

Patient Experience with Dysautonomia: Physiological Perspectives and Its Impact on Quality of Life

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ABSTRACT

Dysautonomia is a disorder of the autonomic nervous system that disrupts essential physiological functions, such as heart rate regulation, blood pressure control, and thermoregulation. While existing research has explored the physiological mechanisms of this condition, the subjective experiences of individuals living with dysautonomia remain underexplored, particularly regarding the diagnostic process, daily coping strategies, and social implications. The lack of qualitative research limits our understanding of how patients navigate their condition, leading to gaps in patient-centered care and medical recognition of dysautonomia as a disabling illness. This study employs Interpretative Phenomenological Analysis (IPA) to examine the lived experiences of individuals diagnosed with dysautonomia, offering a deeper understanding of their challenges and adaptation strategies. Using semi-structured interviews with ten participants, the study identifies key themes, including diagnostic uncertainty, daily functional limitations, personal coping mechanisms, and the role of social and medical support. Findings reveal that many patients face prolonged diagnostic delays, develop self-management strategies, and rely on online communities for emotional validation and medical guidance. These insights underscore the necessity of improving physician awareness, developing multidisciplinary treatment approaches, and fostering supportive networks for dysautonomia patients. The study contributes to a more holistic understanding of autonomic dysfunction and highlights the need for further research on the intersection of medical recognition, patient advocacy, and social adaptation.



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INTRODUCTION

Dysautonomia is a complex disorder characterized by dysfunction of the autonomic nervous system (ANS), which regulates involuntary bodily functions such as heart rate, blood pressure, digestion, and temperature control (Balfoort dkk., 2024). As a dysregulation of autonomic processes, this condition affects multiple physiological systems, leading to symptoms that range from mild discomfort to severe disability (Bhoopalan dkk., 2023). Despite its profound impact on patients' daily lives, dysautonomia remains underdiagnosed and often misunderstood within the medical community, contributing to delayed treatment and inadequate patient support.

The increasing recognition of autonomic disorders has led to advancements in diagnostic tools and management strategies, yet the understanding of dysautonomia has predominantly been framed within biomedical and physiological perspectives (Compton dkk., 2023). While research has provided valuable insights into the neurophysiological mechanisms underlying the condition, the subjective experiences of patients—how they perceive, navigate, and adapt to life with dysautonomia—remain underexplored (Dimitriu dkk., 2005). Given the variability in symptom presentation and severity, individuals with dysautonomia often encounter significant challenges in obtaining a diagnosis, managing their condition, and maintaining a sense of normalcy in social and occupational settings.

Previous studies on autonomic dysfunction have largely focused on quantifiable physiological responses, utilizing tools such as tilt-table testing, heart rate variability analysis, and autonomic reflex

screening to assess dysfunction in autonomic regulation. While these methodologies are essential for identifying objective markers of the disorder, they do not capture the lived experiences of individuals who struggle with the condition daily (Douglas, 2013). The psychosocial burden, including the emotional distress of uncertainty, the stigma associated with invisible illness, and the strategies patients develop to cope with unpredictable symptoms, requires deeper qualitative exploration.

This study seeks to bridge this gap by adopting a phenomenological approach to examine the lived experiences of individuals with dysautonomia (Franchini, 2014). By prioritizing patients' narratives, the research aims to illuminate the multifaceted impact of the condition beyond physiological measurements, highlighting the intersection of physical, psychological, and social dimensions. Understanding how patients make sense of their condition, adapt to limitations, and seek support will provide valuable insights that can inform patient-centered care and improve awareness among healthcare professionals.

The study of patient experiences in chronic illnesses, particularly conditions that involve autonomic dysfunction, has gained increasing attention in medical and psychological research. As healthcare increasingly recognizes the importance of patient-centered care, understanding how individuals experience and interpret their conditions has become a crucial aspect of improving diagnosis, treatment, and support systems (He dkk., 2022). In the case of dysautonomia, where symptoms are diverse and often invisible, capturing the lived experiences of patients is essential to addressing the challenges they face in both clinical and social contexts.

Despite the recognition of subjective experiences as a vital component of healthcare research, methodological challenges persist in effectively capturing the depth and complexity of these experiences (Himmelreich dkk., 2019). Traditional biomedical and quantitative approaches, while valuable for identifying physiological patterns and treatment outcomes, often fail to grasp the nuanced ways in which individuals perceive and navigate their conditions. Many existing studies on dysautonomia have relied on surveys or symptom-tracking tools, which, though useful for identifying prevalence and severity, do not provide insights into the emotional, psychological, and social dimensions of living with the disorder.

These limitations highlight the need for qualitative methodologies that prioritize personal narratives and meaning-making processes. Phenomenological research, particularly Interpretative Phenomenological Analysis (IPA), offers a framework for exploring how individuals construct their understanding of illness, adaptation, and identity. By focusing on subjective meaning rather than purely clinical indicators, phenomenology allows researchers to uncover the deeper implications of living with dysautonomia—how individuals cope with uncertainty, adjust to functional limitations, and negotiate their place within social and medical structures. This approach is particularly relevant given the significant delays in diagnosis and the frequent dismissal of symptoms experienced by patients with dysautonomia, which can lead to emotional distress and a sense of medical invalidation.

Given these challenges, the present study seeks to contribute to the growing body of phenomenological research in healthcare by exploring the lived experiences of individuals diagnosed with dysautonomia. This investigation aims to provide a more comprehensive understanding of the condition, addressing the gaps left by previous studies that have primarily focused on physiological assessments.

Existing research on dysautonomia has primarily focused on its physiological mechanisms, diagnostic criteria, and medical management strategies. The dominant approach has been the use of objective diagnostic tools such as tilt-table testing, autonomic function assessments, and pharmacological interventions to quantify symptoms and identify treatment pathways. While these methods are essential for clinical practice, they fail to capture the lived experiences of patients, particularly the challenges they face in daily life, their coping strategies, and the social and emotional implications of their condition.

A growing body of research acknowledges that chronic illnesses, particularly those with fluctuating and invisible symptoms like dysautonomia, cannot be fully understood through quantitative measures alone. Patient-reported outcome measures (PROMs) and survey-based studies have attempted

to address this gap by collecting subjective data on symptom severity and quality of life. However, these instruments often impose predefined response categories that may not accurately reflect the dynamic and deeply personal nature of the patient experience. As a result, the nuanced ways in which individuals interpret, manage, and adapt to their condition remain largely unexplored.

The lack of in-depth qualitative research on dysautonomia means that healthcare professionals often lack insight into the broader psychosocial and existential challenges patients face. Delayed diagnosis, medical dismissal, and the unpredictability of symptoms can contribute to emotional distress and social isolation, yet these aspects are rarely investigated in existing studies. Without a deeper understanding of these subjective experiences, clinical care may continue to overlook critical elements of patient support, leading to inadequate communication, mismanagement of symptoms, and unaddressed psychosocial needs.

Given these limitations, a phenomenological approach is necessary to bridge the gap between clinical assessments and patient lived experiences. By focusing on how individuals construct meaning around their condition, a phenomenological study can provide richer insights into the interplay between physiological symptoms, psychological adaptation, and social dynamics. This perspective is crucial for developing patient-centered care models that consider not only the medical but also the personal and social dimensions of living with dysautonomia.

Existing research on chronic illnesses and autonomic dysfunction has largely focused on biomedical perspectives, emphasizing diagnostic criteria, symptom management, and pharmacological interventions. Studies exploring patient experiences have primarily relied on survey-based assessments and quality-of-life measures, which, while informative, fail to capture the deeper meanings individuals assign to their condition. Previous qualitative research on chronic illnesses has demonstrated the value of phenomenological inquiry in uncovering lived experiences, yet dysautonomia remains an underexplored area within this framework. Theoretical perspectives such as homeostasis regulation and Baroreflex theory provide physiological explanations, but they do not address the psychological adaptation and social struggles patients encounter. This gap underscores the necessity of adopting a phenomenological approach to gain a holistic understanding of dysautonomia beyond its clinical manifestations.

To address this gap, the present study employs Interpretative Phenomenological Analysis (IPA) to examine the lived experiences of individuals diagnosed with dysautonomia. This approach allows for an in-depth exploration of how patients perceive their symptoms, navigate medical systems, and adapt to daily challenges. By prioritizing patient narratives, IPA captures the subjective reality of living with dysautonomia, offering insights into themes such as uncertainty in diagnosis, coping mechanisms, and the impact on social identity. The use of semi-structured interviews ensures flexibility, enabling participants to articulate their experiences in their own words. Through this method, the study aims to provide a richer understanding of dysautonomia that informs both medical practice and patient support strategies.

This article is structured to guide the reader through a comprehensive exploration of the phenomenon. The Introduction contextualizes dysautonomia and presents the research objectives, while the Methodology details the phenomenological approach, participant selection, and data collection techniques. The Results section presents emergent themes derived from the analysis, illustrating key aspects of patients' lived experiences. The Discussion synthesizes these findings with existing literature, highlighting theoretical and practical implications. Finally, the Conclusion reflects on the study's contributions, its limitations, and potential directions for future research.

RESEARCH METHODS

Study Design

This study employed a phenomenological approach to explore the lived experiences of patients diagnosed with dysautonomia (Lacy dkk., 2020). Phenomenology was chosen as the research design due to its emphasis on understanding individuals' subjective experiences and the meanings they assign to their condition. Given that dysautonomia presents diverse and often invisible symptoms, this

approach facilitated an in-depth exploration of patients' perspectives, capturing both their physiological and psychosocial challenges.

Interpretative Phenomenological Analysis (IPA) was used to examine participants' narratives, allowing for a detailed exploration of how individuals make sense of their experiences. This method was particularly suited to the study as it acknowledges the role of interpretation in understanding lived experiences while maintaining a connection to the participants' original accounts. The IPA framework guided the analysis in identifying key themes that reflect the essence of participants' encounters with dysautonomia.

Participants

Participants were selected using purposive sampling, ensuring that they had firsthand experience relevant to the study's objectives. The inclusion criteria required individuals to have a medically confirmed diagnosis of dysautonomia, to have lived with the condition for at least one year, and to be willing to share their experiences in a reflective manner. Individuals with severe psychological disorders that could hinder self-reflection or coherent narration of their experiences were excluded from the study.

A total of 10 participants took part in the study, representing a diverse range of backgrounds in terms of age, gender, and symptom severity. The sample consisted of individuals aged between 22 and 55 years, with a mean duration of illness of 4.7 years. This demographic range provided a broad spectrum of experiences, allowing for a richer understanding of the condition's impact on different life stages.

Data Collection

Data were collected through in-depth, semi-structured interviews conducted in a setting chosen by each participant to ensure comfort and openness. The interviews followed a flexible guide that covered key areas such as symptom onset, diagnostic journey, daily challenges, coping mechanisms, and social interactions. This approach allowed for organic discussions, enabling participants to share personal insights beyond predefined questions.

Each interview lasted between 45 and 90 minutes and was conducted either in person or via a secure online platform, depending on participants' preferences and mobility constraints. To capture non-verbal cues, video recordings were used when possible, with participants' consent. Interviews were audio-recorded and transcribed verbatim to maintain accuracy. Field notes were also taken to document contextual observations and initial reflections on the participants' narratives.

Data Analysis

Data analysis followed the structured process of Interpretative Phenomenological Analysis (IPA), ensuring a systematic examination of participants' experiences while preserving the richness of their narratives (Nguyen dkk., 2023). The transcribed data were first read multiple times to gain familiarity before initial codes were generated, capturing significant statements and recurring patterns.

Themes were then identified inductively, with a focus on participants' meanings and interpretations of their experiences. These themes were iteratively refined, ensuring coherence while maintaining fidelity to individual accounts. The analysis also incorporated hermeneutic interpretation, situating participants' experiences within broader theoretical frameworks related to physiological regulation and chronic illness coping mechanisms. NVivo software was used to facilitate coding and thematic organization, enhancing the rigor and transparency of the analytical process.

Ethical Considerations

Ethical approval for this study was obtained from the relevant institutional research ethics board. Informed consent was obtained from all participants prior to data collection, ensuring that they fully understood the purpose of the study, their rights, and the confidentiality measures in place. To protect anonymity, participants were assigned pseudonyms, and all identifying details were omitted from the transcripts.

Confidentiality was maintained by securely storing all interview recordings and transcripts in encrypted digital formats, accessible only to authorized personnel. The study adhered to ethical guidelines outlined by international research ethics standards, ensuring respect, autonomy, and the well-being of all participants throughout the research process.

RESULTS

Uncertainty in Diagnosis

Participants consistently described the challenging journey of obtaining an accurate diagnosis, marked by prolonged uncertainty and frequent misdiagnoses. They recounted their experiences of consulting multiple healthcare providers, often receiving conflicting or vague explanations before disautonomia was finally identified. One participant shared, "I went from doctor to doctor, hearing everything from anxiety to chronic fatigue syndrome. It wasn't until years later that someone even mentioned disautonomia." This uncertainty led to feelings of frustration and helplessness, with another participant stating, "I began to doubt myself... was it all in my head?"

The emotional toll of this diagnostic odyssey was palpable, as participants expressed feelings of isolation and invalidation. Many noted that the lack of awareness among medical professionals exacerbated their struggles, contributing to a sense of being misunderstood. As one participant put it, "I felt dismissed, like my symptoms weren't serious because no one could explain them." This recurring theme underscores the need for improved diagnostic protocols and education among healthcare providers to reduce diagnostic delays and misinterpretations.

Limitations in Daily Activities

Participants reported significant limitations in their daily activities due to symptoms such as dizziness, extreme fatigue, and syncope. These physical challenges hindered their ability to engage in social interactions, maintain employment, and perform routine tasks. One participant described, "Standing for more than a few minutes made me lightheaded. I had to plan every outing carefully, knowing I might need to sit or lie down unexpectedly."

These functional impairments affected not only their independence but also their self-esteem and social relationships. Participants recounted experiences of social withdrawal, as they felt burdensome or embarrassed by their condition. As one participant expressed, "I stopped going out with friends... I didn't want to be the one who always needed to rest or cut the evening short." The unpredictable nature of symptoms further compounded these limitations, leading to a sense of lost control and unpredictability in their lives.

Coping Strategies and Adaptations

Despite the challenges, participants demonstrated resilience through various coping strategies. Many adopted lifestyle modifications, including dietary adjustments, light exercise routines, and strict hydration practices to manage their symptoms. One participant shared, "I realized that eating smaller, more frequent meals helped me avoid the dizzy spells after eating." Another noted the importance of physical therapy, stating, "Learning gentle exercises helped me stay active without triggering my symptoms."

In addition to physiological strategies, psychological coping mechanisms were prevalent. Participants utilized mindfulness, cognitive reframing, and support systems to navigate the emotional burdens associated with disautonomia. One participant explained, "I joined an online support group... talking to others who truly understood made me feel less alone." This theme illustrates the adaptive capacity of individuals in the face of chronic illness, highlighting the importance of holistic management approaches that encompass both physical and psychological support.

Social and Medical Support Dynamics

Participants' experiences revealed a complex dynamic of support from both social circles and medical professionals. While some reported positive experiences with empathetic healthcare providers, many encountered a lack of knowledge and understanding about disautonomia, leading to feelings of

frustration and distrust. One participant stated, "One doctor actually listened and took the time to learn about my symptoms. It made all the difference." Conversely, others expressed disappointment, with one sharing, "I felt like I was educating my doctors instead of getting answers."

Social support also played a critical role in participants' coping mechanisms. Family and friends' support varied, influencing participants' emotional well-being and perceived quality of life. As one participant reflected, "My family was supportive, but they didn't always understand why I couldn't push through the fatigue like everyone else." Several participants turned to online communities for validation and shared experiences, underscoring the importance of community in managing chronic conditions.

The findings from this phenomenological study illuminate the multifaceted experiences of patients with dysautonomia, highlighting the complexities of navigating diagnostic uncertainty, daily functional limitations, coping mechanisms, and social-medical support dynamics. These narratives reveal not only the physiological challenges but also the profound emotional and social impacts of living with dysautonomia. The insights gathered emphasize the necessity for increased awareness, better diagnostic procedures, and comprehensive care strategies that address both physical and psychosocial needs. These findings contribute to a deeper understanding of the lived experiences of dysautonomia patients, offering valuable perspectives for healthcare providers to enhance patient-centered care.

DISCUSSION

This study reveals that individuals living with dysautonomia experience profound uncertainty, functional limitations, and a complex interplay between physiological symptoms and psychological adaptation (Sinn dkk., 2011). These findings address the core research questions by illuminating how patients navigate their symptoms, seek medical recognition, and develop coping mechanisms within their social and medical environments.

The findings provide a deeper understanding of the diagnostic uncertainty that characterizes many dysautonomia cases (Szöör dkk., 2021). Participants consistently described prolonged diagnostic journeys, often facing misdiagnoses and skepticism from medical professionals. This supports the notion that dysautonomia, as an "invisible illness," is frequently overlooked in clinical settings, leading to delayed recognition and emotional distress. The study also highlights the significant impact of dysautonomia on daily life, demonstrating that symptoms such as dizziness, fatigue, and syncope force individuals to modify their routines, restrict their physical activities, and adjust their professional and social engagements. Importantly, the research uncovers patients' reliance on self-developed coping strategies, including dietary modifications, controlled hydration, and mindful rest periods, to manage their condition effectively. The role of social support—both from personal networks and online communities—emerges as a crucial factor in how individuals make sense of their condition and sustain emotional resilience.

These findings align with existing research on chronic illness and invisible disabilities, which emphasize the psychological and social burdens of conditions that lack clear diagnostic criteria. Previous studies on patient experiences with autonomic disorders have noted similar diagnostic delays and the frequent misattribution of symptoms to anxiety or psychological causes (Wilton-Clark & Yokota, 2022). The present study extends this discussion by incorporating a phenomenological perspective, revealing not only the challenges of obtaining a diagnosis but also the existential struggle patients face in legitimizing their illness within medical and social contexts.

The results also resonate with the theory of homeostasis and autonomic regulation, which explains how autonomic dysfunction disrupts the body's adaptive responses. However, while physiological studies focus on dysautonomia as a biological condition, this research adds a humanistic dimension, showing how patients actively negotiate these disruptions in their daily lives. The findings further support the concept of illness narratives, in which patients construct personal and social identities around their condition, often seeking validation from medical professionals and support networks. Unlike previous research that primarily quantifies dysautonomia's physiological impact, this

study provides a lived-experience perspective that highlights patients' agency in managing their health, despite systemic and social obstacles.

Implications of Findings

The findings of this study have significant implications for both medical practice and broader societal understanding of dysautonomia. Clinically, the study highlights the need for increased awareness and education among healthcare providers regarding the complexity of autonomic dysfunction. The prolonged diagnostic uncertainty reported by participants underscores the necessity of integrating a more patient-centered approach in medical consultations, where subjective symptom descriptions are taken as seriously as physiological assessments (Worth & Thrasher, 2015). The findings also suggest that healthcare professionals should adopt a multidisciplinary approach, incorporating not only neurology and cardiology but also psychology and physical therapy to address the multifaceted challenges faced by patients.

Beyond the clinical setting, these results contribute to the growing discourse on invisible illnesses and the social validation of chronic conditions. Many participants experienced dismissal and skepticism from both medical professionals and their social circles, reinforcing the stigma often associated with conditions that lack clear diagnostic markers. This highlights the need for greater public awareness and advocacy efforts to legitimize the lived experiences of individuals with dysautonomia. Additionally, the study provides insights for support groups and online patient communities, emphasizing their role in providing emotional resilience and information-sharing for individuals navigating complex health journeys.

Limitations of the Study

While this study offers valuable insights into the lived experiences of individuals with dysautonomia, several limitations should be acknowledged (Zhang dkk., 2024). First, as a qualitative phenomenological study, the findings are deeply contextual and reflective of the specific experiences of the participants, limiting broad generalization. The sample size, though sufficient for phenomenological inquiry, remains relatively small, and experiences may vary significantly across different cultural and healthcare contexts. Additionally, the reliance on self-reported experiences introduces the potential for recall bias or subjective interpretation, as participants may frame their narratives based on their personal reflections at the time of the interview.

Another limitation is the potential influence of interviewer-participant dynamics. While efforts were made to establish a neutral and open-ended discussion environment, some participants may have adjusted their responses based on perceived expectations. Furthermore, the study did not account for variations in symptom severity or comorbid conditions, which could influence how individuals perceive and cope with dysautonomia. Future research could benefit from incorporating a broader range of perspectives, including those of healthcare providers and caregivers, to provide a more comprehensive understanding of the condition.

Future Research Directions

Given the complex interplay between physiological symptoms, psychological adaptation, and social experiences, future research should further investigate the biopsychosocial dimensions of dysautonomia. Longitudinal studies could explore how individuals' coping strategies evolve over time and how different stages of the diagnostic journey shape their perceptions and quality of life. Additionally, expanding the study to diverse cultural and healthcare contexts would offer comparative insights into how systemic factors influence patient experiences.

Further exploration is also needed on the role of digital communities in supporting dysautonomia patients. Many participants in this study turned to online support groups for validation and guidance, suggesting that digital platforms may serve as crucial spaces for patient advocacy and education. Investigating the effectiveness of such communities in improving mental well-being and access to information could provide valuable implications for patient-centered care. Finally, interdisciplinary collaboration between medical professionals, psychologists, and sociologists could

enhance the understanding of dysautonomia as not only a physiological disorder but also a deeply embedded social and psychological experience.

CONCLUSION

This study explored the lived experiences of individuals with dysautonomia, addressing the diagnostic uncertainty, daily challenges, and coping strategies that shape their condition. The findings reveal that patients face significant barriers in obtaining a diagnosis, often encountering medical skepticism and delays that contribute to emotional distress. Additionally, the impact of dysautonomia extends beyond physiological symptoms, affecting social interactions, self-identity, and overall quality of life. By adopting a phenomenological approach, this research provides a deeper understanding of how individuals navigate their illness, filling a gap left by prior studies that focused primarily on clinical and quantitative assessments. These insights emphasize the need for a more holistic, patient-centered approach in medical practice and greater awareness in public discourse about invisible illnesses. Future research should further examine cross-cultural perspectives and the role of digital communities in supporting individuals with dysautonomia to enhance care strategies and social support networks.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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