

# Impact of diabetes on mental health of young adults

A Literature review

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Abstract:

This literature review will discuss mental health among young adults suffering from diabetes. The objective is to understand different impact and help that can be provided. Mental health is an aspect often ignored in the process of treating diabetes. The need for attention towards the same is important. The study aims to know the impact on the mental health of young adults suffering from diabetes and the ways that can be a help to them to lead a normal life. Research questions in the thesis are: 1) How does diabetes impact mental health among young adults? 2) What are the possible measures to help young adults in regard to mental health? The theory chosen for this study is Dorothea E Orem's nursing theory. Through reliable sources, scientific articles, were collected for review through PubMed, Science Direct, and Google Scholar. Main search word used were: Diabetes AND mental health AND young adults OR impact OR distress OR self-care. A qualitative literature review was conducted to get content for the research questions. Inductive content analysis for the qualitative review of literature was done. The important finding for the impact on the mental health of young adults with diabetes is stress and the important finding for the different measures that can be taken to help young adults with diabetes in respect with mental health is psychoeducation. The author concludes the study with reflecting on the importance of integration of mental health in diabetes care. Mental health is an important element to be taken care of. Mental health wellbeing leads to a progressive and positive control over the disease.

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# Contents

1	Inti	roduction		
2	2 Background			
	2.1	Mental Health	7	
	2.2	Depression	8	
	2.3	Stress and Anxiety	8	
3	Nu	rsing Theoretical framework	10	
	3.1	Dorothea E. Orem's Theory	10	
	3.1.	1 Theory of self-care	11	
	3.1.	2 Theory of Self-Care Deficit	12	
	3.1.	3 Theory of Nursing Systems	12	
4	Ain	n and Research Questions	13	
5	5 Research methodolOgy14			
	5.1	Qualitative Research	14	
	5.2	Data collection	15	
	5.2.	1 Inclusion and Exclusion Criteria	15	
	5.3	Content Analysis	18	
	5.4	Ethical Considerations	19	
6 Findings		dings	21	
	6.1	Impact on Mental Health due to diabetes	21	
	6.2	Measures to help Young Adults with Diabetes in regards with Mental Health	22	
7	Dis	cussion	27	
8 Conclusion				
	8.1	Limitations and Recommendations	31	
9	References			

# FOREWORD

I would wish to take this opportunity to thank Dr. Pamela Gray who introduced the subject in a structured pattern that was understandable in the easiest way possible through all the possible links shared which explained the whole idea of the thesis in the simplest form possible. I would also wish to render my thanks to Heikki Paakkonen , Pauleen Mannevaara , Terese Sjölund ,and my supervisor Lotta Eronen for the unmatchable support through their transparent feedbacks based on their knowledge, insight , experience throughout the process of my work. It would have not been possible without you all. I feel humbled to have got an opportunity to be your student.

## 1 INTRODUCTION

In this study the author shall be looking into the impact on mental health of young adults due to diabetes. The study starts with a brief explanation of the definition of mental health and the most common form of mental health issues such as depression and stress are also briefly discussed in the background chapter. The study shall focus on the various problems related to mental health that young adults suffering from diabetes deal with in their daily life. The study shall look into the possible measures that can be taken to help young adults to lead a normal life while living with the disease.

The author was motivated and decided to choose this particular subject and topic because of personal experience. The author has been dealing with likewise situation in personal life where it was difficult to comprehend and deal with the situation being a family man. A lot of questions were left unanswered and the confusion of how to convey and what to do in the different situations often led to a stressful mind. There used to be a lot of thought processes which are usually used to seek answers to different questions related to the situation.

However, the author has made sure that none of the personal thoughts or perspective hampers the study to keep it free from any sort of bias. The study shall be purely reflecting results based on the content acquired from reliable sources.

The background chapter will define key concepts and shall be relfecting on the state of the young adults living with diabetes and how important it is for them to get help with mental health. The theory chosen is the Dorothea. E. Orem's nursing theory for the this literature review , which shall be covered in the nursing theoretical framework chapter. The aim of the literature review shall be stated along with the research questions. A description in details on data collection and the content analysis will be presented in the Research Methodology chapter. The literature review will present the list of ten articles chosen from schientific journals and are presented in chronological order. The findinigs from the chosen articles are then mentioned in details so as to get the answers related to research question for the thesis. To conclude , the thesis will finish with a conclusion

chapter where the author shall also mention about the limitations and the recommendations related to the thesis.

### 2 BACKGROUND

According to the W.H.O (World Health Organization), health is defined as "*a state of complete physical, mental and social wellbeing and not merely the absence of diseases or infirmity*". (WHO, 2003) . Mental Health wellbeing plays an important role in the diabetes management process in an individual. Often the focus on mental health of the individuals living with diabetes are not talked about which in turn leads to complications related to the disease in itself. Poor adherence to medication is linked to poor HbA1c, blood pressure and cholesterol control. Non depressed individuals living with diabetes are most likely to adhere to the medications as compared to those people living with diabetes and are also depressed. Patients with severe psychological distress, low social support have poor self-care related to diabetes control. (Owens-Gary, et al., 2018)

The American Diabetes Association and the Unites States preventive services task force suggest regular evaluation for these problems dealt by people living with diabetes to avoid fatal possible life-threatening complications and a threat to the mental wellbeing of an individual. The data shows that screening rate for depression remains low for people living with diabetes and it is noted that they are not using the tool of screening as part of their interventions. Lack of adequate training is also considered to be a part of the concern. (Owens-Gary, et al., 2018)

#### 2.1 Mental Health

Mental Health must be looked above the concept of just an imbalance of the mental aspect of a human being. The idea of being mentally healthy is about feeling good about personal feelings, opinions and realizing the ability and capability of oneself. It is also about feeling good when an individual can manage and get over a situation in life, be it during working life or personal life, and can be an effective resource to society. The imbalance of mental health can happen to whoever and however, irrespective of the age, gender, age. It becomes a significant matter to think about for the whole society and therefore it must not be just a state of the condition being handled by those who are being affected. (WHO, 2003) Psychological well-being influences in many ways in day-to-day life. The connection between the mind and the body can affect the health of the body. Similarly, the way of thinking, the approach towards situations and life also is directly reflected on the health of the body. It influences the capacity and ability to face situations of stress and equally affects the decision-making process. Psychological issues if left unattended or untreated it can lead to multiplication of the problems both in psychiatric aspect and also in medical aspect , which means , if a person is suffering from a disease irrespective of what the disease is , the probability of the status of the disease to get complicated remains high due to an imbalanced mental health of the individual (Centers for Disease control and Prevention, 2018)

#### 2.2 Depression

Melancholy is a clinical ailment that causes sensations of trouble and regularly a deficiency of interest in the things or activities the individual used to do or wished to do. Only 25% to half of the individuals with diabetes who have gloom get analyzed and treated. Furthermore, without treatment, the condition deteriorates further. (Centers for Disease control and Prevention, 2018)

Indications of melancholy can be gentle to serious and include: Feeling dismal or void, Losing interest in things that used to be done by the individual normally, Indulging or not having any desire to eat (loss of appetite), sleeping excessively, experiencing difficulty thinking or deciding, feeling exceptionally drained, feeling sad, on edge, or liable , having migraines, spasms, or stomach related issues , having contemplations of self-destruction or demise. (Centers for Disease control and Prevention, 2018)

#### 2.3 Stress and Anxiety

Stress can be common, but it stresses if it persists for long it can lead to further issue. Stress level if it persists for long it can damage the health of the individual easily and can lead to medical abnormalities. Stress can persist also due to medical abnormalities and different factors can lead to stress. Uneasiness, sensations of stress, or being tense is how your brain and body respond to pressure. (Centers for Disease control and Prevention, 2018)

### **3 NURSING THEORETICAL FRAMEWORK**

When scientific research is done it needs a structured theoretical framework which shall be a knowledge-related guiding tool along with the process. By using a theoretical framework, it provides an organized and intellectual approach that acts as a guide and helps in the process of the thesis. A theoretical framework becomes a mode of the critical way of thinking and thereby helps to support the intent of the research. (Theories A Framework for professional practice, 2015)

In this research, the author has used Dorothea E Orem's Self-care deficit nursing theory. The theory was found to be reliable, related to problem-solving, apt, and simple understanding of the theory and hence the theory has been used. Adequate knowledge regarding self-care if not given it can lead to multiple problems related to mental health which can develop due to the impact of diabetes, which often is forgotten as part of the complication regarding mental health of an individual caused due to the disease. As per the theorist, individuals who are vulnerable to complications caused due to the disease must be motivated to take care of themselves as part of self-care so that they could lead a better quality of life and good well-being in life. The motivation and proper educations related to taking care of themselves, which is self-care, if given on time helps the individual in leading a good life and helping in the promotion of health and thereby must be advised also to maintain the same approach throughout life as well. (Nursing Theory, 2020)

### 3.1 Dorothea E. Orem's Theory

The theory of self-care deficit was introduced by Orem in the 1950's and until 2001. It is known to be a major theory that has a wider aspect to common principles that can be used in all nursing examples. The focus of the theory was that individuals can care for themselves and can come out of the possible complications or even from the basic problem by taking care of their health as much as possible from their side. (Nursing Theory, 2020)

The criteria for self-care according to Orem were divided into categories:

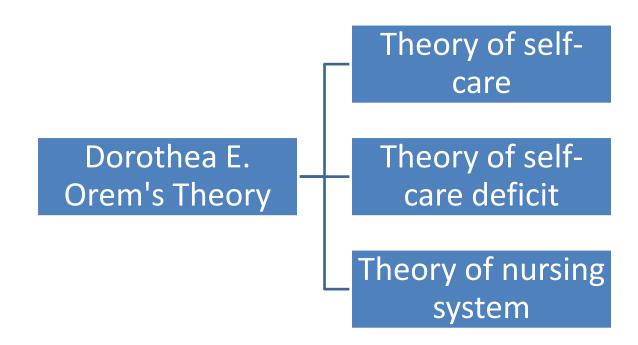


Figure 1: The categories of self-care deficit theory of Nursing as indicated by Dorothea E. Orem.

#### 3.1.1 Theory of self-care

This theory suggests taking care of self that an individual (client) starts and does by self and keeps intact the quality of life and remain healthy and maintaining wellness in life without the guidance, advice, assistances of any professional such as nurses. It indicates and reflects on how a patient is expected to take care of themselves before getting the attention of the professionals in respect with caring. It also mentions that caring for self is within the capability and ability of a human being and it is seen based on age, different life situations, wellbeing in life. It is by nature of a human being to intellectually and function their life in a way which shall lead to their growth be it medical, personal growth and maturing with developmental stages in life. The therapeutic approach to caring for self involves and includes all ways adopted for the apt care which an individual needs in attaining the care level for self. Some factors related to personal criteria such as age of the person, gender of the individual, the economic condition, surrounding or the society the individual lives, the way of living, are some pointers which can in one way that can manipulate the results of the evaluation of the self-care demand in therapeutic perspective. (Nursing Theory, 2020)

There were some criteria for caring for self, mentioned by Orem in the theory of self-care which has been inculcated in the structure of caring for self-concept to lay down the ground expectations for self-care. The requisites for caring for self are found in almost all humans and are a common find among human beings because it is a part of the phases in human life. The criteria for developmental caring for self are connected to developing stages in the life cycle of humans. These usual criteria of caring for self in this will be varied and might differ. However, they are seen or are related or may be seen in instances of different phases in human life such as being at school, being graduated, wedding, reaching the age of pension. (Nursing Theory, 2020)

#### 3.1.2 Theory of Self-Care Deficit

This part of the theory sheds light on how and why people usually let the nurses or carers help them or assist them or take care of them when they are not able to so. It reflects clearly on the ways adopted by humans or the urge for leading a quality life, positive healthy life, good wellbeing, and survival methods for a good quality of life. As per Orem , caregivers use different helpful ways to reach the needs of self-care of the patients such as spreading awareness and sharing their knowledge and educating them at the same time , by giving them the needed support in terms of physical and also supporting them and giving them the much needed mental support which is the psychological part , telling them what to do , how to do and why it should be done , proving them a clear path to follow. (Nursing Theory, 2020)

#### 3.1.3 Theory of Nursing Systems

Theory of Nursing Systems was included as a part of the theory for care by Orem. It reflects on the vital aspect of the caring factor which is about the kind of environment or the relation which must be established for the care to provided and how it should be developed and always aimed to be maintained and updated along the process of care given and or in future anticipated care as well. (Nursing Theory, 2020)

# 4 AIM AND RESEARCH QUESTIONS

The research aims to get answers based on scientific articles through reliable sources regarding the impact on the mental health of young adults due to diabetes. It is also aimed at getting answers regarding the different measures to be taken to help young adults with diabetes in regard to the mental health.

#### **Research Questions**

1. How does Diabetes impact mental health among young adults?

2. What are the possible measures to help young adults in regard to mental health to lead a normal life with Diabetes?

#### 5 RESEARCH METHODOLOGY

Research methodology is a scientific procedure that gathers and arranges in order the preparation and implementation of research with a focus of answering the research question and or the goal or aim of the research. There are two traditional research methods, qualitative or quantitative method (Research methodology in Nursing, 1985).

#### 5.1 Qualitative Research

Qualitative research focuses on the basic problem through a human perspective or an ideological perspective. The qualitative method is often used to know what the belief of people is, their way of behaving, their dealings or interactions, their experiences. It deals with data without numbers. (Pathak, Jena, & Kalra, 2013)

In qualitative research, there is a focus to understand the different meanings given to different realities related to a particular subject or topic. Qualitative research can be used to do findings through any philosophical and or theories found in the process. The desired approach shall define a way to decide the research design which is indeed used to carry out to sustain and use in the study. If the initial interest or aim is to just understand a particular idea then it can be done through common ways of going through case studies, understanding the core of the topic from the author's experience or point of view. Other studies that are critical in nature have also respective aims or goals, but they are tried to be done in a more intense way that would aim a better understanding level, which means it would go in depth to find some vital answers to the question. Mostly the qualitative research shall be looking or aiming to see things through the eyes of people in questions , how they feel being in that situation , what the situation is for them , what is it that they are going through for example physical , emotional , social hardships etc. , how the problem they are in is handled by them living in that situation and how the world looks at them being in that situation. (Introduction to Qualitative Research, 2002)

This thesis is a literature review conducted through a qualitative research methodology. This method is used because it helped in the best way to get answers to the research questions and helped in understanding the underlying factors in relation to the topic and the possibility of further study on the topic.

#### 5.2 Data collection

The qualitative method was chosen for the study, and the content analysis shall be done based on this chosen method. Data collection modes in qualitative research include interviews, observations, case studies etc. However, in this thesis the author has used and focussed on data from scholarly articles, journals, studies related to nursing. Searches done on Google scholar, PubMed, Science Direct are used as initial and primary source of accessing articles because of the database holding genuine and authentic scientific publications. Some specific keywords were used to specific searches to get the desired content. There were as follows: Diabetes AND mental health AND young adults OR impact OR distress OR selfcare. The materials accessed were thoroughly investigated to make sure that the concerned articles, studies, journals, were serving the purpose of answering the research questions of this thesis. While the articles were read and decided to be included, certain exclusions and inclusions were done.

#### 5.2.1 Inclusion and Exclusion Criteria

During the process of reading the articles and after reading certain exclusions and inclusions were made. Articles were made free from any language barriers and articles with English language as content were included. Paid articles, articles requiring institutional logins and articles that did not serve the purpose of thesis research question and intended content related to thesis and articles not related to nursing were excluded. Only articles related to the concerned topic were included. Articles with full text for free and which range within the last 10 years i.e., between 2010-2020 were selected. 10 relevant articles were chosen.



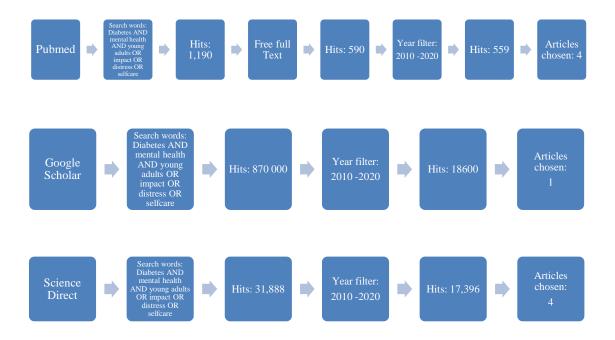


Figure 3: Presentation of articles chosen:

- Michael Vallis, Tricia Tang, Gerri Klein.(2020) Mental Health in Diabetes: Never a better time, *Canadian Journal of Diabetes*.(Online) 44 (6), 453-454. Available from: <u>https://www.canadianjournalofdiabetes.com/article/S1499-</u> <u>2671(20)30177-5/fulltext</u> (Accessed on 25th February 2021).
- Eimear C. Morrissey, Blathin Casey, Sean F. Dinneen, Michelle Lowry, Molly Byrne. (2020) Diabetes distress in Adolescents and Young Adults Living with Type 1 Diabetes, *Canadian Journal of Diabetes*. (Online) 44 (6), 537-540. Available from: <u>https://www.canadianjournalofdiabetes.com/article/S1499-2671(20)30068-</u> <u>X/fulltext</u> (Accessed on 25th February 2021).
- 3. Janine Clarke, Judy Proudfoot, Veronica Vatiliotis, Charles Verge, Deborah J. Homes-Walker, Lesley Campbell, AM, Kay Wilhelm, Catherine Moravac, Pillaveetil S. Indu, Madeleine Bridgett. (2018) Attitude towards mental health, mental health research and digital interventions by young adults with type 1 diabetes: A qualitative analysis, *An International Journal of Public Participation in Health*

*Care and Health policy*. (Online) 21 (3), 668-677. Available from: <u>https://doi.org/10.1111/hex.12662</u> (Accessed on 26th February 2021).

- Lee Ducat, Arthur Rubenstein, Louis H. Philipson, Barbara J. Anderson. (2015) A review of the Mental Health Issues of Diabetes Conference, *American Diabetes Association*. (Online) 38 (2), 333-338. Available from: <u>https://care.diabetesjour-nals.org/content/38/2/333</u> (Accessed on 28th February 2021).
- Maria Donald, Jo Dower, Joseph R Coll, Peter Baker, Bryan Mukandi, Suhail AR. (2013) Mental health issue decrease diabetic specific quality of life independent of glycaemic control and complications: findings from Australia's living with diabetes cohort study, *Health and Quality of Life Outcomes*. (Online), Available from: <u>https://doi.org/10.1186/1477-7525-11-170</u> (Accessed on 5th March 2021).
- Myles Balfe, Frank Doyle, Diarmuid Smith, Seamus Sreenan, Ruairi Brugha, David Hevey, Ronan Conroy. (2013) What's distressing about having type 1 diabetes? A qualitative study of young adults' perspectives, *BMC Endocrine Disorders*. (Online), Available from: <u>https://link.springer.com/article/10.1186/1472-6823-13-25</u> (Accessed on 6th March 2021).
- Chris Garrett, Anne Doherty. (2014) Diabetes and mental health, *Clinical Medicine Journal*. (Online), Available from: DOI: <u>10.7861/clinmedicine.14-6-669</u> (Accessed on 6<sup>th</sup> march 2021).
- Fei-Ling Wu, Hsiu-Chen Tai, Jui-Chiung Sun. (2019) Self-management experience of Middle-aged and Older Adults with Type 2 Diabetes: A Qualitative Study, *Asian Nursing Research*. (Online) 13 (3), 209-215. Available from: <u>https://doi.org/10.1016/j.anr.2019.06.002</u> (Accessed on 5th March 2021).
- Eun-Hyun Lee, Young Whee Lee, Seung Hei Moon. (2016) A Structural Equation Model Linking Literacy to Self-efficacy, Self-care Activities, and Health-related Quality of Life in Patients with Type 2 Diabetes, *Asian Nursing research*. (Online)

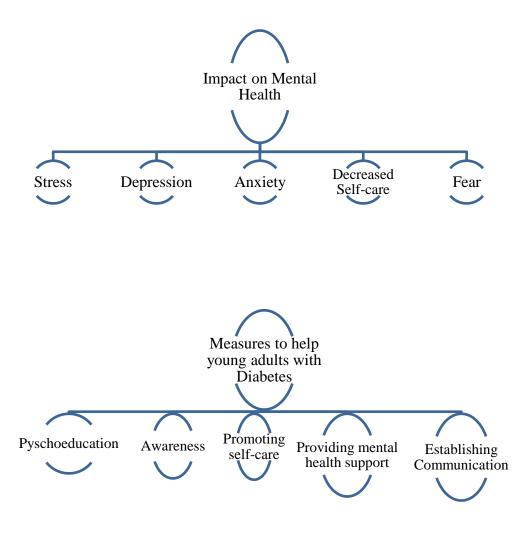
10 (1), 82-87. Available from: <u>https://doi.org/10.1016/j.anr.2016.01.005</u> (Accessed on 6th March 2021).

Sun Young Jung, Sook Ja Lee, Sun Hee Kim, Kyung Mi Jung. (2015) A predictive Model of Health Outcomes for Young people with Type 2 Diabetes, *Asian Nursing Research*. (Online) 9 (1), 73-80. Available from: <a href="https://doi.org/10.1016/j.anr.2014.11.002">https://doi.org/10.1016/j.anr.2014.11.002</a> (Accessed on 6th March 2021).

### 5.3 Content Analysis

The data collected was thoroughly read through and a planned and systematic approach was done by the author to analyze the articles chosen. This Qualitative Literature review has had an inductive content analysis. The chosen articles were summarized to find out codes and patterns in the articles. The codes were decided from the article based on the two research questions and sub-categories were formed from the common pattern reflecting throughout different articles which helped the author to get answers for the research questions. Until the analysis is made, and findings are documented based on the analysis no prior assumptions can be made at this phase of the research. Therefore, the articles were re-read to be sure regarding the content of the articles and the authors understanding regarding the same.

Listing and categorizing of codes:



# 5.4 Ethical Considerations

Ethical decision was carried out throughout the research process. The author has maintained the standard set by Arcada University of Applied Sciences in the form of guidelines and instructions for ethical research writing.

The guidelines by the Finnish advisory board on research integrity were observed, followed and issues concerning ethical aspect were taken care of while doing the study. The articles obtained and included in the study were thoroughly evaluated to make sure that the research ethics were followed, and the findings of the literature found and reviewed were also checked for reliability as per the guidelines of responsible conduct of research by the Finnish advisory board on research integrity. (TENK, 2012). The author has made sure of avoiding any sort of fabricated information's in respect with the research and has thereby chosen authenticated articles from the scientific database such as PubMed, Science Direct, Google Scholar. Non-bias and personal opinions have been avoided and due respect towards the original work has been given by not copying and pasting the content of the articles and being vulnerable to plagiarism, thereby ensuring that research is done keeping in consideration in ethical and legal compliance.

#### 6 FINDINGS

Based on the content analyzed, themes and sub-categories of the theme were derived from the literature which were chosen. The author shall discuss the respective findings in detail derived from the articles chosen.

#### 6.1 Impact on Mental Health due to diabetes

Living with diabetes leads to an emotional crisis and it eventually affects the health of the individual. The fact that the management or self-care must be done regularly and must be followed up leads to a growth in the stress level attached to the process. It is a non-stop process and a process that becomes a part of life that cannot be skipped or avoided for example. (Vallis, Tang, & Klein, 2020).

The dietary restrictions attached to the management of the disease leaves a negative impact and thereby making one feel restricted to choices to eat food and whenever it is about food it will be about choosing the correct diet in order. So, it adds to the level of stress also when one must check blood glucose level daily, and the fear related to its awaited fluctuations. All these leads to a decreased approach towards taking care of self while living with the disease and this happens due to reduced moral and depressing state of mind. (Donald, et al., 2013)

Thinking of the pressure of leading life with diabetes also leads to emotional distress which emerges since it is already an element of the fear, worry which a young adult has to go through thinking about a life with a chronic disease like diabetes. Distress in this context can be referred to as distress caused due to diabetes or diabetes distress, however this is not a mental health problem or a condition. but if this is not taken care off at early stages and if it is taken for granted or is avoided then it can lead to further complications as well. Because excess of negativity which triggers stress and distress with underlying cause of fear, worry etc. can lead to severe mental health problems which can affect the span of life (Morrissey, Casey, Dinneen, Lowry, & Byrne, 2020)

As mentioned above that distress happen due to some underlying factors, those factors cannot be disregarded. Being conscious to the management process of the disease, the social factor and the thinking of how the society shall perceive or acknowledge the disease as and how difficult it would be to face the society (Balfe, et al., 2013) The difficulty to accept the reality of possessing a long term disease condition and the fact that it needs constant maintenance and management in respect with the control of the disease leading to a depressive state of mind (Garrett & Doherty, 2014) The uncertainty regarding the future in personal life and uncertainty of starting a family life (pregnancy). All these are some underlying elements of facing diabetes distress. (Balfe, et al., 2013) Gradually the realization of the fact that diabetes is beyond control and the blood glucose level cannot be always kept under control even after doing everything possible to control the disease, it leads to fall in the self-care attitude and a feeling of helplessness and giving up on the disease arises. (Garrett & Doherty, 2014)

Fear of being hypoglycemia keeps the mind under stress and the complications related to hypoglycemic episode leads to an uncomfortable and uncertain state of mind which at times makes them to alter the management of diabetes with a motive to keep the glucose level higher than the desired level and this attempt affects the process of self-care when it comes to control of glucose which leads to further complications. (Garrett & Doherty, 2014)

# 6.2 Measures to help Young Adults with Diabetes in regards with Mental Health.

The focus on mental health in diabetes is an aspect that can easily been underrated as a problem for those suffering from this long-term condition. The high level of stress caused due the pressure of tasks and self-management attached makes the young adult weak and it can directly affect the process to taking care of self in regards with the disease and it can affect the blood sugar level due to an altered effort in in the interventions which is usually planned. (Morrissey, Casey, Dinneen, Lowry, & Byrne, 2020)

Diabetes happens to be a common problem which is covered with eventual mental issues. Making the individual aware of the impact on the mental health aspect of the disease and the different coping methods would eventually help in bring down the complications that can happen due to diabetes on the mental health perspective (Garrett & Doherty, 2014) Educating about a particular situation or condition which is known as psychoeducation helps in reducing stress in this case. It focused on Diabetes and the humor or identifying and dealing with those motivational factors which were the reasons for relatively lowlevel distress. There are tools to grade the level of distress due to diabetes. Problem areas in diabetes scale (PAID) and Diabetes Distress Scale (DDS). But none of them have been adopted for the population of young adults, yet and needs more work to be done on it to be sure of its use on young adults and whether it would give a transparent result. (Morrissey, Casey, Dinneen, Lowry, & Byrne, 2020)

However, as per the standards of medical care in diabetes -2014, it is suggested that a regular examination for psychological issues related to diabetes related distress, depression, anxiety, eating disorder etc. (Ducat, Rubenstein, Philipson, & Anderson, 2015) If a person has already slipped into depression due to diabetes then the primary intervention of giving anti-depressants is provided to deal with the problem at first. Motivational interviewing and cognitive behavioral therapy can be used to deal with psychological problems in diabetes. Improving psychological wellness and implementations done to deal with psychological issues have helped improve the blood glucose level control as well. (Garrett & Doherty, 2014)

Many young adults do not feel motivated to have one to one or face to face communication which can be due to social stigma, lifestyle reasons, work life, ignorance towards the disease, lack of adequate knowledge regarding the complications related to mental health due to the disease. (Clarke, et al., 2018)

Some services that can be provided to young adults with high level of distress are: Initiating communication and discussing the emotional aspect of life while living with the disease and focusing on positive communication while discussing it. (Morrissey, Casey, Dinneen, Lowry, & Byrne, 2020)

Conveying support and making them aware of the different ways of managing oneself living with diabetes and how to manage the disease. Listening to the participant and understanding their perspective is important and any type of comments made should be in reflection to their thoughts and any information asked from the participant can be framed in a way considering their mental health. The whole process should be focused only on the participant. An Attempt should be made to neutralize the distress level present in the participant which can give a feel of assurance to the individual. At the same time, it can be conveyed and made aware to the individuals that distress is something that can relapse at different level and can vary with different situation. If the young adults still face severe level of distress then adequate psychological help by the team should be provided for further interventions. (Morrissey, Casey, Dinneen, Lowry, & Byrne, 2020)

The intervention for young adults dealing with distress due to diabetes can be provided with some practical help as well such as by providing education which is in particular structure so that it can be easy to understand for the young adults and also by equipping them with some latest technological medical tools such as continuous glucose monitoring, insulin pump etc., as part of self-management support. (Morrissey, Casey, Dinneen, Lowry, & Byrne, 2020)

These steps of communicating and providing support for self-management related to the disease triggers a good relationship that builds between the young adults and the health care staff specialized in diabetes care for example. The significance of listening to the participant, allowing them to open up about their feeling living the disease and the distress level they are going through, to acknowledge their concerns, issues and making them aware and making them feel better by assuring them of hope and better future and giving them practical support are some of the important skills needed when it comes to diabetes care (Morrissey, Casey, Dinneen, Lowry, & Byrne, 2020)

Social support related to diabetes from healthcare workers, fellow individuals suffering from diabetes and family members so one way to manage the diabetes related distress as well. Study shows that getting diabetes related social support can help in managing the distress level because when they discuss with concerned health care staff regarding the emotional aspect of living with diabetes it helps them a lot mentally and young adults also feel that mental health support should be a part of their regular intervention when dealing with people suffering from diabetes. They felt that appointments with doctors are short and mental health is not focused rather medical aspect of the disease has been quickly talked or discussed about. (Balfe, et al., 2013)

Family support where they help the young adults in their daily routines of checking blood sugar and taking care of what they eat and protecting them from negativity, distressing thoughts etc. and by giving them hope and assurance of a hopeful present and future provides a big relief and a positive feeling towards life. Another person living with diabetes can always relate to the problem the peer is going through, so any type of judgment is kept aside. So, peer support also comes handy, and an empathetic approach is established where they can discuss openly between each other regarding their thoughts or struggles. A social media interaction via a group which can be formed where peers are involved and productive talks and helpful comments and discussion related to disease and its mental health complications and the remedy to it can be a source of reliability and can give emotional strength and support whenever needed. (Balfe, et al., 2013)

In some countries like the United states of America and United Kingdom, they have adopted a model of care for diabetes patients which is an innovative effort done lately, where they have attempted to integrate psychiatry and clinical diabetes care which eventually resulted in improvement in the mental health status of the individuals and also the physical health and it also resulted in improved blood glucose level, improvement in patient satisfaction, and decline in unexpected need for care and the expenses related to it (Garrett & Doherty, 2014)

Emphasis on self-management should be given to improve the well-being and the health of people living with diabetes. Self-management education related to diabetes is a process of owning the necessary awareness and skills needed for self-care. (Wu, Tai, & Sun, 2019) Self-care in diabetes is directly related to the quality of life of the individual living with diabetes (Lee, Lee, & Moon, 2016)

Awareness must be given regarding Diabetes management being a daily routine through diet control, exercising, monitoring blood glucose level regularly as indicated and taking medicines regularly as prescribed and indicated. All this being the responsibility of the individual dealing with the disease, it is vital to provide and equip the individual with the necessary knowledge and guidance regarding the same. (Wu, Tai, & Sun, 2019)

Young adults suffering from type 2 diabetes are often carried away with work, life situations which demands their attention more than the giving time for self-care for management of disease. They are often occupied and unfortunately not able to dedicate time to self-care and cannot keep it at high priority in their life. Such a situation leads to development of poor health habits and the focus on betterment in regards with self-care related to disease is ignored due to helplessness and challenging situations. Marriage, pregnancy, family life etc. can lead to a diversion of thoughts and time to other aspects of life and it would become difficult for young adults to find out time and keep the blood glucose control intact. This can lead to mental pressure and stress and a fear shall always follow and be a part of their daily life or routine. So, it is important to understand the life situation of the young adults and an intervention must be made according to their needs and they must be taught self-care management accordingly depending on their life situation and environment (Jung, Lee, Kim, & Jung, 2015).

#### 7 DISCUSSION

The purpose of the thesis was to get answers for the impact on the mental health of young adults suffering from diabetes and the possible measures to help them lead a normal life. The answers to which were found while doing the literature review through reliable scientific sources. Based on two research questions that were formed for the study. the author was able to identify the most important findings for each of the research questions.

The most important finding for the question which dealt with various impact on the mental health of young adults due to diabetes was stress. Stress being the intangible factor behind the root cause of the problems that usually cannot be avoided. Stress of the fact that Diabetes is a long-term disease and the fact that medications have to be taken regularly and the health needs to be monitored regularly and self-care needs to be done regularly, these thoughts and pre-occupied thought regarding the hectic daily routine it can lead to creates a lot of stress, which further leads to a situation of diabetes distress. Stressful environment leads to fear, uncertainty and often the stress related concerns are usually left unsaid but remains in the mind of the person. The individual often fails to discuss it with medical health team nor the family. This leads to depressive state of mind because stress if left uncared would lead to chaotic mind and a state of sadness due to the feel of helplessness. The depressive mind leads to reduced level of self-care which occurs when an individual gives up on the situation and leaves it to its destiny, which unfortunately an individual cannot afford to do so in case of diabetes. The pressure from society worsens the problem, myths regarding the disease in the society, the stigma adds to the problem and the depressive mind. Society tends to keep distance with mental health issues; hence an individual tends to lead life silently hiding the emotional distress the individual might be going through in the meanwhile. Many questions remain unanswered often as concentration is always on the medical aspect of the disease and a holistic approach always lacks when it comes to treatment. Questions related to whether an individual suffering from diabetes can start a family life, questions related to time spent during pregnancy. Such questions and answers to it hold a lot of importance to the young adults, as it gives them a clear vision of how they could adjust their life accordingly and try to live at peace with it.

The most important findings to the question which dealt with different measures to deal with the mental health of the young adults with diabetes was psychoeducation. The solution to the most important finding in the first question is psychoeducation which helps in reducing the level of stress associated with disease condition. Psychoeducation helps in educating the individual regarding the disease and the probable complications related to it and this makes the young adult ready to deal with the situations accordingly. Often lack of awareness regarding the disease and its complications leads to lot of confusion and a situation where the individual feels that the condition or situation is irreversible. However, awareness regarding the disease and important information's related to it helps individual to deal accordingly and make necessary adjustments in life. The awareness shared with young adults helps them to be prepared and approach to life accordingly. They are more confident than before and have answers to different situations that can come up in the meanwhile living with the disease. It helps them and motivates them to initiate a communication with the health team members and they will be willing to communicate their distress or concerns which in turn shall help to deal with mental health issue at the grassroot level and thereby can be stopped from multiplying its impact and causing further damage to the human body.

Living with diabetes was not just a medical issue rather the review of literature showed that that it could also pose mental health issues. These mental health issues often ignored or not spoken about can lead to complications which in turn can pose a mental health imbalance in life, which affects the overall well-being in life. The care of diabetes being a long-term disease comes with a lot of stress and the constant taking care of self in respect with the disease causes a feel of helplessness and can feel exhausted also. Distress, depression, fear, stigma, family life, professional life, the inability to prioritize health due to other responsibilities in life, showed how deep the problem is and how deep it can affect the mental health of the young adult.

Dorothea E. Orem's Nursing Theory helps in understanding the importance of self-care and the way an individual can lead a better life with self-care and lit leads to a growth in life and influences the wellbeing of life. The theory of self-care deficit explains how caregivers help or assists individuals through psychological, physical and by sharing knowledge and educating them. This helps the individuals to follow the path shown by the caregivers. The theory of nursing system ponders upon the kind of relationship that needs to be established by the caregiver so that it becomes creates a strong trustworthy relationship needed for a future process of care which shall be needed which needs to be maintained and developed.

Young adults can have different life situations and responsibilities, so it is necessary that an effective two-way bridge of communication and trust is established. The more the selfcare is done based on the advices of the health care workers and the relationship is established where the individual can convey the problems to the healthcare worker, it paves way to proper and apt interventions needed for the situation. Providing awareness regarding the mental health perspective is of utmost importance and focusing on the mental health during the clinical meetings is also needed. Social support specially from family, peers, and the health care system is found to be an effective way to deal with the problem. Communication is important to understand the problem and effective communication and patient centered care helps in knowing more about the underlying cause of why an individual is not able to maintain the glycemic control or why the individual has not been feeling well, is important to sketch the future of intervention. The young adults must be shown a picture which is above any form of stigma, fear, and helplessness and must be given confidence in the form of a reliable and effective patient centered communication and implementations and follow up. When there is a control over the mental health issues related to the disease it gradually shall show positive results in the medical aspect of the disease also, through an improved glycemic control. The mental health discussions should be made a part of the diabetes care. If mental health part is taken care of then it will help in avoiding multiple problems among which includes a possible self-care deficit which can cause due to decreased level of mental health. Tools to measure the mental health status should be worked out and fixed for the young adults as well and necessary implementation based on individual approach is needed. If mental health aspect is taken care of then there is higher probability to see the progress in both the physical and mental wellbeing of the young adults suffering from diabetes. An integrated approach which includes mental health as part of the diabetic care is necessary and can help in dealing with the disease more effectively for a better mental and physical wellbeing of young adults. As nurses we can make sure that we also play a part in the uplifting of the mental health of young adults living with diabetes whenever they approach us. Approach should be focused on mental health as well and required advice and motivation needs to be given

while serving a patient. A pro-active mental health support from the nurse's side can trigger a lot of pending emotions to be discussed by the young adults living with diabetes. This would be helpful if we as nurses include it as a common practice while dealing with such patients. This intervention shall help the healthcare team to attend to the underlying factors related to mental health that can directly affect the glycemic control in the process.

#### 8 CONCLUSION

This research focused on getting answers based on scientific articles through reliable sources about the impact on the mental health of the young adults due to Diabetes. It also aimed at getting to know the different measures to be taken to help the young adults with diabetes in regards with the mental health. The two main findings among the content analysis done through the review of literature were stress (impact on mental health of young adults with diabetes) and psychoeducation (measure to help young adults with diabetes lead a normal life in respect with mental health). Studies show the various impact that diabetes leave on the mental health of the young adults and how on most occasions they are intangible and hence are not discussed about or are not focused upon as part of Diabetic care. The study reflects on the need of the patient-centered intervention in respect with disease along with the clinical or medical interventions. Mental health of the patient has had direct impact in curbing this long-term disease. Progress has been hampered even though apt medical interventions are done, hence, it is needed that an integration of the mental health perspective in diabetes care is done and followed as standard interventions as part of diabetic care.

The author's questions were answered in the study. However, there is a need of more study on this topic of the impact on mental health of young adults with diabetes, to help prevent the young adults suffering from diabetes with mental health complications related to the disease, which can help them lead a life with positive well-being.

#### 8.1 Limitations and Recommendations

The author found that the previous studies done on this subject had relatively less mention about the focus group (young adults). Even though studies have been done on the subject, the author at times found it bit difficult to gather specific information related to the focus group related to the topic with the inductive research method adopted.

The author would wish to recommend that more implementations and steps are taken keeping in mind the focus group (young adults) and concrete methods are universally adopted so that mental health perspective can be officially included as part of diabetes care, irrespective of whichever part of the world the young adults suffering from diabetes approaches the respective healthcare system. Integrating the mental health in diabetes care shall help and play a major role in the development of the progress level in terms of recovery and wellbeing both physically and mentally among the individuals suffering from the disease.

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