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A Comparative Study to Assess Illness Perception, Quality of Life and Self Care among Men and Women with Diabetes Mellitus Visiting for Follow Up in a Selected Hospital at Bagalkot, City

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Abstract

Original Research Article

Background of the study: The prevalence of diabetes mellitus (DM) has been increasing all over the world in past 30 years, and particularly higher prevalence is seen in the Indian Subcontinent. India is a country with second highest number of people with type 2 DM. Apart from regular medications, there are other beneficial activities that can help in improvement of quality-of-life among patients with diabetes and can lead to better prevention and control of imminent complications such as diabetes. ***Aim:*** To find the comparison on illness perception, quality of life and self care among men and women with diabetes mellitus Patients. ***Materials and methods:*** Total 200 samples were selected by purposive sampling technique. 88 women and 112 men were selected. The standardized tools were used to assess the quality of life, self care and illness perception level. The data was collected for a period of 8 weeks in a selected hospital OPD. Unpaired t test and chi square test was used to compare the variables and find the association respectively. Graphs and tables were used to describe the data collected by the samples. ***Results:*** The study results reveal that majority Male (71.59%) of the DM patients were in the group of low experimental threat, Female (32.14%) of the DM patients were in the group of high. Male (29.54%) of the DM patients were in the group of high, Female (27.67%) of the DM patients were in the group of low experimental threat. Male (29.54%) and Female (18.75%) of the DM patients were in the group of moderate. Regarding quality of life shows that majority Male (73.32%) and Female (64.77%) of the DM patients were in the group of good category. Male (21.42%) and Female (28.40%) of the DM patients were in the group of vary good category. Male (6.25%) and Female (6.81%) of the DM patients were in the group of moderate. In regards of self care it shows that the majority Male (65.17%) and Female (55.68%) of the DM patients were in the group of good category. Male (28.57%) Female (37.5%) of the DM patients were in the group of excellent category. Male (6.25%) Female (6.81%) of the Dm patients were in the group of moderate category. The t value shows that There is a significant difference between illness perception among male and female diabetic patient (t=1.99, df=198, p=0.0480) is more than the Table value (1.94). There was no significant difference was found between male and female DM patient in concern with quality of life and self care. There is a significant association between illness perception scores with selected demographic variables of male diabetic mellitus patients like age in years (X^2=10.08, df=1, p=0.0223), marital status (X^2=11.8, df=4, p=0.0010), education (X^2=41.271, df=5, p=0.0001), type of family (X^2=17.5, df=3, p=0.0373), type of diet (X^2=5.66, df=1, p=0.0001), any bad habits (X^2=14.8, df=3, p=0.0266), family history of diabetes mellitus (X^2=24.936, df=1, p=0.0223). There is a significant association between illness perception scores with selected demographic variables of female diabetic mellitus patients like age in years (X^2=48.035, df=1, p=0.0001), type of diet (X^2=7.35, df=1, p=0.0067), how many of years of disease (X^2=19.80, df=3, p=0.0002), suffer with any other disease (X^2=45.5, df=1, p=0.0001), family history of Diabetes mellitus (X^2=12.46, df=1, p=0.0004). There is a significant association between quality of life scores with selected demographic variables of male diabetic mellitus patients like monthly family income (X^2=10.4068, df=3, p=0.0154), How many years (X^2=7.3068, df=3, p=0.0627), any bad habits (X^2=15.4874, df=3, p=0.0014). There is a significant association between quality of life scores with selected demographic variables of female diabetic mellitus patients like age in years (X^2=5.222, df=1, p=0.0223), marital status

(X^2=18.567, df=4, p=0.0010), education (X^2=129.84, df=5, p=0.0001), type of family (X^2=6.5779, df=2, p=0.0373), type of diet (X^2=96.539, df=1, p=0.0001), any bad habits (X^2=9.2121, df=3, p=0.0266). There is a significant association between self care scores with selected demographic variables of male diabetic mellitus patients like age in years (X^2=93.337, df=1, p=0.0001), type of family (X^2=10.757, df=2, p=0.0046), family history of DM (X^2=13.232, df=1, p=0.0003). There is a significant association between self care scores with selected demographic variables of female diabetic mellitus patients like age in years (X^2=84.048, df=1, p=0.0001), marital status (X^2=20.4058, df=4, p=0.0004), occupation (X^2=21.028, df=5, p=0.0008), education (X^2=19.075, df=5, p=0.0019), type of family (X^2=21.111, df=2, p=0.0001), monthly income (X^2=20.556, df=3, p=0.0001), type of diet (X^2=19.118, df=1, p=0.0001), how many years (X^2=19.41, df=3, p=0.0002), suffer with any other disease (X^2=69.219, df=1, p=0.0001), any bad habits (X^2=20.304, df=3, p=0.0001), family history of DM (X^2=18.031, df=1, p=0.0001). ***Conclusion:*** The study concludes that there is a significant difference in quality of life, illness perception and self acre among male and female diabetic patients. There is a need to conduct some interventional studies to enhance their quality of life and self care and reduce the negative illness perception.

Keywords: Assess, Illness perception, Quality of Life, Self-care, men, Women Diabetes Mellitus.

INTRODUCTION

The prevalence of diabetes mellitus (DM) has been increasing all over the world in past 30 years, and particularly higher prevalence is seen in the Indian Subcontinent. According to the International Diabetes Federation (IDF), the global diabetes prevalence for the year 2013 was found to be 8.3%, affecting 382 million adults and it is projected to increase to 8.8% and 592 million adults by 2035 [1]. Currently, India is a country with second highest number of people with type 2 DM. As per IDF data for the year 2013, there were 65.1 million people with diabetes in India, which is predicted to rise up to 109 million by the year 2035 [1].

The primary goal of any diabetes treatment is better control of blood sugar levels. The treatment options for diabetes tend to be multiple and lifelong. Several studies have documented low levels of adherence to treatment among patients with diabetes [2-4]. Apart from regular medications, there are other beneficial activities that can help in improvement of quality-of-life among patients with diabetes and can lead to better prevention and control of imminent complications such as diabetic nephropathy, diabetic retinopathy and neuropathy through better control of blood sugar levels. Such activities include, healthy eating, being physically active, regular monitoring of blood sugar levels, taking regular medications, good problem-solving skills, healthy coping skills and risk-reduction behaviors.

The progression of diabetes and its complications are mainly influenced by poor awareness and practices among patients with diabetes [5]. Regular practice of these activities is associated with good outcomes among people with diabetes [6,7]. In developing countries like India, where the resources are limited, and treatment costs for diabetes are constantly increasing [7-10]. the self-care component among patients with diabetes may lead to better economic and therapeutic outcomes.

Currently, there is a dearth of literature regarding self-care practices among people with diabetes in the Indian subcontinent [11-16]. The available literature shows poor compliance of patients with diabetes regarding self-care advices by healthcare providers. Hence, this study would like to add evidence regarding the self-care component in the management of people with diabetes in India by assessing the practice of self-care activities among them.

Hence researcher has planned to undertake "A Comparitive Study to Assess Illness Perception, Quality of Life and Selfcare Among Men and Women With Diabetes Mellitus Visiting For Follow Up In A Selected Hospital At Bagalkot, City."

MATERIAL AND METHODS

Study design and participants

Present study was descriptive comparative research approach design. A purposive sampling technique adopted for this study to select the 200 subjects. Men and women with diabetes mellitus and who were able to understand read and write Kannada or English and available at the time of data collection are selected for the study. In the present study the data was collected by using of quality of life, self care and illness perception scales. Data was analysed by using descriptive and inferential statistics.

RESULTS

Description of socio-demographic characteristics of subjects.

Percentage wise distribution of diabetes mellitus patient according to their age group reveals that majority of patient (34.82%) in males age group of 41-60 and (6.25%) were in age group of 81-100.In females (39.77%) in age group of 61-80 and (2.27%) in age group of 81-100. Male Marital status shows that (2.6%) are unmarried, (10.7%) are married. Females marital status shows that (71.59%) are married, (4.54%) unmarried, (17.04%) widow. According to their occupation.

(27.67%) males are business man.(18.75%) men are private employee. In females majority (75%) of females are house wife (2.2%) are government employee (8.03%) are retired. According to their education qualification of males (33.92%) are having degree, (12%) are had primary education, (12%) are completed PUC, (19%) are not having formal education and (14%) are PG having degree and above, (17.15%) are had high school education. In females (32%) completed primary education, (27.27%) are not having no formal education, (21%) are completed high school education (10%) had PUC education, (5.68%) are had degree, (2.2%) are completed PG and above degree. As per the type of family Majority of males (60%) are from nuclear family (33.92%) are from joint family, (5.35%) are belongs to extended family. In females majority (38.63%) are from joint family, (1.64%) are from nuclear family, (5.68%) are from extended family. As per their monthly income majority of males (48.21%) are paid less than Rs 20000 monthly, (8.03%) are paid more than Rs 60000 (37.5%) are paid in between 20000-40000, (6.25%) are paid 40000-60000.Where as in females majority of (85.22%) are paid less than 20000 per month. according to their diet Majority of males (58.92%) are following mixed diet (41.07%) are following vegetarian diet. In females majority of females (55.68%) are following vegetarian diet, (44.31%) are following mixed diet. According to how many years they suffered with disease majority of males (33.33%) are suffered since from 4 years, (23.21%) are from 3 year, (21.45%) are from 2 year, (22.32%) are less than one year. Majority of females (30.68%) are suffered since from 4 year, (23.86%) are from 3year, (23.86%) are from 2 year, (21.59%) are suffered from less than 1 year. According to their they are suffering from any other diseases Majority of males (71.42%) are not suffering from any other diseases, (28.57%) are suffering from any other diseases. In females majority (70.45%) are not suffering from any other diseases, (29.54%) are suffering from diseases. according to their bad habits Majority of males (41.96%) are not having any bad habits, (19.64%) are chewing tobacco, (19.64%) are alcoholic, (18.755%) are smokers. In females majority of them (76.13%) not Having any bad habits, (11.36%) are chewing tobacco, (6.8%) women will smoke. Percentage wise distribution of diabetes mellitus patient according to their family history Majority of males (57.14%) are not having family history of diabetes mellitus, (42.85%) males are having family history of diabetes mellitus. In females majority of them (60.22%) are not having family history of diabetes mellitus, (39.77%) are having family history of diabetes mellitus.

SECTION 2: ASSOCIATION OF ILLNESS PERCEPTION AMONG MALE AND FEMALE.

MALE: There is a significant association between illness perception scores with selected demographic variables of male diabetic mellitus patients like age in years (X^2=10.08, df=1, p=0.0223), marital status (X^2=11.8, df=4, p=0.0010), education (X^2=41.271, df=5, p=0.0001), type of family (X^2=17.5, df=3, p=0.0373), type of diet (X^2=5.66, df=1, p=0.0001), any bad habits (X^2=14.8, df=3, p=0.0266), family history of diabetes mellitus (X^2=24.936, df=1, p=0.0223). Remaining variables are not got significant association with illness perception.

FEMALE: There is a significant association between illness perception scores with selected demographic variables of female diabetic mellitus patients like age in years (X^2=48.035, df=1, p=0.0001), type of diet (X^2=7.35, df=1, p=0.0067), how many of years of disease (X^2=19.80, df=3, p=0.0002), suffer with any other disease (X^2=45.5, df=1, p=0.0001), family history of Diabetes mellitus (X^2=12.46, df=1, p=0.0004). Remaining variables are not got significant association with illness perception.

SECTION 3: ASSOCIATION OF QUALITY OF LIFE AMONG MALE AND FEMALE.

MALE: There is a significant association between quality of life scores with selected demographic variables of male diabetic mellitus patients like monthly family income (X^2=10.4068, df=3, p=0.0154), How many years (X^2=7.3068, df=3, p=0.0627), any bad habits(X^2=15.4874, df=3, p=0.0014). Remaining variables are not got significant association with quality of life.

FEMALE: There is a significant association between quality of life scores with selected demographic variables of female diabetic mellitus patients like age in years (X^2=5.222, df=1, p=0.0223), marital status (X^2=18.567, df=4, p=0.0010), education (X^2=129.84, df=5, p=0.0001), type of family (X^2=6.5779, df=2, p=0.0373), type of diet (X^2=96.539, df=1, p=0.0001), any bad habits (X^2=9.2121, df=3, p=0.0266). Remaining variables are not got significant association with quality of life.

SECTION 4: ASSOCIATION OF SELF CARE QUESTIONNARE AMONG MALE AND FEMALE

MALE: There is a significant association between self care scores with selected demographic variables of male diabetic mellitus patients like age in years (X^2=93.337, df=1, p=0.0001), type of family (X^2=10.757, df=2, p=0.0046), family history of DM (X^2=13.232, df=1, p=0.0003). Remaining variables are not got significant association with selfcare.

FEMALE: There is a significant association between self care scores with selected demographic variables of female diabetic mellitus patients like age in years (X^2=84.048, df=1, p=0.0001), marital status (X^2=20.4058, df=4, p=0.0004), occupation (X^2=21.028, df=5, p=0.0008), education (X^2=19.075, df=5, p=0.0019), type of family (X^2=21.111, df=2, p=0.0001), monthly income (X^2=20.556, df=3, p=0.0001), type of

diet (X^2=19.118, df=1, p=0.0001), how many years (X^2=19.41, df=3, p=0.0002), suffer with any other disease (X^2=69.219, df=1, p=0.0001), any bad habits (X^2=20.304, df=3, p=0.0001), family history of DM (X^2=18.031, df=1, p=0.0001).

Section 5: Comparison of Illness Perception Quality of Life and Self Care Questionnare among Male and Female.

ILLNESS PERCEPTION,
N=200

Dm person	Mean	Median	SD	T value	Table value	P value	Significance
Male	73.258	39	7.75	1.99	1.94	0.0480	Significant
Female	47.090	47	4.41				

The above table shows that There is a significant difference between illness perception among male and female diabetic patient (t=1.99, df=198, p=0.0480) is more than the Table value (1.94). Male mean, Median and Sd of (73.258, 39 7.75) respectively where as Female Mean, median and SD is (47.090, 47 and 4.41) respectively. So table shows that there is a significant difference regarding illness perception among male and female diabetic patients.

QUALITY OF LIFE:
N=200

Dm person	Mean	Median	SD	T value	Table value	P value	Significance
Male	80.53	96	8.5614	1.37	1.94	0.1722	No significant
Female	97.21	98	9.1713				

The above table shows that There is no significant difference between male and female diabetic patient quality of life (t=1.37, df=198, p=0.1722). Male Mean, median and SD is (80.53, 96, 8.5614) respectively. Female Mean, median, and sd is (97.21, 98 and 9.1713) respectively.

SELF CARE:
N=200

Dm person	Mean	Median	SD	T value	Table value	P value	Significance
Male	80.53	81	8.5230	1.44	1.94	0.1514	No significant
Female	88.04	79	8.5293				

The above table shows that There is no significant difference between male and female diabetic patient self care (t=1.44, df=198, p=0.1514). Male Mean, median and SD is (80.53, 81, 8.5230) respectively. Female Mean, median, and sd is (88.04, 79 and 8.5293) respectively.

DISCUSSION

This descriptive comparative research approach design study included a sample of 200 among men and women with diabetes mellitus visiting for follow up in a selected hospital at Bagalkot, city. Findings revealed that, Finding related to the male association between illness perception were revealed that significant association found that with their age (RV=48.035), Significance association found that with their diet (7.35), Significance association found that with their how many years (19.80), Significance association found that with suffering with any other disease (45.50), Significant association found that with family history of DM (12.46).

Finding related to the male association between illness perception were revealed that significant association found that with their age (RV=48.035), Significance association found that with their diet (7.35), Significance association found that with their how many years (19.80), Significance association found that with suffering with any other disease (45.50), Significant association found that with family history of DM (12.46).

Finding related to association between illness perception were revealed that significant association was found between illness perception with their age (93.337), type of family (10.757), family hiatory of DM (13.232).

RECOMMENDATIONS

Similar study can be conducted to assess the effectiveness of exercise and diet on reduction of the blood glucose level. Similar type of study can be conducted for a large group.

- Similar study can be conducted as a correlation study between interventional methods.
- Similar study can be done for larger samples for wider generations.
- The study can be conducted to assess alternatives therapies in treatment of blood glucose.
- The similar studies may be conducted using other type of alternative therapies and nutrition

CONCLUSION

This presents study the conclusion drawn, implication, suggestions, and recommendations. The focus of this study was to assess illness perception, quality of life and self-care among diabetes mellitus patient at HSK hospital Navanagar. The nurse's role is to create the health education program regarding the diabetes mellitus, and their treatment especially in hospital. and to assess illness perception, quality of life and selfcare among men and women with diabetes mellitus. Findings related to the association between self care questionarre were revealed that significant association was found between self care questionnaire with their age (84.048), marital status (24.4058), occupation (21.028), education (19.057), type of family (21.211), monthly income (20.5556), type of diet (19.118), how many years(19.41), suffer with any other disease(69.219),any bad habits (20.304), family history of DM(18.031).

Ethical Consideration

The study was approved by the Institutional Ethical Clearance Committee, BVVS Sajjalashree Institute of Nursing Sciences, Bagalkot.

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Conflicts of Interest: There are no conflicts of interest.

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