People with Aphasia Rehabilitation: Post-Stroke Depression Considerations

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Abstract

The aim of this poster is to provide speech-language pathologists an overview of the development of post-stroke depression (PSD) in individuals with aphasia and its impact on rehabilitation outcomes. Information provided regarding the underlying causes for development of PSD for people with aphasia (PWA) that aids referring for appropriate screening and assessment. PSD treatment considerations and outcomes for PWA will also be discussed. Given the high prevalence of people with aphasia developing PSD, adults with aphasia are 7.408 times more likely to exhibit PSD symptoms when compared to adults without aphasia (Zanella et al., 2022). In closing, it is important for speech-language pathologists to be knowledgeable about PSD so that they may provide pertinent support and intervention for PWA.

Learner Outcomes

- 1. Explain how PSD impacts people with aphasia's quality of life.
- 2. Recall appropriate materials to adequately assess/screen for PSD in people with aphasia.
- 3. Identify efficacious treatment approaches for people with aphasia presenting with PSD.

PSD and Quality of Life

- Depression is a common symptom for individuals post stroke. Approximately one third of the stroke population is affected by PSD (Towfighi et al., 2017).
- Individuals who have a diagnosis of aphasia have been linked to have an increase in depression scores (Shehata et al., 2015).
- PWA experience an acute inability to function in the complete range of activities of their everyday life in cognitive, behavioral, leisure, occupational, social, and family activities. PWA will commonly have a negative emotional reaction to these alterations which often presents as depression (Code et al., 1999).
- An increase in one's aphasia severity score has also been shown to have a significant relationship to the development of PSD, such that PWA are 2.06 times more likely to experience PSD symptoms with every 1-point increase in aphasia severity (Zanella, et al., 2022).
- Identifying the diagnosis of aphasia as well as the severity of the aphasia are both important risk factors for developing PSD symptoms (Zanella, et al., 2022).

Depression Screeners For PWA

Patient Health Questionnaire-2 (PHQ-2):

Addresses difficulties communicating with respondents by using only the first two questions found within the PHQ-9 (Zanella et al., 2022)

Stroke Aphasic Depression Questionnaire (SADQ-10):

10-item questionnaire comprised questions regarding the presence of depressive behaviors; completed by the participant's caregiver (Laures-Gore et al., 2016)

Aphasic Depression Rating Scale (ADRS):

Nine-item questionnaire that rates external symptoms of depression and is completed by the participant's caregiver (Laures-Gore et al., 2016)

Visual Analog Mood Scale (VAMS):

Consists of eight individual vertical VAMS measuring the following mood states: sad, happy, tense, afraid, confused, tired, energetic and angry (Benaim et al., 2010)

Effects on Rehabilitation

- PSD has been shown to negatively influence rehabilitation, recovery, and quality of life through individual's poor involvement in rehabilitation and limited social activity (Tiwari et al., 2020).
- Numerous studies have revealed that individuals with PSD see results in worse functional outcomes, impairment, and recovery when compared to peers in this population without depression (Schmid et al., 2011).
- Inflammation from stroke and depression has been shown to impact neuroplasticity, as evidenced by the decreased availability of brain-derived neurotrophic factor (BDNF) in synapses (Wijeratne et al., 2021) which impacts one's ability to form and reorganize connections within the brain.

Efficacious PSD Treatment Approaches

- Stroke health professionals suggest problem-solving together, on a case-by-case basis to find appropriate treatment strategies, such as referring to a mental health specialist and encouraging speech pathology sessions as an important time for PWA to discuss feelings (Baker et al., 2019).
- Intensive Comprehensive Aphasia Program (ICAP): service delivery model, especially in a university setting, which may aide in reducing depression and improving quality of life in PWA (Griffin-Musick et al., 2020).
- Stepped psychological care after stroke: a framework with levels 1 to 4 which can be used to prevent and treat depression for PWA, however more research is needed for evidence required for Levels 3 & 4 (Baker et al., 2017) see table 1
 - PWA after stroke with sub-threshold mood symptoms. Includes routine assessment, support, information provision, goal setting, problem solving, and monitoring of mood to prevent emotional problems.
 - PWA and mild depression may benefit from behavioral therapy and significant other support.
 - PWA with severe symptoms requiring specialist mental health service.
 - 4 PWA with severe symptoms and challenging behaviors.

Table 1

- Medical management of PSD with antidepressants has proven to be effective in numerous trials treating PSD, this approach is also supported by the American Heart Association.
- Clinical trials of antidepressants in individuals with PSD have revealed: remission of depressed mood, improvement of cognitive and functional impairments, as well as long improved longevity (Vasiliu et al., 2019).
- Per research, selective serotonin reuptake inhibitors (SSRIs) are the gold standard regarding pharmacological treatment for PSD due to their relatively better side-effects (Vasiliu et al., 2019).
- However, treatment with antidepressants does not go without risk for this population; side effects are patient specific and may be due to interactions with other variables (Robinson & Jorge, 2016).





