

Witness to the execution

From murder scenes to train wrecks to war zones, journalists cover a panorama of brutality and tragedy. It's part of their job description. A less obvious facet of the job takes place in the days or weeks after witnessing extreme violence, when many journalists experience a number of trauma-related symptoms that help them quell personal anguish and meet their deadlines, according to a report in the September *AMERICAN JOURNAL OF PSYCHIATRY*.

The study relied on an unusual circumstance — the 1992 execution in California of a convicted murderer, which was attended by 18 media eyewitnesses who watched through a window as a gas chamber carried out its lethal task. About 1 month after the execution, 15 of the media observers completed a questionnaire that asked mainly about symptoms of anxiety and dissociation during and shortly after the event.

Dissociation refers to reactions to trauma that revolve around feelings of emotional numbness, confusion, a sense of unreality or time alteration, distancing oneself from thoughts and sensations, detachment from others, and flashbacks.

The nine men and six women who completed questionnaires averaged 38 years of age and had spent an average of 15 years as journalists. Of that group, 12 granted interviews about their experience of the execution.

Participants reported an average of five symptoms of dissociation — often accompanied by signs of anxiety — in the wake of the execution, assert Andrew Freinkel, a psychiatrist at Stanford University School of Medicine, and his coworkers. Similar reactions occurred in survivors of a massive fire that swept through residential areas near San Francisco several years ago, the researchers note.

For the first time, however, evidence suggests that merely witnessing violence — even if the act has legal approval and observers prepare for it in advance — provokes at least short-lived dissociation and anxiety.

In interviews, several journalists who cited a lack of dissociation described themselves as “clicking into another mode” or distracting themselves during the execution in order to get their job done with a minimum of emotional turmoil. These individuals may have dissociated so well that they failed to notice their symptoms, the investigators contend.

“It seems likely that dissociation is a nonpathological and expectable response to witnessing unusual or extreme physical trauma or violence,” they maintain.

Stressed-out cell loss

Social stress may intensify the harm inflicted on a key brain structure by neurological affronts such as seizures, strokes, and even the aging process.

A research team led by Robert Sapolsky, a neuroscientist at Stanford University, injected a seizure-causing substance into anesthetized rats. Some of the animals had endured 3 days of intermittent stress, such as periodically shifting social groups. Others had had their adrenal glands removed so that the scientists could regulate certain adrenal hormones that are secreted in response to stress. Prior research indicated that these hormones damage the hippocampus, a brain area involved in memory and learning.

Stressed rats lost more hippocampal cells than nonstressed rats, including those given high hormone doses, Sapolsky's group reports in the September *JOURNAL OF NEUROSCIENCE*.

Adrenal hormone output rises in humans and rats during aging. This surge may render the hippocampus more vulnerable to neurological insults, especially in the presence of stress, the scientists propose. In their study, they note, only stressed rats lost cells in the part of the hippocampus that suffers selective damage in Alzheimer's disease.

Common drug may boost blood pressure

Elderly people may increase their risk of developing high blood pressure by taking nonaspirin, nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen, according to a new study.

The researchers examined NSAID usage by 9,411 Medicaid enrollees age 65 and over who had recently begun taking medicine for hypertension. They compared this group's use of NSAIDs with that of 9,629 enrollees not taking blood pressure medication, they report in the Sept. 14 *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*.

Forty-one percent of the participants who used drugs to control blood pressure had taken anti-inflammatories in the last year, while only 26 percent of those not on the hypertension medication had, report Jerry H. Gurwitz of Brigham and Women's Hospital in Boston and his colleagues. The larger a person's NSAID dose, the more likely it was that he or she took blood pressure drugs.

NSAIDs probably reduce inflammation by inhibiting an enzyme critical to the production of prostaglandins, fatty acids that help control blood pressure, the authors note.

Physicians prescribe anti-inflammatories for 10 to 15 percent of men and women over age 65 for a variety of problems, including arthritis and muscle pain. Between 30 and 40 percent of the over-65 set has hypertension.

Helping mothers help their crybabies

Some infants cry a lot more than others. In England, for example, researchers estimate that 25 percent of babies cry more than 3 hours a day. Mothers often find that professional advice on how to stop their babies' tears helps. But researchers wonder what it is about such counseling that proves useful. Could empathy and attention alone help mothers handle their babies better?

A recently completed 3-month study compared the benefits of simply lending a sympathetic ear, providing nonprofessional behavioral counseling, or offering no support. In all cases, parents kept a diary of their child's crying. Ninety-two mothers of troublesome infants age 1 to 3 months participated in the study. All of the children cried and fussed nearly 6 hours a day.

Behavioral counseling cut the duration of crying bouts in half and helped more than the other two approaches, report Dieter Wolke, now of the University of Munich Children's Hospital in Germany, and his colleagues in the September *PEDIATRICS*.

When the counselors just listened and sympathized, the children reduced their crying by 37 percent by the study's end. But the babies whose mothers received no support cried almost that much less, the researchers found.

Children in all three groups had a similar decline in the number of times they cried each day. But those whose mothers received counseling had fewer crying bouts in the evening.

The counselors — mothers who had raised colicky kids of their own — spoke with the study participants three times on the phone. Their recommendations included establishing daily routines and avoiding overstimulating the infants, such as by rocking them too vigorously.

Despite the reduction in tears, the children still cried more than average and generally had difficult temperaments. Data from this and other studies suggest that such infants probably have unusual central nervous systems, the team asserts.

However, “the question of whether difficult temperament, caretaking style, or both...lead to excessive crying cannot be answered by the data presented here,” they note.

While infants like these do cry less as they get older, another study found that “colic babies” still cried four times as much as other kids at age 10 months, says Wolke.