A study to assess the association between selected demographic variable with health related quality of life among adults with type two diabetes mellitus at selected hospitals of Jabalpur city

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Abstract

Objectives: To find association between demographic variables & quality of life among adults with type 2 diabetes mellitus

Method: Present study was performed in the Golchha hospital Napier town Jabalpur Madhya – Pradesh. Hospitalized adults or attending opd’s. The study population was consisted 80 type 2 diabetes mellitus patients. The study was carried out for one month.

Result: Study shows the association between dimension energy and mobility with selected demographic variables, depicts item number (1), (3), (9), (10), (11), (12), (13) highly associated with selected demographic variables, only dimension drug used other than diabetes and no. of visits per year shows in- significant p value. Less than $P>0.05$.

Dimension Diabete control with selected demographic variables, there are item number (23), trying to keep diabetes in control, (25) needing to eat regular intervals, is highly associated with energy and mobility dimension. Variables duration of illness and number of visit per year not associated with any item with insignificant p value less than $P>0.05$.

Dimension anxiety and worry with selected demographic variables, here item number (28), (29), (30) highly associated with selected demographic variable, demographic variable Gender and other disease and number of visit per year not associated with any item, with insignificant p value. Dimension social overload with selected demographic variable, it shows the item number 34,35,36 highly associated with selected demographic variable, only demographic variable gender and no of visit per year not associated with any item of selected dimension social overload with insignificant $P$ value.

Association between sexual behavior with selected demographic variable, in here item no. 39 highly associated with $p<0.05$. $P$ value most significant, also item no 38, only any other disease and no of visits per year not associated with any item of these dimension.

Present study reveals in D-39 instrument, consist total 39 items, which are based on totally health related quality of life of adults with type 2 diabetes mellitus, in mainly item number (1), (3), (9), (10), (11), (12), (13), (23), (25), (28), (29), (30), (34), (35), (36), and item number (38), & (39) have significant association between selected demographic variables. Showing highly significant association through tabulated value $P<0.05$. Significance. The study shows the selected demographic variables are affected health related quality of life of adults with type 2 diabetes mellitus.

Keywords: Demographic variable, clinical features, complications, coronary artery disease, adults

Introduction

Type 2 Diabetes (T2D) is a major health problem worldwide. This metabolic disease is indicated by high blood glucose levels due to insufficient insulin production by the pancreas. An inflammatory response occurs as a result of the immune response to high blood glucose levels as well as the presence of inflammatory mediators produced by adipocytes and macrophages in fat tissue. This low and chronic inflammation damages the pancreatic beta cells and leads to insufficient insulin production, which results in hyperglycemia. Hyperglycemia in diabetes is thought to cause dysfunction of the immune response, which fails to control the spread of invading pathogens in diabetic subjects. Therefore, diabetic subjects are known to more susceptible to infections. The increased prevalence of T2D will increase the incidence of infectious diseases and related comorbidities.

Method: Study was performed in the Seth golchha hospital Napier town Jabalpur.
The study population was consist of 80 adults with type 2 diabetes mellitus patients attending OPD’S and also hospitalized. This study was carried out for one month. This study was carried out in patients over the age of 18 years and who gave consent to participate in the study. To obtain the information related to the study population, a form was provided to which include the sociodemographic data such as gender, age, education, duration other complications, used diabetes drugs, number of visit per year. The second form was the D-39 assessment questionnaire which was translated into the local language if needed for the participants. This instrument was used as it was easy to administered and easy to understand and it was based on likert scale which uses a 7 point category such as unaffected and very much affected as the highest and the lowest values based on previous research. Research will be analyzed by excel software.

Result
Study shows the association between dimension energy and mobility with selected demographic variables, depicts item number (1), (3), (9), (10), (11), (12), (13) highly associated with selected demographic variables, only dimension drug used other than diabetes and no of visits per year shows insignificant p value. Less than $P > 0.05$.
Dimension Diabetes control with selected demographic variables, there are item number (23), trying to keep diabetes in control, (25) needing to eat regular intervals, is highly associated with energy and mobility dimension.

Variables duration of illness and number of visit per year not associated with any item with insignificant p value less than $P > 0.05$.
Dimension anxiety and worry with selected demographic variables, here item number (28), (29), (30) highly associated with selected demographic variable, demographic variable Gender and other disease and number of visit per year not associated with any item, with insignificant p value.
Dimension social overload with selected demographic variable, it shows the item number 34, 35, 36 highly associated with selected demographic variable, only demographic variable gender and no of visit per year not associated with any item of selected dimension social overload with insignificant P value.
Association between sexual behavior with selected demographic variable, in here item no. 39 highly associated with $p < 0.05$, p value most significant, also item no 38, only any other disease and no of visits per year not associated with any item of these dimension.

Present study reveals in D-39 instrument, consist total 39 items, which are based on totally health related quality of life of adults with type 2 diabetes mellitus, in mainly item number (1), (3), (9), (10), (11), (12), (13), (23), (25), (28), (29), (30), (34), (35), (36), and item number (38), (39) have significant association between selected demographic variables. Showing highly significant association through tabulated value $P < 0.05$. Significance. The study shows the selected demographic variables are affected health related quality of life of adults with type 2 diabetes mellitus.

| Table 1: Association between selected socio-demographic variables and health related quality of life among adults with type 2 diabetes mellitus |
|-------------------------------------------------|-----------------|-----------------|-----------------|
| **Dimension** | **Demographic variable** | **Question Item no.** | **Chi-quire** | **Degree of freedom (DF) p-value** |
|----------------|-----------------|-----------------|-----------------|
| Energy and mobility | 1. Gender | (13) Restless sleep | 12.49 | $X^2=12.49 P<0.05$ at 6df, Most significant. |
| | 2. Age | (1) Decreased or lack of energy. | 35.06 | $X^2=35.06 P<0.05$ at 18, DF, Most significant. |
| | | (11) difficulty in climbing stairs | 45.08 | $X^2=45.08 P<0.05$ at 18 DF, Most significant. |
| | 3. Education | (1) Decreased or lack of energy. | 55.84 | $X^2=55.84 P<0.05$ at 24, DF, Most significant. |
| | | (3) Feeling of weakness. | 89.08 | $X^2=89.08 P<0.05$ at 24, DF, Most significant. |
| | | (9) Not being able to do house work. | 59.61 | $X^2=59.61 P<0.05$ at 28, DF, Most significant. |
| | | (12) Difficulty in taking care of your self. | 65.52 | $X^2=65.52 P<0.05$ at 24, DF, Most significant. |
| | 4. Duration of illness | (12) Difficulty in taking care of yourself. | 38.35 | $X^2=38.35 P<0.05$ at 24, DF, Most significant. |
| | 5. Other disease | (10) Need to rest several time a day. | 40.08 | $X^2=40.08 P<0.05$ at 24, DF, Most significant. |
| | 6. drug used | Not any item associated with demographic variable, P-value less than $P > 0.05$. | - | In significant |
| | 7. No of visits | - | - | In –significant. |

Table 01. Table 10-the above table shows the association between dimension energy and mobility with selected demographic variables, depicts item number (1), (3), (9), (10), (11), (12), (13) highly associated with selected demographic variables, only dimension drug used other than diabetes and no. of visits per year shows insignificant p value. Less than $P > 0.05$.

Discussion
Shows the association between health related quality of life dimension 01, Energy and mobility with selected demographic variables in out of five dimensions, energy and mobility, diabetes control, anxiety and worry, social overload and sexual behavior, most of the items were consist in dimension 01 are having significant association between.it shows adult with type two diabetes mellitus having difficulty in living with energy and also during activity in their daily routine heavily affected by diabetes mellitus.

References