Original Article

Bereavement Life Review Management on Depression in Patients with Stroke in Medan

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ABSTRACT

OBJECTIVE: To examine the effect of Bereavement Life Review (BLR) on depression levels among stroke patients.
METHODOLOGY: This study was conducted between June and December 2021, utilizing a quasi-experimental design with a pretest-post-test control group structure. The study sample comprised 70 stroke patients experiencing extremity weakness. Participants were selected through purposive sampling and assigned to either the intervention or control groups. Depression levels were measured using the Beck Depression Inventory (BDI). The intervention group received BLR therapy in two sessions, while data analysis was conducted using a dependent t-test to assess changes in depression within and between groups.
RESULTS: Statistical analysis using the independent t-test revealed a significant reduction in depression among stroke patients who received the BLR intervention, with a p-value of 0.000 (p < 0.05). The BLR facilitated recontextualization, self-forgiveness, and reflection, contributing to more robust coping mechanisms and helping patients find meaning despite their circumstances.
CONCLUSION: BLR management provides a profound emotional intervention for stroke patients, aiding them in coping with extremity weakness and associated depressive symptoms.

KEYWORDS: bereavement, coping skills, depression, humans, stroke, self-compassion

INTRODUCTION

A stroke is defined as a sudden and acute interruption of cerebral blood flow, leading to ischemic events, which can be further categorized as thrombotic embolic or hemorrhagic occurrences that result in irreversible tissue damage[1]. Approximately 85% of all stroke incidents are classified as ischemic, whereas hemorrhagic strokes constitute slightly over 12% of cases [2]. Stroke represents a predominant cause of neurological hospitalizations, is the second leading cause of mortality, and ranks as the third most prevalent cause of disability on a global scale[3,4]. The global incidence of stroke exhibits significant variation across different age groups, and it remains a prominent contributor to both mortality and long-term disability[5]. Survivors of stroke often encounter diverse physical, cognitive, and emotional impairments, with a notable prevalence of depressive symptoms[5,6].
Post-stroke depression (PSD) represents the most prevalent mental health complication after a cerebrovascular accident, exerting a considerable burden on both affected individuals and healthcare systems (REF). As delineated in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), PSD is categorized as a mood disorder that emerges because of a medical condition characterized by episodes of major depressive disorder or mood disturbances exhibiting depressive features [5]. Depression constitutes a substantial component of the global mental health burden, impacting over 258 million individuals globally, and its prevalence and effects are on an upward trajectory[7,8]. Research indicates a significant correlation between stroke and depression, both of which are associated with increased inflammatory activation within the immune system. This heightened inflammatory response exacerbates health complications in either condition[9].
Bereavement management refers to the comprehensive emotional and psychological processes that individuals undergo after a significant personal loss. This includes the grief experienced following an event such as a stroke, which may result in substantial physical impairment [10]. Practical bereavement support typically encompasses the facilitation of loss acceptance, the enhancement of spiritual well-being, and the alleviation of symptoms associated with depression [11]. However, despite broad research on grief management, there remains a limited understanding of Bereavement Life Review's (BLR) specific impact on depression in stroke survivors.
The BLR is a systematically designed, two-session intervention initially formulated to assist bereaved families in mitigating emotional distress while promoting spiritual resilience through the exploration

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of significant life memories. This intervention facilitates individuals' reflections on their past experiences, which contributes to restoring meaning and purpose in their lives. This process is particularly advantageous for those coping with profound life changes, such as those resulting from a stroke[3]. A distinctive feature of BLR is the development of a "life album," which serves as a visual representation of the patient's life narrative, aimed at fostering appreciation and facilitating emotional healing. This process has been shown to benefit mental health, enriching the caregiving experience for patients and their families[3].

Initially developed for individuals diagnosed with cancer, the BLR framework has demonstrated efficacy in enhancing spiritual well-being and coping mechanisms across a spectrum of health contexts, including stroke (REF). Consequently, it has been endorsed for implementation by qualified nursing professionals in managing stroke patients[4]. Nevertheless, additional investigation is warranted to validate the efficacy of this intervention, particularly in its capacity to diminish depressive symptoms and enhance psychological resilience in individuals who have experienced a stroke. This study endeavors to fill this critical gap by scrutinizing the impact of BLR on depressive states among stroke survivors. The objective is to ascertain the feasibility of BLR as a complementary therapeutic approach within stroke rehabilitation, thereby potentially fostering improvements in the psychological and spiritual well-being of the patient population.

METHODOLOGY

Study Design

This study utilized a quasi-experimental design incorporating a quantitative methodology to examine the effects of the BLR intervention on depressive symptoms in stroke survivors. The research focused on one independent variable - the BLR intervention - and one dependent variable: the level of depression, which was assessed using the Beck Depression Inventory (BDI). All BLR sessions were conducted in a controlled, private environment to ensure confidentiality for the participants.

The BLR intervention comprised two structured sessions. The initial session included an exploratory interview in which respondents were prompted with reflective questions to foster personal insight. The questions posed during this session included:

1) What do you consider most important in your life?
2) What has been the most memorable event for you?
3) What makes you proud of yourself?
4) What aspects of yourself do you dislike?
5) What achievements in your life bring you pride?

This session lasted approximately one hour and adhered to the stages of therapeutic communication, progressing from pre-interaction to termination. Each interview was audio-recorded, and the researcher subsequently transcribed the responses. The reflections were then synthesized into a personalized "life album," where key themes and responses were visually represented for the patient.

The second session lasted one week after the initial session and lasted approximately one hour. During this session, the researcher facilitated a review of the life album, prompting the patient to reflect on the documented memories and insights. Each participant within the intervention group attended both sessions at one-week intervals.

Data collection for the intervention group commenced with administering the BDI pre-test before the BLR sessions. Following the conclusion of the second session, participants undertook a BDI post-test to evaluate any alterations in depressive symptoms. In the control group, participants adhered to the same temporal spacing between pre- and post-tests as the intervention group, featuring a one-week interval between measurements. The control group received the BLR intervention after completing the post-test phase. The duration of the study spanned seven months, was initiated within a hospital setting, and was subsequently extended to follow-up sessions conducted in the participants' homes, where applicable.

Population and Sample

The target population for the present study consisted of individuals diagnosed with stroke who exhibited weakness in one or more extremities. Participants were selected through purposive sampling, guided by specific inclusion criteria to ensure relevance and homogeneity among subjects. The inclusion criteria stipulated that participants must: 1) possess a confirmed stroke diagnosis for a duration exceeding one year, 2) be devoid of any additional medical complications, and 3) demonstrate motor weakness in at least one limb. These criteria were implemented to ascertain that participants accurately represented a stable post-stroke cohort, thereby establishing a suitable framework for evaluating the intervention's effects on depression levels correlated with chronic physical limitations.

Instrument

This study utilized the BDI as a primary instrument for assessing depression levels among participants. The BDI is a widely recognized self-report inventory comprising 21 items, each specifically designed to capture typical attitudes and symptoms associated with depressive disorders. Respondents evaluated each item based on their experiences over the preceding two weeks, providing insight into their depressive states.

The BDI's scoring yields a total score that facilitates categorizing depression severity. Scores range from 0 to 13, indicating minimal or no depression; 14 to 19, indicating mild depression; 20 to 28, indicating moderate depression; and 29 to 63, indicating severe depression. The BDI may be scored manually or via Pearson's proprietary software, Q-global, an online platform that enhances scoring efficiency and results interpretation.

From a psychometric perspective, the BDI is highly reliable and valid for assessing depression in clinical and non-clinical populations. It demonstrates strong internal consistency and construct validity. The instrument's user-friendly design allows participants to complete the assessment expeditiously compared to traditional interview-based evaluations, making it a practical choice for clinical and research contexts.

Data Analysis

The data analysis conducted for this study employed a dependent t-test to evaluate the variations in depression levels before and after the intervention within the intervention group. This statistical approach enabled the comparative assessment of mean depression scores pre- and post-administration of the BLR intervention, thereby facilitating a rigorous examination of its impact on depression severity in patients who have suffered a stroke.

Ethical Statement

Before participation, all subjects were informed about the study's purpose, procedures, and potential risks. Informed consent was obtained, ensuring participants understood their right to withdraw at any time. The study followed ethical standards, with protocols approved by the ethics committee to protect participant rights and well-being.

RESULTS

Table I delineates the baseline disparities in depression levels between the intervention and control cohorts among stroke patients. In the intervention cohort, a predominant segment of participants (25 patients, representing 72%) demonstrated elevated levels of depression, while the remaining ten patients (28.57%) classified their depression as moderate. Conversely, the control cohort exhibited an even greater incidence of severe depression, with 30 patients (86%) experiencing profound depressive symptoms and only five patients (14%) categorized with moderate depression. These preliminary findings highlight the comparable yet marginally heightened severity of depressive symptoms observed within the control group before the intervention.

Table I: Depression Level Intervention and Control Group of Stroke, Patient (n = 70)

Depression Category	Intervention		Control	
	f	%	f	%
High	25	72,45	30	86
Middle	10	28,57	5	14
Low	0	0	0	0
No Depression	0	0	0	0
Totally	35	100	35	100

Table II illustrates the post-intervention levels of depression within the intervention group after the BLR Management. Notably, none of the participants in the intervention cohort reported elevated levels of depression following the implementation of the BLR intervention. Instead, a noteworthy transition in depression levels was observed, with 14% of participants experiencing moderate depression, while a significant 86% attained low depression levels. These findings indicate a substantial reduction in depressive symptoms, as the majority of participants transitioned from higher to lower classifications of depression after the administration of the BLR intervention.

Table II: Depression Category of Intervention Group after Bereavement Life Review Management (n= 35)

Depression Category	f	%
High	0	0
Middle	5	14
Low	30	86
No Depression	0	0
Total	35	100

Table III presents the results of the analysis of post-treatment depression levels within the intervention group, utilizing an independent t-test. The findings indicate a statistically significant reduction in depression after the BLR management intervention, evidenced by a p-value of 0.000. This result substantiates that the BLR intervention substantially impacted mitigating depressive symptoms among participants in the intervention group, with the observed changes in depression levels deemed highly significant.

Table III: Depression after Bereavement Life Review Management (n = 35)

Management Life Bereavement	Intervention		p
	M	SD	
Pre Test	3.63	3.070	0.000
Post test	6.71	1.622	

DISCUSSION

Stroke continues to represent a principal cause of morbidity and mortality globally, positioned as the second highest contributor to mortality rates and disability-adjusted life years (DALYs)[3,12]. PSD is identified as the most prevalent psychiatric disorder in the aftermath of a stroke, impacting approximately 85% of survivors[5]. PSD is intrinsically associated with adverse functional outcomes, hindered recovery processes, and heightened social isolation, thereby exacerbating the complexities of rehabilitation efforts[7]. The clinical manifestations commonly associated with PSD encompass persistent low mood, apathy, fluctuations in weight, sleep disturbances, fatigue, feelings of worthlessness, and anhedonia, with mood disturbances and apathy emerging as the most salient symptoms[9].

In a comprehensive meta-analysis encompassing 61

studies with a total sample of 25,488 stroke patients, the pooled prevalence of PSD was determined to be 31%. Notably, this prevalence decreases to 25% in individuals assessed one to five years post-stroke[8,13]. Generally, PSD exhibits a pattern of spontaneous remission occurring within one to two years following the stroke event. However, a subgroup of individuals may experience enduring depressive symptoms, which can persist for up to three years post-stroke[12]. Moreover, both short-term and long-term PSD present a heterogeneous clinical picture, frequently manifesting as milder forms of depression. The incidence of PSD affects both genders; nonetheless, empirical evidence indicates that female patients are more predisposed to experiencing depressive symptoms in comparison to their male counterparts[11,14].

Effective management of PSD is paramount in optimizing recovery outcomes. Although life review therapy has been recognized as a viable therapeutic intervention, its application within clinical environments must be revised. This modality possesses considerable potential as a complementary approach to conventional post-stroke care, specifically enhancing patients' and their families' psychological and spiritual well-being[2]. The integration of life review therapy with post-stroke health education could bolster patients' psychological resilience, thereby mitigating the worsening of depressive symptoms. BLR, a more targeted variant of life review therapy, presents a holistic therapeutic framework advantageous for patients and their family members[1,15].

The stimulation of the grieving process is posited to significantly enhance the efficacy of BLR as a therapeutic intervention for depression. This process can be systematically delineated into four distinct stages: first, the acceptance of loss as an undeniable reality; second, the comprehensive experience and expression of grief; third, the adaptation to an environment now devoid of the deceased; and fourth, the reinvestment of emotional and psychological energies into new life possibilities. An alternative conceptualization of the grieving process suggests that it entails the development of a capacity to coexist with the memories of the deceased, which encompass a complex array of emotions, including hurt, happiness, sadness, and joy, all while maintaining a steadfast comfort in the presence of these memories[15].

In light of contemporary research findings, we propose the following comprehensive elucidation for the observed effectiveness of BLR: 1) the creation of an environment in which the individual feels secure and supported in expressing profound emotions; 2) an exhaustive examination and reflection on the spectrum of positive and negative life experiences associated with the loss; 3) the cultivation of a forward -looking vision that embraces a newly defined role in life, thus instilling a sense of pride in one's capacity to progress; and 4) the discovery of a renewed sense of purpose within the family unit, facilitated by the intelligent inquiries posed during the life review process. It is anticipated that through these interventions, the spiritual well-being of the bereaved family member may be significantly enhanced as a direct consequence of the implemented procedures.

CONCLUSION

The findings of this study indicate that BLR management has a significant impact as a psychological intervention for stroke patients, particularly in enhancing their spiritual well-being. The study demonstrated that BLR contributes to improving coping mechanisms in stroke patients by fostering a process of self-reflection and increasing self-integrity. This process helps individuals derive greater meaning in their lives, both about themselves and their surroundings. Furthermore, the BLR intervention was shown to positively influence the spirituality of stroke patients, strengthening their ability to cope with the emotional and physical challenges posed by their condition. Overall, BLR serves as an effective therapeutic tool for enhancing psychological resilience and spiritual health in individuals recovering from stroke.

Limitation. This study's notable limitation is the variability in patients' conditions over time, necessitating rescheduling appointments and disrupting the planned research timeline. This fluctuation in patient health posed challenges to the consistency of data collection and contributed to delays in the overall research process.

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Data Sharing Statement: The corresponding author can provide the data proving the findings of this study on request. Privacy or ethical restrictions bound us from sharing the data publicly.

AUTHOR CONTRIBUTION

Sitepu NF: conceived the initial idea, developed the theoretical framework, and conducted the computations.

Zendrato N: was crucial in refining the final manuscript and overseeing the project.

Lufthiani: contributed to creating the theoretical formalism and performed the analytical calculations.

Tanjung D: verified the analytical methods employed in the study.
All authors contributed significantly to the execution of this research.
All authors discussed the results and collaboratively contributed to preparing the final manuscript.

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