

Depression & Isolation Following a Stroke

American Stroke Association
Stroke Symposium

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- About 11% of the U.S. non-disabled population is moderately or severely depressed at any given time
- Research suggests that about 20% - 30% of people with long-term disabilities have a depressive condition.

Symptoms of Depression

- *Persistent sad, anxious, or “empty” mood*
- *Feelings of hopelessness, pessimism*
- *Feelings of guilt, worthlessness, helplessness*
- *Loss of interest or pleasure in hobbies and activities that were once enjoyed, including sex*
- *Decreased energy, fatigue, being “slowed down”*
- *Difficulty concentrating, remembering, making decisions*
- *Insomnia, early-morning awakening, or oversleeping*
- *Appetite and/or weight changes*
- *Thoughts of death or suicide or suicide attempts*
- *Restlessness, irritability*
- *If five or more of these symptoms are present every day for at least two weeks and interfere with routine daily activities such as work, self-care, and childcare or social*

Impact of Disability

- Mobility & Accessibility
- Social Isolation
- Financial
- Body Image
- Cognitive challenges
- Pain
- Health Problems
- Change in Family Roles-lack of caregiver

Post Stroke Depression (PSD)

- About 1/3 of survivors evidence symptoms of depression within the first 1-3 years post stroke, with decline in depression after 3 years.
- Most consistent predictive factors are
 - physical disability
 - Stroke severity
 - History of depression
 - Cognitive impairment
- Study on stroke survivors in the community:
 - 47% complain of pain
 - 60% complain of fatigue
 - 25% complain of cognitive changes

Towfighi et al 2017

PSD Correlates

- Study of stroke group and matched control group
 - younger age, in the stroke and control groups, associated with greater increases in depression scores over time
 - African American stroke survivors had larger increases in depressive symptoms than white stroke survivors, but not difference on QOL measures
 - Did not find gender difference

Haley et al 2017

Post Stroke Depression (PSD)

- PSD is a factor with the greatest effect on ratings of quality of life (QOL) measures
- Despite good functional outcomes, those with PSD had lower participation and engagement and lower score on QOL measures.

AHA/ASA Scientific Statement

Post Stroke Depression (PSD)

Biological factors/considerations

- Late onset PSD associated with chronic white matter disease and small silent infarcts.
- Not consistently associated with stroke location
- Potential bio markers:
 - Cerebral perfusion reduction
 - Higher cortisol levels
 - Low levels of neurotrophic factor,
 - Amygdala volume reduction

AHA/ASA Scientific Statement

Additional Impact of PSD

- Those with PSD are 1.4-1.5 more likely to experience incident acute myocardial infarction (AMI) or stroke.
- 85% risk attributed to known risk factors of obesity, smoking, low education and pre-existing chronic illness.
- Social isolation, but not loneliness, associated with 1.5-fold increased risk of mortality after the AMI or stroke
- Social isolation remained an independent risk factor for mortality after the AMI and stroke event.

Hakulinen et al 2018

Social Isolation

- Living alone is a risk for worsening quality of life after stroke.
- Stroke survivors living alone reported larger increases in depressive symptoms after stroke compared to stroke survivors with support network.

Haley et al 2012

Now COVID-19



Impact of Quarantine

- Factors impacting stress during Quarantine
 - Longer duration, >10 days, associated with more mental health symptoms
 - Fear of being infected or infecting others, especially if experience any symptoms
 - Confinement, loss of usual routine, and reduced social and physical contact with others
 - Having inadequate supplies (including food, shelter, water, medications)
 - Lack of information

Caregiver Concerns

- Inclined to have greater difficulty adjusting to the cognitive-behavioral changes versus physical challenges
- Caregiving associated with
 - Depression, anxiety, frustration, social isolation
- Can result in reduction in personal relationships, employment and creation
- Presence of a support network as a strong predictor of caregiver satisfaction with life

Treatment

- Screening for depression early in recovery
 - Assessment of emotional and behavior functioning
- Collaborative team care
- Education on effects of CVA, recovery process
- Identify Caregivers and caregiver services
- Treatment: Psychotherapy and medication options for stroke survivor and family
- Engaging in meaningful activity
- Participation in home and community
- Regular exercise

References

- Broussy, S., Saillour-Glenisson, F., Lorenzo, G., Fouanet, R., Lesaine, E., Maugeais, M., Aly, F., Glize, B., Salamon, R and Sibn, I. (2019) Sequelae and Quality of Life in Patients Living at Home 1 Year After a Stroke Managed in Stroke Units. *Front Neurol.* Vol10: 907.
- Haley, W., Roth, D, Kissela, B., Perkins, M. and Howard, G. (2011). Quality of life after stroke: a prospective longitudinal study. *Qual Life Res.* 2011 Aug; 20(6): 799–806
- Hakulinen, C., Lulkki-Raback, L., Virtanen, M., Jokela, M., Kivimaki, M. And Elovainio, Marko. (2018) Social isolation and loneliness as risk factors for myocardial infarction, stroke and mortality: UK Biobank cohort study of 479 054 men and women. *Heart* 2018;104:1536–1542
- Towfighi, A., Ovbiagele, B., Hussein, N., Hackett, M., Jorge, R., Kissela, B., Mithchell, P., Skolarus, L., Whooley, M., and Williams, L. (2017) Poststroke Depression: A Scientific Statement for Healthcare Professionals From the American Heart Association/American Stroke Association. *Stroke* Vol 48 (2).