

## Psychological care for disaster victims: are we doing well?

Atendimento psicológico às vítimas de catástrofes: estamos fazendo bem?

Atención psicológica a las víctimas de los desastres: ¿estamos haciendo bien?

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Potentially traumatic experiences that place the lives and physical integrity of individuals and their loved ones in jeopardy are common, although they vary over time and between populations. According to a study in the cities of Rio de Janeiro and São Paulo<sup>1</sup>, more than 80% of inhabitants over 14 years of age had already experienced such situations at least once in their lives.

Major disasters or collective catastrophes, whether natural or manmade, normally draw great attention in the mass media. Earthquakes, floods, fires, airplane crashes, and terrorist attacks are presented with varying hues and tones to readers and viewers worldwide. While this article was being written, three persons died and at least 180 were injured in the attack at the Boston Marathon in the United States.

A recent example in Brazil was the nightclub fire in Santa Maria, Rio Grande do Sul State, in January 2013, killing 242. Two years ago the media gave extensive coverage to the floods and landslides in the mountainous region of Rio de Janeiro State, with more than 900 deaths, and to the massacre in a municipal public school, in which a shooter killed 12 children before taking his own life.

Prospective studies show that a significant number of disaster survivors develop intense psychological reactions immediately after these experiences<sup>2</sup>. Although many victims do not dis-

play important long-term psychological damage, some can develop disabling symptoms as part of a condition known as post-traumatic stress disorder (PTSD). In the more serious cases, PTSD can be accompanied by depression, anxiety, and alcohol abuse (and that of other psychoactive substances), with major harm to the individual's social, professional, and academic life<sup>3</sup>.

The magnitude of such events and the exhaustive media coverage, especially in the early hours and days, usually cause great commotion, often accompanied by action from governments and civil society. Until recently such action was practically limited to providing material support for disaster victims, including calls for donations. However, in recent years a new element has been incorporated into the set of resources offered to disaster victims: immediate psychological care.

Although the humanitarian element fueling this new perspective is understandable, the lack of knowledge on the consequences of such interventions is worrisome, especially in Brazil. The challenge is to determine not only their effectiveness, but also the risks or harm that may result from them.

One contribution of evidence-based medicine has been to demonstrate the need to integrate experience with the best available external evidence, drawing on systematic research to identify safe and effective interventions. System-

atic investigation of the effects has shown that numerous approaches are unjustified. Without a basis in scientific evidence, common sense and intuition can lead to tragic results. The widespread advice to parents in the 1950s to 80s to put infants to sleep on their bellies led to thousands of so-called "crib deaths" or sudden infant death syndrome<sup>4</sup>. And who could have predicted that the indiscriminate use of supplementary oxygen in premature infants would cause an epidemic of blindness (retinopathy of prematurity), with future singer Stevie Wonder as one of the victims<sup>5</sup>?

Population-based interventions aimed at prevention can also produce harmful effects. In the 1940s, the Cambridge Somerville Youth Study developed a psychological and pedagogical intervention aimed at reducing juvenile delinquency. McCord<sup>6</sup> evaluated the participants 30 years after the program's implementation. The author found that the group exposed to the intervention showed higher arrest rates for serious crimes as well more alcohol abuse and mental disorders, in addition to dying (on average) five years earlier than the controls. Interestingly, such unwanted consequences might even have gone undetected, since two-thirds of the interviewees claimed that the program had helped them become better persons. Identification of the harm produced by the intervention was only possible because the program provided for an evaluation of its effects using a random design.

Efforts to identify safer and more effective forms of care for disaster victims intensified after the 9/11 attacks. A workshop of experts from different countries was held, revealing huge knowledge gaps in the area<sup>7</sup>.

Immediate psychological interventions, or those within the first 72 hours after the traumatic incident, are customarily proposed as an appropriate procedure. However, although their use has grown, thus far there is no evidence of their effects in reducing PTSD<sup>8</sup>. One of the most widely reported immediate interventions is psychological debriefing. Offered individually or collectively, this approach encourages participants to express their thoughts, emotions, and reactions towards the traumatic experience. This widespread form of early psychological help, proposed in a more structured way since the 1980s, should not be confused with early treatment of cases of mental disorders identified after trauma. Psychological debriefing usually involves a crisis intervention offered to trauma victims within hours or days after the event, in a single session, with the aim of relieving acute stress symptoms and preventing the emergence of post-trauma symptoms.

Contrary to intuition, randomized studies have found that interventions based on debrief-

ing have not proven effective. Worse yet, they appear to increase the risk of PTSD, possibly due to the exacerbation and crystallization of symptoms which they (theoretically) attempt to prevent<sup>9,10</sup>.

Educational interventions such as that described by Turpin et al.<sup>11</sup> and pharmacological interventions<sup>12</sup> have also failed to provide evidence of efficacy.

Given these findings, the National Institute for Health and Care Excellence (NICE) of the United Kingdom and the National Institute of Mental Health (NIMH) of the United States have recommended measures to detect cases of mental disorders and to supply treatment, particularly cognitive-behavioral therapy. The proposal generates an important demand for studies to identify valid screening tools in different age brackets and cultures, in addition to instruments to evaluate mental health programs in disaster situations<sup>2</sup>. Another gap in knowledge involves factors that increase community resilience following traumatic experiences<sup>13</sup>.

The implementation of post-disaster interventions without proven effectiveness can mean a major waste of human and material resources. Such interventions become even more worrisome when they can actually produce psychological harm. And this is even more serious in the case of catastrophes affecting large numbers of individuals simultaneously, when the interventions are immediate and concentrated.

Many scientists have predicted an increase in climate disasters due to global warming. Given the limited knowledge on the benefits and safety of interventions, especially the more immediate ones, studies are needed to evaluate the consequences of measures targeting the persons involved (victims and family members) in collective incidents such as floods, large-scale fires, and airplane crashes. Such studies should seek to identify risk and resilience factors and provide systematic and structured evaluation of the effectiveness of short, medium, and long-term interventions. It is clearly difficult to conduct studies at times of great emotional impact, both from the ethical point of view and in terms of acceptance by the population. Another challenge is to obtain financing for such research, since funding by research agencies does not contemplate immediate demands for resources. However, despite these difficulties, if efforts are not made to deal with the gaps and inconsistencies in this field, we will remain in the dark about whether we are dealing adequately with the psychological needs of disaster victims.

### Contributors

Both authors designed, wrote, and approved the manuscript.

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