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Abstract

The study was conducted to predict the relationship of psychological burden and marital satisfaction among patients of diabetic mellitus with role of demographic variables. Sample size was 150 diagnosed diabetic patients in which 75 married males and 75 were married females. Sample was approached through purposive sampling technique. All diabetic patients were selected from public hospitals and private clinics of Multan Division, Pakistan. The Nishter Hospital Multan, Combined Military Hospital Multan and City Hospital Multan and it was focused to their gender, age, education, type of disease, working status and socio-economic condition. Depression, Anxiety, Stress Scale (Lovibond, 1995) and Index of Marital Satisfaction (Hudson, 1981) were used as a research instrument to collect the data. Data were analyzed on SPSS. Findings of the study reveal that there is negative correlation between psychological burden and marital satisfaction. Moreover, depression, anxiety and stress are the significant negative predictors of marital satisfaction. Results suggest that level of psychological burden was reported higher among female patients than male. Mean score of marital satisfaction was greater among male as compared to female patients. Furthermore, there was significant mean score difference on PB between educated and uneducated patients. Patients with type 2 have greater level of psychological burden as compared to type 1 diabetes. Level of psychological burden was greater in those patients who have above than 3 children as compared to those who have 1-3 children. Difference is significant between working and non-working diabetic patients on psychological burden. Results suggest that there is no significant mean score difference of marital status with respect to education, type of diabetes, family size, and working status. There was no significant difference of PB and MS with respect to socio-economic status. Role of demographic characteristics of the participants is significant in predicting psychological burden among them.

Keywords: Depression, anxiety, stress, marital satisfaction

1. Introduction

Diabetes mellitus, a metabolic disorder, is characterized by elevated blood glucose levels, leading to potential organ damage and the development of other complications. Diabetes mellitus can be broken down into different kinds, such as type 1 and type 2 diabetes, based on how the disease affects people. Diabetes mellitus has the potential to result in several health-related consequences, including negative impacts on psychological aspects, such as an elevated prevalence of depression among those diagnosed with diabetes. In addition, women seemed to be more affected by diabetes distress because of their marital status, especially for married women (Huang et al., 2022).

Based on data provided by the International Diabetes Federation (IDF), it was projected that in 2019, there were around 463 million persons between the ages of 20 and 79 living with diabetes mellitus. This figure represented 9.3% of the global population. Furthermore, projections indicate that the prevalence of diabetes is expected to rise to 10.2% (578 million) by the year 2030 and 10.9% (700 million) by 2045. While the prevalence of type 2 diabetes is on the rise globally, it is noteworthy that a significant majority of individuals with diabetes, around 79%, reside in low-and middle-income countries (Yang & Wang, 2023). Furthermore, it is anticipated that the increase in prevalence will be particularly pronounced in low-income countries (Kaiser et al., 2018).

People who have diabetes have a greater risk of morbidity and mortality, in addition to increased costs associated with medical care, as comparison to the general population. According to the International Diabetes Federation (IDF), diabetes was the cause of 4.2 million deaths and at least 10% of global health expenditures in 2019 (USD 760 billion dollars) (Yang & Wang, 2023). Diabetes is commonly regarded as a controllable condition through the use of lifestyle adjustments and medical interventions. Nevertheless, the perpetual obligations associated with diabetes management, including dietary adherence, physical fitness maintenance, blood glucose monitoring, routine medical check-ups, symptom management, and concerns over potential consequences, might contribute to heightened stress levels in individuals with diabetes. As a consequence of this, people are prone to experiencing feelings of despair, anxiety, and stress, all of which have a negative impact on their overall quality of life and their physical health (Penckofer et al., 2007).

The rise in glucose level presents a bigger challenge to those attempting to keep their metabolism under control. Patients who have poor glycemic control and functional impairment due to developing diabetes complications may experience sadness and anxiety for the first time or experience a worsening of their symptoms (Khan et al., 2019). The occurrence of anxiety and depression is frequently observed in individuals diagnosed with type II diabetes, and numerous studies have provided a comprehensive overview of their incidence (Alzahrani et al., 2019).

Research found that patients with diabetes experienced much higher levels of anxiety and depression than the general population (Rajput et al., 2016). If someone has diabetes and depression at the same time, it can lead to poor glycemic control and self-management, an increased risk of diabetes complications, a decrease in overall quality of life, and a shortened life expectancy (Alzahrani et al., 2019). The global incidence of diabetes has exhibited a consistent upward trend over the course of the last thirty years (Zimmet et al., 2014). It is anticipated that the number of diabetic patients will rise from 463 million in 2019 to roughly 700 million in 2045 as a result of population growth, urbanization, and changes in lifestyle (Saeedi et al., 2019). This will cause diabetes mellitus to continue to have its destructive effects. In addition, healthcare professionals have documented that diabetes ranks among the top ten prevalent causes for individuals seeking medical care at primary healthcare facilities worldwide (Finley et al., 2018).

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Marital satisfaction refers to the state in which partners experience a prevailing sense of contentment and fulfillment with one another (Tavakol et al., 2017). The establishment of strong connections within romantic partnerships can be assessed based on the presence of mutual affection, comprehension, and the level of concern demonstrated towards one another (Dadgari et al., 2015). A poor marital adjustment among diabetic patients can adversely affect both physical and mental health, quality of life, and the economic status of these couples (Trief et al., 2002).

Marriage and its worth are two of the most important psychological factors that affect a person's health in many ways. In addition, the examination of marital quality encompasses various dimensions, including positive aspects such as marital satisfaction, adjustment, intimacy, positive supportive interaction, marital support, constructive communication, and enjoyment. It also encompasses negative dimensions such as marital stress, marital risk, marital tension, marital strain, and negative unsupportive interactions. People think that the quality of a marriage is an important part of the quality of life, which affects many parts of health. As a result of modern lifestyles, diabetes is now recognized as a major international health concern. A study done by Raval et al. (2010) in India proved that high prevalence of depression in patients with type 2 diabetes mellitus was associated with diabetic complications particularly neuropathy and diabetic foot disease. Women are disproportionately affected by type 2 diabetes, and risk factors include low education, low social and vocational position, and low income. Higher household income has stronger effects on the risk of type 2 diabetes and is linked to a higher prevalence rate among men in developed countries (Sun et al., 2022). Moreover, the availability of healthcare services, particularly for women residing in developing nations, can provide a hindrance to adequate prevention and treatment of type 2 diabetes. In the context of Japan, there exists a significant association between higher levels of perceived stress and an elevated likelihood of developing incident diabetes. This relationship is particularly pronounced among the male population (Aviles-Santa et al., 2020). Men are more protected by high work demands and an active employment, while women are more at risk of type 2 diabetes due to reduced decision latitude. There exists a significant association between sedentary behavior and several negative psychological outcomes, such as anxiety, depressive symptoms, increased perceived interference, and reduced self-efficacy. This relationship is more pronounced among women diagnosed with type 2 diabetes. Only women who worked at night for a long time were more likely to get Type 2 diabetes. Previous studies have documented comparable findings on the effects of shift employment on women. In conclusion, it may be inferred that psychological risk factors exert a more pronounced influence on the onset of type 2 diabetes in females as opposed to males (Chilet-Rosell et al., 2020).

1.1. Statement of the Problem

The purpose of the study was to find the relationship between psychological burden and marital satisfaction among patients of diabetic mellitus. Diabetes is a chronic disease that causes several psychological and physiological complications among patients. Many studies have been designed to explore the impact of this disease on mental health and intimacy relationships in Western culture and society. Previous studies were conducted to investigate the relationship of diabetic mellitus with marital satisfaction and psychological burden in different countries as well as in Pakistan with multiple dimensions. Much area on this perspective is still unexplored in lower Punjab Multan Pakistan so, the researcher was interested to see the long lasting effects of diabetes on psychological well-being and perceived level of marital satisfaction among married people. The aim of current study was to examine that how diabetic mellitus influences the level of marital satisfaction and psychological health of patients and compare the differences between these variables on gender, age, education, weight, type of diabetes, years of marriage, number of children, working status and socio-economic conditions. This study will provide new horizons for the researchers to conduct such type of research in future.

1.3. Objectives of the Study

- To investigate the impact of psychological burden on marital satisfaction among patients of diabetic mellitus.
- To compare the level of psychological burden and marital satisfaction with respect to gender, education, type of disease, family size, working status and socio-economic condition of the patients with diabetes mellitus

2. Method

2.1. Participants

The study was designed to predict the relationship between psychological burden and marital satisfaction among patients of diabetic mellitus. Sample size was 150 diagnosed diabetic patients in which 75 married males and 75 were married females were intentionally chosen to observe the changes in the responses with demographic variables. The population was unknown, the researcher used the non-probability sampling technique. Sample was approached through purposive sampling technique. All diabetic patients were selected from public hospitals and private clinics of Multan Division, Pakistan. The Nishter Hospital Multan, Combined Military Hospital Multan and City Hospital Multan and it was focused to their gender, age, education, type of disease, working status and socio-economic condition.

2.2. Instruments: There are two research instruments were used in study.

- Depression, Anxiety and Stress Scales (DASS-21).
- Index of Marital Satisfaction (IMS).

2.2.1. Depression, Anxiety and Stress Scales (DASS-21)

The Depression, the Anxiety and Stress Scales (Lovibond, 1995) is used in the study to measure and assess the psychological burden in life of diabetic patients. DASS is useful for assessing the disturbance and lot of other complication. It has 21 items that indicates and describes the level of depression, the anxiety and stress and the responses on this scale are listed as; 0 score means, it is statement of response which is not applied for that person. 1- Responses which are given on 1 number denote the situation that is matched with person sometimes and at some extend. The responses on the situation 2 express the statement about the individual for a good time. The responses on the category of 3 numbers, which finds the condition which, is related to very much close to that person. The normal score of the depression is ranged from (0-4), and as well as anxiety is separated from (0-3) and stress is moving the value from (0-7). The mild score of the depression of the people is start from the figure (5-6), while the anxiety is situated between these

numbers (4-5) and the stress as well as is comes between this group (8-9). The moderate score of depression is ranging from (7-10), and the anxiety that is categorized between such type of values (6-7) and the stress values are ranged into this condition that is lies between these values (10-12). Severe and chronic level of the depression is categorized into these numbers (11-13), and the severe condition of anxiety lies between this group (8-9) and the stress is divided for it severity is ranged between such condition (13-16) while the extreme scores of the depression is indicated to this particularly is (14+), anxiety is related to this figure (10+) and the stress severe level is always indicates this category of score (17+).

2.2.2. Index of Marital Satisfaction (IMS)

The index of the marital satisfaction that is given by (Hudson, 1981) and was designed to measure the partner marital relationship and spouse problems related marital life and assess the degree and severity of marital issues during marital relationship. The ultimate purpose of IMS is to measure the degree of satisfaction and dissatisfaction between couple during marital relation with each other. Total number of the items are 25 among them some items are presented through some different way like as these have reversed scoring. Reversed item are twelve 12 which have these numbers; 1, 8, 3, 9, 16, 11, 21, 13, 16, 23, 19, 20, 21, and 17. Each item of this scale that is used to measure the satisfaction in couple life is scored with five different categories; 1 states the responses are not occur for any time, 2 figure indicates these responses are comes not on regular time, 3 figure is considered this response is occurred sometime, 4 categories expresses the responses which are part of that person of life, 5 number means these are part of people life. The reverse scoring of the following items 5 is converted into the category 1, 4 is segregated into this number 2, 3 is will remains the same value, while 2 becomes the response 4 and 1 converted into 5 category.

3. Procedure

Hospital authority was approached and informed to get permission for conducting the research on their diabetic patients and the purpose of the study was to explain to them. After getting permission, they were requested to give separate room for the administration of the scale in order to maintain confidentiality. Authority of the hospital was very cooperative in this regard. A booklet of scales was given to those diabetic patients who were educated give the responses honestly. A complete instruction was provided to them for complete the scales by the researcher. Responses were taken from uneducated diabetic patients through reading the questions by researcher. It was ensured that their information will be kept so confidential that is ethical principle of research and used for only research purpose. The collected data were analyzed on SPSS.

4. Results

Table 1: Relationship between Psychological Burden and Marital Satisfaction among patients of Diabetes Mellitus

| Variables | PB | MS |
|----------------------|----|---------|
| Psychological Burden | 1 | -.609** |
| Marital Satisfaction | | 1 |

Table 1 shows the significant negative relationship between psychological burden and marital satisfaction among diabetic patients. These variables have an opposite direction. It means marital satisfaction is negatively associated with psychological burden among patients of diabetes mellitus. The value of $p < 0.05$ correlation is significant.

Table 2: Regression analysis shows the Impact of Psychological Burden on Marital Satisfaction

| Predictor | B | Std. Error | Beta | t | p-value |
|----------------------|---------|------------|-------|--------|---------|
| Constant | 113.433 | 4.237 | | 26.775 | .000 |
| Psychological Burden | -1.184 | .127 | -.609 | -9.336 | .000 |

Adjusted R^2 .371, $F=87.166$, $p < 0.05$

Table 2 shows the significant impact of psychological burden on marital satisfaction among diabetic patients. Findings reveal that depression, anxiety and stress have negative effect on the level of marital satisfaction on those who suffer with diabetes mellitus.

Table 3: Mean, Standard Deviation, t-value and scores of psychological burden scale between male and female diabetic patients

| Variable | Gender | N | M | SD | t | df | p-value |
|----------------------|--------|----|---------|---------|--------|-----|---------|
| Psychological Burden | Male | 75 | 23.8267 | 9.23913 | -9.411 | 148 | 0.000 |
| | Female | 75 | 38.5067 | 9.85623 | | | |

Table 3 shows the significant difference between male and female diabetic patients on psychological burden scale. Females are sensitive and emotional by nature so, their level of psychological burden is higher than male patients. Male diabetic patients are able to control and manage their disease effectively so, their level of disturbance due to diabetes is less than female patients. The $p < .001$, it means that gender difference is significant on depression, anxiety and stress.

Table 4 describes that male diabetic patients have greater level of marital satisfaction as compared to female. Males possess the ability to cope with any disease than females. Gender difference is significant on marital satisfaction and $p < 0.001$ that means difference is exist between male and female diabetic patients. It was constructed that male diabetic patients are more satisfied in their marital relationship than females. Results are significant so, the hypothesis is accepted.

Table 4: Mean, Standard Deviation, t-value and scores of marital satisfaction scale between male and female diabetic patients

| Variable | Gender | N | M | SD | t | df | p-value |
|----------------------|--------|----|---------|----------|--------|-----|---------|
| Marital Satisfaction | Male | 75 | 93.8667 | 15.50007 | 13.517 | 148 | 0.000 |
| | Female | 75 | 59.1733 | 15.93091 | | | |

Table 5: Mean, Standard Deviation, t-value and scores of psychological burden scale between educated and uneducated diabetic patients

| Variable | Education | N | M | SD | t | df | P-value |
|----------------------|------------|----|---------|----------|--------|-----|---------|
| Psychological Burden | Educated | 84 | 28.8690 | 10.25081 | -2.692 | 148 | 0.008 |
| | Uneducated | 66 | 34.0909 | 13.50638 | | | |

Table 5 shows that uneducated diabetic patients have higher level of psychological burden than educated. There is significant difference is founded between educated and uneducated patients on depression, anxiety and stress scale (psychological burden). Educated patients have complete awareness about this disease, so they manage and control it carefully as compared to uneducated. The $p < 0.05$ that shows education is significant with psychological burden among diabetic patients.

Table 6: Mean, Standard Deviation, t-value and scores of marital satisfaction scale between educated and uneducated diabetic patients

| Variable | Education | N | M | SD | t | df | p-value |
|----------------------|------------|----|---------|----------|------|-----|---------|
| Marital Satisfaction | Educated | 84 | 77.5238 | 21.67085 | .591 | 148 | 0.555 |
| | Uneducated | 66 | 75.2424 | 25.57767 | | | |

Table 6 shows that there is no difference between educated and uneducated diabetic patients on marital satisfaction. Results describe the same level of satisfaction with marriage. It means that this chronic disease is not influenced by education among patients. The p-value is not less than 0.05 that means lack of difference between educated and uneducated diabetic patients.

Table 7: Mean, Standard Deviation, t-value and scores of psychological burden scale between type 1 and type 2 diabetic patients

| Variable | Type | N | M | SD | t | df | p-value |
|----------------------|--------|----|---------|----------|--------|-----|---------|
| Psychological Burden | Type 1 | 53 | 28.2075 | 10.73520 | -2.256 | 148 | 0.026 |
| | Type 2 | 97 | 32.7835 | 12.44842 | | | |

Table 7 shows that there is significant difference between type 1 and type 2 diabetes on psychological burden among patients. Patients with type 2 have greater level of psychological burden as compared to type 1 diabetes because they are insulin dependent and have low capacity to control and manage their disease. Patients with type 1 diabetes manage their disease through exercise and diet so, their level of depression, anxiety and stress related to disease is less than type 2 diabetic patients. The $p < 0.05$ that means difference is exist between types of diabetes.

Table 8: Mean, Standard Deviation, t-value and scores of marital satisfaction scale between type 1 and type 2 diabetic patients

| Variable | Type | N | M | SD | t | df | p-value |
|----------------------|--------|----|---------|----------|-------|-----|---------|
| Marital Satisfaction | Type 1 | 53 | 80.2075 | 23.67598 | 1.431 | 148 | 0.155 |
| | Type 2 | 97 | 74.5052 | 23.14633 | | | |

Table 8 describes that there is no difference between type 1 diabetes and type 2 on marital satisfaction among patients. Findings of the study showed that types of the disease are not significant with satisfaction of marital life. Results reject the researcher hypothesis that states level of the marital satisfaction is higher in type 1 diabetic patients.

Table 9: Mean, Standard Deviation, t-value and scores of psychological burden scale between number of children (1-3) and above (3) of diabetic patients

| Variable | Children | N | M | SD | t | df | p-value |
|----------------------|----------|----|---------|----------|--------|-----|---------|
| Psychological Burden | 1-3 | 80 | 28.8125 | 11.93770 | -2.610 | 148 | 0.010 |
| | Above 3 | 70 | 33.8571 | 11.65853 | | | |

Table 9 explores that level of psychological burden is greater in those patients who have above than 3 children as compared to those who have 1-3 children. Numbers of the children are highly significant with psychological burden for patients. Findings of the study support the researcher hypothesis that is predicted patients with more than 3 children have greater level of psychological burden than those with 1-3 children and $p < 0.05$ that indicates significant difference is exist between numbers of children among diabetic patients.

Table 10: Mean, Standard Deviation, t-value and scores of marital satisfaction scale between number of children (1-3) and above (3) of diabetic patients

| Variable | Children | N | M | SD | t | df | p-value |
|----------------------|----------|----|---------|----------|------|-----|---------|
| Marital Satisfaction | 1-3 | 80 | 77.8750 | 23.96959 | .757 | 148 | 0.451 |
| | Above 3 | 70 | 74.9741 | 22.83905 | | | |

Table 10 describes that there is no significant difference between numbers of children on marital satisfaction. Results of the study reveals that numbers of children do not influence the level of marital satisfaction among diabetic patients. These findings did not support the hypothesis of the study. It was hypothesized that patients with more than 3 children possess lower level of marital satisfaction as compared to those with 1-3 children.

Table 11: Mean, Standard Deviation, t-value and scores of psychological burden scale between working and non-working diabetic patients

| Variable | Working | N | M | SD | t | df | p-value |
|----------------------|-------------|----|---------|----------|--------|-----|---------|
| Psychological Burden | Working | 61 | 22.8689 | 10.56642 | -2.843 | 148 | 0.005 |
| | Non-working | 89 | 33.4270 | 12.50899 | | | |

Table 11 shows that difference is significant between working and non-working diabetic patients on psychological burden scale. The level of depression, stress and anxiety related to diabetic disease is higher among non-working patients as compared to working. It was hypothesized by researcher that psychological burden is greater in non-working than working patients. Results support the hypothesis and $p < 0.05$ that describes the significant difference among patients on their working status.

Table 12: Mean, Standard Deviation, t-value and scores of marital satisfaction scale between working and non-working diabetic patients

| Variable | Working | N | M | SD | t | df | p-value |
|----------------------|-------------|----|---------|----------|-------|-----|---------|
| Marital Satisfaction | Working | 61 | 79.9344 | 20.75624 | 1.484 | 148 | 0.140 |
| | Non-working | 89 | 74.1798 | 24.91967 | | | |

Table 12 shows that there is no difference between working and non-working on marital satisfaction among diabetes patients. Findings of the study reveal that marital satisfaction is not depended on patients working status because effects of any chronic disease are equal for all diabetic patients. These results reject the researcher hypothesis because p-value is not less than 0.05 that indicates the lack of significant between working and non-working status related to marriage satisfaction.

Table 13: Mean, Standard Deviation, t-value and scores of psychological burden scale between low and high economic status of diabetic patients

| Variable | SES | N | M | SD | t | df | p-value |
|----------------------|------|----|---------|----------|------|-----|---------|
| Psychological Burden | Low | 76 | 31.4605 | 12.31524 | .302 | 148 | 0.763 |
| | High | 74 | 30.8649 | 11.81979 | | | |

Table 13 describes that difference between low and high socio-economic status of patients on psychological burden is not significant which means patients mental health like stress, anxiety and depression related to disease is not influenced by this kind of burden. Results depicts that researcher hypothesis is rejected by findings because p-value is not less than 0.05 which indicates the scarcity of difference between socio-economic status of diabetic patients.

Table 14: Mean, Standard Deviation, t-value and scores of marital satisfaction scale between low and high economic status of diabetic patients

| Variable | SES | N | M | SD | t | df | p-value |
|----------------------|------|----|---------|----------|------|-----|---------|
| Marital satisfaction | Low | 76 | 76.8553 | 21.16015 | .177 | 148 | 0.860 |
| | High | 74 | 76.1757 | 25.66825 | | | |

Table 14 also shows that there is no significant is founded between socio-economic status of diabetic patients which is divided into low and high on marital satisfaction. It was assumed that patients with high economic status have greater level of satisfaction with their marriage life as compared to low economic condition. Findings of the study reject the researcher hypothesis because the value of p is not less than 0.05 it means difference is not exist among patients on their economic variations.

5. Discussion

Diabetes mellitus is growing rapidly in the world. Diabetes is associated with poor psychological well-being, depression, marital dissatisfaction, mood disturbance, stress, social interaction anxiety, sexual problems, life satisfaction and anxiety disorders. It is increasing dangerously in the world that causes health challenging issues among people. Prevalence and incidence rate is not fair in the future till 2030. The researchers predict that the number of patients will become doubled in coming time because it is common disease in Pakistan. Lack of awareness and screening adequacy leads this disease in developing countries. Pakistan is developing country which has no appropriate treatment. It creates sexual impairments that directly damage the marital satisfaction among

married couples and cause profound effects on mental health like as depression, anxiety, and stress, anxiety. It distorts the pattern of normal behaviour among individuals. It has main two types which influence the health in different modes of severity. Type 1 is considered less harmed as compared to type 11 diabetes because it is easily managed and controlled by proper diet and exercise. Type 11 has severe complications because it is caused by low level of insulin in the liver and patients are dependent on insulin and become conscious about the level of insulin to remained balance.

Results of the study depicts that significant negative correlation between the psychological burden and marital satisfaction is founded. Findings reveal that that psychological burden have a negative effect on the marital satisfaction among diabetic patients. It means that psychological burden is a negative predictor of marital satisfaction. Females patient are more stressed, depressed and anxious about their illness and chronic disease as compared to male diabetic patients. Females are naturally sensitive and emotional in life incidents so, they are not able to manage and control disease. Males are harder and have potential to cope with, problems, hardships and diseases than females. Research found that patients with diabetes experienced much higher levels of anxiety and depression than the general population (Rajput et al., 2016).

Results reveal that males are more satisfied in their marital relationship as compared to female diabetic patients. Due to lot of responsibilities and psychological burden of disease females patients are not happy and do not feel pleasure in their marriage relation. The comparison between educated and uneducated diabetic patients on psychological burden reveal that uneducated patients are more anxious, stressful and depressive from their disease, because they have lack of awareness about diabetes to cure, manage and to cope with it. Findings of the study describe that level of psychological burden is higher among uneducated patients as compared to educated patients. Education leads the people to desensitize about life threatening challenges. There is no difference between educated and uneducated on marital satisfaction. There is significant difference between type 1 diabetic patients and type 2 diabetic patients on psychological burden. Findings of the study show that people with type 2 are more psychologically disturb and depressed, worry and stressful due to their disease than type 1 diabetic patients. Type 2 patients have no energy to control it through exercise and diet and they depend on insulin regularly. Their age and responsibilities increase the level of psychological burden than type 1 who are young and have the greater control and manage diabetes through daily exercise and proper diet.

Moreover, results suggest that there no difference between type1and type diabetic patients on marital satisfaction. In addition, findings reveal that patients who have above 3 numbers of children possess the greater level of psychological burden as compared to those who have 1-3 numbers of children. Findings of the study show the comparison between1-3 and above 3 children in relation to depression, stress and anxiety that is significant. Individuals with large family are more anxious and stressful about the disease because it is difficult to nourish them properly. Diabetes makes them weak to earn handsome income for their children, so these patients live with severe psychological disturbance. Findings reveal that difference is not significant among patients in relation to their family size on marital satisfaction.

Moreover, results show that working status is significant with psychological burden among patients of diabetic mellitus. Results indicate that non-working people with diabetes mellitus have greater tendency to depress, sadness, emotionally disturb and stressful due to chronic disease than working patients. It is stated that outcomes are significant on psychological burden in relation to working status of patients. Working people are able to cope with conditions and their body maintains the balance in any disease. Similarly, the comparison between working and non-working diabetic patients on marital satisfaction is significant. Those people who are engaged with productive activities in life with disease are more tend to satisfied in marriage life as compared to those who live without working activities. Results find that socio-economic status is not significant with psychological burden. According to this study, results are not significant with respect to economic conditions. It means that economic stability and economic crisis did not play any vital role on patients' marital satisfaction. Women are disproportionately affected by type 2 diabetes, and risk factors include low education, low social and vocational position, and low income. Higher household income has stronger effects on the risk of type 2 diabetes and is linked to a higher prevalence rate among men in developed countries (Sun et al., 2022).

6. Conclusion

Findings of the study conclude that there is negative correlation between psychological burden and marital satisfaction. Moreover, depression, anxiety and stress are the significant negative predictors of marital satisfaction. Females patient are more stressed, depressed and anxious about their illness and chronic disease as compared to male diabetic patients. Results reveal that males are more satisfied in their marital relationship as compared to female diabetic patients. The comparison between educated and uneducated diabetic patients on psychological burden reveal that uneducated patients are more anxious, stressful and depressive from their disease, because they have lack of awareness about diabetes to cure, manage and to cope with it. Findings of the study describe that level of psychological burden is higher among uneducated patients as compared to educated patients. There is no difference between educated and uneducated on marital satisfaction. There is significant difference between type 1 diabetic patients and type 2 diabetic patients on psychological burden. Findings of the study show that people with type 2 are more psychologically disturb and depressed, worry and stressful due to their disease than type 1 diabetic patients. Type 2 patients have no energy to control it through exercise and diet and they depend on insulin regularly. Their age and responsibilities increase the level of psychological burden than type 1 who are young and have the greater control and manage diabetes through daily exercise and proper diet. Moreover, results suggest that there no difference between type1and type diabetic patients on marital satisfaction. In addition, findings reveal that patients who have above 3 numbers of children possess the greater level of psychological burden as compared to those who have 1-3 numbers of children. Findings of the study show the comparison between1-3 and above 3 children in relation to depression, stress and anxiety that is significant. Individuals with large family are more anxious and stressful about the disease because it is difficult to nourish them properly. Diabetes makes them weak to earn handsome income for their children, so these patients live with severe psychological disturbance. Findings reveal that difference is not significant among patients in relation to their family size on marital satisfaction. Results indicate that non-working people with diabetes mellitus have greater tendency to depress, sadness, emotionally disturb and stressful due to chronic disease than working patients. Similarly, the comparison between

working and non-working diabetic patients on marital satisfaction is significant. Results find that socio-economic status is not significant with psychological burden. According to this study, results are not significant with respect to economic conditions. It means that economic stability and economic crisis did not play any vital role on patients' marital satisfaction.

6.1. Limitations

- This study was restricted to the patients of Multan city, so these results cannot be generalized to masses of whole country.
- Sample size was too small to represent to entire population truly.
- Time span was too small for conducting this study and to analyze the data effectively and efficiently.
- Purposive sampling was used in this study that directly threatens the external validity.
- This study was conducted only to predict psychological burden and marital satisfaction among diabetic patients.

6.2. Suggestion

- Sample size should be large for the study that represents the entire population.
- Random sampling should be used for data collection to conduct this study in future.
- Time span should be increased to conduct such type of study in future.
- These variables must be studied on clinical population in future.
- Probability sampling must be used to diminish the threats of external validity.
- Psychological well-being, life satisfaction, social interaction anxiety and other variables must be explored in diabetic patients.

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