

# DIABETES MELLITUS IN THE MALTESE ISLANDS

By WALTER GANADO B.Sc., M.D., B.Sc., (Lond), M.R.C.P. (Lond).

*Departments of Medicine and of Physiology, Royal University of Malta*

Is Diabetes Mellitus commoner in the Maltese Islands than elsewhere? If it is more common, why is it so common?

These questions call for an early answer because Diabetes Mellitus appears to be increasing in the Maltese Islands. This increase however does not appear to affect the young. Diabetes in the young does not appear to be more common in the Maltese Islands than elsewhere. During the period 1948-61 the writer met only eight diabetics between the age 8 and 20 years, but the number of diabetics at the age of 40 years and over have been a legion. The increase of Diabetes Mellitus in the Maltese Islands appears to be related to increase of the number of old persons. This has been brought about partly by the emigration drive affecting predominantly the young, and mainly by increased longevity. Crude death rate has in fact fallen from 12.2% in 1948 to 8.7% in 1961, and expectation of life at age one year which in 1948 was 64.8 years for males and 66.9 years for females has risen in 1961 to 68.4 years for males and 72.1 years for females. Hence the number of persons aged 40 years and over, which in 1948 stood at 89,262 and formed 28.5% of the total population, rose in 1961 to 96,691 forming 29.4% of the population; and the number of persons aged 60 years and over which in 1948 stood at 28,125 and formed 9.2% of the population, rose in 1961 to 35,515, forming 10.8% of the population (1). A small survey carried out in 1961 at an old age home in Malta showed that 16

out of 93 patients had glycosuria (2). The age distribution of these glycosurics was as follows:

60 - 64 years .....	4
65 - 69 years .....	5
70 - 74 years .....	5
75 - 79 years .....	2

Indeed, Diabetes Mellitus forms with Senility the major medico-social problem with which the Maltese Islands are faced at present.

Diabetes Mellitus is linked with senility not only because the incidence of Diabetes rises rapidly with advancing old age, but also because Diabetes accelerates and aggravates the troubles of old age. Such complications as gangrene, heart attacks, kidney troubles, tuberculosis, other infections, paralysis and blindness are in fact much more common in diabetic than in non-diabetic patients of corresponding age. Thus a survey of blindness carried out in 1958 (3) has shown that of 638 blind persons, 92 persons or 15.9% of the blind had lost their eyesight because of Diabetes Mellitus. This percentage compares very unfavourably with the corresponding percentage of the United Kingdom. Whereas in the United Kingdom the percentage of total blindness is roughly equal to the percentage of total blindness in the Maltese Islands, the number of persons that are blind because of Diabetes Mellitus constitute in the United Kingdom only 6.9% of the total blind, when this percentage is 15.9% in the Maltese Islands. Of the 92 cases that were found blind because of

diabetes in the Maltese Islands 23 were males and 69 females.

A survey to assess the incidence of Diabetes Mellitus in the Maltese Islands and to establish its relationship to age, sex, occupation, genetics, fertility and diet, is very much indicated. This survey should not present great difficulties. The population is cooperative; Malta is just less than a hundred square miles and all its parts are accessible. Results should throw light also on theoretical aspects. This is a closed community numbering 328,854 persons in 1961 situated in the Central Mediterranean and consuming abundance of carbohydrate foods and fats. Is the Maltese diet related to the incidence of Diabetes?

Once that the incidence of Diabetes is firmly established for the total population, comparison with the incidence in special groups of this population may be indicated. A case in point would be to study the incidence of Diabetes in religious persons living in community. These are hundreds of these single

persons of either sex in the Maltese Islands, consuming meals in common. This food consumption can be accurately estimated.

Is the incidence of Diabetes mellitus higher among descendants of first cousins who marry in the Maltese Islands than in the total population? The Maltese do not marry outside the Catholic Church and this allows marriage between cousins only by dispensation. Hence a list of marriages between first cousins is available. It should be possible to trace down a large number of descendants from first cousins to compare the incidence of Diabetes mellitus of this group with the incidence in the total population.

1. Data kindly supplied by Central Office of Statistics, Malta.
2. Survey on Old Age People in Malta by St. Anne Welfare Committee for the Old, Malta, 1961.
3. Dr. F. Damato. Br. J. Ophth., 1960, 44,164.