

DOI 10.64437/jin0124005 RECOMMENDATION

How to Draft Written Education Materials: The Advantages of NUtrition for TRAuma Handouts (NUTRAH) in Patient Care

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KEYWORDS handout

fact sheet nutrition for trauma NUTRAH guidelines education materials patient care

Received 15 August 2024 | Revised 28 August 2024 | Accepted 31 August 2024

ABSTRACT

Background: Clients with psychological trauma often face cognitive and learning challenges that impede their ability to follow complex health protocols. Traditional practitioner-centered models often fail to provide detailed, self-directed guidance tailored to these individuals, particularly in the areas of nutrition, holistic mental health, and faith-based techniques.

Methods: This study proposes the development of simplified, structured, standardized handouts designed specifically for clients with psychological trauma. The handout research focused on body-mind-spirit practices and handout approaches intended to be clear, accessible, and behavior-focused. Peer stakeholder involvement was emphasized in the creation process to ensure relevance and efficacy. Additionally, guidelines for developing practitioner-focused handouts were established.

Results: The proposed NUtrition for TRAuma Handouts (NUTRAH) focus on simplified step-by-step, easy-to-perform instructional framework that addresses the unique learning needs of clients with psychological trauma. Practitioners are provided with evidence-based, detailed guides that facilitate the integration of self-directed practices into clinical care. These handouts are designed to improve patient understanding, adherence, and long-term health outcomes.

Conclusion: The review demonstrates the necessity of creating specialized, self-directed handouts for clients with psychological trauma, supported by peer involvement. These tools enhance patient education and empower practitioners to deliver more effective, individualized care. Utilizing NUTRAH guidelines can help facilitate this process.

Introduction

The Need for Effective Body-Mind-Spirit Handouts

Clients experiencing psychological trauma have learning needs that require effective strategies for delivering protocol information needed for successful lifestyle recovery. Lifestyle recovery is an intervention characterized as the body-mind-spirit (body [nutrition], mind [holistic mental health], and spiritual [faith-based]) practices needed to overcome significant life challenges that arise from experiencing trauma. These interventions can be delivered by using additional materials, such as client information handouts, which help communicate how to proceed with the protocol effectively and independently. Despite the extensive resources provided by prominent trauma networks, such as the Substance Abuse and Mental Health Services Administration (SAMHSA), the National Child Traumatic Stress Network, and the National Center for PTSD (post-traumatic stress disorder [PTSD]), many existing client information handouts do not focus on nutrition, holistic mental health, or faith-based

techniques. Neglecting to provide materials tailored with these specialized treatment approaches fails to address the need for effective strategies that improve protocol success rates.

A Standardized, Peer-Focused, Self-Directed Framework

Developing a Standardized Framework
A standardized, simplified format for developing handouts centered on nutrition, holistic mental health, or faith-based techniques needs to be developed specifically for clients with psychological trauma. The reason for the development of a standardized framework is because professionals often lack the skills needed to create these specialized client information handouts. Lack of skills occurs because few receive training in the preparation of patient materials, 1 particularly in body-mind-spirit training and overall layout and structural flow.

Many existing client information handouts do not focus



on body-mind-spirit practices. Although the latter, organizations, such as SAMHSA, still recommend developing educational materials to support effective coping strategies.² Taking this into account, many coping strategies for stress are self-directed, recommending nutrition, holistic mental health, or faith-based techniques. Plus, handouts are further suggested to be simple enough (maintain consistency, reusability, portability, and flexibility¹) in order for clients to utilize them. Establishing a simplified structured framework that highlights how to include self-directed practices will help professionals constructively develop intervention content, ensuring that the information being delivered is easy to understand and can be implemented.

Peer Stakeholder Involvement

In producing handouts specific to clients in need of health recovery, peers are recommended to be involved in developing the materials. Peers with similar backgrounds are essential in helping shift the mindset of clients with psychological trauma, helping them understand historical events that shape perspectives of self, but moreover helping them learn and mirror coping strategies.2 As such, practitioners or professionals with peer experience who can fairly see all sides of the issue, are ideally suited to lead this effort. Also, establishing a peer support curriculum to guide the peer support process is a necessity.2 For example, the True PALEO Inc non-profit organization uses certified and licensed professionals with trauma-related backgrounds to develop body-mind spirit community programs and materials specifically for nutrition for trauma (N4T) clients. Thus, although clinically able, professional peers essentially can teach clients with psychological trauma different non-pathological avenues to overcoming their significant life challenges.² Observing peers or curriculum from peers who have successfully managed their trauma leading professional lives can inspire clients with psychological trauma to pursue lifestyle changes for their own health recovery. The overarching issue is the insufficient inclusion of these self-directed practices in simplified client information handouts, leaving many clients without the necessary guidance to take proactive steps in their health recovery.

Outlining Communicable Information

Client information handouts should outline information that is clear and accessible, while providing practical guidance to address learning challenges. This will aid in helping the client move toward set desires and goals.² Patient materials should further focus on behaviors and how-to information.¹ Personal behavior focusing on an

individual's actions and how-to approaches listing practical steps are considered self-management applications. Therefore, developing this standardized framework with specialized body-mind-spirit approaches, in a simplified *what, why, who, when, where, how* model, that is peer focused and self-directed, will enhance the quality of the handouts ensuring that protocol information is delivered effectively.

Objective

The aim of this paper is to create structured guidelines and subsequent checklist for handouts 1) specifically tailored to N4T clients, 2) that incorporates self-directed body-mind-spirit practices, and 3) is simple and accessible enough to accommodate the learning difficulties often experienced by individuals with PTSD. The design should assist clients in achieving long-term behavioral changes that will lead to effective lifestyle management. A subsequent goal is to further develop a framework for practitioner guidance handouts. The authors of this review additionally plan to design these handouts to maintain consistency, reusability, portability, and flexibility.¹

Stress-Related Encephalic and Neurological Communication

Psychological trauma often disrupts cognitive functions, 2,3 leading to a range of encephalic and neurological symptoms. These symptoms can be due to the effects of stress on intracranial cell communication. To elaborate, the brain communicates by using multiple systems, such as the autonomic nervous system (ANS), the hypothalamic-pituitaryadrenal (HPA) axis, and the sympathoadrenal pathways.4 Neighboring networks affected by stress pathway dysfunction and negative feedback communication in PTSD patients3,5-7 are the hypothalamus, 4 amygdala, 3,4 hippocampus, 3-7 and anterior cingulate^{3,4} and the prefrontal cortices.^{3-5,7} Stress-related dysfunction is evidenced by smaller hippocampal volume in PTSD patients in association with chronic levels of glucocorticoids, indicating extremely high stress.6

Learning Challenges in Patients with Trauma

Stress-related encephalic and neurological challenges disrupt sensory information processing 4,5 making it difficult for people with PTSD to maintain focus and adhere to treatment plans. Patients with PTSD present with financial difficulties, impaired memory, 3,4,8 emotional dysregulation, and nightmares and flashbacks. For instance, the amygdala and hippocampal regions are involved in fear memory

recall,3 in which fear triggers the ANS in response to severe environmental stressors.4 These prominent malfunctions diminish learning capabilities. Hence, PTSD patients struggle with learning deficits, 3,5-7 such as poor working memory and delayed recall, 5,6 difficulties with tasks⁵ or overall performance, ⁷impaired motor control,8 inability to sustain attention,3,5 concentration complexities,8 and diminished propensity to process information.⁵ The dysregulation also impairs the ability to manage stress effectively, further complicating the process of following complex health instructions. Consequently, individuals with psychological trauma often need less detailed, straightto-the-point, and accessible resources to support their understanding, refresh their memory, and maintain adherence to treatment protocols. Incorporating targeted strategies, such as simplified nutrition tips, easy-to-follow holistic mental health practices, and concise faith-based techniques, can enhance the design of handouts, making them more effective for individuals with memory issues and information

processing difficulties.

The Importance of Self-Directed Learning Structures Traditional Model Critique

The traditional practitioner-centered model of health education, where verbal information flows primarily from the provider to the patient, has increasingly evolved into a more self-directed, patient-centric society. This shift aligns with the broader trend of integrating online resources and empowering patients to take an active role in their health management. Intrinsically, most conventional models include pharmaceuticals, brief consultations, and standardized psychotherapies. They conclude with packets of general written information not exclusively designed for populations with learning challenges and encephalic and neurological communication difficulties. Moreover, when providing client information handouts, the materials often provide overdetailed, unorganized crammed content with limited details on self-directed aspects such as nutrition,

Handout Requirements

Table 1. The Development of Trauma-Based Body-Mind-Spirit Handouts

Handouts for Clients	
Development	A single peer with both professional and personal experience who can fairly see all sides of the issue, should develop handouts. If not all stakeholders should be involved in handout development.
Content	The layout should contain the overall topic purpose emphasizing: what, how, who, who, where, and when components
	Provides information that is behavior focused (e.g. 'you should') and explains how to implement these self-directed practices.
	Provides evidence-based, cited content.
	Provides actionable steps.
	Includes author names, publication date, their credentials to prove they are a peer.
	Content should be culturally sensitive.
Language	Avoid judgemental, patronizing language. Use 5-6th grade level language, short sentences expressing only a single idea with 1-2 'common' syllable words.
	Write 'you' instead of 'patient.'
Clear Formatting	Use information of interest at the beginning, subheadings, bulleted lists with no more than 5 points, and short paragraphs, no more than 2 pages long.
	Use 12 point font and plain lettering.
Handouts for Practitioners	
Everything from the client info	rmation handout and also:
References	Include citations to key studies, guidelines, or review articles that support the information provided.
Content	Brief, practical tips or insights that can help clinicians apply the information effectively in practice.
	Include article editors or peer-reviewers.
	Include any relevant definitions.
	Include a legend that describes abbreviations and acronyms.
Clinical Utility	Include how the handout should be used.
Patient Communication	Strategies for discussing the topic with patients, addressing common concerns, and ensuring adherence to recommendations.
Action Plan	A clear, step-by-step action plan or decision-making plan to help clinicians integrate the information into their practice.
Some information adopted fro	m Hoffmann and Worrall.[1]

holistic mental health, and faith-based techniques that require the work of self-management for successful healing or protocol achievement. The underlying issue is the partial compliance with the suggestion that handouts be used to supplement or reinforce verbal information, eliciting a positive impact on the effectiveness of patient education, maximizing knowledge and adherence to treatment. As well, patients with trauma who have memory problems 3-6,8 will benefit from specially designed written materials, as handouts have the ability to have the advantage of being available to refresh a person's memory as needed. As society turns to the growing trend of being able to access information independently, practitioners and professionals alike need structured handouts that are developed to encourage self-directed practices with step-by-step, easy-to-perform instructions.

Proactive Patient-Centered Care

In the new paradigm of non-traditional, proactive approaches which emphasize personalized, clientcentered care requiring more initiative from patients, the role of written materials becomes more critical. Likely, it is because individuals with PTSD³⁻⁸ or trauma² have complications navigating and adhering to these proactive interventions that require independent management.² This is especially the case with those that have difficulties building a solid living foundation post stress episodes, as their significant life challenges can further exacerbate these difficulties.2

Case reports document the use of integrative bodymind-spirit techniques, peer led groups, classes with educational curriculum, and the use of self-directed practices (e.g. breathing exercises, mindfulness, journaling, vision statements, smart goals, etc..) that can be easily followed by clients with psychological trauma who present with significant lifestyle challenges. 9,10 Well-designed handouts created to address these aspects can be further useful. Such handouts that address these aspects must provide detailed, consistent, accessible information needed to support effective self-directed learning. Handouts outlining body-mind-spirit practices ensure, despite the complexities and stresses associated with trauma, individuals can effectively manage their interventions from home, thereby building a resilient foundation that fosters independence to manage, restore, and rebuild their lives. 9,10 This element of self-sufficiency is evidenced by the notion that when patients are not interacting with practitioners, written materials can help answer questions as they occur, choosing the level and amount of information they wish to receive.1

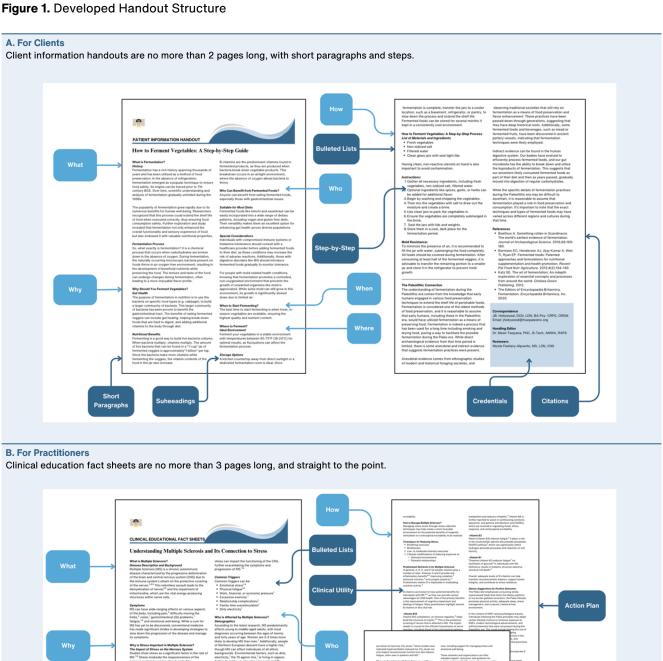
Table 2. Examples of Information Handouts Utilizing the NUTRAH Guidelines

	A. For Clients	B. For Practitioners
Section	Step-by-Step Guides	Clinical Nutritional Information Guide
Title	How to Ferment Vegetables: A Step- by-Step Guide	Understanding Multiple Sclerosis and It Connection to Stress
What	What is Fermentation? • History • Fermentation process	What is Multiple Sclerosis? • Disease description/background • Symptoms
Why	Why Should You Ferment Vegetables? • Gut health • Nutritional benefits	Why is Stress Important in Multiple Sclerosis? • The impact of stress on the nervous system
Who	Who Can Benefit from Fermented Foods? • Suitable for Most Diets • Special Considerations	Who is Affected by Multiple Sclerosis? Demographics Stress exposure EMF exposure
When	When to Start Fermenting?	When do Multiple Sclerosis Symptoms Worsen? • Stress as a trigger for Multiple Sclerosis Relapses • Common Triggers
Where	Where to Ferment? • Ideal Environment • Storage Options	Where to Seek Help for Multiple Sclerosis and Stress? • Medical Support • Programs and Resources
How	How to Ferment Vegetables: A Step- by-Step Process List of Materials/Ingredients Step-by-Step Instructions	How to Manage Multiple Sclerosis Techniques for Reducing Stress Predominant Nutrients in for Multiple Sclerosis Dietary Suggestions for Positive Outcomes

recommendations that tailor to self-directed body-mind-spirit (body [nutrition], mind [mental rejuvenation and renewal], and spiritual [faith-based]) practices

The Role of Structured Handouts: NUTRAH Guidelines

The objective of this review was create structured guidelines and subsequent checklist specifically tailored to N4T clients that incorporates self-directed body-mind-spirit practices and is simple and accessible enough to accommodate the learning difficulties often experienced by individuals with PTSD. The NUtrition for TRAuma Handouts (NUTRAH) guidelines outline a simple what, why, who, when, where, how model that offers step-by-step, easy-to-perform instructions which can be utilized across all body-mind-spirit practices. The NUTRAH guidelines are designed to be ethically sound and clinically relevant, with a primary focus on client value ensuing that content is clear, accessible, and tailored to supporting clients with psychological trauma in nutrition practice. Given the aforementioned encephalic and neurological challenges, structured handouts utilizing the NUTRAH guidelines can play a



pivotal role in supporting the ability for clients with PTSD or psychological trauma to succeed in their interventions. Traditional verbal instructions may be insufficient due to the encephalic, neurological, and emotional barriers faced by these individuals.

Specially designed client information handouts for clients with psychological trauma utilizing the what, why, who, when, where, how model offer several advantages. These benefits can address barriers effectively, including: improving client and practitioner understanding, successful implementation, supporting independence and self-directed learning, increasing accessibility, promoting consistency and flexibility, reinforcing learning, supporting behavioral change, and improving adherence. Integrating peer perspectives and ensuring at least one self-directed body-mind-spirit practice is included can further improve outcomes. Refer to Table 1 for NUTRAH guidelines. Table 2 provides examples of information handouts for both clients and practitioners. While client information handouts are simplified with easy step-by-step easy-toperform instructions, practitioner handouts utilize the same standardized framework, are cited, use at least one body-spirit practice to promote independence, and demonstrate clinical utility.

In clinical settings, structured handouts using the NUTRAH guidelines framework can be utilized as a key tool for practitioners to reinforce therapeutic instructions outside of the clinical encounter, ensuring that patients have reliable resources to refer to at their own pace. In clinics that focus on using self-directed guides emphasizing dietary modifications, mindfulness exercises, or spiritual coping strategies, NUTRAH structured client information handouts can provide step-by-step instructions to help achieve successful transformation and intervention adherence for lifestyle modifications. Professional resources using NUTRAH guidelines are further beneficial in settings where patients may have limited contact with practitioners, such as telehealth environments, community health centers, or support groups. Ultimately, NUTRAH tailored handouts empower clients with psychological trauma by providing them with clear, actionable guidance that is accessible at any time, supporting their journey toward recovery.

Conclusion

The research demonstrates the need for structured self-directed handouts specifically tailored for clients with psychological trauma, focusing on a *what, why, who, when, where, how* model with body-mind-spirit practices. By incorporating input from peer

stakeholders and emphasizing clear, accessible, and behavior-focused content, these handouts can help clients with psychological trauma navigate learning challenges and adhere to treatment protocols. Equipping practitioners with detailed, evidence-based guides following NUTRAH guidelines, this approach ensures that essential information is effectively integrated into clinical practice, improving patient outcomes. Ultimately, this strategy reinforces a collaborative relationship between patients and practitioners, promoting patient autonomy and successful engagement. This alignment with patientcentered care principles supports clients experiencing psychological trauma by addressing their unique learning needs and delivering protocol information needed for successful lifestyle recovery.

References

- 1. Hoffmann T, Worrall L. Designing effective written health education materials: Considerations for health professionals. Disabil Rehabil. 2004;26(19):1166-1173. https://doi.org/10.1080/09638280410001724816
- 2. Center for Substance Abuse Treatment (US). Trauma-Informed Care in Behavioral Health Services (Treatment Improvement Protocol (TIP) Series, No. 57.). Rockville (MD): Substance Abuse and Mental Health Services Administration (US). 2014. Available from: https://www.ncbi.nlm.nih.gov/books/NBK207201/
- 3. Yabuki Y, Fukunaga K. Clinical Therapeutic Strategy and Neuronal Mechanism Underlying Post-Traumatic Stress Disorder (PTSD). Int J Mol Sci. 2019;20(15):3614. Published 2019 Jul 24.https://doi.org/10.3390/ijms20153614
- 4. Mayer EA. Gut feelings: The emerging biology of gut-brain communication. Nat Rev Neurosci. 2011;12(8):453-466. https://doi.org/10.1038/nrn3071
- 5. Vasterling JJ, Duke LM, Brailey K, Constans JI, Allain AN Jr, Sutker PB. Attention, learning, and memory performances and intellectual resources in Vietnam veterans: PTSD and no disorder comparisons. Neuropsychology. 2002;16(1):5-14. https://doi.org/10.1037/0894-4105.16.1.5
- Golier JA, Harvey PD, Legge J, Yehuda R. Memory performance in older trauma survivors:Implications for the longitudinal course of PTSD. Ann N Y Acad Sci. 2006;1071:54-66. https://doi.org/10.1196/annals.1364.006
- 7. Yehuda R, Tischler L, Golier JA, et al. Longitudinal assessment of cognitive performance in Holocaust survivors with and without PTSD. Biol Psychiatry. 2006;60(7):714-721. https://doi.org/10.1016/j.biopsych.2006.03.069
- 8. Ehlers A, Clark DM. A cognitive model of posttraumatic stress disorder. Behav Res Ther. 2000;38(4):319-345. https://doi.org/10.1016/S0005-7967(99)00123-0
- Hollywood JB. Integrative Therapies for Magnesium and Calcium Deficiency in a Food Insecure, Autism Subject: A Case Report. *Integr Med* (Encinitas). 2023;22(4):28-32.
- 10. Hollywood JB. Management of Trauma-Induced Multiple Sclerosis with Paleo Diet and Integrative Therapies: A Case Report. *Integr Med* (Encinitas). 2024;23(1):32-37.

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