

Stressful Life Events and Major Depression

by Kate Stroud, PhD

Major depressive disorder is a relatively common but severe illness associated with significant impairment in functioning. It was identified as the fourth leading cause of disability worldwide in 1990, and it is predicted to be the leading cause of disability by 2020 (Murray & Lopez, 1996). Major depression is an episodic disorder – that is, individuals suffering from depression typically have one or more periods of depression (called episodes) that may fluctuate in duration or severity.

The association between stress and depression has been of great interest to researchers for two primary reasons. First, severe stressful life events are arguably the most important risk factor for episodes of major depressive disorder. Approximately 70% of first depression episodes and 40% of recurrent episodes of depression are preceded by a severe stressful life event (Monroe & Harkness, 2005). Second, given the causal significance of stressful life events for depression, understanding the association between stress and depression is critical for treating and preventing depression.

How is stress related to depression?

Many different types of stress are risk factors for depression. Episodic stress refers to discrete

stressful life events that have a beginning and an ending (Hammen, 2005). Episodic stress is classified according to severity. Severe stressful life events include events such as divorce, death of a close family member, and job loss. Nonsevere events include more minor disruptions such as a break-up following a brief romantic relationship, a friend moving out of state, or failing an exam. In contrast to episodic stress, chronic stress refers to ongoing stressful life experiences, such as marital problems, financial strain, and ongoing parent-child relationship problems.

It has been argued that severe life events are the most important causal factor for depression. For example, Brown and Harris (1978), in their seminal investigation, found 80% of individuals with depression had a prior severe stressful life event. Severe life events are more likely to be present prior to first episodes of depression than before recurrences of depression (Post, 1992; Monroe & Harkness, 2005; Stroud, Davila & Moyer, 2008). For instance, Monroe and colleagues (2007) demonstrated that 50% of first episodes were preceded by a severe life event, whereas only 22 – 39% of recurrent episodes were preceded by a severe life event.

Why are severe life events less likely to be present prior to recurrent episodes? Recent research suggests that other types of stress become more important after a first episode of depression. That is, individuals may become sensitized to stress, rendering them more vulnerable to experiencing depression in the face of less and less severe stressors (Post, 1992; Monroe & Harkness, 2005). This theory, called the stress sensitization model,

THE *Family* INSTITUTE
AT NORTHWESTERN UNIVERSITY

The Family Institute at Northwestern University offers a variety of resources for couples transitioning to parenthood, including workshops, classes, groups and psychotherapy.

is supported by research on nonsevere stressful life events. Nonsevere events do not predict first onsets of depression, but develop the capacity to trigger recurrences of depression (e.g., Monroe et al., 2006). Similarly, nonsevere events may be more potent for individuals with a history of depression, such that those with a history of depression are twice as likely to become depressed following a nonsevere event as compared to individuals who have never been depressed (Stroud, Davila, Hammen & Vrsheck-Schallhorn, 2010).

Importantly, the relationship between stress and depression is bidirectional. Not only does stress predict depression, but evidence suggests that depressed individuals and individuals with a history of depression behave in ways that generate stress, creating a cycle of stress and depression that serves to maintain and exacerbate depression over time. This pattern, termed “stress generation” by Hammen (1991), is supported by numerous studies showing that individuals with a history of depression experience higher levels of stressful

life events (particularly events to which they had contributed, such as interpersonal conflicts), even when not currently depressed.

Who is most vulnerable to depression during times of stress?

There are many factors that may influence individuals’ susceptibility to depression in the face of stress. First, as stated above, there is evidence that individuals with a history of depression are more vulnerable to experiencing depression in response to stressful life events. For example, those with a history of depression are more likely to become depressed following a nonsevere event (Stroud et al., 2010). In addition, for those with several past episodes of depression, chronic stress appears to play a key role in triggering recurrences of depression (Monroe et al., 2007).

Research suggests that early adversity (e.g., early loss, child abuse, parental psychopathology, and child neglect) renders individuals more vulnerable to depression in the face of less severe stress. For example, in sample of late adolescent women, those with greater exposure to childhood adversity were more likely to become depressed under low stress conditions. However, under high stress conditions, all women, regardless of exposure to childhood adversity, were at increased risk for depression (Hammen, Henry & Daley, 2000).

Genetic factors also influence vulnerability to depression in the context of stressful life events. Kendler and colleagues (1995) showed that the effects of severe stressors were substantially greater among those at high genetic risk for depression than among those at low genetic risk. Further, Caspi and colleagues (2003) were the first to identify a specific gene locus associated with depressive reactions to stressful life events. This suggests that individuals may be more or less sensitive to stressful life events due to their genetic make-up.

Strategies for Effectively Managing Stress

- Share your feelings
- Develop health sleep and eating habits
- Exercise
- Learn relaxation techniques such as mindfulness, progressive muscle relaxation, deep breathing, imagery
- Engage in self-care
- Seek support from your relationships
- Make time for things you enjoy every day
- Do things that make you feel good about yourself
- Accept what you cannot control
- Alter your reaction to the event

Chronic stress may also amplify the impact of stressful life events, particularly when there is a match between the chronic stressor and the life event (Brown & Harris, 1989). For example, individuals with chronic marital difficulties may be more vulnerable to experiencing depression following a conflict with their spouse. Similarly, individuals may be more sensitive to events during times of transition, such as puberty (Rudolph & Flynn, 2007).

Finally, certain personality characteristics, such as high levels of neuroticism (the tendency to experience negative emotions) and perfectionism, negative ways of thinking, and low self-esteem, all render individuals more sensitive to stressors, and thus, more vulnerable to depression (Hammen, 2005).

Which types of stressful life events are most likely to lead to depression?

Certain life events appear to be relatively potent triggers of depression. For instance, there is abundant research linking interpersonal loss events such as deaths, divorce, break-ups, separations, and threats of separation to depression (Hammen, 2005). In their seminal study of stress and depression in women, Brown and Harris (1978) found nearly 75% of the severe events that occurred prior to depression episodes were interpersonal loss events. Further, both severe and non-severe relationship loss events were more likely to trigger depression episodes in late adolescent women, compared to non-loss severe and non-severe events respectively (Stroud et al., 2010). Finally, severe events that involve humiliation and entrapment, such as a partner's infidelity, rejection by a child, or finding out that a spouse's illness will not improve, are more likely to be followed by episodes of depression (Brown & Moran, 1997).

Research suggests that women may be especially vulnerable to depression following interpersonal loss events (Hammen, 2005). Adolescent girls

appear to be particularly at risk, because they tend to experience higher rates of interpersonal stressful life events as compared to adolescent boys (e.g., Rudolph & Hammen, 1999), which renders them more vulnerable to depression.

Although controllable stressful life events (i.e., those in which individuals have contributed to their occurrence, such as some romantic breakups or conflicts) are more likely to be present prior to first onsets than recurrences (Monroe et al., 2007), stressful life events that are uncontrollable or "fateful" (e.g., death of or separations from significant others) may act as powerful depression episode triggers, especially for recurrences (Monroe et al., 2006; Stroud et al., 2010). This suggests although uncontrollable events may be challenging for all people, they are even more challenging for individuals with a history of depression.

Importantly, the relevance of stressful life events in the development of depression may vary according to gender, age and personality/cognitive style match. For instance, those who place excessive value interpersonal relationships (termed sociotropy), may be more likely to experience depression following stressful interpersonal events as compared to stressful occupational events (Hammen, 2005). Thus, different types of events may be more depressogenic for people, depending on a number of factors, including personality traits.

How can depression be prevented?

Stress happens; it cannot be avoided entirely. However, adopting healthy coping strategies for dealing with stress can prevent both first onsets and recurrences of depression. The major empirically-based psychotherapy treatments for depression, including cognitive behavioral therapy, interpersonal psychotherapy, and behavioral marital therapy, teach coping skills for effectively managing stress (see tips listed below for examples). Consistent with this, Harkness

References

- Brown, G. W., & Harris, T. O. (1978). *Social origins of depression: A study of psychiatric disorder in women*. New York: Free Press.
- Brown, G. W., Harris, T. O., & Hepworth, C. (1995). Loss, humiliation and entrapment among women developing depression: a patient and non-patient comparison. *Psychological Medicine*, 25, 7-21.
- Brown, G.W. & Moran, P.M. (1997). Single mothers, poverty and depression. *Psychological Medicine*, 27, 21-33.
- Caspi, A., Sudgen, K., Moffit, T. E., Taylor, A., Craig, I. W., Harrington, H., et al. (2003). Influence of life stress on depression: Moderation by a polymorphism in the 5-HTT gene. *Science*, 301, 386-389.
- Hammen, C. (1991). Generation of stress in the course of unipolar depression. *Journal of Abnormal Psychology*, 100, 555-561.
- Hammen, C. (2005). Stress and depression. *Annual Review of Clinical Psychology*, 1, 293-319.
- Hammen, C., Henry, R. & Daley, S.E. (2000). Depression and sensitization to stressors among young women with a history of child adversity. *Journal of Consulting and Clinical Psychology*, 68, 782-787.
- Harkness, K., Frank, E., Anderson, B., Houck, P., Luther, J., & Kupfer, D. (2002). Does interpersonal psychotherapy protect women from depression in the face of stressful life events? *Journal of Consulting and Clinical Psychology*, 70(4), 908-915.
- Kendler, K.S., Kessler, R.J., Walters, E.E., MacLean, C., Neale, M.C., et al. (1995). Stressful life events, genetic liability, and onset of an episode of major depression in women. *American Journal of Psychiatry*, 152, 833-842.
- Monroe, S. M., & Harkness, K. L. (2005). Life stress, the "Kindling" hypothesis, and the recurrence of depression: Considerations from a life stress perspective. *Psychological Review*, 112, 417-445.
- Monroe, S.M., Slavich, G.M., Torres, L.D. & Gotlib, I.H. (2007). Major life events and major difficulties are differentially associated with history of major depressive episodes. *Journal of Abnormal Psychology*, 116, 116-124
- Monroe, S. M., Torres, L. D., Guillaumot, J., Harkness, K. L., Roberts, J. E., Frank, E., et al. (2006). Life stress and the long-term treatment course of recurrent depression: III. Nonsevere life events predict recurrence for medicated patients over 3 years. *Journal of Consulting and Clinical Psychology*, 74, 112-120.
- Murray, C.J.L. & Lopez, A.D. (Eds.). (1996). *The global burden of disease: A comprehensive assessment of mortality and disability from diseases, injuries and risk factors in 1990 and projected to 2020*. Cambridge, MA: Harvard University Press.
- Post, R. M. (1992). Transduction of psychosocial stressors into the neurobiology of recurrent affective disorder. *American Journal of Psychiatry*, 149, 999-1010.
- Rudolph, K.D. & Flynn, M. (2007). Childhood adversity and youth depression: Influence of gender and pubertal status. *Development and Psychopathology*, 19, 497-521.
- Stroud, C. B., Davila, J. & Moyer, A. (2008). The relationship between stress and depression: A meta-analytic review. *Journal of Abnormal Psychology*, 117, 206-213.
- Stroud, C. B., Davila, J., Hammen, C. & Vrsheck-Schallhorn, S. (2010). Severe and nonsevere events in first onsets and recurrences of depression: Evidence for stress sensitization. Manuscript under review.

and colleagues (2002) showed that maintenance interpersonal psychotherapy, which focuses on increasing effective coping skills for interpersonal events, may decrease the potency of severe life events in triggering recurrences of depression.

Finally, when stressful life events occur, it is important to seek help, such as social support, assistance from friends and family, or psychotherapy. Those who seek help following interpersonal events and loss events (such as death and divorce), during times of chronic stress (such as marital discord, difficult family relationships, or financial strain), and during times of transition (such as adolescence and retirement) are more likely to prevent depression or limit its severity.



Author Biography

Kate Stroud, PhD, is the John J.B. Morgan Postdoctoral Fellow at The Family Institute at Northwestern University. She received her PhD in Clinical Psychology from Stony Brook University. Dr. Stroud specializes in the treatment of

depression and anxiety in adult women and couples with depression or anxiety disorders. Dr. Stroud's research focuses on the relationship between stress and depression, interpersonal factors in depression, adolescent romantic relationships and parent-child relationships.

THE *Family* INSTITUTE AT NORTHWESTERN UNIVERSITY

Founded in 1968, The Family Institute at Northwestern University is a premier organization dedicated to couple and family therapy, community outreach, education and research. The Family Institute is a center for direct care, academic learning and new discovery.

For more information on The Family Institute, visit www.family-institute.org or call 847-733-4300.