A study to assess the knowledge regarding life style changes among diabetic patient admitted in Bharati Hospital of Pune city

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Abstract

Introduction: Diabetic mellitus is a chronic systemic deficiency characterized by either a deficiency of insulin or a decreased ability of the body to use insulin. A significant health problem, diabetic is the leading cause of death in the United States. About 17 million people have diabetes, approximately one third of these cases are undiagnosed. In addition, another 15 to 16 million people have symptoms.

Purpose: To assess the knowledge regarding life style changes among diabetic patient. To associate the knowledge with the selected demographic variables.

Methods: This was a Non experimental exploratory research design and quantitative research approach. 100 adults were selected from Bharati Hospital of Pune City by non-probability convenient sampling technique. Self-structured questionnaire was used to assess knowledge.

Results: Mean score of knowledge regarding life style changes among diabetic patient was 7.65 with 2.119534 standard deviation that show poor knowledge and the ‘p’ value was more than level of significance 0.05. So there is association between gender, duration of disease, dietary pattern with knowledge. There is no any association between age, marital status, education, occupation, weight, whether on insulin family history of diabetes mellitus with knowledge.

Conclusion: knowledge regarding life style changes among diabetic patient was poor.

Keywords: regarding life, diabetic patient, Bharati hospital, Pune

1. Introduction
Today everybody is affected by the faster urbanization and globalization of India. As a part of this we all are following and trying to adopt sedentary lifestyle, faulty dietary habit and psychosocial stress due to constant requirement and competition in the life regardless of health. Due to the above factor along with population growth ageing, the health of common people is completely deteriorated. This has resulted in a rise of various non-communicable disease like diabetes, cancer, obesity, heart disease and leading cause of mortality and morbidity in our country.

2. Methodology
Quantitative research approach with non-experimental research design was adopted the study was conducted on 100 diabetic patient in Bharati Hospital of Pune city by using non probability convenient sampling technique. The data was collected by using self-administered questionnaire. Content validity of the tool was established by suggestion of five experts. Tool was found reliable, which is calculated by test re-test method. (R=0.90).

Ethical consideration: formal administrative approval was obtained from Bharati Vidyapeeth college of nursing and obtained written inform consent from the participants.

3. Findings
Section I: Analysis of data related to demographic variables. Below table shows that in

Age - In majority of diabetic patient 12% are under 20-30years, 23% of them are 31-40years, 16% under 41-50 years, 23% under 51-60 years 19% under 61-70 years and 07% under 71-80 years.

Gender - In majority sex ratio of male is 44% and female 56%.

Marital status - In majority 93% are married and 7% are unmarried.

Educational Status - In majority of diabetic patient educational status is primary education is 37%, secondary education 32%, 11 and HSC is 18% and HSC and above is 13%.

Occupation Status - In majority of diabetic patient occupation 39% are job, 11% are driver, 49% are housewife, 01% are farmer.

Weight - In group majority of diabetic patient 6% are under 30-40 kg, 23% under 41-50 kg, 34% under 51-60 kg, 29% under 61-70 kg and 8% under 71-80 kg.
Duration of disease - In majority of diabetic patient duration of disease 23% in 1-12 months, 45% in 2-5 years and 32% in 6-10 year.

Dietary pattern - In majority dietary pattern of diabetic patient 51% are non-vegetarian and 49% are vegetarian.

Family history of diabetes mellitus - In control group 01% with family history of diabetes mellitus and 99% with no family history of diabetes mellitus

Table 1: Frequency and percentage distribution of the diabetic patient according to the demographic variables.

| Sr. no. | Demographic variables | Frequency | Percentage % |
|---------|-----------------------|-----------|--------------|
| 1       | Age                   | 20-30     | 12           | 12%         |
|         |                       | 31-40     | 23           | 23%         |
|         |                       | 41-50     | 16           | 16%         |
|         |                       | 51-60     | 23           | 23%         |
|         |                       | 61-70     | 19           | 19%         |
|         |                       | 71-80     | 07           | 07%         |
| 2       | Sex                   | Male      | 44           | 44%         |
|         |                       | Female    | 56           | 56%         |
| 3       | Marital Status        | Married   | 93           | 93%         |
|         |                       | Un-married| 07           | 07%         |
| 4       | Educational Status    | Primary education | 37     | 37%         |
|         |                       | Secondary education | 32     | 32%         |
|         |                       | 11&HSC    | 18           | 18%         |
|         |                       | HSC & Above| 13     | 13%         |
| 5       | Occupation            | Job       | 39           | 39%         |
|         |                       | Driver    | 11           | 11%         |
|         |                       | Housewife | 49           | 49%         |
|         |                       | Farmer    | 01           | 01%         |
| 6       | Weight                | 30-40     | 06           | 06%         |
|         |                       | 41-50     | 23           | 23%         |
|         |                       | 51-60     | 34           | 34%         |
|         |                       | 61-70     | 29           | 29%         |
|         |                       | 71-80     | 08           | 08%         |
| 7       | Duration of disease   | 1-12 Month| 23           | 23%         |
|         |                       | 2-5 Years | 45           | 45%         |
|         |                       | 6-10 Years| 32           | 32%         |
| 8       | Dietary pattern       | Vegetarian| 51           | 51%         |
|         |                       | Non-vegetarian | 49     | 49%         |
| 9       | Whether on insulin    | Yes       | 39           | 39%         |
|         |                       | No        | 61           | 61%         |
| 10      | Family history of diabetic mellitus | Yes | 01 | 01% | | | No | 99 | 99% |

Section II A

Analysis of the data related to the level of knowledge of life style changes among diabetic patient according to their score.

Table 2: Frequency percentage of knowledge score. n=100

| Sr. No. | Knowledge score | Frequency | Percentage |
|---------|-----------------|-----------|------------|
| 1       | Good knowledge  | 0         | 0%         |
| 2       | Average knowledge| 10        | 10%        |
| 3       | Poor knowledge  | 90        | 90%        |

Table No.2- In majority of diabetic patient had good knowledge regarding lifestyle changes among diabetic patient is 0%, 10% had average knowledge regarding lifestyle changes among diabetic patient and 90% had a poor knowledge regarding lifestyle changes among diabetic patient.

Section II B

Table 3: Mean and standard deviation of knowledge assessed.

| Sr. no. | Mean | Standard deviation |
|---------|------|--------------------|
| 1       | 7.65 | 2.119524           |

Table No.3- Mean is 7.65 and standard deviation is 2.119524.

Section III

Table 4: Association of the research findings with selected demographic variables.

| Sr. no. | Demographic | X² | P value |
|---------|-------------|----|---------|
| 1       | Age         | 6.772 | 0.75 |
| 2       | Gender      | 11.936 | 0.05 |
| 3       | Marital Status | 0.40 | 0.951 |
| 4       | Education   | 2.016 | 0.90 |
| 5       | Occupation  | 5.435 | 0.50 |
| 6       | Weight      | 1.671 | 0.99 |
| 7       | Duration of disease | 10.797 | 0.05 |
| 8       | Dietary pattern | 11.838 | 0.05 |
| 9       | Whether on insulin | 0.358 | 0.95 |
| 10      | Family history of diabetes mellitus | 0.112 | 0.95 |

Table No. 4 - The p value was more than level of significance 0.05. So, there is association between gender, duration of disease, dietary pattern with knowledge. There is no any association between ages, marital status, education, occupation, weight, whether on insulin family history of diabetes mellitus with knowledge.

4. Discussion of the research findings

In this research study we find 90% diabetic patient had poor knowledge, 10% diabetic patient had average knowledge and no one had good knowledge regarding life style changes among diabetic patient.

The major finding of the study with supportive are Mehta R S conducted this study in 2005, were familiar about the disease they suffering with and 38.7% understood the treatment of diabetes, 51.56% aware of diabetic diet, 20% were aware of symptoms of hypoglycemia. These finding clearly show the knowledge among the patient regarding management of disease.

5. Conclusion

In this study the issues were some people were not co-operative while taking the samples. Some people were not giving proper information. Some people were not ready to
listen our information more than 5 minutes. We thought that adults may have good knowledge about early signs of myocardial infarction. We thought that they will co-operate with us. We thought that we will finish our samples in very few days. The same study can be done with quantitative research approach having a major group. A similar study can be replicated in different setting to strengthen the finding.

6. Recommendation
Keeping in view the finding of the present study the following recommendation made.
1. The same study can be done with quantitative research approach having a major group.
2. A similar study can be replicated in different setting to strengthen the finding.

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