

## **Abstracts : Mortality in Diabetics-Indian Literature**

**Sridhar, C.B. & Ahuja, M.M.S.**

*Pattern of mortality amongst Diabetics in North India, Ind. J. Path.  
Bact. 9, 222-227 (1966)*

Between 1960 and 1965, 75 diabetics died at AIIMS, New Delhi. The cause of death in 76% of them was due to vascular complication of which the major cause was cardiac in 43% followed by renal and cerebral in 22.7% and 12% respectively. 9.3% of the patients died of coma. Accidents and cirrhosis led to death in 6.7% each, while infection in 2.7%.

Between the ages of 51 and 60, 32% deaths occurred followed by 24% and 23% deaths in 41-50 and 61-70 year age groups. The age of the diabetic at the onset and the duration of the disease also influenced the occurrence of complications that led to death in diabetes. Among the patients, who had diabetes since their childhood (< 20 yrs. of age at onset) coma was the commonest cause of death, and among the patients who developed disease later in life (>20 yrs. of age at onset) vascular complications were more common. The duration of the disease seemed to have little effect on the course of disease among the patients of late onset disease. But renal and cardiac manifestations were significantly high among the diabetics who had diabetes during their 20th to 40th year and suffered from the disease for more than 10 years.

***Patel, J.C., Dhirawani, M. & Deshpande, N.M.***

### ***I. Cause of death in diabetes mellitus, Proceedings of World Congress on Diabetes in Tropics, 417-418, 1966***

Eighty six diabetics were studied retrospectively regarding their causes of death at K.E.M. Hospital, Bombay, between April, 1958 and December, 1964. Among males cardiac complication (in 37.3% of cases) was the commonest cause of death, while among females (in 33.3% of cases), coma was the commonest cause followed by cardiac cause of death. Cerebrovascular disease and gangrene were the next frequent causes leading to death in 34.9% and 20.9% of the total cases. Sepsis and hypoglycaemia also caused death in 14% and 4.7% of cases, studied in this report.

***Patel, J.C. & Gajwani, R.K.***

### ***II. Diabetes - The cause of death, its ranking, Proceedings of World Congress on Diabetes in Tropics, 418-419, 1966***

As diabetes was the fifth commonest cause of death in U.S.A., a study of 2,300 deaths between July, 1960 and June, 1965 in Bombay Hospital to rank the diabetes among the causes of death in India was undertaken. Majority of the deaths in diabetics were due to coronary artery disease (22%) followed by cerebrovascular disease, (10%), renal disease (8%) and infections (3%) in that order. Malignancy and cirrhosis were also the immediate causes of death in diabetes in a few patients.

***Singh Verma, N.P., Gupta, P.S., Krishna Ram, B. & Khanijo, V.***

***Mortality in diabetes at Irwin Hospital, New Delhi. In "challenges of Therapy of Diabetes in Developing Countries", RSSDI, October 30, 1976***

In 5 years (1970-74) of 2091 diabetes (3.1 % of total admissions) admitted in Irwin Hospital, New Delhi, 235 of these died during the hospital stay (11.2%, mortality amongst diabetic patients admitted). 221 complete records were available for retrospective analysis, 21.2% deaths were attributed to myocardial infarction, 22.5% to renal failure, diabetic coma in 21.7% infection and gangrene in 17.6%. cerebrovascular accidents in 12.6% and hypoglycaemia in 4.0%

***Majumdar, G. & Ahuja, M.M.S.***

***Clinical causes of death in Indian diabetics. Paper presented at RSSDI meeting, January, 1978***

Out of the 560 diabetic deaths at AIIMS between 1959 and 1976, 29.1 % and 28.2% died of cardiac and renal disease respectively. Overall the vascular complications were commonest as 70.7% died of these. In patients who died at ages of less than 40 yrs, ketoacidosis was the commonest cause of death. In the remaining, 66 patients died of cerebrovascular disease, 36 died of malignancy, 31 died following infections and 18 diabetics died of liver diseases. The miscellaneous causes of death: in 20 patients included accidents, acute renal failure, obstructive airway disease, cardiomyopathy, etc.

***Nanda, K.C., Samal, K.C., & Tripathy, B.B.***

***Diabetic death. Jour. Diab. Ass. India, 18, 171, (1978)***

Among 71 diabetic deaths vascular causes were found to account for 62 percent; cerebrovascular accident, coronary heart disease and renal angiopathy were equally common in this series. In this hospital death due to non-vascular causes except diabetic coma, has gone down. There are differences in the causes of death among diabetics between this part of the country and the Northern part where coronary heart disease takes the major toll of life. Geographical variation and undernutrition may contribute towards the lower incidence of coronary heart disease peculiar to this part. The cause of this difference requires further probing.

Collaborative attempts at national level should be organised to have a prospective analysis of causes of death among diabetics by improving diagnostic procedures.

*Pathak, U.A., Upasani, S.P. & Sainani, G.S.*

*Analysis of Death in Diabetes Mellitus. Jour. Diab. Ass. India, 17,71,  
1977*

Diabetes ranks 5th cause of death in analysis of 2,279 deaths in Sassoon General Hospital, Poona, during the period of five years. 179 deaths occurred in diabetic patients due to complications of the disease or diabetic coma. Majority of the diabetics were admitted to the hospital with complications. Death rate in diabetics is significantly higher than in general population. Further, deaths due to CHD are significantly higher in diabetics than in general population. Vascular complications and diabetic coma are the prime causes of death.

*Singh Verma, N.P., Gupta, P.S., Krishna Ram, B., & Vinod Khanijo*

*Mortality in Diabetes at Irwin Hospital, New Delhi. Jour. Diab. Ass. India,  
17,51, 1977*

Over the 5 years of study, there were 235 diabetic deaths recorded at Irwin Hospital, accounting for 11.2% mortality among diabetics admitted. Ischemic heart disease was responsible for only 21.2% deaths, whereas 22.5% of diabetics died of renal failure. A high incidence of hypoglycaemia leading to death in 4% of the cases was recorded. Ketotic coma in 21.2%, cerebrovascular accidents in 12.6% and infections in 5.4% of diabetics were recorded to be the causes of death.