



Post traumatic stress disorder and coping in a sample of adult survivors of the Italian earthquake



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ABSTRACT

The aim was to investigate the prevalence of post traumatic stress disorder (PTSD) in people who had left their damaged homes and were still living in temporary housing more than a year after the April 2009 L'Aquila (Italy) earthquake. In addition, we evaluated the differences in coping strategies implemented by persons who had and who did not have PTSD.

A cross-sectional prevalence study was carried out on a sample of 281 people aged > 18 years and living in temporary housing after the earthquake. The questionnaires used include the Davidson Trauma Scale and the Brief Cope.

The prevalence of PTSD was 43%. Women and the non-employed were more vulnerable to PTSD, while, age and level of education were not associated with PTSD. Those with PTSD symptoms often employed maladaptive coping strategies for dealing with earthquake and had the highest scores in the domains of denial, venting, behavioral disengagement, self-blame. By contrast, those without PTSD generally had more adaptive coping mechanisms.

Adults who were living in temporary housing after the earthquake experienced high rates of PTSD. The difference in coping mechanisms between those who have PTSD and those who do not also suggests that they influence the likelihood of developing PTSD.

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1. Introduction

Numerous studies have investigated the prevalence and risk factors for post-traumatic stress disorder (PTSD) following an earthquake. In these studies, prevalence has ranged from 14.5% to 48.2% and appears to be greater in cities that have been heavily damaged than in those with lesser damage (Xu and Song, 2011). On an individual level, studies have shown that damage to victims' homes increases the risk of PTSD (Cerdá et al., 2013; Kilic and Ulusoy, 2003), and that the quality of life is lower in those who live in temporary housing (Zhang et al., 2011). On April 6th 2009, the city of L'Aquila and surrounding villages in central Italy experienced an earthquake with a magnitude of 5.9 on the Richter (6.3 moment magnitude Mw) scale (Istituto Nazionale Geofisica e Vulcanologia (INGV), 2009). It resulted in 309 fatalities and 1600

persons who were injured, including 200 with severe injuries requiring hospitalization. More than 65,000 people were displaced (Dell'Osso et al., 2011a). In the city of L'Aquila, damages were most severe in the old town, one of the largest of Europe and the center of local life with its many squares, churches, monuments, theaters, schools, and historical buildings. A year after the earthquake, about 45% of families in L'Aquila had houses that were considered "uninhabitable" because of structural damage (Cofini and Colonna, 2011). For these families, the Government built blocks of temporary housing in rural areas that lacked many basic services and transport and were far from the center of the city.

A number of studies of high school and college students that were conducted at varying intervals after the earthquake demonstrated high levels of PTSD. A study conducted in L'Aquila ten months after the earthquake demonstrated a prevalence of PTSD of 38% among students with a mean age of 17.65 ± 0.74 years (Dell'Osso et al., 2011a). A second study conducted in L'Aquila after 21 months demonstrated a prevalence of 31% in a sample of 475 adolescents (Dell'Osso et al., 2011b), and a third study showed that 36% of 512 students from L'Aquila, who were in their senior year of high school had PTSD according to DSM-5 criteria (Carraresi,

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