Cover Page

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THE RELATION BETWEEN SENSE OF COHERENCE AND QUALITY OF LIFE IN TYPE II DIABETES -A CORRELATIONAL STUDY

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Abstract

The prevalence of Diabetes is becoming a challenging health issue in the present scenario. The incidence of Diabetes is increasing day by day at an alarming rate because of life style changes,dietary habits and exposure to too much of stress in personal and professional life's . Diabetes occurs when the pancreas cannot produce required amount of insulin or when the body cannot effectively utilise the produced insulin. When an individual has to live with the disease for the rest of their life, rather than worrying about the pathological effects of the disease and restricting themselves to medication, focusing on salutogenic approach in dealing with the disease will help them to experience better quality of life. Sense of coherence is the core concept of salutogenic approach which focuses on the factors that promote health. Quality of life is defined as individual's perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.The present study is conducted on a sample of 70 individuals suffering with Type II Diabetes (47 males and 23 females).The 29 item Orientation to Life Questionnaire developed by Antonovsky and WHO QOL BREF scales were used for collecting the data.Spss was used in analysing the data. The obtained results were in line with the proposed hypothesis that the sense of coherence and it's three components - comprehensibility, manageability and meaningfulness are positively corelated with the components of quality of life domains.

Key words: Type II Diabetes , Sense of coherence, Quality of life

I. Introduction:

Diabetes is caused by pancreatic issues where the pancreas cannot produce the required amount of insulin that is needed for the effective functioning or when the body cannot effectively utilise the produced insulin because of various bodily ailments. Low insulin secretion leads to increased blood glucose levels. Hyper glycemia if not treated can lead to various serious health conditions like diabetic retinopathy, kidney problems, neuropathy , damaging nerve cells and vital organs etc. The common symptoms of diabetes include ploy urea, polydipsia . polyphagia, low energy. Diabetic foot can increase the chances of gangrene infections which in many cases leads to amputation of the fingers, feet, limbs based on the spread the infection in the body.

Type I diabetes is commonly found in children so it is called juvenile diabetes. individuals need to take insulin externally as their pancreas produce insufficient insulin. Children with Type I diabetes experience more cognitive and emotional issues when compared with other children however the intensity of the disease and the way they manage the symptoms plays a crucial role in affecting their academic stress and performance. In Type II diabetes the body cannot utilize the produced amount of insulin causing elevated blood glucose levels which can damage nerve cells and blood cells if left untreated. Family history, obesity, sedentary life style, lack of exercise can enhance the risk of Type II diabetes. Early diagnosis can help the individuals to prevent the severe negative effects. Regular timely health check- ups helps us to diagnosis this in early stages. Individuals in pre diabetic phase should accommodate necessary life style changes to delay the onset of Type II diabetes. Gestational diabetes is found in pregnant women. The hyper glucose levels increase the complications during pregnancy and if not controlled may become Type II Diabetes.

Cover Page

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Hyper glycemia and its associated metabolic dysregulation of carbohydrate, fats and protein can affect and disrupt the functioning of multiple organs in the body. Longterm diabetes can lead to various micro vascular disorders and macro vascular disorders (Banday et al 2020) .The incidence of the disease cannot be prevented by primary preventive methods.

Medication, Dietary changes, exercise and stress management are the main line treatment for controlling Type II diabetes. Only secondary and tertiary prevention is possible in chronic diseases like diabetes where in we can only focus on controlling and minimising its negative impact on the health of the individual but cannot bring back them to the normal disease free state with the present available medical facilities. The normal approach in dealing chronic illness is focusing on the pathogenicity of the disease. The Bio medical approach focuses only on the treatment in controlling the disease. The more recent and appropriate Bio-Psycho-social model of health and illness focus on medication and along with it also emphasises the role of psychological and social factors which have the capacity to aggravate or minimise the detrimental ill effects on the individual. Stress activates the Hypothalamus-pituitary -Adrenal (HPA)pathway and Sympatho Adrenal System. Though the hyper glycemia that occurs during acute phase of stress is not harmful and has some evolutionary basis to support the organisms fight or flight mechanism, prolonged exposure to chronic stress increases the risk of Type II Diabetes. The complimentary and alternate medicines like Yoga, Ayurveda, Naturopathy, Homeopathy, Various Mind Body Techniques, Meditations are also commonly practiced by the Diabetic individuals because of their wide availability and inexpensiveness. Only depending upon those CAM practices and not taking proper medication because of lack understanding of the disease or because of their faulty health beliefs might increase the risk life threatening situations.

Salutogenesis - Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity according to WHO definition. Pathogens are the organisms which cause diseases like bacteria, virus, fungi etc. However, the recent incidence of life style disease are not only caused by organic aetiology or hormonal dysregulation they are also caused by behavioural pathogens. The patterns of behaviours which increases the risk of incidence of the disease. Salutogenesis the concept which is on the flip side of pathology focuses on the factors that promote health. Aaron Antonovsky coined the term salutogenesis. The central concept of this health promoting model is sense of coherence which constitutes of three components namely meaningfulness, comprehensibility and manageability.

Manageability – This is the behavioural dimension of SoC and it is a belief of the individual that he/she has necessary skills, resources to take care of things that are within their control

Comprehensibility- It is the belief that things happen in an orderly and predictable pattern and by understanding this they can reasonably predict the future outcomes to a certain extent. This is the cognitive dimension of SOC. Meaningfulness- This is the motivational aspect of Sense of coherence and is the belief that things in the life are source of satisfaction and are interesting so one needs to take care about what happens. The individuals with diabetes need to manage their physical health, psychological health, social relationships and their environment to have a better quality of life.

The physical health domain includes the ability of the person to perform their day today activities , sleep quality, dependence on their medical treatments, their energy levels, pain related issues etc. The psychological health includes their self- esteem, body image issues, positive and negative emotions and sense of meaning in life. Social relationships mainly measure their satisfaction with their personal relationships and the support they get from their family and friends. The environment domain includes the quality of their physical environment, home atmosphere, financial resources, access to medical services and health information etc

II Objectives of the study:

1. To study the relation between Sense of coherence and Quality of life of diabetic patients
2. To study to what extent the components of Sense of Coherence and domains of Quality of life are corelated

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III. Methodology:

The study is a cross -sectional study conducted on a sample of 70 (Male 43and female 27)diabetic individuals. Purposive sampling method is used in identifying the sample who met the criteria. Information about their family history, medical history, life style choices was taken by interviewing them. Two questionnaires Life orientation scale and WHO QOL BREF were administered for collecting the data. The obtained data was analysed using SPSS. Statistical tests Pearson correlation test was conducted to see the relation between the domains of SOC and QOL.

IV. Procedure:

The patients having diabetes for more than one year were identified from the hospitals in and around Rajamahendravaram and informed consent was taken from them. Patients with terminal illness or cognitive impairment were excluded. Patients with other life style diseases like BP and other chronic illnesses were excluded and sense of coherence scale and Quality of life Scale were administered to collect the data.

Sense of coherence : The 29 item Orientation to Life Questionnaire developed by Antonovsky is used to measure the sense of coherence. Out of 29 items 11 items measure comprehensibility, 10 items measure manageability, and 8 items measures meaningfulness. The response alternatives are noted on a semantic scale consisting of 7 point rating scale. where 1 and 7 indicate extreme feelings about questions about how one's life is experienced. The total score obtained may range from 29 to 203 points . Some items in the questionnaire are reverse scored.

The WHOQOL-BREF is used to measure quality of life of a person. The scale consists of 26 items consisting four domain scores namely physical domain, psychological domain, social domain and environmental domain.

V. Results & Discussion:

Table 1 – Correlation between sense of coherence and QoL domains

Constructs	Comprehensibility	Manageability	Meaningfulness	T.SOC
Physical Health	0.421**	0.474**	0.347**	0.512**
Psychological Health	0.471**	0.441**	0.326**	0.522**
Social relationships	0.342**	0.365**	0.317**	0.418**
Environmental	0.470**	0.505**	0.369**	0.557**
Overall QoL	0.465**	0.448**	0.308**	0.517**

** Correlation is significant at the 0.01 level

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Table 1 shows that there is a moderate positive correlation between the physical health , psychological health, social relationships and environmental domains of quality of life with comprehensibility, manageability and meaningfulness domains of Sence of coherence.

Diabetes is a chronic non communicable health condition where the individual is forced to manage many aspects of life which they once took for granted. The restriction in the amount of food they consume and avoiding foods with high glycaemic index , moderating their stress levels ,energy levels etc make them feel that their quality of life has decreased suddenly. Underestimating or overestimating the effect of the disease may affect their compliance with the treatment. The results obtained from this study clearly indicate that patients sense of coherence related to the cognitive, behavioural and motivational domains positively correlate with all the four domains of quality of life. Enhancing any domain of SoC can make the individual to experience better quality of life. The management domain is relatively easy to focus on in making them to identify the predictability of the events in their day to day life and making them aware of better ways in which they can control the events that are in their control. According Aaron Antonovsky' human life can be compared to a river and thriving of an individual depends on knowing how dangerous the river is and how well the person can swim. The generalized resistance resources helps the individual to effectively utilize specific resistance resources in stressful situations. The relationship between these two resources is via sense of coherence. Focusing on sense of coherence enhance individual's ability to be more capable in identifying and utilising the available resources which are actually the protective factors in individual's life to experience better quality of life.

VI. CONCLUSION:

The study is conducted on a sample of 70 having Type II diabetes. Orientation of life questionnaire and WHO QOl BREF questionnaires were administered to understand their sense of coherence domains and quality of life domains. The obtained results clearly indicate that there is a moderate positive correlation between the domains f soc-Manageability, meaningfulness and comprehensibility with the domains of Quality of life. Making the individual in understanding their sense of coherence can definitely increase their overall quality of life .

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