Review On Psychological Stress, Anxiety And Depression

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ABSTRACT:
Anxiety and fear are the most common emotional disorders amongpatients with diabetes, which have also been proved by the outcome of many researches. Both diabetes and depression belong to so called "life style" or "civilization diseases" and their development may depend on life-style – in the case of type 2 diabetes in females. Depressive symptoms are among the major contributors to non–successive aging by the influence on both mental and physical health. Depression may lead to an unhealthy life style among patients with high risk of coronary heart disease and the life-style may be one of the major factors contributing to life span. Additionally, good health perception and wellbeing exert an effect on the mortality ratio.
In this article, review on psychological stress, anxiety and depression has been highlighted.

Keywords: Psychological, Stress, Anxiety, Depression.

INTRODUCTION:
The review of related literature is a critical component of a research study. The purpose of a literature review is to convey the reader that ideas have been established on a topic and what are the strength and weakness. The literature review allows the reader to be brought up to date regarding the stake of research in the field of familiarizes the reader with any contrasting perspectives and viewpoints on the topic. There are good reasons for beginning a literature review before starting a research paper.
The reasons include:
- ➢ To see what has and has not been investigated
- ➢ To develop general explanation for observed variation in a behaviour phenomenon
- ➢ To identify potential relationship between concepts and to identify researchable hypothesis
- ➢ To learn how others have defined and measured key concepts
- ➢ To identify data source that researches have used

- To develop alternative research projects
- To discover how a research project is related to the work of others
- It can provide new ideas and approaches that may not have occurred to the investigator
- Provide networking opportunities with others individuals in the field

REVIEW OF LITERATURE:

Carlos Henrique Marques dos Santos et al. (2020) stated that Inflammatory bowel diseases – Crohn's Disease (CD) and Ulcerative Colitis (UC) – are chronic disorders associated, for several reasons, with psychological symptoms and stigmatization of patients. To compare individuals with and without inflammatory bowel diseases in relation to the prevalence of anxiety and depression. The psychological aspect was analyzed using two globally validated questionnaires – the Patient Health Questionnaire (PHQ-9) and the General Anxiety Disorder questionnaire (GAD-7) – in addition to a sociodemographic questionnaire. Data collection was carried out in three groups, each one consisting of 100 individuals; the first comprising outpatients with a diagnosis of inflammatory bowel diseases, the second comprising outpatients without a diagnosis of inflammatory bowel diseases and the third by non-outpatients without a diagnosis of inflammatory bowel diseases. Greater severity and a prevalence of anxiety and depression were observed in the group with inflammatory bowel diseases. [1]

Norah Muqbil Alhunayni et al. (2020) stated that Depression is a common comorbidity in type-II diabetic patients, which if undiagnosed leads to poor clinical outcomes. Objectives. To determine the prevalence and risk factors of depression among type-II diabetic patients attending the National Guard Diabetic Clinic in Arar city. This cross-sectional study included every third type-II diabetic patient attending the National Guard Primary Health Care Center between the 1st of January and 31st of March 2019. Participants were interviewed using the Patient Health Questionnaire 9 (PHQ-9). Patients who scored ≥5 were considered to have depression. Chi-square test ($χ2$) was used to compare differences between categorical variables was considered statistically significant. Of the total 422 diabetic patients approached for this study, 397 provided complete responses (94% response rate). Of these, 37% had depression: 23% mild, 9% moderate, and 5% severe. Diabetic patients with low education, poor income, and long duration of diabetes mellitus were found to be at higher risk of depression. Poor compliance with physical activities, diet regimen, family history of DM, and the presence of complications was also significantly associated with depression. On logistic regression analysis, low family income, duration of DM, poor compliance to physical activity, and presence of complications as neuropathy or libido were the main predictors of depression in diabetic patients. More than one-third of type-II diabetic patients had depression. Regular screening of type-II diabetic patients for depression is a necessity, as it can affect the clinical outcome. [2]

According to Salari N et al. (2020), the COVID-19 pandemic significantly affected people's mental health. Therefore, it is of the utmost importance to monitor and oversee the mental health of the populace during emergencies like a pandemic. In this study, the prevalence of stress, anxiety, and depression in the general population during the COVID-19 pandemic will be analysed in reference to previous research efforts and conclusions. In this systematic review and meta-analysis, databases from Science Direct, Embase, Scopus, PubMed, Web of Science (ISI), and Google Scholar were searched without a time limit until May 2020 for articles that addressed the prevalence of stress and anxiety in the general population during the COVID-19 pandemic. The random effects model was utilised to conduct a meta-analysis of the gathered research, and the I2 index was employed to look into the heterogeneity of the studies. Additionally, the Comprehensive Meta-Analysis (CMA) software was used to analyse the data. Stress was found to be 29.6 percent prevalent in five studies with a total sample size of 9074; anxiety was found to be 31.9 percent prevalent in seventeen studies with a sample size of 63,439; and depression was found to be 33.7 percent prevalent in fourteen studies with a sample size of 44,531 (95 percent confidence interval: 27.5-40.6).In addition to posing a risk to one's physical health, COVID-19 can lead to a range of psychiatric illnesses. People's mental health may be impacted by the new coronavirus's spread in many places. In order to prevent the COVID-19 pandemic from having a negative impact on people's mental health, it is crucial to create psychological interventions that can enhance the mental health of susceptible groups [3].

According to a study by Naicker et al. (2017), type 2 diabetes plus symptoms of anxiety or depression increases the risk of premature death. In order to quantify all-cause mortality from survey participation, a sample of 64,177 Norwegian individuals from the Nord-Trndelag Health Study (HUNT 2) that was linked to the Norwegian Causes of Death Registry was used. To assess the mortality risk over the course of 18 years related to type 2 diabetes status and the existence of comorbid emotional disorders at baseline, Cox proportional hazards models were utilised. The study revealed proof that people with diabetes have a higher mortality risk when they are depressed, anxious, or both. Anxiety symptoms had the lowest mortality risk; comorbid depression and anxiety had the highest risk; and depression had the highest risk. Men with diabetes were found to have an elevated mortality risk associated with depression and anxiety, but not women. Men with diabetes and indications of depression were found to have the highest mortality risk [4].

Shahi and Mohammadyfar (2017) made an effort to compare the mental health conditions of type II diabetics and non-diabetics in terms of depression, anxiety, stress, quality of life, and alexithymia. This research was a comparative examination of causality. The selected were all type II diabetic patients who had been sent to Semnan clinics. Using a random selection technique, 60 patients (30 men and 30 women) were chosen as the sample, while 60 healthy individuals were chosen as the control group. The results of this study showed that people with diabetes encounter a variety of mental illnesses that make

it more difficult for them to live their lives, despite the many challenges that this chronic disease causes. [5]

A study by Bener, Ozturk, and Yildirim (2017) used the depression Anxiety Stress Scales tool and its predictions among the diabetic Turkish population to describe the level of glycaemic control, comorbidities, and psychosocial functioning among DM patients. A cross-sectional investigation was conducted. 1,147 out of 1,600 diabetic individuals who were approached granted their approval. The results showed that there were statistically significant differences in occupation, income, residence, and consanguinity marriages between the two groups. The most notable differences were seen in regards to variables like physical activity, high blood pressure, stroke risk, and macro-vascular problems. When compared to HbA1c 8 individuals without diabetes, HbA1c 8 cases had considerably higher and more frequent ratings for sadness, anxiety, and stress. After adjusting for age, gender, and other factors, the multivariable logistic regression analysis showed that high blood pressure, BDI-II depression, DASS21 stress, physical activity, DASS21 depression, income, family history of diabetes, DASS21 anxiety, and sleeping disturbance were the main significant contributors. When comparing HbA1c 8 to HbA1c 8, the distribution of depression, anxiety, and stress scores in DM patients was higher in the former group. According to this study, there is a link between DM and stress, anxiety, and depressive symptoms in the Turkish population. [6]

In order to learn more about depression and mortality in people with Type 2 diabetes mellitus, Jeong et al. (2017) did a study. The Korean National Health Insurance Service's National Health Information database was used to obtain retrospective data for adult type 2 diabetes mellitus (T2DM) patients over the age of 30 from January 2003 to December 2013.(NHIS). Descriptive statistics were used to assess the demographic data and estimate the annual prevalence of depression. The Kaplan-Meier cumulative survival curve displays the overall survival rates according to the T2DM status until the given year of 2013, and the Cox proportional hazard method was used to estimate mortality rates and hazard ratios for each age group (stratified into six age groups) of patients diagnosed with T2DM in 2003. This study showed that, from 2003 to 2013, the annual prevalence of depression was continuously greater in the T2DM group. In all age groups, the mortality hazard ratio was higher for those who were depressed, and the risk was higher for male groups and younger age groups. In T2DM patients, depression was substantially linked to a high mortality risk. [7]

Rajput et al. (2016) looked at the frequency and determinants of depression and anxiety in type 2 diabetes mellitus (T2DM) patients in the Rohtak region of Haryana, India. In this study, 410 healthy controls who were matched for age and sex with 410 consecutive T2DM patients were used as subjects. We gathered sociodemographic and pertinent clinical data. The Hamilton Depression Rating Scale and Hamilton Anxiety Rating Scale were employed, respectively, to assess depression and anxiety. According to the current research, diabetic sufferers experienced despair and anxiety levels that were noticeably

greater than those of healthy controls. Age, female sex, insulin therapy, and diabetic complications were risk factors for both depression and anxiety. It was discovered that compared to healthy controls, a significantly higher percentage of diabetic patients exhibited depression, anxiety, and comorbid depression and anxiety. Compared to men, diabetic women reported higher levels of anxiety and sadness. Age, female sex, insulin therapy, retinopathy, nephropathy, and ischemic heart disease were the main predictors for a severe type of depression and anxiety in T2DM cases. [8]

In order to assess the prevalence of depression, anxiety, and stress in type-2 diabetes patients and to compare these conditions, Rehman & Kazmi (2015) conducted a cross-sectional study. Patients with type 2 diabetes (N = 240), those with problems (foot ulcers, nephropathy), and those without complications (N = 120) made up the sample. Depression, anxiety, and stress were all measured using the DASS. According to the study, sadness, anxiety, and stress affected type-2 diabetes patients in proportions of 47.9%, 69.6%, and 62.9%, respectively. Diabetes patients with problems had depression levels that were noticeably greater than those of people without issues. Patients with complications had much more anxiety than patients without issues. Patients with complications experience much more stress than patients without issues. Those who were female had depression that was noticeably worse than patients who were male. Patients who were female experienced much more anxiety than those who were male. Patients who were female experienced much more stress than those who were male. The researcher further came to the conclusion that type 2 diabetes patients had a significant prevalence of sadness, anxiety, and stress. In comparison to diabetes patients without such issues and male patients, diabetes patients with complications (foot ulcers, nephropathy), and female patients had higher levels of sadness, anxiety, and stress. [9]

In order to determine the prevalence of depression among patients with type-II diabetes mellitus at Peshawar's Khyber Teaching Hospital, Khan et al. (2014) performed a study from March to September 2010. The depression assessment measure BDI-II was employed (BDI-II). Of the 140 patients with type II diabetes, 85 (61%) were women and 55 (39%) were men. Sixty percent, or 84 people, experienced severe depression when they were originally assessed. The study showed that women and widows experienced depression at higher rates than men. Diabetes patients frequently experience despair, especially women and widows. [10]

Azad et al. (2014) conducted a study to ascertain the prevalence of depression among patients with type-2 diabetes who were attending a diabetic clinic in a tertiary care hospital. This cross-sectional study evaluated sadness and anxiety in a group of 110 people with chronic type-2 diabetes using the Hospital Anxiety and Depression Scale. The results of this study confirmed that people with type 2 chronic diabetes frequently experience worry and despair. In this study, it was shown that roughly half of the participants experienced anxiety and melancholy. Due to their lower levels of education

and propensity to be stay-at-home mothers, women were shown to be more affected than men, while diabetes control had no effect on their levels of anxiety or sadness. [11]

CONCLUSION:

Numerous studies have confirmed that the course of depression in patients with diabetes is more severe, and the relapses of depression episodes are more frequent, especially in patients with unbalanced diabetes. Data from the National Health and Nutrition Examination Survey indicate that attaining good diabetes control is possible in only approximately 40% of patients, whereas as many as 20% have HbA1c ≥ 9%, i.e., exceeding the most liberal levels accepted for patients.

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