



Socio-economic status of diabetic mellitus patients attending the Enugu State university teaching hospital Parklane, Enugu, South-East Nigeria

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Abstract

Aim: To assess the socio-economic status of patients with diabetes mellitus attending the diabetic clinic of the Enugu State University Teaching Hospital (ESUTH), Enugu South East Nigeria.

Method: A total of 450 patients with diabetes mellitus who were attending the diabetic clinic of the ESUTH in Enugu were studied over a six months period. An interviewer-administered questionnaire was used to collect data from them. The questionnaire was designed to get demographic and socioeconomic data.

Results: Out of the total of 450 patients used for the study, 50.5% of them were males. The greatest percentage of them (39.5%) was above the age of 61 years. The greatest percentage (38%) of them had an average monthly income of N21,000 to N50,000. About 42.2% of the patients said they do not receive any form of financial assistance from their employers to help them in their treatment. 33.3% receive a financial assistance from their employers. The greatest percentage (20.4%) of patients said that the amount of benefit they get from their employers is below N20,000 per annum while 1.2% receive benefits in excess of N100,000 per annum. 69.7% of the patients do not receive any benefits at all.

Conclusion: Our results show that the greatest percentage of patients is over the age of 61 years which means that they have retired from active service (60 years is the retirement age in this country). Their income will be extremely meager. Again the greatest percentage of patients have incomes less than N100,000. Over 66.7% do not receive any financial assistance for their treatment further adding to the already precarious situation and even those who receive assistance get something too small to be meaningful. All these add up to the fact that the diabetic patients who attend the ESUTH Parklane have very serious issues with getting the money for their treatment and the resultant effect is that most of them do not adhere to their treatment regimen, they default in keeping their hospital appointments and these make the mortality rate and complications due to this chronic disease to be high.

Keywords: Socio-economic status of Diabetes Mellitus patients, Enugu State University Teaching Hospital, South East Nigeria

Introduction

Socioeconomic status (SES) is a complex construct determined by an individual's or group's relative position within a society^[1] and based on socially derived economic factors. Epidemiologic studies using a variety of SES measures have consistently shown that, in the general population, mortality risk increases as SES decreases^[2-6] Furthermore, there is evidence that the influence of SES is cumulative over an individual's life^[6] Adults with low SES are disproportionately affected by diabetes and its complications^[7] Among adults with diabetes, lower SES is associated with many factors known to contribute to poor health outcomes, including reduced access to and underuse of recommended preventive care, poor metabolic control, and psychological distress⁷ Many possible factors may explain the associations of SES with mortality risk^[8-10] including poorer overall health, increased number of co-morbid conditions, lack of access to or underuse of health care services, and psychological factors.

A recent study of the relationship between income and mortality over time in the U.S. found a highly curvilinear gradient in the relationship, with individuals in the lower 30 percent of the income distribution having the highest mortality risk [11]. Recent analysis of the Framingham Offspring Study found that, among women, cumulative SES (as measured by father's education, participant's education, and participant's occupation) was inversely associated with risk of diabetes incidence [12], so that a greater proportion of individuals with diabetes also have lower cumulative SES.

Results

Table 1: Socio Demographic Characteristic of Diabetic Patients Presenting at the Medical Clinic, ESUT Teaching Hospital Parklane, Enugu

Variables	Frequency	Percentage
Gender		
Male	227	50.5
Female	223	49.5
Total	450	100.0
Age		
<30 years	11	2.5
31 - 40 years	41	9.0
41 - 50 years	90	20
51 - 60 years	131	29
>61years and above	177	39.5
Total	450	100.0

There was an almost equal gender distribution of patients Males = 50.5% and Females = 49.5%

The greatest number of patients were 61years and above.

Table 2: The average income of the diabetic patient attending the medical clinic in ESUTH

Variable	Frequency	Percentage
What is your monthly income		
<N20,000	67	15
N21 - N50,000	171	38
N51 - N100,00	104	23.0
>N100,000	43	9.5
Not applicable	65	14.5
Total	450	100.0
Do you receive any benefit from your employers		
Yes	150	33.3
No	110	24.5
Not applicable	190	42.2
Total	450	100.0
How much do these benefits amount to yearly		
<N20,000	93	20.7
N21 - N50,000	32	7.1
N51 - 100,000	22	5.0
>N100,000	3	0.5
Not applicable	300	66.7
Total	450	100.0

The greatest number of the respondents earned between N21=000 – N 50,000 (38.2%).

About 28.4% receive benefits from the employers with majority 20.4% receiving benefits >N20,000 yearly.

Discussion

Socio-economic status (SES) is measured by a variety of factors which include the income level, educational status, occupation/profession, area of residence etc. However this study mainly focused on the income level of patients with diabetes and if they received any form of financial assistance to assist them in their treatment. Our results show that the gender distribution of participants in the study is almost equal with males 50.5% and females 49.5%. Regarding the age distribution, the greatest number of patients are 61years and above showing that the disease is commonest among the elderly. The implication of this is that at that age (61years and above) most of these patients must have retired from active service with consequent sharp decrease in their SES. This is in agreement with the study by Turrell G *et al*, which found that “adults with low SES are disproportionately affected by diabetes and its complications”⁷ Another important factor is that because of scarcity of funds, these elderly patients find it difficult to come to keep their appointments in the hospital, even when they come to see their doctors many of them do not have enough money to buy the drugs prescribed for them. Those of them that are put on special diet find it difficult to keep to the dietary therapy. All these lead to a high mortality rate among these patients. This is also in agreement with Turrell G *et al*. who stated that; “among adults with diabetes, lower SES is associated with many factors known to contribute to poor health outcomes, including reduced access to and underuse of recommended preventive care, poor metabolic control, and psychological distress”⁷ Our findings also show that about 14.5% of the patients do not earn any monthly income and it is expected that they will be living at the mercy of their children or spouses. Even among those who earn monthly income, the greatest percentage (38%) earn between N21,000 and 50,000 per month. Again 33.3% said they receive financial assistance and even those that receive assistance get a very meager amount <N20,000 per month. This is in agreement with the authors who stated that “many possible factors may explain the associations of SES with mortality risk including poorer overall health, increased number of co-morbid conditions, lack of access to or underuse of health care services, and psychological factors”^[8-10].

Conclusion

Patients with diabetes mellitus who attend the Enugu State University Teaching Hospital are mostly elderly patients 61years and above. These patients who had retired from active service have very little income which is too small to maintain them on their drugs and dietary therapy. A very low percentage of them receive financial assistance for their treatment and even the amount they receive is nothing to write home about. All these factors are definitely expected to contribute to the high rate of morbidity and mortality among these patients. It is therefore recommended that these patients should be covered with health insurance to enable them receive medical care the way they should.

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