

# Accepting, adapting and transcending: living with type 1 diabetes – a human becoming perspective

Akceptacja, adaptacja i przekraczanie granic: życie z cukrzycą typu 1 z perspektywy teorii human becoming

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## STRESZCZENIE

### AKCEPTACJA, ADAPTACJA I PRZEKRACZANIE GRANIC: ŻYCIE Z CUKRZycĄ TYPU 1 Z PERSPEKTYWY TEORII HUMAN BECOMING

**Wprowadzenie.** Cukrzyca typu 1 jest przewlekłą chorobą autoimmunologiczną, wymagającą dożywotniego samodzielnego zarządzania i wpływającą na dobrostan fizyczny, psychiczny i społeczny pacjentów. Teoria Human Becoming autorstwa Rosemarie Parse dostarcza holistycznych ram do zrozumienia doświadczeń jednostek, koncentrując się na znaczeniu, rytmiczności i transcendencji. **Cel pracy.** Celem badania jest zbadanie doświadczeń osób z T1DM, ze szczególnym uwzględnieniem wyzwań, strategii adaptacyjnych oraz skutków psychospołecznych, w kontekście teorii Human Becoming.

**Metody.** W badaniu zastosowano podejście jakościowe, a dane zebrano za pomocą półstrukturalizowanych wywiadów z 11 pacjentami z T1DM. Do analizy danych wykorzystano analizę tematyczną, która pozwoliła wyróżnić trzy główne tematy: nadawanie znaczenia chorobie, dostosowywanie się do rytmu codziennego życia oraz pokonywanie trudności.

**Wyniki.** Diagnoza T1DM wiąże się z początkowymi uczuciami szoku, smutku i zaprzeczenia. Stopniowo pacjenci rozwijali strategie samodzielnego zarządzania chorobą, wzmacniając swoją odporność i samoświadomość. Wsparcie społeczne ze strony rodziny i przyjaciół odegrało kluczową rolę w procesie akceptacji i radzenia sobie z chorobą. Pomimo trudności, doświadczenie choroby prowadziło do osobistego rozwoju i przewartościowania życiowych priorytetów.

**Wnioski.** Teoria Human Becoming dostarcza cennych wskazówek w zakresie zrozumienia doświadczeń osób z T1DM. Holistyczne i spersonalizowane podejście do opieki może poprawić zarządzanie chorobą, wspierając jakość życia pacjentów oraz ich rozwój osobisty.

**Słowa kluczowe:** cukrzyca typu 1, znaczenie, teoria Human Becoming

## ABSTRACT

### ACCEPTING, ADAPTING AND TRANSCENDING: LIVING WITH TYPE 1 DIABETES – A HUMAN BECOMING PERSPECTIVE

**Aim.** The study aims to investigate the lived experience of people with Type 1 diabetes mellitus, focusing on the challenges, adaptation strategies, and psychosocial effects, through the approach of the Theory of Human Becoming.

**Material and methods.** The research adopted a qualitative approach, with data collection through semi-structured interviews with 11 Type 1 diabetes mellitus patients. Thematic analysis was used to process the data, highlighting three main themes: making sense of the disease, adapting to the rhythm of everyday life, and overcoming difficulties.

**Results.** The diagnosis of Type 1 diabetes mellitus is accompanied by initial feelings of shock, sadness, and denial. Gradually, patients developed self-management strategies, enhancing their resilience and self-awareness. Social support from family and friends played a key role in accepting and managing the disease. Despite the challenges, the experience of the disease led to personal growth and a redefinition of priorities in life.

**Conclusions.** The theory of Human Becoming provides valuable direction for understanding the experience of people with Type 1 diabetes mellitus. A holistic and personalized approach to care can enhance disease management, promoting patients' quality of life and personal development.

**Key words:** type 1 diabetes mellitus, meaning, human becoming

## INTRODUCTION

Type 1 diabetes mellitus (T1DM) is an autoimmune disease caused by the destruction of pancreatic  $\beta$ -cells, leading to complete insulin deficiency. It primarily affects children and adolescents, and its occurrence varies global incidence rates - with the highest rates in Finland (60/100,000) and lowest rates in Asia and South America (0.1-8/100,000). The disease is rising worldwide (3-4% annually), influenced by genetic predisposition (HLA genes) and environmental factors. The treatment of T1DM is physically and emotionally demanding, often leads to anxiety, depression, and emotional exhaustion. Continuous glucose monitoring, strict diets, and insulin therapy contribute to stress, which results significantly on patients' quality of life and mental well-being [1,2].

Managing T1DM requires daily glucose monitoring, insulin dosage adjustments, and strict diets, which leads to constant stress and emotional exhaustion. Patients often feel trapped by the disease, and experience anxiety over complications like heart disease and neuropathy [3]. The psychological burden begins with denial and sadness, followed by anger and frustration before eventual acceptance- though often with lingering uncertainty. Social support from family and peers is crucial in coping with T1DM, reducing stress, and improving treatment adherence. Education and self-management strategies, supported by healthcare professionals, enhance self-esteem and quality of life, which help patients to regain a sense of control despite the ongoing challenges of T1DM [4].

Parse's Theory of Human Becoming offers a holistic perspective on T1DM, emphasizing meaning, rhythmicity, and transcendence. Rather than viewing patients as biological entities, the theory highlights their evolving experience and personal interpretation of the disease. The meaning making helps patients understand T1DM's impact, while rhythmicity reflects their struggle to balance health, treatment, and daily life. Transcendence allows them to overcome challenges and find new possibilities. This approach enables healthcare professionals to address the emotional and psychosocial aspects of diabetes, providing person-centered care that supports not just symptom management but also patients' journey toward acceptance, resilience, and a fulfilling life [5-7].

Thus therefore, the purpose of this study is to explore in depth review of the experience of people with type 1 diabetes, focusing on their challenges, perceptions, and adaptations, through the lens of Rosemarie Parse's Theory of Human Becoming. This approach seeks to reveal how individuals co-create meaning in their lives, experience the rhythmicity of daily disease management, and overcome difficulties, forming new perspectives on their existence.

## MATERIALS AND METHODS

This study examined the quality of life of people with T1DM using qualitative research, focusing on a variety of individual experiences [8]. Specific inclusion criteria were established to ensure both diversity in the sample and its validity. Participants were required to have a confirmed diagnosis of T1DM for at least a year to ensure they had experienced long-term management challenges. Additionally, they had to be adults (at least 18 years old) capable of providing informed consent. Variability in age, gender, and socioeconomic background was also considered to capture a broad range of perspectives. The sample consisted of 11 diabetic patients from Larissa, selected through previous healthcare interaction and purposeful sampling (Tab. 1.).

Data was collected through semi-structured interviews that allowed participants to openly share their experiences, concerns and coping mechanisms. The interviews were adhered to a flexible framework that addressed essential themes such as daily disease management, emotional health, social support, and healthcare experiences. Each interview lasted 30 to 60 minutes and was conducted in person. For accuracy, all interviews were recorded with the participant's consent and transcribed word for word. Reflectivity was practiced throughout the data collection process to reduce researcher bias and improve reliability. Qualitative research provides valuable insights into the psychological and social dimensions of diabetes, that can be used in person-centered care. However, it carries risks of subjectivity that may impact validity.

The data analysis process adopted a structured thematic approach. Following transcription, the data was meticulously coded using both inductive and deductive approach. Inductive coding facilitated the organic emergence of themes from the data, while deductive coding ensured consistency with the established theoretical framework of Theory of Human Becoming. Themes and sub-categories were developed iteratively to comprehensively capture the important aspects of the live experiences of participants. Researcher reflexivity and peer debriefing were integrated to reduce biases and improve credibility [9].

The study was conducted in accordance with the guidelines of Declaration of Helsinki. Furthermore, permission was obtained from the Ethics Committee of the Department of Nursing of the University of Thessaly (09/19-09-2024). Before the interview, verbal and written consent was obtained from individuals participating in the study.

■ Tab. 1. Characteristics of the sample

Code	Age	Gender	Marital status	Number of Children	Educational level	Years Diagnosed/ Age of diagnosis
P1.	25	Female	Unmarried	0	Tertiary Education	17/8
P2	36	Female	Married	1	Tertiary Education	20/16
P3	56	Female	Divorced	3	Secondary Education	15/41
P4	28	Female	Married 3	Pregnant	Tertiary Education	21/7
P5	37	Male	Married	2	Tertiary Education	21/16
P6	42	Female	Married	2	Secondary Education	22/20
P7	45	Male	Unmarried	0	Tertiary Education	21/5
P8	24	Female	Unmarried	0	Tertiary Education	1/23
P9	50	Male	Unmarried	0	Tertiary Education	23/27
P10	33	Female	Divorced	1	Tertiary Education	9/24
P11	33	Male	Unmarried	0	Tertiary Education	7/26

## RESULTS

The following analysis is based on the three dimensions of the Theory of Human Becoming. The first concerns meaning, that is, how individuals give meaning to their experience and their disease. The second concerns rhythmicity, i.e. the repetitive rhythms and contrasts of everyday life. The last one is related to transcendence, changing coexistence, and how individuals overcome difficulties and evolve. The thematic categories that emerged from the analysis are summarised in Tab. 2 and detailed below.

■ Tab. 2. Themes and categories

Themes	Categories
In Quest of Meaning: A journey of meaning - formation and acceptance	The Pulse of the Initial Reaction: Echoes of Emotions
	In a Quest for Meaning
A Continuous Process: Rhythms of Life and Daily Challenges	Navigating in Daily life
	Adjustment and Limitations in Social Life
	The Evolving Role of Family: From tension to support in Disease Management
Transcending as Becoming: Changing coexistence and personal development	Disease management as a progression pathway
	Life attitude and hope for the future

### Theme 1: In Quest of Meaning: The journey of meaning - formation and acceptance

The experience of diagnosis is a critical turning point for patients. The acceptance process is associated with the recognition of the disease, emotional adjustment, and the attempt to find a new meaning in life. The participants recognised the disease as a part of their lives,

which, despite limitations and difficulties, shaped their identity and strengthened their maturity. Although initially the diagnosis was accompanied by denial and anger, the gradual acceptance of the disease helped to create a more positive attitude towards the challenges. Through the struggle to manage the disease, patients discover ways to remain functional and live a full life, recognizing the importance of support from their environment.

### 1.1 The Pulse of the Initial Reaction: Echoes of Emotions

Initial reactions ranged from denial and shock to sadness and confusion. The first reactions are spontaneous and original, and reveal the truth of the moment. They are often accompanied by strong emotions, such as joy, fear, or shock, and normal reactions, such as increased heart rate or tears. This is the first response of the mind and body to a stimulus, before logical processing occurs. These moments illuminate the inner world and deeper sense of self.

The P2 patient describes: „*I was crying. The first month I didn't want to start taking insulin. I had told the endocrinologist: „As long as it goes, I'll do it..”*” This initial reaction reveals the mental turmoil that accompanies the diagnosis. Another participant P1 remembers being transported by plane because of the lack of specialist treatment in his local hospital: „*I have a very vivid image of being in the plane with my mother and the doctor. I was terrified, but I also didn't understand what was happening.*” While P2 states: „Although I knew about diabetes from my siblings, when they told me, I felt like my world came crashing down.”

### Category 1.2: In a Quest for Meaning

Gradually, the participants tried to find meaning in their new reality. Participants describe finding meaning through managing their chronic condition as a process of ongoing adaptation and acceptance. The participant P1 explains: „*It cost me my childhood, but it made me more mature. It shaped me.*” The male participant P9 stated: „*I have learned to be grateful for every day that I can take care of myself. The illness made me reevaluate everything.*” During this process, the importance of support from family and health professionals is highlighted. Patients identify moments of personal empowerment, recognising positive aspects such as the development of responsibility and maturity. Finally, the need for understanding and acceptance from the social environment is a key element for the creation of a meaning based on maintaining their quality of life. The patient P2 underlines the importance of the financial support that the disease offered her: „*The fact that I get an allowance helped me to study. Every obstacle is good.*”

### Theme 2: Continuous Process: Rhythms of Life and Daily Challenges

Managing diabetes mellitus requires constant adaptation to daily activities, social relationships and self-care, as highlighted by the participants' experiences. The disease imposes new rhythms on their lives, introduces rules

and restrictions, and is often accompanied by feelings of denial, fear and frustration. At the same time, support from family and health professionals helps to accept the situation. Through daily effort, participants find meaning, developing responsibility and mental resilience, while redefining their relationship with themselves and others.

### Category 2.1: Navigating Daily Life

The management of daily life with diabetes requires constant adaptation, such as monitoring levels of glucose in blood, following a diet, and preventing hypoglycemia. The participant P2 explains: „*Everything changes. You need to measure your glucose and carry your insulin. It's a constant process.*” Participants describe the need for organization and flexibility to cope with the challenges of the disease. Their daily life requires constant attention to disease management. The 25-year-old declares: „*I always have to carry a bag of essentials with me. It's a stress that just never goes away.*” At the same time, they emphasize the importance of self-care to maintain the balance in their personal and professional life. Another participant states: „*Every day starts and ends with a self-check. It's exhausting, but also necessary.*”

### Category 2.2: Adjustment and Limitations in Social Life

Participants of the study report that the disease often affects their social relationships, as they avoid sharing their health condition for fear of being stigmatised or misunderstanding. Social life is profoundly affected, as the disease introduces limits to relationships and activities. The patient P1 describes her strategy: „*I chose people in my life who accepted diabetes.*” They face restrictions on social activities such as outings or meals and often need to explain or hide the use of devices such as insulin pumps. The participant P5, explains: „*I never go camping or on trips with friends because I am afraid, I will not be able to manage hypoglycemia.*” Nevertheless, they try to adapt, by choosing people who understand and respect their needs. The study patient P2 says: „*I didn't tell everyone I had diabetes. I didn't want to answer the same questions over and over again.*”

### Category 2.3: The Evolving Role of Family: From tension to support in Disease Management

Relationships with family play an important role in disease management, which is confirmed by, who report receiving support, especially from those closest to them. However, moments of tension, such as frustration or anger, are still reported, especially during the initial phase of the diagnosis. Over time, accepting the situation strengthens relationships and helps create an environment of understanding and cooperation. Family relationships are characterized by mutual support and care. The P4 participant reports: „*My mother didn't sleep for years. She measured my blood glucose level at night.*” The P7 patient, reported, „*My wife is my rock. Without her, I do not know how I would do it.*” The P2 participant explains: „*My husband completely understands and supports me with hypoglycemia.*”

## Theme 3: Transcending as Becoming: Changing coexistence and personal development

The experience of the disease transforms participants, enhancing their resilience and self-awareness. The experience of diabetes leads participants to a continuous process of adaptation, highlighting their resilience and self-awareness. Through difficulties, they develop responsibility, self-discipline and mental strength, while redefining their priorities. The coexistence with the disease keeps them motivated to consistently manage their daily life, maintaining balance in their relationships and life. At the same time, they recognize how new challenges contribute to the formation of a more mature personal identity.

### Category 3.1: Disease management as a progression pathway

Participants describe disease management as a path of personal development, which helps them to develop responsibility, self-discipline and resilience. The 32-year-old participant reported, „*The discipline required to manage diabetes has helped me succeed in other aspects of my life.*” Through challenges, they gain deeper self-awareness and redefine their priorities. Despite the difficulties, the disease becomes an occasion for a more mature and conscious approach to their lives. The 36-year-old patient describes the increased organization: „*I have become more organized and stricter with my diet. It made me matured.*” Personal development emerges as a key outcome of disease management. The 25-year-old patient declares: „*I know how to manage rules and schedules. I have learned my body.*”

### Category 3.2: Life attitude and hope for the future

Participants express an optimistic attitude to life, emphasising the importance of acceptance and adaptation to the demands of the disease. The male participant, P7, reports: „*I do not think about what will happen in ten years. I live in the moment and do my best every day.*” They focus on the possibilities offered by modern technology and science for better management. At the same time, they maintain their hope that the future will bring even more solutions and improvements to their quality of life. Optimism is central to the attitude of the participants. The patient P4 declares: „*I am positive about the future. With effort, everything can be done.*” The participant P2 describes the disease as a constant struggle that requires discipline: „*Diabetes is a constant struggle, but with discipline everything is possible.*”

## DISCUSSION

The purpose of the study was to explore in depth the life experience of people with T1DM, focusing on their challenges, perceptions, and adaptations through the lens of Rosemarie Parse's Theory of Human Becoming. The study sought to reveal how individuals co-create meaning in their lives, experience everyday life with the disease, and overcome difficulties, forming new perspectives on their existence.



The management of the disease requires continuous monitoring of glucose levels, and strict adherence to nutritional and pharmaceutical requirements, which significantly impacts the daily life, social life, and psychological well-being of patients [10]. Rosemarie Parse's theory of Human Becoming provides a holistic framework for understanding the patient's experience, approaching illness not only as a biological dysfunction but as a dynamic process of meaning-making and transcendence. Through the principles of meaning-making, rhythmicity, and transcendence, the theory emphasises the importance of personal development and the formation of a balanced relationship with the disease, helping patients to manage the challenges of everyday life and discover new perspectives for a fulfilled life [11,12].

According to the study findings, the diagnosis of T1DM evokes strong feelings of shock, denial, sadness, and anger, as reported by the participants. Initially, patients experience emotional turmoil and refuse to accept their new reality. Over time, they gradually develop an attitude of acceptance, recognising the importance of support from the family and social environment, as well as psychological support from health professionals. This finding is in line with the studies by Duinkerken et al. and Due-Christensen et al. [13,14]. Indeed, the diagnosis of T1DM is described as a severe disruption of patients' lives, causing shock, grief and denial. A common point is the need for psychological support, which is often overlooked by health care professionals as they focus more on the technical aspects of disease management. However, the cited studies strongly highlight the long-term impact of initial diagnosis on emotional and social adjustment, particularly in adults diagnosed later in life. These findings emphasise the importance of a holistic approach but offer different perspectives on how patients experience and adapt to their new reality.

Daily life with type 1 diabetes is characterised by constant monitoring of blood glucose, adherence to strict dietary plans and management of insulin therapy, causing severe fatigue and anxiety. Patients often limit social activities due to fear of being stigmatised or practical difficulties, such as managing hypoglycemia. Despite the obstacles, they emphasize the importance of self-organization and support from friends and family. Day-to-day treatment of T1DM requires constant monitoring of blood glucose levels, strict adherence to nutritional plans, and management of insulin therapy, which often leads to severe anxiety, fatigue, and emotional exhaustion. [15]. Patients often limit their social activities, as fear of being stigmatised and practical difficulties, such as such as how to deal with hypoglycemia in public places, create additional challenges [16]. Despite these difficulties, self-organization and support from friends, family, and health professionals emerge as key elements for effective diabetes self-management [15,16]. In addition, suggestions for improving services include the presence of social workers in clinics, the creation of mutual support platforms and flexibility in in setting of follow-up appointments to meet the individual needs of patients [15]. Parse's theory of Human Becoming highlights the importance of holistic

care, emphasising each person's unique experiences and personal meaning in life [17,18].

In the context of caring for people with T1DM, the Parse theory suggests a person-centered approach, where healthcare professionals actively listen to patients, recognise their individual needs, and tailor interventions based on values and priorities of the each patient [7]. According to this theory, care is not limited to the treatment of symptoms but promotes emotional and psychological support, helping patients discover new sources of hope and meaning in life [18]. Nurses, as partner in the patient's health journey, actively participate in the process of patient self-awareness and empowerment, creating an environment conducive to healing and emotional well-being [17, 18].

Enhancing social support and psychological help is equally important. Studies show that social isolation and chronic stress can undermine patients' self-control and mental health. The active participation of family, friends, and communities, combined with the provision of psychological support by specialised professionals, contributes to strengthening the resilience and quality of life of people with T1DM. This combined approach is the cornerstone of successful and comprehensive care. Strengthening social support and psychological help is a fundamental factor in the successful management of T1DM. According to the literature, social isolation and persistent stress can undermine patients' ability to effectively deal with the disease, while participation in social networks and communities can improve self-management skills and overall mental health [19,20]. Support from friends, family, and health professionals provides not only emotional relief but also practical help in managing the daily demands of the disease. At the same time, communities and health organisations play an important role in creating a supportive environment, encouraging the exchange of experiences and access to valid information [19]. Overall, this combined approach, which includes family support, community involvement, and specialist psychological help, is the foundation for improving resilience and quality of life for people with T1DM [19,20].

### Implication for Nursing/Clinical Practice

Healthcare professionals can aid in giving meaning by motivating patients to share their experiences through narrative therapy, journaling, or participation in peer support groups. Nurses can incorporate rhythmicity by assisting patients to create routines tailored to their lifestyles instead of enforce strict treatment plans. Furthermore, transcendence can be fostered by highlighting the personal development opportunities that arise from dealing with a chronic illness, such as building resilience, self-discipline, and stronger social bonds [21].

In addition, practical nursing interventions could include organised psychoeducational initiatives, customized counseling sessions, and increased participation of interdisciplinary teams to offer comprehensive support. Healthcare facilities should also prioritise more flexibility in diabetes care services, enabling personalised follow-up schedules and adaptable treatment plans according

to individual requirements. Implementing these specific strategies would close the gap between theoretical knowledge and clinical practice, ensuring that the concepts of Parse's Theory of Human Becoming are not only comprehended but also actively implemented to improve the well-being of individuals with T1DM.

## Limitations

This study has some limitations that must be discussed. Firstly, the qualitative study design limits the generalisability of the findings to the broader T1DM population. Secondly, reliance on self-reported experiences of patients introduces potential biases, as participants' recollections may be influenced by personal perceptions. Lastly, the study focuses primarily on psychological and social aspects, with limited investigation of medical and technological implications in diabetes management.

## CONCLUSIONS

In conclusion, the presented study approached the lived experience of people with T1DM through the lens of Rosemarie Parse's Theory of Human Becoming, highlighting challenges, management strategies, and possibilities for personal development. A T1DM diagnosis marks a radical change in a person's life, initially causing feelings of shock and denial. However, gradual acceptance and adaptation are necessary stages for improving the quality of life. Study participants report that the disease has helped them develop resilience, self-discipline, and self-awareness while redefining their relationships and priorities. Social support from family, friends, and health care professionals plays a key role in managing the disease, strengthening mental resilience, and facilitating self-control. In addition, holistic care, based on Parse's theory, emphasises the importance of a personalised and person-centered approach to the care of people with T1DM. The study concluded that incorporating meaning, rhythmicity, and transcendence into care interventions can enhance the quality of life of patients and facilitate positive coexistence with this chronic disease.

**Reporting checklist:** Standards for reporting qualitative research – SRQR checklist used to report the study findings.

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