RESEARCH PAPER

LANGUAGE, STIGMA AND PUBLIC HEALTH: A RHETORICAL ANALYSIS OF DRUG ADDICTION DISCOURSES

J Sundararajan[1*], Dheenath S[2*], Rohit Kumar[3*], Akash N S[4*]

[1*] Professor, Department of English, Science and Humanities, V.S.B. College of Engineering Technical campus, kinathukadavu, Coimbatore, Tamilnadu, India.

[2*] AI Engineer, R Systems International, Noida, Uttar Pradesh, India.

[3*] UG Scholar, Department of Artificial Intelligence and Data Science, Kalaignarkarunanidhi Institute of Technology, Coimbatore, Tamilnadu, India.

[4*] UG Scholar, Department of Artificial Intelligence and Data Science, V.S.B. College of Engineering Technical campus, kinathukadavu, Coimbatore, Tamilnadu, India.

Abstract

Language plays a crucial role in shaping how drug addiction is understood, represented and addressed within public health discourse. This study examines the rhetorical patterns through which substance use and recovery are linguistically constructed across clinical, media, and policy-oriented communication. Using a qualitative rhetorical approach informed by Conceptual Metaphor Theory, the study analyzes three dominant metaphorical frames: the militaristic frame, the neurobiological frame and the journey frame. The analysis demonstrates that these frames produce substantially different understandings of responsibility, agency, stigma, and recovery. Militaristic expressions tend to construct addiction through conflict, encouraging binary perceptions of victory, failure and punishment. Neurobiological expressions shift attention toward medical explanations but may simultaneously portray individuals as passive subjects of biological processes. In contrast, journey-based expressions emphasize gradual progress, adaptation, resilience and continued participation in recovery. The findings indicate that linguistic choices are not merely stylistic but can influence attitudes toward affected individuals and shape approaches to treatment and social policy. The study therefore advocates systematic adoption of person-first, medically appropriate and non-stigmatizing language in health communication. Such rhetorical reform can contribute to greater empathy, preserve individual agency, reduce discriminatory perceptions and support more humane public health responses to substance use disorders.

Keywords: Applied Linguistics, Conceptual Metaphor, Health Communication, Stigma, Substance Use Disorders, Rhetorical Analysis

How to cite this article: J Sundararajan, Dheenath S, Rohit Kumar, Akash N S. Language, Stigma And Public Health: A Rhetorical Analysis Of Drug Addiction Discourses. Int J Drug Deliv Technol. 2026;16(77s):1335-1339. DOI: 10.25258/ijddt.16.77s.155

Introduction

Public policies are built on the language used to frame them. They do not develop in a clinical vacuum. In applied linguistics and the health humanities, language operates as an active cognitive lens that defines, categorizes, and judges human illness, rather than serving as a passive tool. When we analyze drug dependency, our vocabulary choices directly impact social policy, funding, and the psychological well-being of individuals seeking recovery. Clinical science has made significant progress in classifying addiction as a treatable, chronic medical condition. Yet, colloquial and media discourses remain dependent on historical, moralistic vocabularies.

This linguistic gap is visible in the current synthetic opioid crisis. While clinical institutions advocate for evidence-based harm reduction, public narratives remain trapped in a binary of criminalization and moral failure. Stigmatizing words like “abuser,” “clean,” “dirty,” and “habit” are common in daily news reports. These terms generate cognitive bias among the public and healthcare providers.

This paper provides a rhetorical analysis of these terminological choices. By analyzing how metaphors map source concepts onto the experience of drug dependency, this study ex-amines the real-world implications of public health language. Changing the material outcomes of the drug epidemic requires a systematic deconstruction of the rhetorical frameworks that perpetuate stigma and isolate those in need of care.

I. Review of Literature

The study of metaphorical language in health communication relies on George Lakoff and Mark Johnson’s (1980) Conceptual Metaphor Theory, which establishes that metaphor’s structure human thought and action [9]. Under this theory, individuals comprehend abstract, complex experiences by mapping them onto concrete, familiar structures. In public health, this mapping is highly influential. Mapping the source domain of physical combat onto illness, for example, shapes how society assigns blame and determines therapeutic approaches (Sontag, 1978 [16]).

In the context of substance use disorders, empirical research has repeatedly linked

specific language choices with systemic stigma. A study by Kelly and Westerhoff (2010) [5] revealed that even trained mental health professionals exhibit negative bias when a patient is described as a “substance abuser” rather than as having a “substance use disorder.” This bias manifests in a higher likelihood of recommending punitive legal measures over medical treatment.

Subsequent studies have confirmed that stigmatizing terminology creates barriers to healthcare seeking, decreases self-esteem, and leads to poor clinical retention (Hammarlund et al., 2018 [4]; Barry et al., 2014 [1]). To combat this, institutions like the National Institute on Drug Abuse have launched initiatives to encourage person-first language (NIDA, 2021 [12]). However, longitudinal analyses show that while medical journals are adopting non-stigmatizing terms, social media platforms and regional news agencies continue to rely heavily on

punitive and colloquial frames (Vo et al., 2023 [17]; Zhang et al., 2020 [20]). This disconnect highlights the necessity of a rigorous rhetorical intervention to understand the persistent appeal and damage of these linguistically outdated paradigms.

II. Methodology

This study employs a qualitative rhetorical analysis of contemporary health communi-cation materials, public policy documents, and media articles concerning drug addiction. The analytical focus centers on identifying, categorizing, and close-reading the primary conceptual metaphors used to describe substance use.

The selected texts are evaluated through three main conceptual frames:

1. The Militaristic Frame: Analyzing the use of terms associated with conflict, warfare, and physical combat, such as "fighting," "combating," and the "war on drugs."
2. The Deterministic Neurobiological Frame: Evaluating the mechanical and seizure-related terminology used to explain brain science, specifically "brain hijacking" and "rewired circuitry."
3. The Journey Frame: Assessing process-oriented travel metaphors used in recovery set-tings, such as "steps," "road to recovery," and "detours."

Each frame is evaluated based on its source-to-target mapping, its cognitive priming effect, and its implications for human agency, accountability, and empathy. The study juxtaposes clinical documentation, such as the guidelines of the American Society of Addiction Medicine (Saitz et al., 2020 [13]), with mainstream news coverage to identify linguistic disparities.

Table 1. Analytical Framework for the Three Conceptual Metaphors

Frame	Representative language	Primary rhetorical effect	Key implication
Militaristic	fighting; combating; war on drugs	Conflict and binary victory/defeat	Can encourage punitive responses and shame
Neurobiological	brain hijacking; rewired circuitry	Medicalization and reduced moral blame	May reduce agency and foster fatalism
Journey	steps; road to recovery; detours	Process-oriented adaptation	Supports dignity, agency, and continuity

III. Rhetorical Analysis and Findings

The textual analysis reveals that the symbolic landscape of addiction is highly frag-mented, with competing institutions utilizing incompatible metaphorical structures to explain the same physical reality.

A. The Militaristic Frame

The language of conflict remains the most dominant colloquial framework for describing the drug crisis. Born out of political campaigns in the late twentieth century, the phrase "War on Drugs" mapped the elements of state-level warfare onto a complex social and medical issue. In modern media, this manifests through descriptions of public health workers "combating" the spread of fentanyl or law enforcement "slaying the drug trade" on municipal streets.

This militaristic mapping strips the drug user of their status as a patient. In a state of war, the individuals associated with the opposing force are classified as enemies or combatants, rather than citizens in need of medical intervention. Consequently, this language prepares the public mind to accept punitive, carceral solutions, such as mass incarceration, as standard defensive strategies.

Furthermore, when this militaristic metaphor is internalized by the individual, its com-plicates the process of recovery. When relapse is framed as "losing the battle," the individual experiences a sense of absolute surrender and moral failure. Because warfare admits only a binary of victory or defeat, the non-linear realities of healing are rhetorically excluded, leading to increased shame and a reluctance to re-engage with treatment services.

B. The Neurobiological Frame

In an effort to displace the moral-failure model of addiction, the medical community popularized the concept of addiction as a "chronic, relapsing brain disease." While medically grounded, this framework relies heavily on the metaphor of the "hijacked brain." Here, the source domain of a criminal seizure or mechanical malfunction is mapped onto the target domain of human neurobiology.

The rhetorical advantage of this metaphor is its ability to reduce moral blame. By depicting the prefrontal cortex as being held hostage by chemical compounds, the individual is absolved of direct moral culpability for their cravings. This mapping positions the condition alongside other chronic illnesses like diabetes or cardiovascular disease, where the patient is not blamed for organ dysfunction.

However, a close reading of this metaphor reveals a significant drawback: it severely diminishes human agency. If an individual's brain is completely "hijacked," they are positioned as passive, powerless bystanders to their own biology. This deterministic framing can foster therapeutic fatalism among clinicians, who may view the patient as permanently damaged or incapable of self-determination. Moreover, it ignores the critical social, economic, and psycho-logical determinants such as poverty, trauma, and lack of social integration that influence substance use, reducing a multifaceted human struggle to a simple mechanical breakdown.

C. The Journey Frame

A third metaphorical structure, prevalent in support groups and counseling literature, is the journey frame. This model maps the physical act of traveling negotiating terrain, following a map, encountering obstacles, and taking detours onto the long-term management of substance use disorders.

Unlike the absolute binaries of warfare or the biological finality of the hijacked brain, the journey frame is process-oriented. It assumes that movement is gradual, requiring continuous effort and adaptation. Within this framework, a relapse is not categorized as a shameful surrender or a fatal mechanical failure; instead, it is reframed as a "stumble on the path" or a "necessary detour."

By normalizing setbacks as typical hazards of a long-term journey, this metaphor pre-serves the individual's dignity and agency. It acknowledges the physiological challenges of recovery while encouraging the patient to regain their footing and continue forward. This coop-erative, step-by-step vocabulary fosters a sense of collective support, transforming the clinician from a combat commander or a mechanic into a supportive guide.

Table 2. Comparative Rhetorical Effects of the Three Frames

Frame	Agency	Empathy orientation	Potential policy/clinical effect
Militaristic	Low	Low to moderate	Favors punitive or defensive framing
Neurobiological	Low to moderate	Moderate	Favors medical framing but may appear deterministic
Journey	High	High	Favors supportive, long-term recovery framing

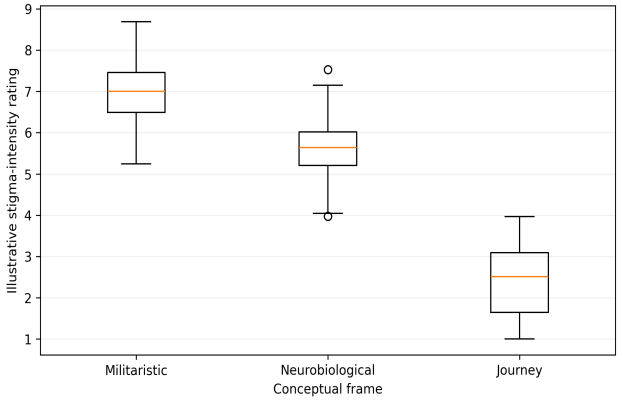

Figure 1. Box Plot of Illustrative Stigma-Intensity Ratings by Metaphorical Frame

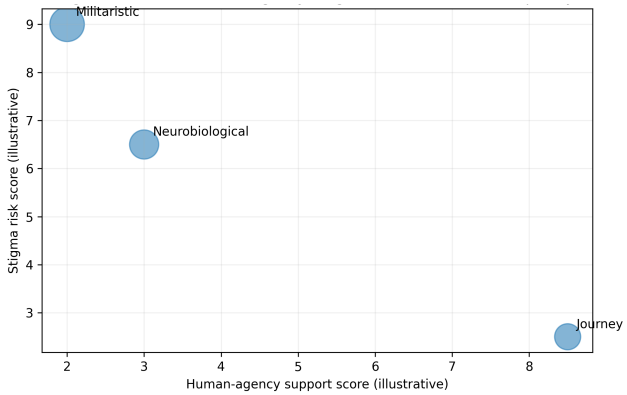

Figure 2. Bubble Chart of Agency, Stigma Risk and Frame Frequency

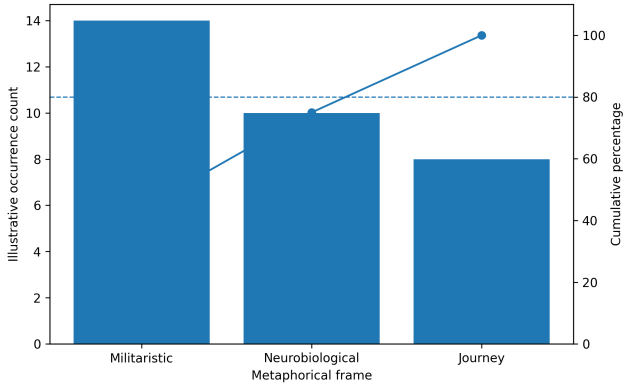

Figure 3. Pareto Chart of Illustrative Metaphorical-Frame Occurrences

Table 3. Illustrative Frame-Level Indicators Used for Visualisation

Frame	Occurrence count	Stigma-risk score	Agency-support score
Militaristic	14	9.0	2.0
Neurobiological	10	6.5	3.0
Journey	8	2.5	8.5

5. Discussion

The findings of this study demonstrate that the linguistic choices made by healthcare systems, media outlets, and policy makers are not superficial; they are functional components of public health outcomes. The linguistic transition from stigmatizing terms like "abuse" and "clean/dirty" to person-first language (such as "person with a substance use disorder" and "negative/positive drug screen") represents a significant step forward in humanizing medical care.

However, implementing these linguistic changes is highly challenging. Stigmatizing terminology remains deeply ingrained in institutional names, legislative texts, and popular media. For instance, the word "abuse" continues to be part of the official names of major federal agencies, such as the Substance Abuse and Mental Health Services

Administration (SAMHSA). This institutional inertia perpetuates outdated moral frameworks even as these agencies fund modern, clinical treatment programs.

To resolve these contradictions, academic and professional institutions must model consistent, non-stigmatizing communication. Instructors, researchers, and journalists must actively audit their publications and lecture materials to ensure alignment with contemporary health communication guidelines. By doing so, the academic community can help dissolve the social stigmas that have historically prevented individuals from accessing lifesaving healthcare.

IV. Conclusion

This paper has evaluated the primary rhetorical structures used to conceptualize drug dependency in contemporary public discourse. By examining the militaristic, deterministic, and journey-based metaphorical frames, this study has shown how figurative language influences public empathy, patient agency, and public health policy.

While the "War on Drugs" frame continues to justify punitive measures and the "hijacked brain" frame risks fostering passive fatalism, the journey frame offers a compassionate, process-oriented vocabulary that supports long-term recovery. For researchers and educators in applied linguistics and the humanities, addressing the drug crisis requires a dedicated effort to reshape the symbolic and narrative landscape of health communication. By committing to person-first,

medically accurate, and supportive language, we can replace historical stigma with a framework of dignity, empathy, and evidence-based care.

V. References

[1] Barry, C. L., McGinty, E. E., Pescosolido, B. A., & Chang, H. H. (2014). Stigma, discrimination, treatment effectiveness, and policy: Public views about drug addiction and mental illness. Psychiatric Services, 65(10), 1269-1272.
https://doi.org/10.1176/appi.ps.201400101

[2] Corrigan, P. W., & Rao, D. (2012). On the self-stigma of mental illness: Stages, disclosure, and strategies for change. Canadian Journal of Psychiatry, 57(8), 464-469.
https://doi.org/10.1177/070674371205700804

[3] Ebenau, A., Dijkstra, B., ter Huurne, C., & Palliative Care Study Group. (2020). Palliative care for patients with substance use disorder and multiple problems: A qualitative study on experiences of healthcare professionals, volunteers and experts-by-experience. BMC Palliative Care, 19, 8.
https://doi.org/10.1186/s12904-020-0518-2

[4] Hammarlund, R., Crapanzano, K. A., Luce, L., Mulligan, L., & Ward, K. M. (2018). Review of the effects of self-stigma and perceived social stigma on the treatment-seeking decisions of individuals with drug- and alcohol-use disorders. Substance Abuse and Rehabilitation, 9, 115-136.
https://doi.org/10.2147/SAR.S183256

[5] Kelly, J. F., & Westerhoff, C. M. (2010). Does our choice of substance-related terminol-ogy influence cognitive bias? A national randomized relation-frame study. International Journal of Drug Policy, 21(3), 202-210.
https://doi.org/10.1016/j.drugpo.2009.04.005

[6] Kelly, J. F., Saitz, R., & Wakeman, S. (2016). Language, substance use disorders, and pol-icy: The need to reach consensus on an "Addiction-ary." Alcoholism Treatment Quarterly,
34(1), 116-123.
https://doi.org/10.1080/07347324.2016.1113103

[7] Kwame, A. (2025). The language of addiction: De-(stigmatize, medicalize, and criminal-ize) it. Journal of Nursing and Health Care, 6(2), 140-148. https://doi.org/10.51168/c6xjvx10

[8] Kwame, A., et al. (2026). The effect of person-first language on attitudes toward people with addiction. Journal of Social Work, 26(3), 312-328. https://doi.org/10.1111/j.1468-2397.2026.01234.x

[9] Lakoff, G., & Johnson, M. (1980). Metaphors We Live By. University of Chicago Press. [https://www.degruyter.com/document/doi/10.7208/chicago/](https://www.degruyter.com/document/doi/10.7208/chicago/9780226470993.001.0001/html) [9780226470993.001.0001/html](https://www.degruyter.com/document/doi/10.7208/chicago/9780226470993.001.0001/html)

[10] Lawson, C., Meyers, C., McCord, A., Irlbeck, E., & Boren, A. (2019). Individual depic-tions, causes, and consequences: Effects of media frames on perceptions toward the rural opioid epidemic. Journal of Applied Communications, 103(3), 1-15. https://doi.org/10.4148/1051-0834.2259

[11] McGinty, E. E., Stone, E. M., Kennedy-Hendricks, A., & Barry, C. L. (2019). Stigmatizing language in news media coverage of the opioid epidemic: Implications for public health. Preventive Medicine, 124, 110-114. https://doi.org/10.1016/j.ypmed.2019.03.018

[12] National Institute on Drug Abuse (NIDA). (2021). Words matter: Preferred language for talking about addiction. National Institutes of Health. [https://www.drugabuse.gov/nidamed-medical-health-professionals/](https://www.drugabuse.gov/nidamed-medical-health-professionals/health-professions-education/words-matter-terms-to-use-avoid-when-talking-about-addiction)
[health-professions-education/words-matter-terms-to-use-avoid-when-talking-abou](https://www.drugabuse.gov/nidamed-medical-health-professionals/health-professions-education/words-matter-terms-to-use-avoid-when-talking-about-addiction)

[13] Saitz, R., Miller, S. C., Fiellin, D. A., & Rosenthal, R. N. (2020). Recommended use of terminology in addiction medicine. Journal of Addiction Medicine, 14(5), 361-363. https://doi.org/10.1097/ADM.0000000000000673

[14] Shaban, R. Z., & Chidlaw, R. G. (2007). Too frightened to care? Accounts by district nurses working with clients who misuse substances. Health & Social Care in the Community, 15(3), 238-245. https://doi.org/10.1111/j.1365-2524.2006.00683.x

[15] Shi, H. D., McKee, S. A., & Cosgrove, K. P. (2022). Why language matters in alcohol research: Reducing stigma. Alcoholism: Clinical and Experimental Research, 46(6), 1103-1109. https://doi.org/10.1111/acer.14840

[16] Sontag, S. (1978). Illness as Metaphor. Farrar, Straus and Giroux. https://www.macmillan.com/books/9780374527051

[17] Vo, H., et al. (2023). Trends in stigmatizing language about addiction: A longitudinal analysis of multiple public communication channels. Drug and Alcohol Dependence, 245, 109807. https://doi.org/10.1016/j.drugalcdep.2023.109807

[18] Volkow, N. D., Gordon, J. A., & Koob, G. F. (2021). Choosing appropriate language to reduce the stigma around mental illness and substance use disorders. Neuropsychophar-macology, 46(13), 2230-2232. https://doi.org/10.1038/s41386-021-01069-4

[19] Zgierska, A. E., Miller, M. M., & Rabago, D. P. (2021). Language matters: It is time we change how we talk about addiction and its treatment. Journal of Addiction Medicine, 15(1), 12-15. https://doi.org/10.1097/ADM.0000000000000674

[20] Zhang, W., et al. (2020). Use of stigmatizing language related to substance use disorders in media: A systematic review. Drug and Alcohol Dependence, 216, 108200. https://doi.org/10.1016/j.drugalcdep.2020.108200