SUMMARY

INTRODUCTION: Type 2 Diabetes mellitus is a major cause of mortality and morbidity worldwide. There have been cases of its late diagnosis in spouses of diabetics managed at the author’s center. Furthermore, reports of a few studies done outside the author’s locality on the concordance of diabetes in spouses of diabetics indicate that these spouses are at a greater risk of the disease when compared to spouses of non-diabetics. This study was undertaken to investigate the concordance of diabetes in couples seen at the author’s practice center.

AIM AND OBJECTIVES: The aim was to determine the concordance of Type 2 Diabetes in couples seen in the General Out Patient Clinic (GOPC), University of Benin Teaching Hospital (UBTH), with a view to identifying its risk factors and designing intervention.

The objectives were to determine the percentage of the spouses of diabetics seen at the GOPC of UBTH who also have Type 2 diabetes, to identify the factors which contribute to this percentage, to establish the relationship (if any) between being diabetic and marriage to a diabetic, to estimate the risk of diabetes in a spouse of a diabetic compared to a spouse of a non-diabetic and to estimate the concordance of established risk factors in concordant couples.

MATERIALS AND METHODS: This was a cross sectional comparative hospital based study.

Two hundred and twenty six (226) consecutively recruited diabetics, sourced from the GOPC of UBTH as well as 226 age and sex-matched consecutively recruited non-diabetics and their respective spouses took part in the study. Fasting blood glucose was done to ascertain the glycemic status of the participants and this was analyzed using a statistical package.

RESULTS: 6.2% of the spouses of non-diabetics had diabetes. 16.4% of the spouses of diabetics also had diabetes i.e. the concordance of diabetes in couples seen at the GOPC of the UBTH was
16.4%. The results show that the percentage of diabetes in spouses of diabetics who participated in the study was 2.6 times the percentage in the spouses of non-diabetics. The higher percentage in spouses of diabetics was statistically significant (p = 0.001.) Thus, being the spouse of a diabetic appears to make the risk of being diabetic about 2.6 times more. However, after adjusting for Body Mass Index and waist/hip ratio, the risk of diabetes in the spouse of a patient with diabetes was 2.27 (adjusted OR=2.267;95% C.I 0.214–0.911;p=0.027) as compared with the spouse of a subject with normal blood glucose. The mean age, mean duration of marriage and mean duration of diabetes in partners were also significantly higher in concordant spouses than in discordant spouses.

Among the concordant spouses, concordance for diabetes was significantly higher in female spouses, the very elderly i.e. spouses within the 80 -89years age group, spouses who had been married for 50 – 59years, spouses whose partners had had diabetes for the longest duration of diabetes in the research (over 26years), those who had a high waist/hip ratio, lived a sedentary lifestyle, had never screened for diabetes, took the same diet with their diabetic partners and never took alcohol. Concordance was also highest among traders, in those with no formal education and in the Binis. Concordance for established risk factors was as follows: sedentary lifestyle - 91.9%, high waist/hip ratio - 67.5%, obesity - 29.7%, family history - 0.0%. 

Apart from having a higher prevalence of diabetes, spouses of diabetics also had a significantly higher prevalence of hypertension, obesity and high waist/hip ratio than the spouses of non-diabetics.

CONCLUSION: The findings of this research suggest that spouses of diabetics are a high risk group for the disease and are more likely to be diabetic when compared to spouses of non-diabetics.
It is recommended that spouses of diabetics be regarded as a target for screening, preventive measures and risk factor reduction.