ISSN: 2690-909X

Review Article

Advances in Neurology and Neuroscience

Living with Autonomic Vulnerability: A Musical Patient Perspective on Dysregulation, Recovery, and Physiological Meaning

Bruce H. Knox*

Independent Scholar, Auckland, New Zealand

*Corresponding Author
Bruce H. Knox, Independent Scholar, Auckland, New Zealand.

Submitted: 2026, Mar 27; **Accepted**: 2026, Apr 17; **Published**: 2026, Apr 28

Citation: Knox, B. H. (2026). Living with Autonomic Vulnerability: A Musical Patient Perspective on Dysregulation, Recovery, and Physiological Meaning. *Adv Neur Sci, 9*(2), 01-03.

Abstract

Background:

Autonomic dysfunction presents with complex, fluctuating, and often poorly communicated symptom patterns. Traditional clinical narratives may fail to capture the temporal, experiential, and integrative nature of these conditions.

Objective:

To present a patient-centred, music-based narrative as a complementary medium for communicating the physiological, emotional, and functional realities of autonomic dysregulation.

***Methods**:*

A series of original lyrical compositions were developed as reflective data, capturing longitudinal lived experience of autonomic instability, recovery patterns, and system behaviour. The songs are organised thematically and temporally, reflecting key physiological mechanisms including sympathetic overactivation, impaired parasympathetic recovery, baroreflex disruption, and delayed system responses.

Results:

The musical narrative demonstrates recurring patterns of autonomic imbalance, including limited physiological "bandwidth," delayed recovery, cumulative overload, and eventual stabilisation. The integration of metaphor, rhythm, and repetition enables communication of complex physiological processes in an accessible and embodied form.

Conclusions:

Music provides a valid and meaningful modality for expressing and interpreting lived physiological experience. This approach supports medical humanities perspectives and offers clinicians and patients a richer framework for understanding autonomic dysfunction, recovery trajectories, and system resilience.

Keywords: Autonomic Dysfunction, Dysautonomia, Patient Perspective, Medical Humanities, Narrative Medicine, Autonomic Nervous System, Recovery Trajectory, Physiological Regulation, Lived Experience, Music as Data

1. Introduction

Autonomic dysfunction is commonly described through fragmented clinical indicators—heart rate variability, orthostatic intolerance, fatigue, and dysregulated blood pressure [1]. These measurements, while essential, offer only partial insight into the condition. For the individual living within this physiology, the experience is not fragmented but continuous: a dynamic interplay of limitation, overload, delay, and adaptation unfolding over time. This reflects the multi-system nature of autonomic regulation and its disruption across central and peripheral networks [2,4,7].

This paper proposes that music can serve as a clinically meaningful language for expressing these dynamics.

The songs presented in this manuscript are not illustrative additions to a medical narrative, they are **the narrative itself.** Each composition captures a specific physiological state or transition—reduced capacity, systemic imbalance, acute overload, delayed recovery, and eventual stabilisation. Through rhythm, repetition, and metaphor, the lyrics articulate patterns that align closely with known features of autonomic regulation, including sympathetic activation, parasympathetic withdrawal, and impaired neurovisceral integration [5,7,8].

Music enables three critical contributions to understanding:

2. Temporal Continuity

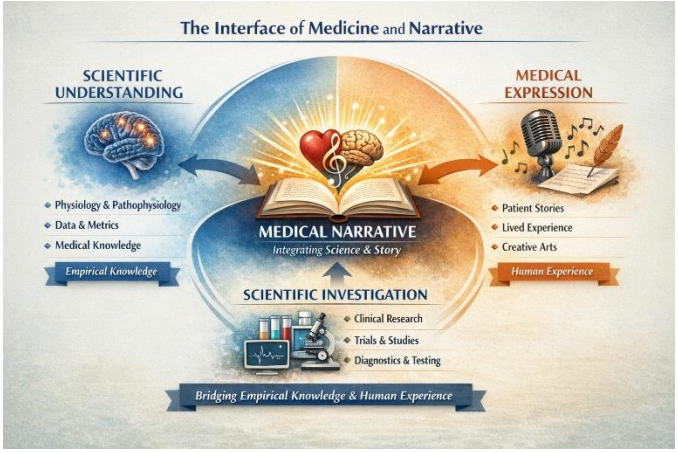
Where clinical snapshots isolate moments, music conveys flow—how one state leads into another. This is particularly relevant given the delayed and non-linear response patterns observed in autonomic conditions [3,5].

3. Embodied Experience

The lyrical form captures what it feels like to live within dysregulation, complementing clinical measures with lived insight [9,11].

4. Integrative Meaning-Making

Emotional, cognitive, and physiological domains are expressed as a unified system, reflecting the true nature of autonomic function and chronic illness experience [10,12]. In this context, the songs function as reflective data, offering insight into the lived physiology of autonomic dysfunction. To listen to this collection of musical expression as the key component of this medical narrative please click on the link below and you will be taken to this page within the hazing repository then click on the bottom right hand corner of each page the page will turn and the music will play.



5. Conclusion

This musical collection offers a longitudinal account of autonomic dysfunction as lived experience rather than isolated clinical events. The findings align with established understanding of autonomic physiology while extending insight into its temporal and experiential dimensions.

Key Findings

• Autonomic dysfunction represents **system-level dysregulation across interconnected networks** [2,4]
• Recovery is **non-linear and temporally delayed** [3,5].
• Physiological capacity is **finite and variable ("bandwidth")** [5,7].
• Emotional, cognitive, and physical domains are **integrated within autonomic function** [5,10].

Key Messages

• Patients experience physiology as **continuous narrative, not discrete symptoms** [9,12].
• Music and narrative can communicate **complex physiological states effectively** [9,10].
• Lived experience provides **clinically meaningful insight** alongside measurement [11].

Implications for Practice

• Clinical assessment should emphasise **patterns over time,** not isolated readings [3,5]..
• Patient narratives should be recognised as **diagnostically informative** [9,10].
• Management should focus on **trajectory, pacing, and adaptive recovery** [5,8].

Implications for Research

• Creative modalities should be explored as **valid qualitative data sources** [9,11].
• Future work should link **narrative patterns with physiological metrics (HRV, BP variability)**

References

1. Goldstein DS. The autonomic nervous system in health and disease. New York: Marcel Dekker, 2001.
2. Freeman R. Autonomic peripheral neuropathy. Lancet. 2005,365(9466):1259–1270.
3. Raj SR. Postural tachycardia syndrome (POTS). Circulation. 2013,127(23):2336–2342.
4. Benarroch EE. The central autonomic network: functional organization and dysfunction. Neurology.1993,43(4):730–735.
5. Thayer JF, Lane RD. Claude Bernard and the heart–brain connection: further elaboration of a model of neurovisceral integration. Neurosci Biobehav Rev. 2009,33(2):81–88.
6. Sletten DM, Suarez GA, Low PA, Mandrekar J, Singer W. COMPASS 31: a refined autonomic symptom score. Mayo Clin Proc. 2012,87(12):1196–1201.
7. McCorry LK. Physiology of the autonomic nervous system. Am J Pharm Educ. 2007,71(4):78.
8. Shaffer F, Ginsberg JP. An overview of heart rate variability metrics and norms. Front Public Health. 2017,5:258.
9. Charon R. Narrative medicine: honoring the stories of illness. Oxford: Oxford University Press, 2006.
10. Greenhalgh T, Hurwitz B. Narrative based medicine: why study narrative? BMJ. 1999,318(7175):48–50.
11. Carel H. Illness: the cry of the flesh. London: Routledge, 2013.
12. Bury M. Chronic illness as biographical disruption. Sociol Health Illn. 1982,4(2):167–182.

Copyright: *©2026 Bruce H. Knox. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.*