

# SOCIAL SUPPORT AND QUALITY OF LIFE OF PATIENTS WITH T2D: A REVIEW

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## ABSTRACT

*Diabetes mellitus is a metabolic disease and has been found to have an extremely significant presence across the globe and more so in India. A lot of research has been done in the clinical area per se on men and women suffering from this chronic illness. The basic purpose of this review is to find out the psychological aspects that may have a major contribution towards the self-management of T2D. The psychological concepts considered for this specific review are social support and quality of life. Social support is perceived to be playing a key role in self-management of the disease. Social support may include the help that is extended by immediate family or even by friends in the daily management of the disease. It could also be inclusive of the support extended by the health care system in the form of doctors, nurses and other health care professionals. This kind of social support attained, it is hypothesized to have a positive effect on one's quality of life and management of diabetes. This review is aimed towards understanding the research that has been done in the two areas of social support and quality of life and the role they play in self-management of diabetes. It has been concluded that real and virtual support contributes greatly towards the patients experiencing a better quality of life.*

**Keywords:** *Diabetes, social support, quality of life, diabetes self-management, self-care*

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## INTRODUCTION

A chronic disorder, diabetes mellitus is characterized by numerous abnormalities in carb, protein and fat metabolism. Sustained and chronic exposure to these abnormalities is accompanied with a whole set of complications. The American Diabetic Association recognizes that diabetes entails a group of clinically and genetically heterogeneous disorders wherein glucose intolerance occurs as the most common denominator [1].

Diabetes mellitus is prevalent in different forms/types, some of which are very common. One is the most popular type 1 diabetes which is also referred to as the insulin dependent diabetes mellitus. Second is the type 2 diabetes which is referred to as the non-insulin dependent diabetes mellitus. In addition to these two, we also have gestational diabetes mellitus and other specific types which includes eight categories (genetic anomalies of beta cell functioning, drug induced/chemical induced diabetes, infections, endocrinopathies, diseases of the exocrine pancreas, genetic anomalies of insulin action, uncommon forms of immune-mediated diabetes and other genetic syndromes sometimes associated with diabetes).

Type II diabetes scenario in India is witnessing a huge surge in the number of people falling prey to this disorder and women are found to be at an even more disadvantage as they are playing the role of a caretaker for the family. In the process they are prioritizing the health of the family members above their own health. As diabetes is a condition that calls for self-management of the disease, it becomes difficult for the women to take care of themselves. Though the men get adequate support from his spouse, family and friends, sometimes they are also unable to manage their condition well.

G.R.Sridhar et al [2] carried out a research to assess evaluated support and parameters of psychological aspects of adults with diabetes in a Diabetes Centre in India with employing measuring instruments: ATT39, ATT19, barriers to self-care, social support, quality of life and well-being questionnaires resulting in gender differences in all the parameters studied, where, men had better adjustment compared to women with disease, coped better, integrated better, had better quality of life and well-being. The social support was focussed on the nuclear family (spouse principally, and children to a lesser extent). The primordial goal in the treatment of T2D is glycemic control. And not everyone is well equipped to handle the dynamic nature of the disease. There may be differences between men and women, urban and rural settings and many more.

### **Social Support**

The support that encompasses multifaceted collection of various influences in an individual's life is called social support. This social support may include community resources, interpersonal relationships, and access to assistance, perception of belongingness or being cared and loved. It is found to be extremely essential for an individual's wellbeing when he or she is suffering from any kind of a chronic illness [3].

Reblin and Uchino [4] in their work on social and emotional support and the implications it has on health summarized that there is a link between physical health and social support. There is more research which proves that such people need to be provided with more support and they should also be willing to receive more social support for better management of chronic illnesses. Interventions are found to be more effective in handling the mysterious nature of the disease.

Social support is considered as one of the most powerful psychosocial resource that is extremely supportive too. The main reason for this is social relationships are emotionally gratifying as well as satisfying, they mitigate the negative effects of stress and also mitigate the likeliness that stress would lead to ill health [5].

Gomes et al [6] conducted a randomized controlled trail that evaluated the contribution that social support extended by the family made towards the metabolic control of T2D. The major difference from the control group was that there was a family caregiver for the intervention group. This caregiver was identified by the participant as a point from where he could get social support. There were educational interventions too that were given to both the groups via telephone to the care givers and the members of the family of the patients. In the results, the researchers found that there was a huge reduction in the levels of glycated hemoglobin in the experimental group when compared to the other group. This indicates that there is a positive outcome of the effort. From this trial it has been concluded by the researchers that families too should be made an integral part of the care of the diabetic condition. Families should be made an integral part of the various health care programs and especially those that can promote various forms of this social support which may even solidify the bond that exists between the members of the family.

### **Quality Of Life**

Till very recent times, quality of life was not given much importance or relevance. People were never really interested in the psychosocial aspects of the related illness or its treatment. But now, researchers have brought out the relevance of this component in relation to dealing with chronic illnesses and more specifically diabetes mellitus. Quality of life is the satisfaction an individual experiences with a wide range of his or her life dimensions in comparison to one's own ideal life. More the discrepancy between the two, lesser will be the quality of life experienced. This component is characterized by the individual's physical health, mental health, the amount of independence he or she experiences, the quality of interaction with the social environment and the factors it entails [7].

There is a lot of worry that creeps in across different age groups once the individual is diagnosed with diabetes. There is social worry. Aspects related to marriage, aspects related to bearing children, being able to work in the most desirable job, ability to complete education, ability to have a normal sexual life and many more keep nagging in the individual at the back of their minds. In some cases people diagnosed with diabetes also may not experience a good quality of life because of the worry they have owing to their condition. People would perhaps look at them differently because they have diabetes, and there could be a fear that others would not be interested in mingling with

them because of their condition. These are all related to the worry factor that may bring about a poorer quality of life in the diabetic individual.

In addition to the social worry and worry related to the disease, there are two other important aspects that may have a bearing on the quality of life one experiences. These are satisfaction with the treatment that one has and also the impact that the treatment is having on them. When they are thoroughly satisfied with both, then they experience a better quality of life. Any discrepancies experienced in these areas would again have a negative bearing on the quality of life experienced.

Therefore, in order to experience a good quality of life, people suffering from diabetes mellitus need support not only from the spouse and others members in the family but also relatives and friends who may be considered as extended family. Support is needed in terms of dietary management, in terms of having and maintaining good eating habits and also in terms of emotional and instrumental support.

Does social support really have a relationship with the perceived quality of life? Is there any association or relationship between the two? Or, does social support really influence the way quality of life is perceived? What if a few of the T2D patients do not really have any kith and kin to turn to in times of health related queries, apart from the health care providers? Is the social media the new emergent in offering the much needed social support? This literature review makes an effort to look into the studies that have been done earlier in the field and draw out to the fore any major findings that have been established.

## **METHOD:**

We have made use of journal repositories and identified studies on social support and quality of life of people diagnosed with type 2 diabetes mellitus. The studies identified have been sourced from PubMed, Science Direct, American diabetes association, and Google Scholar. The keywords used for this specific research paper are diabetes, quality of life, and social support.

## **RESULTS:**

The outcomes arrived at in the studies taken into consideration proved that social support has a considerable impact on the quality of life that the type 2 diabetic patients experience.

Diabetes is a chronic metabolic disease that calls for extensive changes in one's lifestyle and behavior and also an adherence to a regimen that is complex in terms of diet, exercise and medication. Therefore, social support is considered as one of the pivotal aspects that contributes towards taking care of oneself and also in adherence to the treatment regimen thereby bringing about a control. All of this would definitely have a bearing on the quality of life that the person experiences. This has been arrived at in a study conducted by Epple et al [8] while they were studying the role of active family nutritional support in Navajos' type-2 diabetes metabolic control.

Zhang et al [9] examined the relationship that existed between social support and mortality in patients with diabetes. They also studied the pathways to know how social support affected the survival due to diabetes. The results showed that people who had medium social support had lesser risk of death when compared to those who had a low level of social support. This only goes on to prove that social support extended through family, relatives, friends, and neighbors, and health care professionals had a very good impact on the management of the disease. However, in a study conducted by Meisinger, Kandler and Ladwig [10] to examine gender specific associations between risk of type 2 diabetes and living alone in Germany, living alone is found to be an independent predictor of type 2 diabetes in men but not in women. This means women are more secure in dealing with their condition. The same has also been established already in 2006 by Cheng CY where he concluded that older women are psychologically secure being alone and having a positive well-being independent as the stereotype where personal perceptions vary [11].

Lindsay and Chandra [12] carried out a mixed method approach to study the association of perception of family members diabetes self-care knowledge, supportive and non-supportive behaviors (diabetic-specific) and participants medical adherence and glycemic control who undergone sessions in focus groups which discussed diabetes

management - barriers and facilitators. Results showed perceived family members with more knowledge showed supportive behaviors, and those who are not associated showed non-supportive behaviors being less adherent to one's diabetic medical regimen which resulted in worse glycemic control. Focus groups whose families were aware of diabetes reportedly showed sabotaging/ non supportive behaviors. This study highlighted immense need for family based interventions to enhance family members motivational and behavioral skills, improve social support components, self-care activities for helping in improving the glycemic control, to reduce the risk of mortality, non-supportive behaviors and good self-management.

In the study conducted by Azmoude E et al on assessment of family functioning and its relationship to quality of life in diabetic and non-diabetic women, it was found that the former showed more family impairment. This is significant of the fact that family functioning definitely delivered a factor of behavior control, better quality of life as well as healthy women [13].

In one of the studies done on quality of life in elders living alone in Taiwan, Lin, Yen and Fetzer concluded that elders in Taiwan who lived alone in rural areas generally suffered from poor quality of life and depression. These women are more vulnerable and showed a great need for social support [14].

Additionally, it has been established that life style modification would have a positive influence on diabetes quality of life. Shrestha and Ghimire conducted a review study to examine the kind of modifications in life style would bring out in the diabetic patients on their overall quality of life. Modifications in terms of obesity, physical exercise, eating habits could play a pivotal role in averting diabetes and this could be achieved only through well planned behavioral strategies that can bring about a change in the patient's condition. If change has to set in at a macro level, one needs to seek public and private partnerships that encompass personnel from the government, partner organizations, community, health care service providers and people with diabetes [15].

In a study conducted by Goz et al (2007) on the effects of the diabetes mellitus patients on perceived social support and their quality of life, it was observed that higher levels of social support extended towards the diabetic adults benefitted their adjustment to the disease better and also management of the disease better which eventually resulted in experiencing better quality of life [16]

## **DISCUSSION:**

From an understanding of the studies and research that has been mentioned above, we can arrive at a conclusion that social support has a direct relationship with quality of life.

Social support is considered as a coping mechanism that is emotions oriented and a lot depends on the emotions for one's daily functioning. It also has the ability to influence the quality of life [17]. People who are on the receiving end of such kind of help experience better health, as has been proved and established by a few studies [18, 19].

The studies have only helped in proving that social support can definitely have a bearing on the quality of life of an individual, better the levels of care one can take for themselves, better the self confidence levels in management of diabetes, thereby positively impacting the physical, mental as well as social interactions with oneself as well as with others [20].

In short, it can be stated that social support has a tremendous impact on the health of the individuals thereby bringing about a better quality of life which is an interlinked dimension.

Shareh et al (2012) studied the predictors of quality of life of NIDDM patients based on perceived social support. They concluded that the dimensions of family and friends of social support emerged the predictors of quality of life and its dimensions. These two have been found to make a significant contribution towards predicting the quality of life of the diabetic patients [21].

Advancements in technology have introduced people to seek advice from the online platform. Very soon, websites that offered health related solutions paved the way for more interactions through social media platforms. Lewis et al [22] investigated the various reasons as to why older patients suffering from T2D join online communities. The major reasons reported were patients wanted more and more information about their particular health condition. They needed more help in managing the disease and its complications. Some of them joined for social support and

informational support. It is indeed a feel good factor for patients to know that they are not the only ones battling with such kind of a chronic illness but there are many more like them. Interestingly, the researchers found that women went online more in order to find companionship and support and men went for finding out ways in which they could manage their condition. This research only indicates that educating the patients to search for the right information from the right and reliable sources is also as essential. Such online engagement in diabetes communities proved that patients were having better control over their condition when compared to those patients who showed lesser online diabetes community engagement. Research by Litchman et al (2018) on the diabetes patients that participated in online communities found that the active users had high quality of life related to their health and also better self-care levels of diabetes [23].

Oser et al [24] have focused on the role social media played in the area of diabetes management. The study helped them to assess the various psychosocial needs that the diabetic patients and their caregivers have. This study too found that many people joined the diabetes online communities in order to satisfy their yearning for psychosocial support. The members here were found to exchange a lot of support which ranged from informational, technical, psychosocial and management. Patients had often expressed their frustration and worry over fluctuating glycemic levels which led to reciprocal sharing, offering of support as well as encouragement whenever needed. Such kind of an interaction equipped the people with diabetes with more valid information, gave them informational empowerment and greater understanding of their condition. As a result, there is a surge in the number of diabetic patients turning online for support so that they could live with diabetes in an informed manner. The family members too had greater potential to enhance the psychosocial care they could extend to the diabetic patients in the family [25].

In some family settings, there are more than two people suffering from this chronic disease. Such a scenario too develops a situation where one offers a comforting shoulder to the other, and people with diabetes help one another in diabetes management.

## **CONCLUSION:**

The psychosocial factors, social support and quality of life only prove that type 2 diabetes is strongly associated with a few psychological effects that may range in their severity. From mild to moderate depression to self-isolation in a few cases. It is clear that the quality of life of the patients is influenced by a plethora of factors that are patient related, disease related, presence or absence of comorbid conditions. And, when social support is available to the patient it definitely can predict the quality of life of the patients who are suffering from Type 2 Diabetes. It is therefore highly essential for the members of the family, more so the spouse, to be actively involved in rendering support to their counterparts [26].

The cornerstone of management of diabetes lies solely on the diabetic patient's self-care behavior. It may involve systems that the patient interacts with, his immediate family and even broader cultural and social values, the media, all of which have a bearing on the self-care behavior. There is definitely a link that exists between the intimate network of the patient which comprise of the family as well as close friends and also the exchange network of the patient which comprise the health care provider and support offered through the online platform. One needs to understand that these relational targets that bring out the best management of the disease need to be identified, self-care behaviors be modified if needed.

Patients would be receptive to different varieties of diabetes self-management techniques. They would definitely want support to manage their condition well. Where a few are content with the direct access with the doctor, a few of them have other preferences of communication which is readily accessible to them. This of course depends greatly on the language proficiency, health literacy of the patient and other factors like interest in managing one's own condition [27].

The onus is also on the public health systems too to offer a variety of such self-management services in order to meet the diverse needs of the patient population. The literature available on social support and quality of life is robust and more research is getting added to the database. The studies in the future should concentrate more on highlighting what can bring about better quality of life for the patients, what can reduce the morbidity and mortality of the T2D patients with adequate emphasis on the rural diabetic patients too. Leveraging information technology and the internet may be other forms of extending social support to the patients who yearn to experience a better

quality of life. Change has to be brought about not just in the urban areas but also in the rural areas too so that every T2D patient can learn the skill of managing one's own condition. Telemedicine too may become one of the means in which people could get social support and thereby experience better quality of life.

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