<i>1981 Female</i>	-	<i>Total</i>	<i>Male</i>	<i>1982 Female</i>	<i>Total</i>
(7)	(8)		(9)	(10)	(11)	(12)
24 (3.27)	25 (5.08)		49 (3.99)	48 (5.63)	29 (5.39)	77 (5.54)
51 (6.94)	21 (4.27)		72 (5.87)	57 (6.69)	23 (4.28)	80 (5.76)
27 (3.67)	28 (5.69)		55 (4.48)	28 (3.29)	31 (5.76)	59 (4.24)
9 (1.22)	1 (0.20)		10 (0.82)	6 (0.70)	9 (1.67)	15 (1.08)
32 (4.35)	16 (3.25)		48 (3.91)	29 (3.40)	9 (1.67)	38 (2.79)
20 (2.72)	22 (4.47)		42 (3.42)	36 (4.23)	17 (3.16)	53 (3.81)
28 (3.81)	31 (6.30)		59 (4.81)	44 (5.16)	30 (5.58)	74 (5.32)
212 (29.53)	119 (24.19)		336 (27.39)	246 (28.87)	144 (26.77)	390 (28.06)
62 (68.43)	49 (9.96)		111 (9.05)	93 (10.92)	56 (10.41)	149 (10.72)
63 (8.57)	24 (4.88)		87 (7.09)	64 (7.51)	33 (6.13)	97 (6.98)
21 (2.86)	6 (1.22)		27 (2.20)	28 (3.29)	19 (3.53)	47 (3.38)
12 (7.08)	57 (11.59)		109 (8.88)	55 (6.45)	50 (9.29)	105 (7.55)
60 (8.16)	34 (6.91)		94 (7.66)	61 (7.16)	40 (7.43)	101 (7.27)
41 (5.58)	31 (6.30)		72 (5.87)	40 (4.70)	25 (4.63)	65 (4.68)
28 (3.81)	28 (5.69)		56 (4.56)	17 (2.00)	23 (4.28)	40 (2.88)
795(100.00)	492(100.00)		1227(100.00)	852(100.00)	538(100.00)	1390(100.00)

TABLE

## Statement showing the leading causes of deaths

Sl. No.	Code No.	Cause of death	1980				
			1	1-14	15-44	45+	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	I	(001-009) Intestinal infectious disease	12 (6.19)	31 (16.06)	12 (5.20)	21 (3.87)	76 (6.55)
2	I	(010-018) Tuberculosis		4 (2.07)	10 (4.33)	43 (7.92)	57 (4.91)
3	I	(020-041) Other bacterial diseases	4 (2.06)	21 (10.88)	12 (5.19)	7 (1.29)	44 (3.79)
4	I	(045-079) Viral diseases	3 (1.55)	7 (3.63)	4 (1.73)	6 (1.10)	20 (1.72)
5	II	(140-239) Neoplasma			7 (3.03)	23 (4.24)	30 (2.58)
6	III	(240-279) Nutritional and metabolic diseases immunity disorders		9 (4.66)	13 (5.63)	18 (3.32)	40 (3.45)
7	VI	(320-389) Diseases of nervous system and sense organs	19 (9.79)	26 (13.47)	14 (6.06)	15 (2.76)	74 (6.37)
8	VII	(350-459) Diseases of the Circulatory system	11 (5.67)	23 (11.92)	64 (27.71)	261 (48.07)	359 (30.92)
9	VIII	(460-519) Diseases of the Respiratory system	24 (12.37)	29 (15.02)	15 (6.49)	44 (8.10)	112 (9.65)
10	IX	(520-579) Diseases of the digestive system	1 (0.52)	2 (1.04)	3 (1.30)	6 (1.10)	12 (1.03)
11	X	(580-629) Disease of the Urinary system	1 (0.52)	1 (0.52)			2 (0.17)
12	XV	(760-779) Certain conditions originating in the perinatal period	83 (42.78)	1 (0.52)	3 (1.30)	1 (0.18)	88 (7.58)
13	XVI	(780-799) Signs, symptoms and ill defined conditions	24 (12.37)	16 (8.29)	42 (18.18)	77 (14.18)	159 (13.70)
14	XVII	(800-999) Injury and poisoning	2 (1.03)	1 (0.52)	4 (1.73)		7 (0.60)
15		Others	10 (5.15)	22 (11.40)	28 (12.12)	21 (3.87)	81 (6.98)
		<b>Total</b>	<b>194</b> (100.00)	<b>193</b> (100.00)	<b>231</b> (100.00)	<b>543</b> (100.00)	<b>1161</b> (100.00)
			16.71	16.62	19.90	46.77	100.00

3.2

## in Quilon Municipality according to age groups 1982.

1981					1982				
1	1-14	15-44	45+	Total	1	1-14	15-44	45+	Total
(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
8	17	8	16	49	18	52		7	77
(3.33)	(10.12)	(3.19)	(2.82)	(3.99)	(7.38)	(27.66)		(1.01)	(5.54)
1	4	14	53	72		8	12	60	80
(0.42)	(2.30)	(5.58)	(9.93)	(5.87)		(4.26)	(4.49)	(8.69)	(5.76)
16	12	18	9	55	24	13	8	14	59
(6.67)	(7.14)	(7.17)	(1.59)	(4.40)	(9.83)	(6.91)	(3.00)	(2.03)	(4.24)
1	5	2	2	10	1	5	6	9	15
(0.42)	(2.98)	(0.00)	(0.35)	(0.82)	(0.41)	(2.66)	(2.25)	(0.43)	(1.08)
	3	10	35	48			6	32	38
	(1.79)	(3.98)	(6.16)	(3.91)			(2.25)	(4.63)	(2.73)
2	7	7	26	42			8	45	53
(0.83)	(4.17)	(2.29)	(4.58)	(3.42)			(3.00)	(6.51)	(3.81)
11	25	11	12	59	6	33	23	12	74
(4.58)	(14.88)	(4.38)	(2.11)	(4.81)	(2.46)	(17.55)	(8.61)	(1.74)	(5.92)
7	5	69	255	336	14	4	52	320	390
(2.92)	(2.98)	(27.49)	(44.89)	(27.39)	(5.74)	(2.13)	(19.47)	(46.31)	(28.06)
52	18	10	31	111	38	25	19	67	149
(21.66)	(10.71)	(3.98)	(5.46)	(9.05)	(15.57)	(13.30)	(7.12)	(9.70)	(10.72)
11	16	23	37	87	4	17	26	50	97
(4.58)	(9.52)	(9.16)	(6.51)	(7.99)	(1.64)	(9.04)	(9.74)	(7.24)	(6.98)
2	3	7	15	27	2	1	16	28	47
(0.83)	(1.79)	(2.79)	(2.64)	(2.20)	(0.82)	(0.53)	(5.99)	(4.05)	(3.98)
109				109	101	3	1		105
(45.42)				(8.88)	(41.39)	(1.60)	(0.37)		(7.55)
16	14	26	38	94	22	11	40	28	101
(6.67)	(8.33)	(10.36)	(6.69)	(7.66)	(9.02)	(5.85)	(14.98)	(4.05)	(7.27)
1	21	30	20	72	1	11	35	18	65
(0.42)	(12.50)	(11.95)	(3.52)	(5.87)	(0.41)	(5.85)	(13.11)	(2.61)	(4.68)
3	18	16	19	56	13	5	15	7	40
(1.25)	(10.71)	(6.38)	(3.35)	(4.56)	(5.93)	(2.66)	(5.66)	(1.01)	(2.88)
240	168	251	568	1227	244	188	267	691	1990
(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
19.56	13.69	20.46	46.29	100.00	17.55	13.53	19.21	49.71	100.00

TABLE No.  
Sex wise Details of Medically Certified  
1980, 1981

Sl. No.	Code No.	Cause of death	Male	1980 Female	Total
(1)	(2)	(3)	(4)	(5)	(6)
1	I(001-009)	Intestinal infectious diseases	23(3.70)	12(3.07)	35(3.46)
2	I(010-018)	Tuberculosis	66(10.61)	24(6.14)	90(8.88)
3	I(020-041)	Other bacterial diseases	23(3.70)	22(5.63)	45(4.41)
4	I(045-079)	Viral diseases	16(2.57)	12(3.07)	28(2.16)
5	II(140-239)	Neoplasms	27(4.34)	12(3.07)	39(3.85)
6	III(240-279)	Nutritional and metabolic diseases and Immunity disorders	14(2.25)	17(4.35)	31(3.06)
7	VI(320-389)	Diseases of the nervous system and sense organs	28(4.50)	33(8.41)	61(6.02)
8	VII(350-459)	Diseases of the circulatory system	222(35.69)	131(33.50)	353(34.85)
9	VIII(460-519)	Diseases of the Respiratory system	77(12.38)	36(9.21)	113(11.16)
10	IX(520-579)	Diseases of the digestive system	10(1.61)	3(0.77)	13(1.28)
11	X(580-629)	Diseases of urinary system	4(0.64)	2(0.51)	6(0.59)
12	XV(760-779)	Certain conditions originating in the perinatal period	21(3.38)	11(2.81)	32(3.16)
13	XVI (780-799)	Signs, symptoms and ill defined conditions	23(3.70)	11(2.81)	34(3.36)
14	XVII(800-999)	Injury and poisoning	14(2.25)	10(2.56)	24(2.37)
15		Others	54(8.68)	55(14.06)	109(10.76)
		<b>Total</b>	<b>622(100.00)</b>	<b>391(100.00)</b>	<b>1013(100.00)</b>

Note: Figures in brackets are percentages



41

## Deaths in Alleppey Municipality During year

and 1982

			1982		
Male	Female	1981 Total	Male	Female	Total
(7)	(8)	(9)	(10)	(11)	(12)
20.2.60)	6(3.55)	36(2.95)	23(2.81)	21(4.51)	44(3.43)
63(8.19)	26(5.76)	89(7.30)	75(9.16)	31(6.67)	106(8.25)
55(7.15)	33(7.32)	88(7.21)	33(4.03)	37(9.96)	70(5.45)
49(6.37)	41(9.09)	90(7.38)	41(5.37)	33(7.10)	77(6.00)
41(5.72)	24(5.32)	68(5.57)	80(9.77)	23(4.94)	103(8.02)
31(4.03)	23(5.10)	54(4.43)	35(4.27)	21(4.52)	56(4.36)
10(1.90)	11(2.44)	21(1.72)	18(2.20)	15(3.23)	33(2.57)
223(28.00)	115(25.50)	338(27.71)	240(29.30)	119(25.59)	359(27.96)
56.7(28)	38(8.43)	94(7.70)	43(5.25)	24(5.16)	67(5.22)
65(8.46)	19(4.21)	84(6.89)	46(5.62)	19(4.09)	65(5.06)
45(5.85)	27(5.99)	72(5.90)	53(6.47)	38(8.17)	91(7.09)
2(0.26)	4(0.89)	6(0.49)	3(0.37)	2(0.43)	5(0.39)
13(1.69)	2(0.44)	15(1.23)	15(1.83)	8(1.72)	23(1.79)
2(0.26)	3(0.66)	5(0.41)	3(0.37)	2(0.43)	5(0.39)
91(11.84)	69(15.30)	160(13.11)	108(13.18)	72(15.48)	180(14.02)
769(100.00)	451(100.00)	1220(100.00)	819(100.00)	465(100.00)	1284(100.00)

TABLE

## Statements Showing the Leading Cause of

Sl. No.	Code No.	Cause of death	1980			
			I	1-14	15-44	45+
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	I(001-009)	Intestinal infectious diseases	6 (4.48)	19 (12.50)	1 (0.45)	9 (1.81)
2	I(010-018)	Tuberculosis	1 (6.75)	4 (2.63)	17 (7.66)	60 (13.65)
3	I(020-041)	Other bacterial diseases	16 (11.94)	14 (9.21)	10 (4.50)	5 (1.00)
4	I(045-079)	Viral diseases	4 (2.99)	7 (4.61)	9 (4.06)	8 (1.61)
5	II(140-239)	Neoplasms	1 (0.75)	5 (3.29)	10 (4.50)	23 (4.62)
6	III(240-279)	Nutritional and metabolic diseases & Immunity disorders	5 (3.73)	4 (2.63)	7 (3.15)	15 (3.01)
7	VI(320-389)	Diseases of nervous system and sense organs	13 (9.70)	26 (17.10)	11 (4.96)	11 (2.21)
8	VII(350-459)	Diseases of the circulatory system	21 (15.67)	27 (17.76)	65 (29.28)	234 (46.98)
9	VIII(460-519)	Disease of the Respiratory system	16 (11.94)	30 (19.74)	18 (8.11)	49 (9.84)
10	IX(520-579)	Disease of the digestive system		2 (1.32)	2 (0.90)	9 (1.81)
11	X(580-629)	Disease of urinary system			3 (1.33)	9 (0.60)
12	XV(760-779)	Certain conditions originating in the perinatal period	31 (23.13)		1 (0.45)	
13	XVI(780-799)	Signs, symptoms & illdef conditions	11 (8.21)	9 (1.97)	2 (0.90)	18 (3.61)
14	XVII(800-999)	Injury and poisoning	2 (1.49)	1 (0.66)	10 (4.50)	11 (2.21)
15		Others	7 (5.22)	10 (6.58)	56 (25.23)	35 (7.03)
Total			134 (100.00)	152 (100.00)	222 (100.00)	498 (100.00)

4.2

## Death in Alleppey Municipality According to Age Groups

Age NR	Total	1981				Age NR	Total
		1	1-14	15-44	45--		
		(10)	(11)	(12)	(13)		
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	35 (3.46)	2 (1.00)	22 (0.59)	4 (1.61)	8 (1.35)		36 (2.95)
	90 (6.88)		5 (1.95)	41 (16.53)	43 (7.29)		89 (7.30)
	45 (4.44)	20 (16.60)	37 (14.45)	9 (3.63)	22 (3.73)		88 (7.21)
	28 (2.76)	7 (5.60)	55 (21.49)	13 (5.24)	15 (2.54)		90 (7.30)
	39 (3.85)		13 (5.06)	8 (3.23)	47 (7.97)		68 (5.57)
	31 (3.06)	7 (5.60)	12 (4.69)	6 (2.42)	29 (4.91)		54 (4.43)
	61 (6.02)	3 (2.40)	7 (2.73)	5 (2.02)	6 (1.02)		21 (1.72)
6 (85.76)	353 (34.85)	11 (8.80)	27 (10.55)	61 (24.60)	239 (40.51)		338 (27.71)
	113 (11.16)	24 (19.20)	23 (8.99)	4 (1.61)	43 (7.29)		94 (7.70)
	13 (1.28)	1 (0.80)	4 (1.56)	24 (9.68)	55 (9.32)		84 (6.89)
	6 (0.59)	28 (22.40)	17 (6.64)	6 (2.42)	21 (3.56)	—	72 (5.90)
	32 (3.16)	6 (4.80)					6 (0.49)
	34 (3.36)	2 (1.60)		6 (2.42)	7 (1.19)		15 (1.23)
	24 (2.37)	3 (2.40)		1 (0.40)	1 (0.17)		5 (0.41)
1 (14.29)	109 (10.76)	11 (8.80)	34 (13.29)	60 (24.19)	54 (9.15)	1 (100.00)	160 (13.11)
7 (100.00)	1013 (100.)	125 (100.00)	256 (100.00)	248 (100.00)	590 (100.00)	1 (100.00)	1220 (100.00)

<i>Sl. No.</i>	<i>I</i>	<i>1-14</i>	<i>1982 15-44</i>	<i>45+</i>	<i>Age NR</i>	<i>Total<sup>r</sup></i>
	(16)	(17)	(18)	(19)	(20)	(21)
(1)	8 (4.94)	20 (12.12)	5 (1.82)	11 (1.62)		44 (3.43)
(2)	2 (1.24)	1 (0.61)	26 (9.45)	77 (11.35)		106 (8.25)
(3)	22 (13.58)	20 (12.12)	10 (3.61)	18 (2.65)		70 (5.45)
(4)	6 (8.70)	38 (23.03)	11 (4.00)	22 (3.25)		77 (6.00)
(5)		10 (6.06)	21 (7.64)	71 (10.47)	1 (25.00)	103 (8.02)
(6)	01 (6.17)	6 (3.64)	8 (2.91)	32 (4.72)		56 (4.36)
(7)	8 (4.92)	12 (7.27)	4 (1.45)	9 (1.33)		33 (2.57)
(8)	2 (1.24)	14 (8.48)	60 (21.82)	282 (41.59)	1 (25.00)	359 (27.96)
(9)	14 (8.64)	10 (6.06)	7 (2.55)	36 (5.31)		67 (5.22)
(10)	1 (0.62)	3 (1.82)	14 (5.09)	47 (6.93)		65 (5.06)
(11)	61 (37.65)	1 (0.61)	7 (2.54)	22 (3.25)		91 (7.09)
(12)	4 (2.47)	1 (0.61)				5 (0.39)
(13)	2 (1.23)	4 (2.43)	6 (2.18)	11 (1.62)		23 (1.79)
(14)	4 (2.47)	1 (0.61)				5 (0.39)
(15)	18 (11.11)	21 (14.54)	96 (34.91)	40 (5.90)	2 (50.00)	180 (14.02)
	162 (100.00)	165 (100.00)	275 (100.00)	678 (100.00)	1 (100.00)	1281 (100.00)

TABLE 5

Comparative statement showing percentage of deaths due to major causes during 1980, 1981 and 1982 in Cochin, Calicut, Quilon and Alleppey

Sl.No.	Diseases	Cochin		Calicut		Quilon		Alleppey					
		1980	1981	1980	1981	1980	1981	1980	1981	1982			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
1.	Intestinal infectious diseases	1.94	4.24	3.61	4.08	5.71	4.93	6.55	3.99	5.54	3.46	2.95	3.43
2.	Tuberculosis	6.89	5.04	5.57	7.08	6.13	5.19	4.91	5.87	5.76	8.88	7.30	8.25
3.	Other bacterial diseases	3.08	3.39	3.36	6.31	6.40	6.25	3.79	4.48	4.24	4.44	7.21	5.43
4.	Neoplasm	9.21	0.61	7.95	0.73	10.65	0.35	2.58	3.91	2.73	3.85	5.57	8.02
5.	Diseases of the circulatory system	32.19	37.55	37.88	24.10	22.59	26.10	30.92	27.39	28.06	34.85	27.71	27.96
6.	Diseases of the respiratory system	0.83	5.80	6.33	0.57	6.80	7.82	9.65	9.05	10.72	11.16	7.70	5.22
7.	Perinatal causes	6.79	7.63	6.03	8.39	7.39	9.80	7.58	0.88	7.55	3.16	0.49	0.39

959



