



GOVERNMENT OF KERALA

**MEDICAL CERTIFICATION
OF CAUSE OF DEATH
1986**

**DEPARTMENT OF
ECONOMICS AND STATISTICS
TRIVANDRUM—1988**

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**REPORT ON
MEDICAL CERTIFICATION OF
CAUSE OF DEATH**

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C O N T E N T S

1. Introduction
2. Quilon Municipality
3. Cochin Corporation
4. Calicut Corporation
5. Comparative study of the leading causes of death in the three centres.
6. Sex-wise comparative study of leading causes of death in the three centres.
7. Conclusion
8. Tables.

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P R E F A C E

The scheme 'Medical certification of cause of death' is in operation in the city corporations of Cochin and Calicut and in the Quilon municipality.

This report dealing with mortality by causes occurred in the State during the year 1986 was prepared by the Vital Statistics unit of this department.

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Introduction

The vital statistics system includes legal registration, statistical recording, reporting of vital events, collection, scrutiny, compilation, analysis, presentation and distribution of statistics pertaining to vital events. Data on Merbidity & Mortality statistics form an integram part of the vital statistics system. It clearly reflects the health statistics of a population. Health administrators & policy formulaters rely on statistics of causes of deaths to study the effectiveness of Public Health Programmes and impact of all plan schemes.

The Scheme 'Medical Certificaion of Cause of Death' has been introduced in the State in 1969 as part of the programmes for improvement of Vital Statistics. The data on causes of death, medically certified in hospitals, though suffer from a number of deficiencies, provides leading guidelines to medical practitioners, social workers, policy formulaters, administrators, researchers and other interested in the field.

This report deals with the cause of death analysis in the corporations of Cochin and Calicut and in the Quilon Municipality for the year 1986.

1.2 Objectives.

The main objectives of the scheme are the following:-

- i. to obtain reliable information on the underlying causes of death.
- ii. to pin point the leading causes of death for males and females.
- iii. to identify individual causes of death in certain special groups such as infants, mothers and aged persons.
- iv. to study the mortality pattern of certain important diseases like cancer, tuberculosis, heart diseases etc.
- v. to 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 Municipality/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 certificate received from the institutions are scrutinised and the casuses of death are

identified and coded by the deputy health officer appointed for the purpose. For coding the causes of deaths, the list 'A' of the International classification of Diseases (IX Revision) is adopted.

1.4 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 is likely to have multiple causes and death occurs only as a result of a chain of causes.

In this report, only the causes of death which account for atleast 3 per cent of the deaths in any one or more of the three 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 diseases - Code I (001 - 009)
- ii. Tuberculosis - I (010 - 018)
- iii. Other bacterial diseases I (020 - 041)
- iv. Viral diseases - (045 - 079)
- v. Neoplasms - II (140 - 239)
- vi. Diseases of the nervous system and sense organs (VI (320 - 389)
- vii. Heart diseases - VII (390 - 429)
- viii. Cerebrovascular diseases VII (430 - 438)
- ix. Diseases of the respiratory system VIII (460 - 519)
- x. Diseases of the digestive system IX (520 - 579)
- xi. Certain conditions originating in the perinatal period
XV (760 - 779)
- xii. Signs, symptoms and ill - defined conditions - XVI (780 - 799)
- xiii. Injury and poisoning XVII (800 - 999)

1.5 Limitation

The data covers only 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 all the three centres, the outstanding cause of death, during the year was heart diseases. Again it was more predominant in the age group 15 - 44 and 45 & above. The incidence of cerebrovascular disease was also high in the age group 45+. The position in respect of Quilon Municipality and the two corporations is discussed below.

2. Quilon Municipality

2.1 As per the 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. Causes of death regarding 1447 deaths in the municipality during the year 1986 are analysed in this report.

2.2 Sex wise distribution of the leading cause of death

The percentage share of male deaths in the 1447 deaths was 62.95 and of female deaths was 37.05.

2.3 Distribution of deaths due to leading causes is given below:-

i. Intestinal infectious diseases

This group of diseases accounts for 3.73 percent of deaths during the year 1986. 3.40 percent of male deaths and 4.29 percent of female deaths were due to this disease.

ii. Tuberculosis

This cause claimed 3.18 percent of deaths with 3.52 percent male deaths and 2.61 percent female deaths.

iii. Other bacterial diseases

4.91 percent of deaths occurred due to this disease. Out of this 5.05 percent were males and 4.66 were females.

iv. Viral diseases

Compared to the other causes the impact of viral diseases (1.18) Percent was minimal.

v. Neoplasms

Deaths due to neoplasm form 3.39 percent. Percentage of male and female deaths due to this cause come to 3.18 and 3.73 respectively.

vi. Diseases of nervous system and sense organs

Deaths due to this cause was greater among females (5.60 percent) than among males (3.62 percent). Percentage of total deaths reported was 4.35 percent of the deaths due to all causes.

vii. Heart diseases

20.39 percent of the total deaths were due to this cause. This was the major cause of deaths reported during the year. Male victims (22.17 percent) were found to be much more than females (17.35 percent).

viii. Cerebrovascular diseases

This disease also created much distress. 15.76 percent of deaths came under this cause. Percentage of female victims (16.98 percent) was found to be greater than that of males (15.04 percent).

ix. Diseases of the respiratory system

This was the third major cause of death reported during the year. 11.06 percent of the total deaths were reported to have occurred due to this disease. Of this 11.20 percent were males and 10.82 percent were females.

x. Disease of the digestive system

6.22% deaths was due to this cause

xi. Conditions originating in the perinatal period

Deaths due to this cause was about 5.18 percent. The percentage of female deaths (6.53 percent) was higher than that of male deaths (4.39 percent).

xii. Signs, symptoms & ill defined conditions

4.90 percent of deaths were due to this cause.

xiii. Accidents, injuries & poisoning

4.70 percent of deaths were due to this cause.

xiv. Others

11.05 percent of the total deaths were due to other causes.

2.4 Deaths according to age

Agewise analysis of mortality is attempted in the following four age groups.

1. 0-1 year (infants)

Infant deaths came to 229 during the year under report. This is found to be less than the previous years' infant death (244). The outstanding cause of death was conditions originating in the perinatal period (32.76 percent). This was followed by other bacterial diseases (18.78 percent) and diseases of respiratory system (15.28).

1-14 years

Deaths in this age group constitute 8.22 percent of reported deaths. The main cause of death reported was diseases of the respiratory system (22.69 percent) followed by diseases of the nervous system and sense organs claiming 17.65 percent of deaths. Intestinal infections diseases (12.61 percent), Viral diseases (9.25 percent) and heart diseases (6.72 percent) are also noted as significant causes of death in this age group.

15-44 years

The major cause of death in this age group was heart diseases (23.69 percent). The other significant causes were accidents, injuries & poisoning (14.74 percent), Signs, symptoms and ill defined conditions (8.42 percent) and diseases of the digestive system (8.42 percent).

2.5 The details of sex-wise and age-wise deaths are given in Table 1.1 and 1.2 of the appendix.

2.6 Domiciliary deaths in Quilon Municipality

Domiciliary deaths in the municipality verified by the deputy health officer were 20. Of these 9 were due to heart diseases and 5 were due to cerebral apoplexy. Out of the other six deaths, each one was due to gastro enterities & other diarrheal diseases, influenza, typhoid, cancer, diabetes and other causes.

2.7 Summary

- i. Heart disease is the most outstanding cause of death. It affected the 15-44 and 45 + age group noticeably. Male victims are more than females.
- ii. Certain conditions originating in the perinatal period is the major cause of infant deaths.
- iii. Diseases of the respiratory system proved fatal to the 1-14 age group.
- iv. Accidents, injuries & poisoning is the second outstanding cause of death in the 15-44 age group.
- v. Cerebrovascular diseases was found to be the second major cause of death to the age group 45 +

3. Cochin Corporation

3.1 The Cochin Corporation was formed in 1967. According to 1981 census the population of Cochin was 5.13 lakhs with an area of 95 Sq. Kms., the density being 5409 per Sq. Km. During the year 1986 a total of 2632 medical certification forms regarding deaths were received. Analysis of the data gives the following results.

3.2 Sex-wise distribution of the leading causes of death.

Out of the 2632 deaths reported during the year 1741 (66.15 percent) occurred to males and 891 (33.85 percent) to females.

3.3 Causes of death

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

1. Intestinal infectious diseases

Deaths due to intestinal infectious disease was 1.44 percent to total deaths. Male deaths come to 1.21 percent and female deaths to 1.91 percent.

ii. Tuberculosis

Tuberculosis accounts for 3.85 percent of deaths. The percentage of male deaths (4.15) is higher than that of female (3.26).

iii. Other bacterial diseases

Deaths due to other bacterial diseases was 3.15 percent. Male and female deaths come to 2.87 percent and 3.70 percent respectively.

iv. Viral diseases

Deaths due to viral diseases was 3.84 percent. The percentage of female deaths (5.39%) was higher than that of male deaths (3.05%).

v. Neoplasms

8.04 percent of the total deaths was due to this cause. This is the third major cause of death reported in Cochin Corporation during the year. The victims formed 8.37 percent males and 7.41 percent females.

vi. Diseases of the nervous system

The effect of this cause was superficial in this year compared to other causes.

vii. Heart diseases

This is the major cause of death reported during the year. 34.88 percent of the total deaths are due to this disease. Among males the percentage was 36.30 and among females it was 32.10.

viii. Cerebrovascular diseases

This disease was also a cause for great concern in Cochin. Ranking as the second dominant cause of death (10.37 percent), it was more fatal to females (12.68) than males (9.19).

ix. Diseases of the respiratory system

6.16 percent of the deaths was due to this disease. Among males it was 6.26 percent and among females it was 5.95 percent.

x. Diseases of the digestive system

3.04 percent of male deaths and 2.13 percent of female deaths was due to this disease.

xi. Conditions originating in the perinatal period

The percentage of infant lives claimed by perinatal causes was 7.64. This is greater than the percentage (6.31) of the last year.

xii. Signs, symptoms & ill defined conditions

2.99 percent males and 1.80 percent of females died due to the above cause.

xiii. Accidents, injuries and poisoning

More males (8.50 percent) than females (5.05%) died due to the above causes during the period under report.

6.57 percent of the total deaths was due to other causes which were not included in the above.

3.4 Deaths according to age

Age wise analysis of mortality will help the identification of age affinity of diseases. The analysis is attempted in four age groups viz., below 1 year, 1-14 years, 15-44 years and 45 and above.

i. 0-1 year (infant deaths)

Infant deaths accounted for 14.13 percent of the total deaths reported. The major cause of infant death was conditions originating in the perinatal period. 54.03 percent of deaths were due to it. The second notable cause for infant deaths was other bacterial diseases (9.95%). Next to this stands diseases of the respiratory system with 9.68 percent deaths to its credit. Heart diseases was also notable. 7.80 percent of the infant deaths was due to this cause. Intestinal infectious diseases and vital diseases claimed 2.42 percent and 2.69 percent of infant lives. The effect of the other diseases was minimal.

ii. 1-14 Years

3.95 percent of the total deaths come under this age group. Viral diseases claimed the maximum number of lives in this age group (19.23 percent). Heart diseases ranked second (17.31 percent) and diseases of the respiratory system ranked third (10.58 percent). Other major causes of death in this age group are other bacterial diseases, (9.62%) intestinal infectious diseases (7.69 percent), cerebrovascular diseases (6.73 percent) and accidents, injuries and poisoning (6.73 percent).

iii. 15-44 years

This age group accounts for 19-30 percent of total deaths reported during the year. Heart diseases (27.76 percent) ravaged this age group the maximum. Next important cause of death in this age group was accidents, injury & poisoning (22.83 percent). This was followed by neoplasms (9.06 percent) and cerebrovascular diseases (7.87 percent). Viral diseases (5.51 percent) and tuberculosis (5.32 percent) also affected this age group damagingly.

iv. 45 years and above

Deaths in this age group constitute 62.6% of total deaths. Heart disease was the most significant cause of death (44.30 Percent) in this age group. Cerebrovascular diseases claimed 13.53 percent lives and neoplasms 9.65 percent. Diseases of the respiratory system, tuberculosis and accidents, injuries and poisoning are other notable diseases affect this group significantly.

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

3.6 Table 2.3 of the appendix presents the details of domiciliary deaths in Cochin Corporation. The Deputy Health Officer verified about 123 household deaths. The leading cause of deaths in this instance is also heart disease. More males (31) were affected than females (14). The other major causes affected were tuberculosis (13), Cerebrovascular diseases (13), Neoplasms (12), Pulmonary diseases (7), Signs and symptoms of ill-defined conditons (7). Five deaths were due to diseases of the digestive system, three deaths each due to viral diseases, diseases of the nervous system, diseases of the circulatory system and diseases of the Urinary system. Intestinal infectious disease causes two deaths, Lymphoid, Leukaemia and Diabetes cause two deaths each. Burns, poisoning and other causes cause one death each.

3.7 Summary

- i. Heart disease is the major cause of death both among males and females during the year 1986 in Cochin Corporation.
- ii. Cerebrovascular diseases stand second among the leading causes of death of men and women.
- iii. Infant deaths came up to 14.13 percent. Out of this 54.03% are due to perinatal causes alone.
- iv. Viral diseases affected severely the 1-14 age group.
- v. In the age group 15-44 and upwards heart diseases predominates.

4. Calicut Corporation

4.1 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. Causes of death pertaining to 5552 deaths received from the medical institutions were analysed in this report.

4.2 Sex-wise distribution of leading causes of death

Of the 5552 deaths reported from the hospitals 3562 (64.15%) are to males and 1990 (35.85%) to females.

4.3 The distribution of deaths due to leading causes are given below:-

1. Intestinal infectious diseases

About 3.51 percent of the deaths was due to this disease. The percentage of female deaths (4.22) was higher than that of males (3.12).

ii. Tuberculosis

Deaths due to this disease constituted 4.67 of the total deaths. Percentage of death due to this is higher among males (5.45%) than females (3.27%).

iii. Other bacterial diseases

This disease was responsible for 5.58 percent of total deaths. Here percentage of female deaths is higher than the percentage of male deaths.

iv. Viral diseases

Deaths due to viral disease was 3.80 percent, the male deaths being 3.06 percent and female deaths 5.13 percent.

v. Neoplasms

This proved to be one of the important causes of death during the year 1986 contributing 10.32 percent of total deaths.

vi. Diseases of the nervous system and sense organs

3.48 percent of the total deaths was due to this disease.

vii. Heart diseases

This proved to be the major cause of death in Calicut Corporation also. percentage of death was 15.42 of the total. Male deaths (17.15 percent) out number the female deaths (12.31 percent).

viii. Cerebrovascular disease

This disease occupied the second position among the causes of death, percentage being 12.90. It affected males (12.97 percent) and females (12.76 percent) almost alike.

ix. Diseases of the respiratory system

This cause accounted for 7.96 percent of deaths with 7.50 percent among males and 8.79 percent among females.

x. Diseases of the digestive system

4.70 percent deaths was due to this cause.

xi. Conditions originating in the perinatal period

10.43 percent of deaths were due to perinatal causes with 9.40 percent among males and 12.26 percent among females.

xii. Signs, symptoms and ill-defined conditions

2.25 percent of deaths were due to these causes.

xiii. Accidents, injuries and poisoning

7.75 percent of deaths reported during the year were due to accidents, injuries and poisoning. The impact was heavy on males (8.90 percent) than females (5.68 percent).

All other causes not mentioned earlier claimed 7.23 percent of lives.

4.4. Deaths according to age

Age-wise analysis of the mortality is attempted in the following four groups.

1. Infant death (0-1 year)

Infant deaths constituted 19.38% of reported deaths. Certain conditions originating in the perinatal period was the major cause of deaths of infants (53.81%). This is followed by other bacterial diseases (13.38%) and diseases of the respiratory system (10.98%). Diseases of the nervous system and sense organs (6.32%) Intestinal infectious diseases (2.97%) and Viral diseases (2.23%) too had their impact.

1-14 years

As in the case of Cochin Corporation, in Calicut also viral diseases claimed the maximum number of lives in this age group (19.25%). The second major cause among this group was diseases of the respiratory system (12.77%) and third Intestinal infectious diseases (12.27%). Other causes were other bacterial diseases (9.95%), accidents, injuries and poisoning (9.78%), Diseases of the nervous system and sense organs (7.96%) Tuberculosis (5.80%).

15-44 years

The major cause of death for this age group was accidents, injuries & poisoning (19.19%) followed by heart diseases (14.73%). Neoplasms (13.09%) diseases of the digestive system (6.49%), diseases of the respiratory system (6.20%), Tuberculosis (5.52%) Cerebrovascular diseases (5.52%) were also noted as significant causes of death in this age group.

45 years and above

Deaths under this age group formed 51.17% of reported deaths. The main cause of death, as in the case of 45+ age group in the other two centres, is heart disease (23.97%) Cerebrovascular diseases (23.06%), Neoplasms (13.94%) and diseases of the Respiratory system (6.44%) were other prominent causes of death in this age group.

4.5 Details of sex-wise and age-wise deaths are presented in Table 3.1 and 3.2 of the appendix.

4.6 Table 3.3 of the appendix presents the details of domiciliary deaths in Calicut Corporation. The number of domiciliary deaths verified by the Deputy Health Officer were 162 of which 89 were males and 73 females. Other than senility and ill-defined condition the major cause of death was pneumonia-Bronchitis. 35 deaths were due to this cause. Second major cause was heart diseases (32). Enteritis & other diarrheal diseases (18), Chronic liver diseases & Cirrhosis (16), Septicaemia (10) Anaemia (6) were the other causes of death. The lowest number of deaths was due to neoplasms (1).

4.7 Summary

1. Heart diseases is the most outstanding cause of death.
 2. Cerebrovascular diseases stand second among the leading causes of death.
 3. Certain conditions originating in the perinatal period is the major cause of infant death.
 4. Viral diseases occupies the number one position in the age group 1-14.
 5. Accidents, injuries & poisoning predominate as the number one disease in the age group 15-44 and heart disease in the age group 45 and above.
5. Comparative study of the leading causes of death in the three centres.
1. The details of comparisons among the three centres are given in table - 4 appended.
 2. It is evidenced from the table that heart disease was the major cause of death in all the three centres under report. The highest percentage of death is in Cochin and the lowest in Calicut.
 3. All the three centres were affected severely by Cerebrovascular diseases.

4. Deaths due to diseases of the respiratory system is highest in Quilon Municipality and the lowest in Cochin Corporation.

5. The damaging effect of perinatal causes was felt in all the three centres notably. The highest is in Calicut and the lowest in Quilon.

6. The impact of neoplasm is relatively higher in Calicut Corporation and lower in Quilon Municipality.

7. Calicut ranked first in the case of death due to other bacterial diseases.

8. Tuberculosis affected the three centres in a more or less same manner.

9. Intestinal infectious diseases also cause its share of death in Quilon and Calicut. Its impact was marginal in Cochin Corporation.

6. Sex-wise comparative study of leading causes in the three centres.

1. The details of comparison among the three centres are given in the table - 5 appended.

2. Intestinal infectious diseases affected females more than males in all the three centres.

3. Impact of tuberculosis was higher in males in all the three centres.

4. Other bacterial diseases affected females severely than males in the two Corporations. Its impact was higher on males in Quilon Municipality.

5. Neoplasms claimed more victims among males than females in Cochin & Calicut Corporation.

6. The incidence of heart diseases in males is found higher in all the three centres.

7. In Quilon and Cochin females were more susceptible to Cerebrovascular diseases.

8. The highest percentage of males and females affected by diseases of the respiratory system is in Quilon Municipality.

9. In all the three centres female infants were more exposed to the risk of death due to perinatal causes.

7. Conclusion

In all the three centres the most threatening cause of death seem to be heart diseases. This has been the trend in past years also. Cerebrovascular diseases, diseases of the respiratory system and perinatal causes also proved to be the dreaded causes for death during the year under report.

Table 1.1 Sex-wise details of medically certified deaths in Quilon Municipality 1986

Sl. No.	Code Number	Cause of deaths	Male		Female		Total	
			4	5	6	7	8	9
1	2	3	31	3.40	23	4.29	54	3.73
	I (001-009)	Intestinal infectious diseases						
1.			32	3.52	14	2.61	46	3.18
2.	I (010-018)	Tuberculosis	46	5.05	25	4.66	71	4.91
3.	I (020-041)	Other bacterial diseases	11	1.22	6	1.12	17	1.18
4.	I (045-079)	Viral diseases	29	3.18	20	3.73	49	3.39
5.	II (140-239)	Neoplasms	33	3.62	30	5.60	63	4.35
6.	VI (320-389)	Diseases of the nervous system and sense organs	202	22.17	93	17.35	295	20.39
7.	VII (390-429)	Heart diseases	137	15.04	91	16.98	228	15.76
8.	VII (430-438)	Cerebro Vascular diseases	102	11.20	58	10.82	160	11.06
9.	VIII (460-519)	Diseases of Respiratory system	68	7.46	22	4.11	90	6.22
10.	IX (520-579)	Diseases of the digestive system	40	4.39	35	6.53	75	5.10
11.	XV (760-779)	Conditions originating in the perinatal period	47	5.16	24	4.48	71	4.93
12.	XVI (780-799)	Signs, Symptoms, ill-defined conditions	41	4.50	27	5.04	68	4.70
13.	XVII (800-999)	Accidents, Injuries & poisoning	92	10.09	68	12.68	160	11.05
14.	Others							
	Total		911	100.00	536	100.00	1447	100.00

Table 1.2 Statement showing the leading causes of death in Quflon Municipality according to age group (1986)

Sl. No.	Code Number	Cause of death	Below 1 year										Total	%
			3	4	5	6	7	8	9	10	11	12		
1.	I (001-009)	Intestinal infectious disease		10	4.37	15	12.61	8	4.21	21	2.31	54	3.73	
2.	I (010-018)	Tuberculosis		-	-	3	2.52	7	3.68	36	3.96	46	3.18	
3.	I (020-041)	Other bacterial disease		43	18.78	6	5.04	7	3.68	15	1.65	71	4.91	
4.	I (045-079)	Viral diseases		2	0.87	11	9.25	2	1.05	2	0.22	17	1.17	
5.	II (140-239)	Neoplasms		-	-	2	1.68	8	4.21	39	4.29	49	3.39	
6.	VI (320-389)	Diseases of the nervous system and sense organs		15	6.55	21	17.65	8	4.21	19	2.09	63	4.35	
7.	VII (390-429)	Heart diseases		17	7.42	8	6.72	45	23.69	225	24.75	295	20.39	
8.	VII (430-438)	Cerebro Vascular diseases		4	1.75	1	0.84	12	6.32	211	23.21	228	15.76	
9.	VIII (460-519)	Diseases of the respiratory system	35		15.28	27	22.69	10	5.26	88	9.68	160	11.06	
10.	IX (520-579)	Diseases of the digestive system	2		0.87	5	4.20	16	8.42	67	7.37	90	6.22	
11.	XV (760-779)	Conditions originating in the perinatal period	75		32.76	-	-	-	-	-	-	75	5.18	
12.	XVI (780-799)	Signs, symptoms and ill-defined conditions	11		4.80	1	0.84	16	8.42	43	4.73	71	4.90	
13.	XVII (800-999)	Accidents, Injuries and Poisoning	2		0.87	7	5.88	28	14.74	31	3.42	68	4.70	
14.	Others		13		5.68	12	10.08	23	12.11	112	12.32	160	11.06	
	Total		229		100.00	119	100.00	190	100.00	909	100.00	1447	100.00	

Table 1.3 Domiciliary deaths in Quilon Municipality 1986
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Sl. No.	Cause of death	Male	Female	Total
1	2	3	4	5
1.	Heart disease of various forms	8	1	9
2.	Enteritis and other diarrheal diseases	-	1	1
3.	Influenza	1	-	1
4.	Typhoid	-	1	1
5.	Cerebral apoplexy (Paralysis)	1	4	5
6.	Cancer	-	1	1
7.	Diabetes	1	0	1
8.	Others	1	0	1
	Total	12	8	20

Table 2.1 Sex-wise details of medically certified deaths in Cochin Corporation in 1986

Sl. No.	Code number	Cause of death	Male		Female		Total	%
			4	5	6	7		
1.	I (001-009)	Intestinal infectious disease	21	1.21	17	1.91	38	1.44
2.	I (010-018)	Tuberculosis	72	4.15	29	3.26	101	3.85
3.	I (020-041)	Other bacterial diseases	50	2.87	33	3.70	83	3.15
4.	I (045-079)	Viral diseases	53	3.05	48	5.39	101	3.84
5.	II (140-239)	Neoplasms	146	8.37	66	7.41	212	8.04
6.	VI (320-389)	Diseases of nervous system and sense organs	25	1.44	12	1.35	37	1.41
7.	VII (390-429)	Heart diseases	632	36.30	286	32.10	918	34.88
8.	VII (430-438)	Cerebro Vascular diseases	160	9.19	113	12.68	273	10.37
9.	VIII (460-519)	Diseases of the respiratory system	109	6.26	53	5.95	162	6.16
10.	IX (520-579)	Diseases of the digestive system	53	3.04	19	2.13	72	2.74
11.	XV (760-779)	Conditions originating in the perinatal period	105	6.03	96	10.77	201	7.64
12.	XVI (780-799)	Signs, symptoms and ill-defined conditions	52	2.99	16	1.80	68	2.58
13.	XVII (800-999)	Accidents, injuries and poisoning	148	8.50	45	5.05	193	7.33
		Others	115	6.60	58	6.50	173	6.57
		Total	1741	100.00	891	100.00	2632	100.00

Table 2.2 Statement showing the leading causes of death in CochIn Corporation according to age group.

1986

Sl. No.	Code Number	Cause of death	Below 1 year													Total	%
			4	5	6	7	8	9	10	11	12	13					
1.	I (001-009)	Intestinal infectious diseases	9	2.42	8	7.69	9	1.77	12	0.73	38	1.44					
2.	I (010-018)	Tuberculosis	2	0.54	1	0.96	27	5.32	71	4.31	101	3.84					
3.	I (020-041)	Other bacterial diseases	37	9.95	10	9.62	15	2.95	21	1.27	83	3.15					
4.	I (045-079)	Viral diseases	10	2.69	20	19.23	28	5.51	43	2.61	101	3.84					
5.	II (140-239)	Neoplasms	2	0.54	5	4.81	46	9.06	159	9.65	212	8.05					
6.	VI (320-389)	Diseases of the nervous system & sense organs	6	1.60	6	5.77	12	2.36	13	0.79	37	7.41					
7.	VII (390-429)	Heart diseases	29	7.80	18	17.31	141	27.76	730	44.30	918	34.88					
8.	VII (430-438)	Cerebro Vascular diseases	3	0.80	7	6.73	40	7.87	223	13.53	273	10.37					
9.	VIII (460-519)	Diseases of the respiratory system	36	9.68	11	10.58	19	3.75	96	5.83	162	6.16					
10.	IX (520-579)	Diseases of the digestive system	4	1.08	1	0.96	12	2.36	55	3.34	72	2.74					
11.	XV (760-779)	Conditions originating in the perinatal period	201	54.03	-	-	-	-	-	-	201	7.64					
12.	XVI (780-799)	Signs, symptoms and ill-defined conditions	7	1.88	5	4.81	21	4.13	35	2.12	68	2.58					
13.	XVII (800-999)	Accidents, injuries & poisoning	4	1.08	7	6.73	116	22.83	66	4.00	193	7.33					
14.		Others	22	5.91	5	4.80	22	4.33	124	7.52	173	6.57					
		Total	372	100.00	104	100.00	508	100.00	1648	100.00	2632	100.00					

Table 2.3 Domiciliary death in Cochin Corporation 1986

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Sl. No.	Cause of death	Male	Female	Total
1	2	3	4	5
1.	Intestinal infectious disease	1	1	2
2.	Tuberculosis	7	6	13
3.	Viral diseases	2	1	3
4.	Neoplasm	6	6	12
5.	Lymphoid Leukaemia	2	0	2
6.	Diabetes	1	1	2
7.	Diseases of the nervous system	3	0	3
8.	Diseases of the circulatory system	2	1	3
9.	Heart disease	31	14	45
10.	Pulmonary diseases	5	2	7
11.	Cerebrovascular disease	9	4	13
12.	Diseases of digestive system	4	1	5
13.	Diseases of urinary system	3	0	3
14.	Signs and symptom of ill-defined conditions	4	3	7
15.	Burns	0	1	1
16.	Poisoning	1	0	1
17.	Others	1	0	1
	Total	82	41	123

Table 3.1 Sex-wise details of medically certified deaths in Calicut Corporation 1986
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Sl. No.	Code No.	Cause of death	Male		Female		Total	%
			4	5	6	7		
1	2	3	4	5	6	7	8	9
1.	I (001-009)	Intestinal infectious diseases	111	3.12	84	4.22	195	3.51
2.	I (010-018)	Tuberculosis	194	5.45	65	3.27	259	4.67
3.	I (020-041)	Other bacterial diseases	173	4.86	137	6.88	310	5.58
4.	I (045-079)	Viral diseases	109	3.06	102	5.13	211	3.80
5.	II (140-239)	Neoplasms	383	10.75	190	9.55	573	10.32
6.	VI (320-389)	Diseases of nervous system and sense organs	111	3.12	82	4.12	193	3.48
7.	VII (390-429)	Heart diseases	611	17.15	245	12.31	856	15.42
8.	VII (430-438)	Cerebro Vascular diseases	462	12.97	254	12.76	716	12.90
9.	VIII (460-519)	Diseases of respiratory system	181	7.50	175	8.79	442	7.96
10.	IX (520-579)	Diseases of the digestive system	181	5.08	80	4.02	261	4.70
11.	XV (760-779)	Conditions originating in the perinatal period	335	9.40	244	12.26	579	10.43
12.	XVI (780-799)	Signs, symptoms and ill-defined condition	94	2.64	31	1.56	125	2.25
13.	XVII (800-999)	Accidents, injuries and poisoning	317	8.90	113	5.68	430	7.75
14.		Others	214	6.00	188	9.45	402	7.23
		Total	3562	100.00	1990	100.00	5552	100.00

Table 3.2 Statement showing the leading causes of death in Calicut Corporation according to age group (1986)

...

Sl. No.	Code Number	Cause of death	Below 1 year												
			4	5	6	7	8	9	10	11	12	13			
1.	I (001-009)	Intestinal infectious diseases	32	2.97	74	12.27	27	2.62	62	2.18	195	3.51			
2.	I (010-018)	Tuberculosis	9	0.84	35	5.80	57	5.52	158	5.56	259	4.66			
3.	I (020-041)	other bacterial diseases	144	13.38	60	9.95	48	4.65	58	2.04	310	5.58			
4.	I (045-079)	Viral diseases	24	2.23	116	19.25	44	4.26	27	0.95	211	3.80			
5.	II (140-239)	Neoplasms	3	0.28	39	6.47	135	13.09	396	13.94	573	10.32			
6.	VI (320-389)	Diseases of the nervous system and sense organs	68	6.32	48	7.96	36	3.49	41	1.44	193	3.48			
7.	VII (390-429)	Heart diseases	9	0.84	14	2.32	152	14.73	681	23.97	856	15.42			
8.	VII (430-438)	Cerebrovascular diseases	5	0.46	-	-	57	5.52	654	23.06	716	12.91			
9.	VII (460-519)	Diseases of the respiratory system	118	10.98	77	12.77	64	6.20	183	6.44	442	7.96			
10.	IX (520-579)	Diseases of the digestive system	11	1.02	21	3.48	67	6.49	162	5.70	261	4.70			
11.	XV (760-779)	Conditions originating in the perinatal period	579	53.81	-	-	-	-	-	-	579	10.43			
12.	XVI (780-799)	Signs, symptoms & ill-defined conditions	4	0.37	12	1.99	42	4.07	67	2.35	125	2.25			
13.	XVII (800-999)	Accidents, injuries and poisoning	4	0.37	59	9.78	198	19.19	169	5.95	430	7.74			
14.		Others	66	6.13	48	7.96	105	10.17	183	6.42	402	7.24			
		Others	1076	100.00	603	100.00	1032	100.00	2841	100.00	5552	100.00			

Table 3.3 Domiciliary death in Calicut Corporation 1986

Sl. No.	Cause of death	Male	Female	Total
1	2	3	4	5
1.	Heart diseases of various forms	18	14	32
2.	Tuberculosis	2	2	4
3.	Enteritis & other diarrheal diseases	10	8	18
4.	Neoplasm	1	-	1
5.	Pneumonia-Bronchitis	20	15	35
6.	Septicaemia	6	4	10
7.	Viral hepaltities	2	2	4
8.	Chronic liver diseaes & cirrhosis	10	6	16
9.	Anaemia	3	3	6
10.	Senility & ill defined condition	17	19	36
	Total	89	73	162

Table - 4 Comparative study of leading causes of death in Quilon, Cochin and Calicut (in percentage) 1986.

Sl. No.	Causes of death	Quilon	Cochin	Calicut
1	2	3	4	5
1.	Intestinal infectious diseases	3.73	1.44	3.51
2.	Tuberculosis	3.18	3.85	4.67
3.	Other bacterial diseases	4.91	3.15	5.58
4.	Neoplasms	3.39	8.04	10.32
5.	Heart diseases	20.39	34.88	15.42
6.	Cerebrovascular diseases	15.76	10.37	12.90
7.	Diseases of the respiratory system	11.06	6.16	7.96
8.	Perinatal causes	5.18	7.64	10.43

Table - 5 Sex-wise comparison of leading causes of death in Quilon, Cochin and Calicut
(in Percentage) 1986.

Sl. No.	Cause of death	Quilon		Cochin		Calicut	
		Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8
1.	Intestinal infectious diseases	3.40	4.29	1.21	1.91	3.12	4.22
2.	Tuberculosis	3.52	2.61	4.15	3.26	5.45	3.27
3.	Other bacterial diseases	5.05	4.66	2.87	3.70	4.86	6.88
4.	Neoplasms	3.18	3.73	8.37	7.41	10.75	9.55
5.	Heart diseases	22.17	17.35	36.30	32.10	17.15	12.31
6.	Cerebrovascular diseases	15.04	16.98	9.19	12.68	12.97	12.76
7.	Diseases of the respiratory system	11.20	10.82	6.26	5.95	7.50	8.79
8.	Perinatal causes	4.39	6.53	6.03	10.77	9.40	12.26

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