Chilean Miners Unlikely to Suffer From PTSD

Post-traumatic stress disorder is far less common than many assume, thanks to human resilience.

By Emily Sohn | Tue Oct 19, 2010 10:07 AM ET

The safe return of 33 Chilean miners to Earth's surface last week brought laughter, tears and a list of questions about the psychological fall-out of spending more than two months trapped underground.

Post-traumatic stress disorder is near the top of that worry list. For soldiers returning from war, and victims of terrorist attacks, torture, car crashes and more, people often assume that PTSD is a typical reaction to terrible situations.

Instead, experts say, full-blown PTSD is far less common than most people assume -- affecting, at most, just 30 percent of people after a traumatic event, and usually far less than that. There is also no such thing as a trauma-prone person, making it hard to predict who will ultimately succumb to PTSD.

Even defining the disorder is a work in progress, as psychologists continue to debate its official criteria.

For the miners, only time will tell which, if any, will succumb to this oft-misunderstood disorder. Doctors can't diagnose PTSD until symptoms have persisted for at least a month.

Still, chances are good that the miners will escape serious psychological consequences, experts say, both because of the event's particular circumstances and because, as studies increasingly show, humans are remarkably resilient.

"The data are really clear on this that the most common reaction to potentially traumatic events is the absence of symptoms," said George Bonanno, chair of Columbia University's department of Counseling and Clinical Psychology. "I think we're innately wired to handle these kinds of events."

"The majority of us are exposed to at least one traumatic event and maybe several," he added. "It's absurd to think we would all crumble."

Doctors have known about psychological trauma since the mid-1800s, Bonanno said, especially in the context of war. But they were reluctant to talk about it for many decades, at least in part because governments needed to sell the benefits of war, not emphasize the psychological distress that was likely to come out of it.

In 1980, post-traumatic stress disorder finally became an official diagnosis. And while its exact definition remains in flux, a person must first of all be exposed to a potentially traumatic event. For now, that's defined as something that's life threatening or threatens the physical integrity of you or someone close to you, explained Michael Poulin, a psychologist at the University at Buffalo in New York.

After a horrifying event, a victim of PTSD has uncontrollable and intense stress reactions to memories or images of the event. Reactions might include quicker heart rate, sweating, and shortness of breath. Flashbacks, trouble sleeping, and a feeling of numbness are other hallmarks of the disorder.
And while some or all of these symptoms are common after terrible things happen, symptoms have to last for at least a month to qualify as PTSD. For many people, they go away after a few days or weeks.

Media stories often cite extraordinarily high rates of PTSD in soldiers and other groups, Bonanno said. But in a large review study, soon to be published in the journal *Psychological Science in the Public Interest*, he and colleagues found that just 5 to 10 percent of people exposed to a trauma develop PTSD.

In one study, Bonanno and colleagues found that just 25 percent of people who were at the World Trade Center during the terrorist attacks on Sept. 11, 2001, suffered from PTSD six months later.

Rates of the disorder dropped to 12 percent in people who saw the attack in person, and 11 percent of people who lost a loved one in the attacks. Among the general population of New York metro area, the rate was about 6 percent. Perhaps most telling, 50 percent of people who were at the World Trade Center that day had no symptoms at all.

In another study of Columbia undergraduates, Bonanno found that students lived through an average of six potentially traumatic events in their four years at college. By the time they graduated, though, most of the students had forgotten many of those events altogether.

Bonanno's theory is that distress forces people to process events and learn from them, allowing them to move on psychologically.

"PTSD is pretty hard to have," he said. "We underestimate the human ability to thrive under aversive events."

Predicting exactly who will succumb to PTSD after a trauma is hard to do. Having a history of anxiety or depression seems to up a person's risk. Having a network of social support and outlets for expressing emotion seem to be protective. Personality traits, on the other hand, play a surprisingly small part in predicting vulnerability.

Despite the uncertainty, the future likely bodes well for the Chilean miners, at least when it comes to PTSD.

The men knew the risks of their profession, for one thing, giving them a coping advantage over say, a group of tourists visiting a cave. For most of their time underground, they had food, water and contact with the outside world. They also sat in a circle every day and talked about their feelings. For these men, Poulin said, chronic stress is probably a bigger concern than PTSD.

Even if a few of the miners do succumb to the disorder, effective therapy-based treatments exist. And new medical treatments are under development.

In some controversial studies, Poulin said, rape victims who took beta-blockers in the emergency room ended up with lower rates of PTSD compared to victims who refused the drugs. Beta-blockers impede stress hormones and may prevent the formation of hyperactive memories.

"There's a lot of research that indicates that PTSD takes an event that undoubtedly anyone would be likely to remember and makes the representation of that memory loom larger than it reasonably should," Poulin said.

It's an open question, he added, whether society will approve of a drug that changes what and how we remember, even if those memories are filled with terror.