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# CHARACTERISTICS OF PATIENTS

DYING FROM

*DISEASES*

of

*DIGESTIVE SYSTEM*

*PUNJAB*

1968

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DIRECTOR, HEALTH AND FAMILY PLANNING, PUNJAB.  
CHANDIGARH

# CHARACTERISTICS OF PATIENTS

Dying from

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BY

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## BACKGROUND

As a part of the overall project of disseminating Vital and Health Statistics information, the State Bureau of Health Intelligence, Directorate of Health Services, Punjab, has undertaken a series to publish a data on causes of mortality in the State. The information is based upon the deaths occurring amongst inpatients in hospitals in Punjab State. These deaths were certified in the International form of Medical Certificates of Cause of death (Annexure 'A') prescribed by the World Health Organisation and processed in accordance with the rules laid down in the International Classification of Diseases 1955 Revision. Details of the previous studies in Punjab on the subject may be found in document Nos. 1, 4 and 5 of Series No. 2.

## OBJECTIVES

The primary objectives of the present paper are to highlight the proportion of patients dying from the diseases of the Digestive system, to study the age and sex distribution and to pinpoint the leading individual causes in this broad cause group of diseases.

## SCOPE

The information is based upon the deaths amongst inpatients occurring in 96 hospitals in the State of Punjab. References, in order to study the trend, have also been given for the data on the subject from the years 1964 to 1967. A note on the background, coverage, processing and system of referrals is attached as Appendix I to this paper.

## MAIN FINDINGS

### Morbidity in relation to Mortality

The number of inpatients suffering from diseases in general, diseases of the Digestive System in particular and the corresponding number of deaths from the two categories are shown in the following table from the year 1964 to 1967. The information in respect of patients admitted in the hospital as a result of accidents/external causes has been excluded from the total treated in the inpatient departments of the participating hospitals:—

| Year | In-patients  |                              | Deaths amongst inpatients from |                                    |
|------|--------------|------------------------------|--------------------------------|------------------------------------|
|      | All Diseases | Diseases of Digestive system | Diseases                       | Diseases of Digestive system alone |
| 1    | 2            | 3                            | 4                              | 5                                  |
| 1964 | 2,57,918     | 25,061                       | 7,715                          | 931                                |
| 1965 | 2,74,389     | 24,200                       | 7,815                          | 1,062                              |
| 1966 | 1,66,627     | 13,700                       | 5,278                          | 547                                |
| 1967 | 1,77,758     | 18,340                       | 5,786                          | 735                                |

Patients suffering from the diseases of the Digestive System formed 9.72 per cent in 1964, 8.82 per cent in 1965, 8.22 percent in 1966 and 10.32 per cent in 1967 of the total suffering from all categories of diseases. The mortality amongst patients of the Digestive system was higher in relation to the patients suffering from the same disease group in comparison with the deaths amongst patients for all diseases. For the year 1967 alone the percentage of patients dying and suffering from the Digestive system disease was 4.01 per cent as compared to an over all mortality from all diseases to the extent of 3.25 per cent.

### Hospitals deaths certified in the International form of Medical Certificate of cause of death.

The number of deaths occurring in the participating hospitals amongst inpatients and certified in the International form of Medical Certificates of cause of death, as prescribed by World Health

Organization for the year 1964 to 1968 and classified as those due to external causes, diseases and morbid conditions and diseases of the Digestive system alone are shown in the following table :—

| Year | Total Certificates | External causes | Diseases of Morbid conditions | Diseases of the Digestive system |
|------|--------------------|-----------------|-------------------------------|----------------------------------|
| 1    | 2                  | 3               | 4                             | 5                                |
| 1964 | 3,896              | 390             | 3,506                         | 506                              |
| 1965 | 4,473              | 460             | 4,013                         | 478                              |
| 1966 | 5,221              | 559             | 4,662                         | 531                              |
| 1967 | 5,763              | 657             | 5,106                         | 654                              |
| 1968 | 6,483              | 814             | 5,669                         | 989                              |

The percentage of deaths from external causes has been gradually increasing from 10 per cent in 1964 to 12.6 per cent in 1968. The percentage of deaths from diseases of the Digestive System to the total deaths from all categories started increasing from 10.2 per cent in 1966 through 11.3 per cent in 1967 and attaining the climax as 15.3 per cent during 1968. This high percentage of deaths from diseases of the Digestive system includes diseases of buccal cavity and oesophagus, diseases of stomach and duodenum, Appendicitis, Diseases of Hernia of abdominal cavity, other diseases of intestines and peritoneum, diseases of liver, gallbladder and pancreas etc.

#### Classification by sex

The following table embodies the deaths due to all diseases and morbid conditions and diseases of the Digestive system by sex for the years 1964 to 1968 :—

| Year | Diseases and Morbid conditions |         | Diseases of the Digestive System |         |
|------|--------------------------------|---------|----------------------------------|---------|
|      | Males                          | Females | Males                            | Females |
| 1964 | 2,483                          | 1,023   | 383                              | 123     |
| 1965 | 2,196                          | 1,817   | 297                              | 181     |
| 1966 | 2,890                          | 1,772   | 360                              | 171     |
| 1967 | 3,231                          | 1,875   | 446                              | 208     |
| 1968 | 3,545                          | 2,124   | 707                              | 282     |

The percentage of deaths from diseases of the Digestive system for all the years was higher in respect of males rather than females, when compared to deaths of the respective sex for the over all total of diseases and morbid conditions. There was an increasing trend in case of percentage of deaths from diseases of Digestive system for males—being 12.5 per cent in 1966, 13.8 per cent in 1967 and 19.9 per cent in 1968. There was a declining trend in this percentage for females from the year 1964 to 1966—being 12.0 per cent for the year 1964 and 9.7 per cent in 1966. Thereafter the percentage started increasing to 11.1 per cent in 1967 and 13.3 per cent in 1968.

### Broad Categorisation

The deaths from diseases of the Digestive system in various broad cause groups for the year 1968 are shown in the following table for males and females :—

| Cause group                                  | International Code No. | Deaths in respect of |         |
|--|------------------------|----------------------|---------|
|  |                        | Males                | Females |
| Diseases of buccal cavity and oesophagus     | 530—539                | ..                   | ..      |
| Diseases of Stomach and duodenum             | 540—545                | 12                   | 4       |
| Appendicitis                                 | 550—553                | 11                   | 4       |
| Hernia of abdominal cavity                   | 560—561                | 20                   | 2       |
| Other diseases of intestines and peritoneum  | 570—578                | 543                  | 221     |
| Diseases of Liver, gallbladder, and pancreas | 580—587                | 121                  | 51      |
| All Categories                               | ..                     | 707                  | 282     |

For males other diseases of the intestines and peritoneum claimed 76.8 per cent of the total deaths from this broad category of causes. This was followed by diseases of Liver, gallbladder and pancreas contributing 17.1 per cent of the total deaths and diseases of Hernia of abdominal cavity, etc. with 2.8 per cent contribution to the total. For females diseases of intestines and peritoneum contributed 78.4 per cent of the total deaths from this broad category followed by diseases of Liver, gallbladder and pancreas with 18.1 per cent.

#### First ten leading causes of deaths for diseases of Digestive system

To pin-point the individual leading causes signing the death warrants of people and belonging to the category of diseases of the Digestive system, separate account has been sketched for males and females.

#### Males

Out of 707 male deaths from the category of diseases of the Digestive system 685 were exclusively due to the first ten causes. These are tabulated below:—

| Disease  | International Code No. | Number of Deaths |
|--|------------------------|------------------|
| Gastro-enteritis and Collitis, except ulcerative, age 4 weeks and over | 571                    | 319              |
| Intestinal obstruction without mention of hernia                       | 570                    | 198              |
| Cirrhosis of liver   | 581                    | 98               |
| Peritonitis  | 576                    | 17               |
| Hernia of abdominal cavity without mention of obstruction              | 560                    | 11               |
| Acute appendicitis   | 550                    | 11               |
| Ulcer of stomach   | 540                    | 9                |
| Hernia of abdominal cavity with obstruction                            | 561                    | 9                |
| Other diseases of liver  | 583                    | 7                |
| Suppurative hepatitis and liver abscess                                | 582                    | 6                |

These ten leading causes of deaths contributed 19% of the total of 19.9% of the deaths from Digestive system in relation to the deaths from all categories of diseases. Gastro-enteritis and collitis except ulcerative age four weeks and over gave rise to 8.9% of the deaths from all diseases. Intestinal obstruction without mention of Hernia added another 5.5% and Cirrhosis of liver 2.7% to the total of 19.9% of deaths from diseases of the Digestive system. These three causes alone contributed 17.1% of the total males death from all disease.

### Females

Out of 282 deaths for females from the diseases of the Digestive system group, 274 occurred due to ten causes alone during 1968 and as tabulated below:—

| Disease   | International Code No. | Number of deaths |
|---|------------------------|------------------|
| Gastro-enteritis and Collitis except ulcerative, age 4 weeks and over | 571                    | 145              |
| Intestinal obstruction without mention of hernia                      | 570                    | 61               |
| Cirrhosis of liver  | 581                    | 40               |
| Peritonitis   | 576                    | 13               |
| Acute appendicitis  | 550                    | 4                |
| Other diseases of gallbladder and biliary ducts                       | 586                    | 3                |
| Suppurative hepatitis and liver abscess                               | 582                    | 2                |
| Diseases of pancreas  | 587                    | 2                |
| Other diseases of intestines and peritoneum                           | 578                    | 2                |
| Other diseases of stomach and duodenum                                | 545                    | 2                |

The ten causes claim a share of 12.9% of the deaths amongst females out of a total of 13.3% for the same sex and for diseases of the Digestive system. Like males the first three leading causes of deaths were Gastro-enteritis and Collitis except ulcerative, age 4 weeks and over, Intestinal Obstruction without mention of Hernia and Cirrhosis of liver. All the three causes contributed 11.6% of the deaths out of a total of 13.3%.

### Age and sex distribution of first three leading causes

The following table helps in a study of the age and sex distribution for the first three leading causes of deaths and the Digestive system both for males and females:—

| Serial No. | Age Group          | Gastro-Enteritis and Collitis except ulcerative age 4 weeks and over |         | Intestinal obstruction without mention of Hernia |         | Cirrhosis of Liver |         |
|------------|--------------------|--|---------|--|---------|--------------------|---------|
|            |                    | Males  | Females | Males  | Females | Males              | Females |
| 1          | All Age Groups     | 319  | 145     | 198  | 61      | 98                 | 40      |
| 2          | Under one Year     | 155  | 53      | 36   | 6       | 9                  | 5       |
| 3          | 1—4 years          | 73   | 38      | 14   | 2       | 13                 | 2       |
| 4          | 5—14 years         | 27   | 11      | 18   | 1       | 6                  | 2       |
| 5          | 15—24 years        | 11   | 10      | 18   | 3       | 6                  | 4       |
| 6          | 25—54 years        | 26   | 23      | 54   | 31      | 43                 | 19      |
| 7          | 55 years and above | 24   | 7       | 54   | 13      | 14                 | 5       |
| 8          | Age not Specified  | 3  | 3       | 4  | 5       | 7                  | 3       |

*Gastro-enteritis and collitis.*—So far as Gastro Enteritis is concerned the problem both for males and females was acute in the age groups under 1 year and 1 to 4 years. The percentage of deaths for males under one year was 48.6% of the total deaths from the diseases in all age groups. The percentage of deaths was less in respect of females in the age group under one year—being 36.6% of the total deaths of all age groups from the disease amongst females.

*Intestinal obstruction.*—Intestinal Obstruction without mention of Hernia was concentrated in the age group 25—54 years (27.3%) and 55 years and above (27.3%) amongst males. For females the mortality was maximum in the age group 25—54 years being 51%.

*Cirrhosis of liver.*—For males the mortality from the disease increased from 9.2% under one year, 13.3% in the age group 1—4 years and fell to 6.1% in the age group 5—14 years and maintaining the same percentage even in the age group 15—24 years. 43.9% of the total deaths from Cirrhosis of liver was in the age group of 25—54 years. For females the incidence was higher under one year of age followed by a reduction in the subsequent age groups up to 14 years of age and rising again in the age groups 15—24 (10%) and 25—54 years (47.5%) of the total deaths amongst females from this disease.

### Seasonal Variation

The deaths occurring in the participating hospitals amongst inpatients in various months of the year 1968 are shown in the following table:—

| Month        | Accidents  | Diseases of Digestive System | Diseases of Non-Digestive System |
|--------------|------------|------------------------------|----------------------------------|
| January      | 63         | 58                           | 344                              |
| February     | 55         | 30                           | 313                              |
| March        | 70         | 60                           | 353                              |
| April        | 75         | 78                           | 370                              |
| May          | 75         | 141                          | 376                              |
| June         | 90         | 121                          | 450                              |
| July         | 79         | 100                          | 481                              |
| August       | 59         | 115                          | 457                              |
| September    | 62         | 91                           | 434                              |
| October      | 69         | 57                           | 335                              |
| November     | 52         | 67                           | 361                              |
| December     | 65         | 71                           | 406                              |
| <b>Total</b> | <b>814</b> | <b>939</b>                   | <b>4,680</b>                     |

For the diseases as a whole there was a rising trend in the percentage of deaths starting from February (6.1%) through March (7.3%), April (7.9%), May (9.1%), June (10.1%) and July (10.2%). This very trend was reflected in mortality from diseases of the Digestive System starting from the month of February (3.0%) through March (6.1%), April (7.9%) and May (14.2%). For diseases as a whole mortality started decreasing from the months of July to October; whereas for diseases of the Digestive system the trend which started from the month of May continued upto the month of November. Diseases other than those of the Digestive system reflected a different pattern because the increase in mortality was there in respect of such diseases from the months of May to July as against diseases of digestive system during this very period.

Looked from the angle of various cause groups within the system of Digestive diseases it was noticed that other diseases of intestines and Peritoneum had an increasing mortality trend from the month of



February to the month of May. It had a decreasing trend from the month of August to the month of November. Diseases of the Liver Gallbladder etc. had inclining trend upwards from the month of April to the month of June.

### SUMMARY AND CONCLUSIONS

An analysis of 6483 deaths amongst inpatients in 96 participating hospitals in Punjab State for the year 1968 led to the following main conclusions:—

1. About 15.2% of the deaths were from diseases of the Digestive system alone.
2. The mortality from diseases of Digestive system was higher amongst males (19.9%) in relation to females (13.3%) of the total deaths from diseases for the respective sex.
3. Other diseases of the Intestines and peritoneum (International Code No. 570-578) topped the sub-categories under the head diseases of the Digestive system both for males and females—contributing 76.8 and 78.4% of deaths from Digestive system diseases.
4. The first three individual leading causes of deaths both for males and females were Gastro-Enteritis and Collitis except ulcerative, age 4 weeks and above, Intestinal Obstruction without mention of Hernia and Cirrhosis of liver. Out of 19.9% of deaths from Digestive diseases for males three causes contributed 17.1%. Out of 13.3% of deaths from diseases of Digestive system for females, these three individual causes formed 11.6% of the total.
5. Gastro-enteritis and Collitis except Ulcerative age 4 weeks and over was a problem diseases under one year of age in particular and age group 1—4 years in general both for males and females.
6. Intestinal obstruction without mention of Hernia was most common amongst females in the age group 25—54 years. The problem was equally acute for males in the age group 25—54 years and ages 55 years and above—each age group contribute 27.3% of the deaths from the diseases of the total in all age groups.
7. Cirrhosis of liver was concentrated in the age group 25—54 years both amongst males and females.

### IMPLICATIONS

The above analysis is based on hospitals deaths and by nature the data is selective in character. As such generalization of the results need be made with caution. However, this provides ample scope to initiate actions by the Health Department and also mobilise public opinion to minimise morbidity and mortality from such diseases as Gastro-enteritis and Collitis etc. which can easily be prevented through Hygienic conditions and cleanliness.

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4. Causes of deaths Medically certified (Major Hospitals) in Punjab State 1966, Series No. 2, Publication No. 1.

## APPENDIX I

### BACKGROUND, COVERAGE AND PROCESSING

Punjab is one of the Northern States of India. It occupies an area to the extent of 47,000 square miles inhabiting a population of 11.14 million in 109 towns and 12,883 villages according to 1961 Census. The mid-year estimated population for 1968 is 12.6 million. According to registration data the population has been growing at a rate ranging from 1.9 per cent to 2.2 per cent after 1961 Census. The density of population per square kilometer is 246. The literacy rate according to 1961 Census was 26.7 per cent. 76.9 per cent of the 1961 Census population and 76.4 per cent of the 1968 estimates lives in rural areas.

The number of registered Medical Practitioners in the State is approximately 4,400. This gives a Medical Practitioner and population ratio as 3,027 persons per one registered Medical Practitioner. It is common that as in other areas of the Country there is concentration of these registered Medical Practitioners in the urban rather than the rural areas. The gap is being covered through establishment of Primary Health Centres in the rural areas and dispensaries where both the preventive and the curative aspects can be made available to the public served by these institutions. It is not feasible to ensure attendance to every sick person and also precisely pin-point the causes of deaths due to shortage of medical personnel on one hand, and patchy distribution of this scarce commodity in the rural areas in particular on the other.

### INTRODUCTION OF MEDICAL CERTIFICATION OF CAUSE OF DEATH

Realising that a stage of saturation is hardly within the sight, when every death would be certified by a medical attendant, a beginning to lay the hands, on as precise a cause of death as possible, was made through the introduction of medical certification of cause of death in the International form (as prescribed by the World Health Organization), during the year 1963 in Punjab State. During that year the number of hospitals covered was only 39. The number of hospitals covered during different years are as under :—

| Year | No. of Hospitals covered |
|------|--------------------------|
| 1963 | .. 39                    |
| 1964 | .. 39                    |
| 1965 | .. 63                    |
| 1966 | .. 71                    |
| 1967 | .. 71                    |
| 1968 | .. 96                    |

All hospitals with bed strength 10 and above have been covered and stand incorporated in this report. The number of medical certificates of cause of death in the International form collected during various years from these hospitals are as under :—

| S.No. | Year | No. of Medical Certificates in respect of |       |         |
|-------|------|---|-------|---------|
|       |      | Both Sexes                                | Males | Females |
| 1     | 2    | 3   | 4     | 5       |
| 1     | 1964 | .. 3,896                                  | 2,800 | 1,096   |
| 2     | 1965 | .. 4,473                                  | 2,513 | 1,960   |
| 3     | 1966 | .. 5,221                                  | 3,330 | 1,891   |
| 4     | 1967 | .. 5,763                                  | 3,748 | 2,015   |
| 5     | 1968 | .. 6,483                                  | 4,169 | 2,314   |

## PROCESSING OF THE INFORMATION

The 96 hospitals participating in the supply of medical certificates of cause of death in the International form as prescribed by World Health Organization, maintain a direct contact with the State Bureau of Health Intelligence of the Department. Certificates in respect of deaths occurring in the inpatient departments of a hospital during a particular month were due by the 7th of the succeeding month. It was possible to ensure a response rate to the extent of 75 per cent of the institutions in the first lot. The remaining 25 per cent were followed through reminders and telegrams. The chronic defaulters were the hospitals attached to the teaching Colleges, who could hardly send the information in time.

### CHECKING AND COMPILATION

The Medical Certificates of cause of death received were checked for incompleteness and inconsistencies with regard to various items such as the personal information like sex, age, residence or incomplete diagnosis. Such certificates wanting information on one score or the other were referred back to the hospital and the certifying physician for rectification. Others were coded according to the rules as prescribed in the International Classification of Diseases, Seventh Revision.

Punch card system with the help of the sorter and tabulator enabled to tabulate the information along various axes presented in the report. About 12.4 per cent of the certificates were referred back during 1968 in relation to 16.7 per cent during the year 1967.

ANNEXURE "A"

INTERNATIONAL FORM -

MEDICAL CERTIFICATE OF CAUSE OF DEATH

|                     |          |       |   |                   |      |                   |               |            |     |      |      |      |
|---------------------|----------|-------|---|-------------------|------|-------------------|---------------|------------|-----|------|------|------|
| Name of Institution |          |       | Hospital in-patients<br>(Not to be used for still births) |                   |      | Admission No.     |               | For use by |     |      |      |      |
|                     |          |       |   |                   |      |                   |               | S          | B   | H    | I    | (1)  |
| Name of deceased    |          | Sex   | Marital status  | Date of birth     |      | Date of death     |               | (5)        | (6) | (7)  | (8)  |      |
|                     |          | M/F   | S/M/W/D   |                   |      |                   |               |            |     |      |      |      |
| Resident of—        |          |       | A   |                   | G E  |                   | —incompleted— |            | (9) | (10) | (11) | (12) |
| Rural Area          | District | State | Years   | If under one year |      | If under 24 hours |               |            |     |      |      |      |
| Urban               |          |       |   | Months            | Days | Hours             | Minutes       |            |     |      |      |      |

|  |  |                        |                                 |  |      |      |      |      |
|--|--|------------------------|---------------------------------|--|------|------|------|------|
| <b>I</b><br>Immediate Cause<br>(Disease or condition directly leading to death)  |  | CAUSE OF DEATH         |                                 | Approximate interval between onset and death | (13) | (14) | (15) | (16) |
| State the disease, injury or complication which caused death (not the mode of dying such as heart failure, asthenia, etc.)     |  | (a)                    | due to (or as a consequence of) |  | (17) | (18) | (19) |      |
| Antecedent Causes<br>Morbid conditions, if any, giving rise to the above cause, stating the underlying condition last          |  | (b)                    | due to (or as a consequence of) |  | (20) | (21) | (22) | (23) |
|  |  | (c)                    |                                 |  | (24) | (25) | (26) | (27) |
| <b>II</b><br>Other Significant conditions<br>Contributing to the death, but not related to the disease or condition causing it |  |                        |                                 |  |      |      |      |      |
| Alleged ACCIDENT <input type="checkbox"/>  |  | How did injury occur ? |                                 |  |      |      |      |      |
| Alleged SUICIDE <input type="checkbox"/>   |  |                        |                                 |  |      |      |      |      |
| Alleged HOMICIDE <input type="checkbox"/>  |  |                        |                                 |  |      |      |      |      |
| (Tick relevant cell)   |  |                        |                                 |  |      |      |      |      |
| IF DECEASED WAS A FEMALE   |  |                        |                                 |  |      |      |      |      |
| Was the death associated with pregnancy ? . . . . . If yes, was there a delivery . . . . .                                     |  |                        |                                 |  |      |      |      |      |
| (Yes or No)  |  |                        |                                 |  |      |      |      |      |

Signature of Medical Attendant

Date of Signature

SEE REVERSE FOR INSTRUCTIONS

## MEDICAL CERTIFICATE OF CAUSE OF DEATH

### Directions for completing the form

**Name of deceased.**—To be given in full. Do not use initials. If deceased is an infant, not yet named at the time of death write "Son of" (S/o) or "Daughter of" (D/o) followed by names of mother or father.

**Sex.** Strike off which is not applicable.

**Marital Status.**—Indicate whether single (S), married (M) widowed (W) or divorced (D). Tick mark (✓) which is applicable.

**Date of birth.**—Please try to ascertain this in the largest possible number of deaths. It is of great importance from both the legal and statistical point of view.

**Rural, Urban.**—Strike off which is not applicable.

**Age.**—This should be stated whether or not the date of birth has been given. If deceased is more than one year old : give age in years upto last birthday (completed number of years). If under 1 year : give age in months and days. If under 24 hours : give age in hours and minutes.

**Cause of death.**—This part of the form should always be completed by the attending physician personally.

The certificate of cause of death is divided into two parts, I and II. Part I is again divided into three parts—lines (a) (b) (c). If a single morbid condition completely explains the death, then this will be written on line (a) of Part I, and nothing more need be written in the rest of Part I or in Part II. For example, smallpox, lobar pneumonia, cardiac beriberi, are sufficient causes of death and usually nothing more is needed.

Often, however, a number of morbid conditions will have been present at death, and the doctor must then complete the certificate in the proper manner so that the correct underlying cause will be tabulated. First, enter in Part I (a) the immediate cause of death. This does not mean the mode of dying e.g., heart failure, respiratory failure, etc. These terms should not appear on the certificate at all, since they are modes of dying and not causes of death. Next consider whether the immediate cause is a complication or delayed result of some other cause. If so, enter the antecedent cause in Part I line (b). Sometimes there will be three stages in the course of events leading to death. If so, line (c) will be completed. The underlying cause to be tabulated always written last in Part I.

Morbid conditions or injuries may be present which were not directly related to the train of events causing death but which contributed in some way to the fatal outcome. Sometimes the doctor finds it difficult to decide, especially for infant deaths, which of several independent conditions was the primary cause of death, but only one cause can be tabulated, so the doctor must decide. If the other diseases are not effects of the underlying cause they are entered in Part II.

**Do not write two or more conditions on a single line.**—Please write the names of the diseases in full) in the certificate as legibly as possible to avoid the risk of their being misread.

**Onset.**—Complete the column for interval between onset and death whenever possible, even very approximately e.g., "from birth" "several years".

**Accident or violent deaths.**—Both the external cause and the nature of the injury are needed and should be stated. The doctor or hospital should always be able to describe the injury stating the part of the body injured, and should give the external cause in full when this is known. Example : 1 (a) Hypostatic Pneumonia ; (b) Fracture of neck of femur, ; (c) Fall from ladder at home.

**Maternal Deaths.** Be sure to answer the questions—on pregnancy and delivery. This information is needed for all women of child bearing age, even though the pregnancy may have had nothing to do with the death.

**Old age or senility.**—Old age (or senility) should not be given as a cause of death if a more specific cause is known. If old age was contributory factor, it should be entered in Part II. Example : I(a) Chronic bronchitis II-Old age.

**Completeness of information.**—A complete case history is not wanted, but, if the information is available, enough details should be given to enable the underlying cause to be properly classified.

**Examples—Anaemia.**—Give type of anaemia, if known. **Neoplasms.**—Indicate whether benign or malignant, and site, with the site of primary neoplasm, whenever possible, **Heart disease.**—Describe the condition specifically if congestive heart failure, chronic corpulmonale, etc., are mentioned ; give the antecedent condition. **Tetanus.**—Describe the antecedent injury if known **Operation.**—State the condition for which the operation was performed. **Dysentery.**—Specify whether bacillary amoebic etc., if known. **Complications of pregnancy or delivery.**—Describe the complication specifically. **Tuberculosis.**—Give Organs affected.

**Symptomatic statements.**—Convulsions, diarrhoea, fever, ascites, jaundice, debility, etc., are symptoms which may be due to any one of a number of different conditions. Some times nothing more is known, but whenever possible, give the disease which caused the symptom.

**DETAILED TABULATION**  
of  
**DEATHS FROM DISEASES OF THE DIGESTIVE SYSTEM**  
Medically Certified  
in  
**INTERNATIONAL FORM**  
from  
**96 Hospitals**  
in  
**Punjab State**  
**1968.**









| 14 | 15  | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |
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# ***Publications***

## **State Bureau of Health Intelligence (SBHI)**

*Series No. 1—* Population and Demographic Data.

*Series No. 2—* Mortality Statistics.

*Series No. 3—* Health Statistics.

*Series No. 4—* Reports and Recommendations of Advisory Committee on Health Statistics.

*Series No. 5—* Reports and Recommendations of Expert Committee on the improvement of Birth and Death Registration and allied publications.

*Series No. 6—* Special Survey, Investigation Reports.

*Series No. 7—* Annual Administration Reports of Health Department.

*Series No. 8—* Hospital Statistics and allied publications.

**For Reports on individual subjects**

**Please write**

**to**

**Assistant Director, Health Statistics,**

**DIRECTORATE OF HEALTH AND FAMILY PLANNING,  
PUNJAB, CHANDIGARH.**