Drop in positive emotions -- rather than jump in negative -- linked to poorer health in widowhood

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(PhysOrg.com) -- When a spouse or life partner dies, the survivor experiences more illness, mental health issues and earlier death than non-widowed counterparts, research has found. Now, a new Cornell prospective study reports that the culprit is not bereavement's negative emotions -- grief, distress, fear and anger -- that disrupt the stress response system and cause harmful biological changes. The study finds that it is the steep drop in positive emotions that does the damage.

Anthony Ong, assistant professor of human development in the College of Human Ecology, and colleagues report in the March issue of Health Psychology (30:2) that widowed participants showed a relative flattened daily rhythm of salivary cortisol (cortisol a marker for the stress response), compared with non-widowed controls, who showed the more normal pattern of a precipitous decline in cortisol over the course of a day.

Ong, who conducted the study with Thomas Fuller-Rowell, Ph.D. '10, now at the University of Wisconsin-Madison, clinical psychologist George Bonanno of Columbia University and David Almeida of Pennsylvania State University, said that other evidence is emerging to suggest that positive emotions influence daily cortisol rhythms. There is also evidence that recently widowed individuals experience a significant decline in positive emotion.

The study's findings suggest that the association between positive emotions and changes in the stress response system are linked to the negative health consequences often found among those who have lost a spouse.

Using data from a subsample of a national survey that included information from telephone interviews and surveys 10 years apart, the researchers identified 22 individuals who had been widowed within three years of the follow-up interview and had not remarried. The team compared this group with a random sample of 22 continuously married individuals selected to match the widowed adults in age, gender and education.

The survey data included measures of positive emotions (e.g., how much time participants felt cheerful, happy, calm and peaceful), and negative emotions (e.g., sadness and hopelessness). The survey also assessed such personality traits as extraversion (i.e., being outgoing and friendly) and neuroticism (i.e., moodiness, nervousness, anxiousness). Participants provided saliva samples, which are commonly used to measure stress levels.

The researchers' analysis revealed that changes in the level of positive emotion accounted for the changes in the cortisol slope found among those who had lost their spouse.

"These findings add to other recent evidence that positive emotions are beneficial during bereavement," says Ong.

While there is still more work to be done to further clarify the mechanism by which reductions in positive emotion are linked to disrupting the stress response system, this research provides insights into why supporting the bereavement process is important.

"Following loss of a spouse, social worlds contract," said Ong. "Failure to reconstruct these sources of enjoyment and mobilize adequate positive emotional resources in the aftermath of loss is a significant risk. Interventions designed to help bereaved individuals rebuild opportunities for positive emotional engagement are promising."

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