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TEN OUTSTANDING REFERENCES ABOUT:

Psychopathology and terrorism

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INTRODUCTION

Knowledge about psychological repercussions in victims of terrorist attacks has aroused the researchers' interest for decades, but it has been revived after two events which are undoubtedly already historic: September 11 in the U.S.A., and March 11 in Spain.

The volume of papers dealing with victims of terrorism is high, but it increases significantly when the September 11 descriptor is added. Worthy of note is the effort made by American researchers when it came to conducting field studies, though we should also mention that all of them are subsidized to a higher or lesser extent by some kind of organization, whether public or private. In Spain, on the contrary, the scarcity of sound studies on the psychological impact of ETA-related terrorism is quite striking, if we consider that it is a country that has been battered by this kind of events for more than 30 years.

Likewise, scientific output as regards the events of March 11 has not been as profuse as compared, for instance, with that produced in the United States on account of September 11, although it is true that it has only been a short time since the occurrence of the Madrid events. On the other hand, a great deal of the material available concerning the psychological consequences of terrorism in our country is more of a disclosing and self-help nature rather than of a scientific nature.

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However, worthy of note is the significant effort made by the research teams of J. J. Miguel-Tobal, M. Muñoz and C. Vázquez, all of them belonging to the Universidad Complutense de Madrid, which enables us to approach the sequels left by such disturbing events as those that occurred on March 11 in the mental health of those who were affected directly and even indirectly. All the aspects heretofore described have made quite complex the task of selecting the most representative 10 papers. For that purpose, we established a number of "requirements", even being aware that they may not be the most relevant. On the one hand, we have included studies by American and European authors (though the proportion between them is not homogeneous) and we have even considered one of Israeli origin, with the intention of covering almost all terrorist events of major significance worldwide. We also selected studies with diverse objectives and about different types of populations, though we found, in some cases, the collaboration of the same authors in different papers, but giving answers to different hypothesis in each of them. It is worth mentioning that, as foreseeable, most of the research papers chosen consider Posttraumatic Stress Disorder a central psycholopathological manifestation as a basis; however, references can be found that also allude to affective symptoms, coping strategies, amongst others. Lastly, we should point out that what they all have in common is that they are published in journals easily available; in this respect, we underline the fact that there exist other equally attractive papers which are quite consistent with the issue we are concerned with, but access to which is more difficult.

The order in which the papers are presented is due to several reasons. In the first place, theoretical

studies are presented for the purpose of introducing the reader to the subject matter we are dealing with. Then, articles from publications contemplating different terrorist events which occurred throughout the world are included, and finally, we focus on a number of articles dealing with the September 11 attacks. The latter group, in turn, is presented according to the year of publication and to the purposes of the study. Before we proceed with our paper, we want to point out that the comments made are intended to highlight the value of the contribution of each paper, as well as to make the necessary corrections, as regards their less flawless aspects.

North, C. S. and Pferfferbaum, B. (2002). Research on the mental health effects of terrorism. *JAMA, 288,* 633-636.

It could be said that this article should be mandatory reading for all the researchers and investigators who seek to study in depth the effects that traumatic situations, such as terrorist attacks, may have on people's mental health. Comments included therein provide guidelines about the significant aspects to be taken into account for the design of research work intended to get sound data on this issue; therefore, it is of incalculable value, if we consider how difficult it is to conduct a study within the context of chaos and crisis that may result from the occurrence of this kind of events.

The different aspects addressed by North and Pfefferbaum, refer to the time frame covered by the studies, the selection of a sample and of appropriate comparison groups, the choice of assessment instruments, the careful interpretation of the data obtained, and lastly, in a very brief way they mention the challenges posed to the researchers who are concerned about the effects that the traumatic situations may have on people's mental health. All of them are elements that may help in the different decision-making processes that the design of an investigation may entail.

As regards the time frame of studies, it is convenient to initiate them as soon as possible, once the traumatic event has taken place, so that early reactions associated therewith can be detected. Likewise, the longitudinal follow-up of the studied population is very important, so that the evolution of psychological distress manifestations and/or the psychiatric symptoms initially detected can be known. Furthermore, we should take into account that if our interest focuses on diagnostic categories such as the Posttraumatic Stress Disorder, it is convenient to delay collecting the data for at least one month, so that a precise diagnosis of such a disorder can be established.

On the other hand, with respect to the selection of the sample and of the comparison groups, it is considered inappropriate to generalize the results obtained as regards one kind of event or population to a different one. In this respect, Echeburúa, Corral and Amor (1998) have observed that even in terrorism, differences can be detected as regards psychopathological profiles, with the prevalence of certain symptoms according to the specific type of event experienced (attack, kidnapping). Also, it appears to be essential to distinguish between people forming part of the general population and people who were directly affected by the traumatic event, in order to make an the assessment of mental health.

One of the most important aspects dealt with by the authors refers to the selection of the assessment instruments and the way they would be applied. Worthy of note are the advantages and inconveniences of adopting a categorial or dimensional approach, and they stress that although the use of brief self-reports reduces the amount of resources needed (above all in the case of studies that seek to cover a large-sized sample of participants), such self-reports do not enable, however, to establish psychiatric diagnoses. Therefore, the investigators' cautiousness is imperative when it comes to describing the findings obtained by means of self-reporting instruments in terms of disorders.

On the other hand, North and Pfefferbaum point out that recognizing certain symptoms, such as concentration problems or sleep disorders, does not necessarily imply the experiencing of psycho-pathologies; they propose to name them *reactions*, which would have a normative nature within the context of such overwhelming events. In this respect, they affirm the need to assess these significant manifestations of psychological distress which cannot be regarded as a disorder, since normally, they require specific intervention processes different from the psychiatric treatment. Likewise, the authors fill the gap that currently exists as regards what is meant by indirect exposure to the traumatic event and, more specifically, how to consider the psychological distress detected in persons exposed to such events only through the television images. Concerning this aspect, they suggest the adoption of a circumspect position which implies regarding the symptoms and reactions shown by this group of subjects as psychological sequels, but not as a disorder; contributing somewhat, pending new contributions, to the solving of certain critical matters which might be raised.

This paper also lays stress on the care the researcher or investigator should have when interpreting the results obtained, specifically, the associations between variables, pointing out that certain associations should not be interpreted, necessarily in terms of cause-effect and that they might be implying spurious relationships.

Briefly, we can regard this document as an excellent material to come first into contact with the design of research on the psychological effects that such disturbing events as terrorist attacks may have on general population. The authors provide the investigator with general guidelines of action as regards critical methodological aspects relevant to the conducting of empirical studies in this field, comments on recently published papers dealing with this issue, being especially useful. Finally, it is worth mentioning that most of the psychological elements tackled are restricted to Posttraumatic Stress Disorder or its related symptoms, leaving out of the debate other possible types having an impact on mental health.

Miller, A. M. and Heldring, M. (2004). Mental health and primary care in a time of terrorism: psychological impact of terrorism attacks. *Families Systems & Health, 22,* 7-30.

This paper can be considered unavoidable for researchers and investigators concerned about the study of the effects that terrorist acts may have on mental health and, particularly, the attacks of September 11. It is a very recent, in-depth and rigorous review article which allows the reader to take a first approach to the research issue which concerns us.

The authors started from the objective of reviewing the research conducted on the psychological impact that the events of September 11 had, both in adults and children, and identifying guidelines for future research enabling guardians to guide the development of resources. Miller and Heldring organized the articles by thematic areas in: (1) prevalence of psychological and somatic symptoms immediately after September 11; (2) trends in prevalence over time; and (3) correlates or predictors (factors) related to psychological distress and *resilience*. They presented the findings of reviewed research and compared them with those of other studies on natural disasters and other terrorist attacks both in U.S.A. and in other nations.

The method employed for the selection of articles consisted in a search for the descriptors *terrorism, terrorist attacks and September 11* on the databases MEDLINE, PsycINFO and CINAHL. They limited said search to the period from September 2001 to August 2003. Finally, they included 31 studies published in English and carried out in the U.S.A. within the first year after the attacks. It could be considered that the criteria used by the researchers and investigators which consisted in reviewing only the studies conducted during the 12 months after the attacks constitute a major limitation, since longitudinal studies providing a more complete view of the psychological impact of September 11 are excluded.

As regards the results, the authors recorded in tables the main characteristics of each of the studies conducted. Among them they underscored: the region in which the study was carried out, the period of time that passed from September 11, the instruments used for collecting the data, the sampling method, the population studied (adults, adolescents, children, families, special groups - immigrants, refugees, patients with psychiatric or medical diagnoses, etc.) and the number of persons the studied sample was composed of. They also briefly described the psychological distress they had (symptoms of depression, PTSD, stress, anxiety, fear, sadness, alcohol and drug abuse), the *resilience* variables detected (empathy, coping strategies, positive emotions, finding a positive meaning) and lastly, the prevalence of symptoms found along with the correlates of the severity of symptoms. All in all, any person who is not an expert on the matter may have within a short period of time, after examining these tables, a descriptive and detailed view of which is the state of affairs of the research conducted on the psychological impact that the September 11 attacks had. We can highlight, in this respect, the commendable synthesis job done by the authors, especially because this work facilitates researchers and investigators the access to a quick and detailed review of literature, although it is limited to one year.

Miller and Heldring found that the overall findings in September 11, as regards prevalence rates for PTSD and general distress were consistent with previous estimates made on the impact of natural disasters and other terrorist acts that occurred before September 11. The prevalence rates for PTSD ranged, depending on the proximity to the World Trade Center, between 7.5% and 40%; for depression symptoms up to 60%, and for non-specific symptoms up to 90%.

On the other hand, the authors did not include in their review, research papers about the psychological impact on rescue teams and health professionals. However, they provided data from other studies, indicating that there were no differences as regards predictors of PTSD among health professionals and victims. Although other studies found fewer reactions in physicians than in nurses, directors, and assistants, data are not conclusive. Also, they underscored the findings that children were at the highest risk for manifesting stress reactions.

As regards the development of symptoms, the reviewed studies reported a decreased prevalence over time, contrary to what happened with somatization symptoms. Furthermore, findings about correlates and predictors of the severity of symptoms were along the lines of the consequences of other attacks and natural disasters. That is to say, demographic risk factors for the development of psychopathological problems included: being of female sex (between 40 and 60 years of age), being married and having parents, being member of an ethnical minority and having a low socioeconomic level. Other correlates were: having a history of mental disorders, proximity to the event, severity of exposure in terms of injuries, having panic during the event, loneliness, loss of possessions, and being displaced from home.

Finally, in view of the results of the 31 papers reviewed, the authors give recommendations of interest for future research, among which the following should be mentioned: the systematic study of somatic symptoms since in the past they were consistently identified as significant correlates or indicators of depression, anxiety and other mental problems; analyzing in families the impact of relationships on adjustment; investigating which are the factors that promote *resilience* and the coping strategies. Likewise, they underlined the implications from all those studies, for example, for the design of educational and intervention material, and, on the other hand, to sensitize those concerned to the need of implementing psycho-educational prevention programs in families and in the most vulnerable sectors of community.

Baca, E., Cabanas, M. L., Pérez-Rodríguez, M. M. and Baca-García, E. (2004). "Trastornos mentales en las víctimas de los atentados terroristas y sus familiares." *Medicina Clínica, 122,* 681-685.

Among the most recent contributions within the subject matter we are concerned with, we can select the last paper by Baca *et al*. whose contributions are focused on the reality lived by the Spanish society. Interest in the psychological effects of attacks has been revived after the events of September 11 in the United States of America

and, more recently, on March 11 in the Capital of Spain. There have never been terrorist acts of such dimensions which have caused such an impact on the Spanish population as the aforementioned event of March 11. However, in our context we have been suffering the consequences of terrorism for several decades, a type of terrorist act less collective and extraordinary, more personalized with the use of fire weapons – point-blank firing-, but at the same time indiscriminate with the use of explosives – usually, car bombs. In fact, on a constant basis and for decades, ETA terrorism has been ranked first among the issues analyzed in polls about what the Spanish citizen is concerned about.

This paper highlights the impact that terrorist attacks may have on the mental health of Spanish citizens, so we could regard it as a mandatory source of consultation for persons interested in this area of research which is increasingly significant. The starting point of the authors is focused on knowing the psychopathological sequels that the most frequent type of terrorism in Spain may cause. It is worth mentioning, as shown by the available bibliography on this issue, that it is not only one of the few pieces of research carried out in our population, it also covers all the Spanish geography and comprises an evaluation of General psychopathology: *mood disorders*, *somatoform disorders*, as well as the *disorders related to alcohol*. Therefore, it is not limited to the *posttraumatic stress disorder* (PTSD), studied so widely, and more deeply, after the attacks of SEPTEMBER 11.

Specifically, the authors analyzed if the people who were the target of terrorist attacks and their relatives constitute a group vulnerable to psychopathological alterations with stronger probability than the persons who seek medical assistance in general; also, they considered variables such as the degree of kinship and the family support perception. With this aim, Baca *et al*. interviewed at the family home address and within a period of 5 years (from 1997 through 2001) 544 families (direct victims, survivors and relatives) who were the target of 426 terrorist attacks. They excluded from them minors and persons related in any other way to the attack or to other affected relatives. They classified them according to the degree of involvement or impact experienced into (1) direct victims (those who suffered the attack personally, n = 230 persons), (2) relatives of victims (next of kin of direct victims, n =140) and (3) direct victims and victims' relatives (they met the two preceding conditions, i.e., both the victims and their next of kin had suffered personally the attack, n = 706).

To collect the data, they used the PRIME-MD (Saiz *et al*., 1999), a procedure for the diagnosis of mental disorders, based on the diagnostic criteria of the DSM-IV (APA, 1994). This instrument, widely used in the American population, has been recently validated in our country (Saiz *et al*., op. cit.), though its use is still limited. However, it is very useful in medical assistance and, more specifically in Primary Care, as a screening to detect psychopathological alterations in patients and, consequently, refer them to Mental Health specialists. To fulfill the objectives of this work, the authors only took into account the four aforementioned areas, out of the five areas that this test comprises (the test relative to *eating disorders* being excluded).

They applied linear association tests to check the relationship between the degree of impact experienced by the victim and the presence of mood, anxiety, somatoform and alcohol disorders. Secondly, they carried out logistic regression analyses to see to what an extent the degree of impact experienced, type of attack, social support, previous psychopathology and family history constituted risk factors for the existence or non-existence of psychopathological alterations. Among the results they obtained, we can point out that there were more mood disorders, as well as anxiety and somatoform disorders, in victims and their relatives than in primary care patients used as a comparison group, and that the number of such disorders was also increasing according to the degree of impact experienced (greater in direct victims, followed by the direct victim and victim's relatives and, lastly, by the victim's relatives). However, alcohol abuse was similar to that found in general population, except for direct victims who showed a higher prevalence. With these data, the authors confirmed that the degree of impact of the terrorist attack conditioned the presence of mental disorders (in the study, for example, 62.4% of the victims had some kind of mood disorder). Also, we can lay stress on the finding that the prevalence of anxiety disorders was doubled in this sample with respect to the general population. Furthermore, they observed in the persons studied a gradient showing that the greater the impact the higher the prevalence of at least one of the disorders mentioned. On the other hand, they found that attacks with explosives were clearly related to a higher risk of symptoms of anxiety-depression. Finally, they observed that the risk of having the psychopathology studied was increased if there was a history of any psychiatric condition, whether in the family or personal; if the attempt was indiscriminate (with explosives) and if the victim perceived little social support in the immediate environment he/she inhabited.

The main limitations of this study, as the authors stated, were due to the characteristics of the measurement instrument used, because it is sensible and its specificity is high, therefore, it can indicate an elevated rate of false positives. However, the authors recognized that, even considering this possible over-diagnosis, prevalence rates in victims were much higher than those for primary care (whose mental health values were lower than those for general population).

All in all, we find in the specialized literature a number of research papers centred on the study of the Posttraumatic Stress Disorder; however, very few are focused on other possible psychopathological alterations. Therefore, we could highlight as regards this paper, the fact that it took into consideration the analysis of other psychopathological manifestations of victims and also compared them with populations that had not experienced life "disastrous" events and that would not have a PTSD. It is interesting to underscore that Baca *et al*. regarded the relationship established between the psychopathological disorders herein studied and the PTSD, either as a symptom frequently associated with PTSD or as a late consequence of the posttraumatic pathology and of the

deterioration it causes in the life of individuals who are victims of attacks.

North, C.S., Nixon, S. J., Shariat, S., Mallonce, S., McMillen, J.C., Spitznagel, E.L. and Smith, E. (1999). Psychiatric Disorders among survivors of the Oklahoma City bombing. *JAMA, 282*, 755-762

The intentional disasters of the first magnitude (with national and international repercussions) have aroused on several occasions, the concern of researchers for the study of the psychological effects on the population affected. The event that triggered off this study is the Oklahoma City bombing in the year 1995.

From the occurrence of this event it is sought, like in other research papers, to measure the impact on the mental health of the survivors who were directly exposed to the explosion, examine in particular the posttraumatic stress disorder (PTSD), diagnostic co-morbidity, functional damage, and identify the psychopathology predictors after the attack that will serve as a guide in mental health intervention work in future disasters.

The 255 survivors, older than 18 years, who participated in this study, were selected from a confidential register of the Department of Mental Health in the city of Oklahoma. One of the most important requirements to form part of the sample was to have been directly exposed to the explosion (between 46 and 148 m. from the point of detonation). Out of 255 persons, 182 were included in the study (71%) due to several reasons: impossibility to establish contact, 32; refusal to participate on a justified basis, 35; not wanting to do the interview without a justified reason, 6. To fulfill the objectives set, North *et al*. used the *Diagnostic Interview Schedule* (DIS)/ *Disaster Supplement*, which is based on the diagnostic criteria of the DSM-III-R (APA, 1987) and which they applied systematically over 6 months. The use of this instrument is very appropriate since it provides information about 8 psychiatric disorders: posttraumatic stress disorder, major depression, panic disorder, generalized anxiety, somatoform disorders, alcohol-related disorders, drug-related disorders and antisocial personality disorder. The interview also provided socio-demographic data about the level of functioning and the treatment received. Subjects interviewed with the *Disaster Supplement* were asked about the experiences lived in the attack, such as the degree of exposure to the event, how family and friends were affected, and the physical damage suffered. Although these interviews were not conducted exactly in the same way to every person being studied, in most cases they were carried out completely in a face-to-face situation (63%), in others, and for reasons not made explicit in the paper, they conducted by telephone (25%) or even begun in person and completed by telephone (12%). Apparently, this procedure has no impact on outcomes, possibly because of that, the authors themselves do not overvalue this fact and do not consider it an obstacle in any case.

The analysis of results show striking and even alarming values, since 45% of the persons interviewed have a psychiatric disorder after the attack, and 34.5% a PTSD, particularly when the symptoms of such disorders interfere with daily activity, work, and they experience negative changes in their interpersonal relationships. The variables that strongly predict these psychological effects on the population are the direct exposure to the explosion, gender (female) and history of psychiatric disorder. The authors have also found that around 40% of those persons need medication to cope with the situation and a large number of persons are receiving a mental health treatment (69%), and, more specifically, a psychiatric treatment (16%). Also, it is important to point out that as regards the group experiencing a PTSD (DSM-III-R criteria) the symptoms that appear more frequently belong to group B (intrusive re-experiencing) and group D (increased activation). North *et al*. provide a graphic representation in which one can clearly see the increase in these diagnostic indicators, as well as appreciate that the symptoms of group C (avoidance and blunting of general reactivity) are considerably fewer as compared with the aforementioned. However, said symptoms of avoidance and blunting of general reactivity are significantly associated with a psycho-pathological history and co-morbidity after the disaster, as well as with mental health therapy being received, an association which is not evidenced in the criteria of groups B and D. To make clear these products, the authors also present results in the form of bar diagrams, and they provide the findings obtained in other pieces of research conducted, in which similar disasters are considered; this serves to demonstrate the clinical significance that these disorders have and to support the data obtained.

All in all, the results from this work we have chosen, suggest that avoidance and blunting symptoms can be useful as an effective procedure in the PTSD screening and can identify earlier more clinical cases in the acute period after the disaster. Psychiatric co-morbidity can help to identify cases of functional damage and those in which a treatment is necessary. However, the presence of these symptoms, belonging to group C, does not reach pathological levels; therefore, treatment thereof will not be administered with medical interventions but with programs of health education, social support and state of wellbeing.

Verger, P., Dab, W., Lamping, D. L., Loze, J. AND. Deschaseaux-Voinet *et al*. (2004). The psychological impact of terrorism: an epidemiological study of Posttraumatic Stress Disorder and associated factors in victims of the 1995-1996 bombings in France. *American Journal of Psychiatry, 161*, 1384-1389.

The terrorist acts which this paper deals with refer to the wave of bombings that struck France during the period from July 1995 and December 1996, which resulted in 12 people killed. Specifically, seven devices exploded, most of them in the city of Paris, in underground stations. An Islamic fundamentalist organization claimed responsibility for the attacks. Focusing on these events, in the year 1998, Verger *et al*. conducted retrospective research work using a cross-sectional design to know the prevalence of the Post-Traumatic Stress Disorder and the factors preceding its development in persons who were direct victims of these events.

Recruitment of the sample was carried out with the cooperation of the non-governmental organization *SOS Attentats*. The members of said Organisation contacted the 228 citizens who had sought indemnification from the French Guarantee Fund for Victims of Terrorism, and who had also undergone a process of assessment by independent experts, whereby their condition of direct victims of terrorist attacks was confirmed[2]

It should be pointed out that this paper contrasts with others developed within this field (Galea *et al*., 2002; Schlenger *et al*., 2002), in which definitions enabling to determine whether a subject has been directly exposed or not to the traumatic event, are established by the researching team itself. Worthy of note is that this document does not mention, perhaps due to the lack of accessibility, the criteria handled by the group of experts during the investigation they carried out. Finally, the sample consisted of 196 adults (out of the initial 228), all of them civilians and French-speaking, who gave their consent to participate in the research.

The data collection was made through telephone interviews in which 20 interviewers participated. For the PTSD assessment, a 22-item standardized instrument was used which was based on the DSM-IV criteria (APA, 1994); according to the authors, such criteria were broken down into several items to make them more understandable; questions were asked about symptoms relative to the event, the duration thereof, and the impact on the social and working life of subjects. Also, each of them had to be scored according to a 5-point scale. It should be added that the appropriate psychometric properties (reliability, specificity, sensitivity and concurrent validity) of the instrument had been previously highlighted.

The questionnaire format was also used to know aspects relative to socio-demographic characteristics, risk factors and effects on physical health. A rate of severity of the physical injuries suffered was obtained, and data were compiled about the perception of threat (2 items), the suffering from hearing problems (4 items), psychiatric history (3 items) and even about changes in physical appearance. In the latter case, the 4 items used came from the *Burn-Specific Health Scale* (Munster, Horowitz and Tudahl, 1987). The statistical processing of the data was based fundamentally on the regression analysis (univariate logistics and multiple logistics).

As regards the results obtained, it is worth mentioning that the mean period of time between the traumatic event and the moment in which the assessment was made was 2.6 years (d.t.= 0.6). On the other hand, the PTSD prevalence was 31.1%, which was higher among people who had suffered serious consequences for physical health, as compared with the other participants, whose physical sequels were mild or moderate.

[2] The French Guarantee Fund for Victims of Terrorism required all citizens applying for indemnification to undergo this kind of evaluation; in this case, out of the 450 initial applicants, only 288 decided to continue with the examinations required.

On the other hand, the regression analyses showed that the factors that predict the PTSD occurrence are: age (range between 35 and 54 years), gender (female), having experienced severe physical injuries or changes in physical appearance as a consequence of the events, and lastly, having felt threatened during such events. Furthermore, no association between PTSD prevalence and a previous psychiatric history, the place where the attacks occurred or the number of years that passed therefrom.

As aforesaid, this study deals with the PTSD prevalence and the predictor factors thereof in direct victims of the attacks that took place in France. The data contributed constitute a source of support for the identification of those who are in a high risk situation for the development of a psychopathology after an event of this kind. Likewise, worthy of note is the inclusion of the variable changes in physical appearance, demonstrating its value as a PTSD predictor, which suggests the need of including said variable in future research conducted within this field. However, some considerations appear to be important to be taken into account. In the first place, excluded from the sample were all those subjects who could be indirect victims of these events in whom it is also possible to find symptoms associated with PTSD. In the second place, data on the participants' initial reactions to the events of interest are not included either, therefore, neither the evolution of the PTSD prevalence in this group of subjects nor factors associated with its persistence over time can be known. In the third place, if we start from the fact that measurements were made 2.6 years after the occurrence of the event, it is possible that during said period participants were able to experience other traumatic events, an aspect which has not been controlled and that might affect the prevalence detected. Although, in this respect, we should point out that in the assessment of PTSD, questions about symptoms relative to the attacks were included.

Bleich, A., Gelkopf, M. and Solomon, Z. (2003). Exposure to terrorism, stress-related mental health symptoms, and coping behaviours among a nationally representative sample in Israel. *JAMA, 290,* 612-620.

The research conducted by Bleich *et al*. is one of the first pieces of research carried out in the field of continuous (not punctual) terrorist attacks, specifically those which have been being launched by the Al-Aqsa *intifada* in Israel since later September 2000. As a consequence of 560 terrorist attacks (with cold steel, and fire weapons, shooting, breaking into houses, and self-immolation with bombs), one year and a half later, in April 2002, 473 persons had died and 3,856 were injured. The authors examined the emotional and cognitive impact caused by continuing terrorist acts on the population of Israel over that period. Specifically, their aim was to determine the level of exposure to terrorist attacks and the prevalence of trauma-related stress symptoms, symptoms of posttraumatic stress disorder (PTSD), sense of safety and, lastly, to identify correlates of the psychological sequels and the strategies of coping with continuing threat, and terrorism.

The selection of participants was carried out by a random strata sampling method, using a database containing socio-demographic data of owners of telephone lines. The computer system randomly chose the telephone numbers of potential participants within each stratum, identified by the following variables: age, residence in cities or communities, being new immigrants of European, Asian or African origin. Out of 742 persons surveyed by telephone, 512 (older than 18 years) agreed to participate in the study; all of them expressed verbally their informed consent. With this careful sampling method, the authors report a 4.5% maximum error of representativity of the population of Israel, which is not a significant amount. It is necessary to point out that trying to obtain a nationally representative sample in such a heterogeneous country as Israel is a commendable aim which is difficult to achieve. Despite all the efforts made by Bleich's team, care should be taken when it comes to generalizing the results obtained, especially in subpopulations not having a telephone that were not exposed to the objective threats of terrorism, and people younger than 18 years who, on the other hand, would be at a higher risk of developing symptoms in general or the PTSD in particular.

As regards this research article, worthy of note is the thoroughness with which the authors tried to carry it out from its planning. Thus, they started from operating definitions of *terrorist attack* and *objective threat*. They divided the sample according to the place people lived in (cities with a higher incidence of suicidal attacks and troubled communities with respect to the rest of the cities). Furthermore, they controlled the degree of exposure to the attack by dividing participants into six groups: (1) non-exposure; (2) exposure of a relative/friend, not injured; (3) exposure of a relative/friend, injured or dead; (4) only personal exposure; (5) personal exposure, exposure of a relative/friend, none injured; (6) personal exposure, exposure of a relative/friend, with (an) injured and/or dead relative(s) or friend(s).

The gathering of information was made by means of telephone surveys using a battery of standardized instruments, modified by the authors according to the results of a prior pilot study conducted with 50 persons. They thought items would be more understandable by telephone, and they sought to guarantee the maintenance of the appropriate psychometric properties. However, the method used for gathering information and the adjustments made to the instruments by the authors (without validation in a larger population) is criticizable.

Specifically, the instruments applied were the *Stanford Acute Stress Reaction Question* (SASRQ) by Cardena, Koopman, Classen, Waelde and Spiegel (2000), they added to it a simple question to consider possible depression and sadness; a modified version of the COPE (Carver, Séller and Weintraub, 1989), to which they added questions concerning the strategies they used when attacks occurred, about the verification of their relatives' and friends' safety; whether they looked for information in the radio or TV news or they avoided it; and if they asked relatives and friends for help. They also applied the *Children's Future Orientation Scale* (Saigh, 1997) as modified by them, with which they assessed the future orientation. They also formulated specific questions to gather information about the sense of safety, self-efficacy and help-search behaviours.

With respect to the results obtained, it can be inferred that the continuing terrorist attacks have a significant impact on mental health of citizens, which is greater in women than in men. In the sample studied, 76.7% showed trauma-related signs, 37.4% had symptoms of PTSD for at least one month (the average was 4 symptoms per person) and 9.4% met the diagnostic criteria for PTSD; 58.6% felt depressed or sad. However, these findings appear to show a moderate impact as compared with the virulence and frequency of the terrorist attacks experienced; the authors themselves considered that it was milder than what they expected to find in that context.

On the other hand, most of the Israeli population studied coped with the terrorist attacks constructively and with flexibility, specifically, they used coping strategies associated with emotional health, among them, active information search, receiving and giving emotional and instrumental support. The majority of participants demanded little or no professional help, expressed optimism about their personal future and the future of Israel and expressed self-efficacy with regard to their ability to function in a terrorist attack. Probably the most satisfactory explanation for these findings is that given by the authors driven by the *accommodation effect*, that is to say, the stress and the distress caused in the beginning by traumatic events tend to diminish when they occur again. Similar results have been found in other situations of continuing attacks, such as the Second World War, the Gulf War, etc.

Finally, no association was found between the level of exposure (even if the person was injured) and the intensity of the symptoms of PTSD or other distress indicators. This finding, highlighted in other research papers, would reflect the fact, according to different authors, that the psychological impact of a national trauma is not limited only to those who experience it directly.

All in all, we have chosen this research article, in comparison to so many articles written about the specific case of September 11, on account of its innovative contributions as regards the psychopathological impact of continuing threats and/or terrorist threats on the citizens who experience them. In fact, it is interesting to verify, even taking into account all the limitations and critique of the study, that the psychological (cognitive and emotional) response of the human being in such threatening and adverse situations is adaptive and employs healthy coping strategies. Therefore, the reading of this paper will surely give rise to the researching of *resilience*, an area of study of incipient interest on a national and international scale.

Cohen, R., Alison, E., McIntosh, D., Poulin, M. and Gil-Rivas, V. (2002). Nationwide Longitudinal Study of Psychological Responses to September 11. *JAMA, 288,* 1235-1244.

The aim of this paper is to inform about the scope of psychological responses after a national traumatic event. Specifically, the objectives are focused on identifying the predictor variables in the experiencing of symptoms of posttraumatic stress disorder, in anxiety about future risks and global stress, as a consequence of the September 11 attack. In addition to limiting themselves to the psychological repercussions, the authors take into account the analysis of coping strategies used by people after the terrorist attack and their possible relationship in the appearance and/or maintenance of stressing symptoms. Also, the socio-demographic variables and the time of exposure to the traumatic event are controlled, either directly or indirectly. Furthermore, other variables prior to the attack have been considered, such as physical and mental health history and lifetime exposure to stressful events, in which case people were sounded out on the age at which they experienced the event and the duration of the attack.

In view of these considerations, it is quite commendable that the authors took into consideration both retrospective (in spite of the difficulties it entails) and prospective variables.

A mechanized sampling method was used which consisted in a survey of people who had a telephone line and access to the Internet; though it is a system quite common in the United States of America which facilitates the randomization of the sample as regards the control of the socio-demographic variables (along with the fact that practically all the population has both communication media at home) in our country, it is a somewhat innovative system and, above all, scarcely used. However, among the advantages of this procedure we can point out the sample size obtained and the economy of effort and time it takes. To achieve the objectives Cohen *et al*., use a longitudinal design (1, 2 and 6 months), though as expected, and despite the economic reward offered, the number of participants decreased progressively. The first sample was obtained between September 20 and October 4 (n = 2,729) representing 78% of the 3,496 subjects that formed part of the initial panel of the survey. Data from the second sample were collected between November 10 and December 3 (n = 933) and the third sample group was made up of those persons contacted between March 16 and April 11, 2002 (n = 787). All participants were older than 18 years.

The instruments used to obtain the information were: the abridged version of the *Stanford Acute Stress Reaction Question* (SASRQ) by Cardena *et al*. (2000) which is a specific measure of the acute stress disorder, so it was only applied to the sample collected during the first month. To the other two samples, instead, the *Impact of Events Scale-revised* was applied, which gathers, with proven validity and reliability (Weiss and Marmar, 1997), some of the posttraumatic stress symptoms of the DSM-IV (APA, 1994). The correlation between both measures (acute stress and posttraumatic stress symptoms) was significant (r = 0.55, p 0.001). For the assessment of global stress, the *Hopkins Symptom Checklist* (HSCL) by Derogatis, Lipman, Rickels, Uhlenhut and Covi (1974), and the Brief Symptom Inventory (BSI-18) by Derogatis (2001) were used. In both instruments, data are obtained about the degree to which every person responds with symptoms of stress, depression, anxiety and somatization. For the study of coping strategies, the Brief COPE by Carver (1997) was applied. This instrument measures the frequency of use of said strategies which are listed in the instrument. Said scale was applied only to the first sample, i.e., at the time nearest the attack; in this respect, it should be pointed out that the authors have not properly considered the time stability in coping responses.

From the analysis of the results it is inferred that 70% of the population studied showed symptoms of posttraumatic stress after two months. This percentage did not disappeared completely though it declined significantly after six months (5.8%). Based on that percentage, the sample was divided in two ways (model 1, including significant data from health history prior to 09/11, and the severity of the exposure to the attack; and model 2 including, in addition to the significant data of model 1, the coping strategies significantly associated with posttraumatic stress symptoms) to determine which variables strongly predict the presence of such symptoms. Findings indicate that the most elevated symptoms of posttraumatic stress are associated with: female sex, marital separation, psychopathological history before 09/11 (anxiety or depression), suffering from physical disorder before the attack, degree of direct exposure in the attack, and quickness and effort in the use of coping strategies after the attack. Furthermore, global stress is related to the severity of the loss due to the attack and the coping strategies employed. In this respect, it should be pointed out that the assessment of the coping strategies immediately after the attack becomes an excellent predictor of posttraumatic stress symptoms as well as of global stress. Also, results are consistent with other studies about the important role played by the use of certain coping strategies traditionally classified as positive or active coping strategies (planning, searching for support, acceptance) as a "shock-absorber" of anxiety and stress, while avoidance behaviours (giving up, denial, feeling of guilt, etc.) are usually identified as negative and result in increased global stress (Carver, Pozo and Harris, 1993; Perczek, Burke, Carver, Krongrad and Terris, 2002).

In spite of the significance of these findings, the authors point out that the effects of an event of this kind are not limited to those who experience it directly, and the degree of response is not predicted, simply by objective measures of exposure to or loss from the trauma; thus, the appearance or not of symptoms over time depends on the use of specific coping strategies shortly after the occurrence of the event.

In particular, disengagement from coping efforts can signal the likelihood of psychological difficulties 6 months after the traumatic event.

Galea, S., Vlahov, D., Resnick, H., Ahern, J., Susser E. *et al.* (2003). Trends on probable Post-Traumatic Stress Disorder in New York City after the September 11 terrorist attacks. American *Journal of Epidemiology, 158*, 514-524.

This research article, like many others developed within the field of the effects of the September

11 attacks on people's mental health, is focused on the estimation of the prevalence of the Posttraumatic Stress Disorder (PTSD) and of subthreshold PTSD in adults residing in the metropolitan area of New York. However, unlike the majority of the other studies, it is focused on determining the changes which, over time, may take place in said estimations. The authors also propose to analyze the relationship that may exist between socio-demographic characteristics and the degree of exposure to the events, and the persistence of the PTSD. To achieve these objectives, Galea *et al*. conducted three different studies 1, 4 and 6 months from the attacks. In all three cases, random-digit dialling was used to contact people and ask them for their participation. Selected samples were quite large with 998, 2,001 and 1,570 participants, respectively. Besides, the areas of the city from which participants were selected were then extended; i.e., in the first case, the sample was made up only of people who resided south of 100th Street in Manhattan; in the second, of people living in the city of New York, though the subjects belonging to the previous condition (residing south of 110th Street) were overrepresented (residing south of 110th Street); and in the third case, adults residing in the metropolitan area of New York were also included, those who belonged to the two preceding conditions being overrepresented.

The gathering of information was carried out by means of a structured questionnaire administered by telephone and available in three languages, which indicates that the heterogeneity of the New York population was taken into account . It should be added that measures were the same in the three studies so that comparisons could be established. Authors obtained data relative to the socio-demographic characteristics of participants and controlled the occurrence of traumatic events during the 12 months prior to the attacks and within the period of time after such attacks, as well as the proximity to the place where the events occurred.

Also, they established categories to classify the subjects directly affected by the catastrophe, though no measures of indirect exposure to the traumatic event were taken into account. If we focus on the psychopathological manifestations considered, we should highlight that this is one of the few papers about this issue which used structured interviews linked to DSM-IV criteria (APA, 1994); they specifically employed the module to measure the PTSD of the National Women's Study. In the three assessments the current presence of PTSD and subthreshold PTSD was measured, and only in the last two, the persistence of said disorder from September 11 was also taken into account. Moreover, to measure the occurrence of panic attacks during the first few hours after the attacks, a modified version of the diagnostic interview of the Centers for Disease Control and Prevention, 1989, was used.

In spite of the significance of the aspects described, it appears that the authors did not collect data relative to the psychopathological history prior to September 11 in any of the three assessments. However, worthy of note is that in the PTSD assessment the fact that the content of symptoms alluded to the terrorist acts in question was taken into account and that in the case of panic attacks, symptoms occurring during the first few hours right after said events were computed.

As regards the results obtained, it is important to underscore the investigators' caution in comparing the socio-demographic characteristics of the three groups of interviewed people with the estimations of said characteristics drawn from a population survey of the year 2000.

These analyses did not show significant differences, therefore, it is concluded that the samples of participants are demographically comparable with the general population. In the second place, data evidence a quick decline in prevalence both of the PTSD and the subthreshold PTSD in the general population 6 months after the attack; specifically, in those who resided nearer the place where the events occurred (south of 110th Street in Manhattan), the PTSD prevalence was 7.5% one month after the event, while 6 months after the attack, it was already 0.6%. Moreover, it could be observed how said estimates of the PTSD and subthreshold PTSD prevalence were consistently higher, in the three assessments, in persons directly affected by the event, than in those who were not. However, it is interesting to highlight, as regards the latter group of participants, that 6 months after the terrorist attacks, it constituted one third of those who met the criteria for PTSD. Therefore, it seems that events of these characteristics may have psychological effects on a large scale, including mainly those who experience them directly, but also general population.

On the other hand, the variables that predicted the occurrence of the PTSD after the attacks were: marital status (belonging to a couple, actually), social support (low), number of traumatic events experienced during lifetime (4 or more), number of stressors in the last twelve months (2 or more) and having experienced stressful events after September 11. On the other hand, categories relative to exposure to the traumatic event significantly associated with a Posttraumatic Stress Disorder after the attacks allude to: living south of 14th Street in Manhattan, having experienced the attacks in person, having been in the World Trade Center when the events took place, having been injured during said events, having feared being hurt or dead, having experienced the death of a relative or friend, having participated in rescue efforts, and finally, having lost the job as a consequence of the attacks. It should be added that of the participants who met the criteria for PTSD from September 11, 19.7% continued meeting them 6 months after the attacks. In this respect, the only significant predictor was having lost the job as a consequence of these events.

In general, we can say that this paper constitutes one of the few that ventured to study the prevalence of PTSD and subthreshold PTSD right after the occurrence of the September 11 attacks and its changes over a period of six months, which allows us to have a more complete picture of the effects that situations of this kind may have on persons in the beginning and of the future evolution of these initial reactions. However, we cannot lose sight of the fact that we are including cross-sectional studies and that, in order to have full knowledge of the development of symptoms, a longitudinal or prospective design is more convenient. On the other hand, it has the added value of

offering us a detailed analysis of the PTSD occurrence predictors after terrorist acts, as well as of predictors of the PTSD persistence over six months. All these data are especially relevant to the objective of orienting and prioritizing the interventions according to the needs, in the difficulty and uncertainty scenario which normally accompanies this type of events.

Vlahov, D., Galea, S., Resnick, H., Ahern, J., Boscarino, J.A., Bucuvalas, M., Gold, J. and Kilpatrick, D. (2002). Increase use of cigarettes, alcohol, and marijuana among Manhattan, New York, residents after the September 11th terrorist attacks. *American Journal of Epidemiology, 155*, 988-996.

There are very few papers that deal with the increase in the use of substances such as marihuana, alcohol or tobacco, after far-reaching terrorist attacks and, precisely this has been one of the reasons to include it in this section along with a brief comment. It is evident, after going over the scientific literature on the subject we are concerned with, that variables on which investigators focus basically refer to psychopathological disorders and very especially to the experiencing of posttraumatic stress. We have highlighted the importance of these problems for mental health, but it is also true that it is necessary to consider the significant role that the control of impulses can play so that substance use should not result in addiction.

The authors start from the following three hypotheses: 1) there is an increase in the consumption of tobacco, alcohol and marihuana after the attack, 2) the increase in the use of substances is associated with increased Posttraumatic Stress Disorder and depression after the disaster and 3) there is an association between the type of exposure and the increase in the use of said substances.

To answer these hypotheses, the gathering of data took place between the 5th and the 8th week after the fateful date of September 11. The sample consists of 988 persons, older than 17 years, who lived south of 110th Street in Manhattan since it is an area in close proximity to the World Trade Center (WTC). To contact the participants, they used the random-digit dialling technique through which information was also gathered. One of the instruments used was a structured questionnaire in two versions (Spanish and English) which was administered by telephone, and people were first asked if they had ever used tobacco, alcohol and/or marihuana and if the answer was affirmative, they were enquired about the frequency of said use both before and after the attack. Questions about the socio-demographic variables of the participants were also asked. Likewise, a list of life stressful events was used to determine if they had experienced any of them during the year prior to the attack.

The posttraumatic stress disorder was assessed with a modified version of the *Diagnosis Interview Schedule* and to determine the presence of depression, they used the modified and validated version of *Structured Clinical Interview*, both based on the DSM-IV criteria (APA, 1994).

For the analysis of the results, the sample was divided into four categories according to the geographic area of residence with relation to the proximity to or distance from the WTC. From said analysis it can be inferred that 28.8 % of the affected survivors had significantly increased the use of any of the three substances in the period after the attack; taking refuge in alcohol is the most frequent situation (24.6%), followed by consumption of tobacco (9.7%) and less frequently of marihuana (3.2%). Thus, this finding confirms the first hypothesis and suggests that the increase in the use of "drugs" after a disaster can become a significant problem. On the other hand, the persons who had significantly increased the use of tobacco and marihuana had a diagnosis of both disorders; PTSD and depression, while the increase in the use of alcohol only occurs among persons with diagnosed depression. These results, in addition to answering the second hypothesis, reveal that the use and increase in the use of different substances is associated with the presence of different psychiatric co-morbidity conditions. The mood disorder constitutes here one of the risk factors and it is significantly associated with the consumption of alcohol. Anyway, between five and eight weeks may be too soon to speak of dependence or abuse of substances; if this study had been extended by a few months, results could have been more conclusive in this respect.

As regards the third hypothesis, findings suggest a significant increase in the use of tobacco in those persons who had a closer exposure to the attack. In spite of the significance that these results may have, the authors recommend prudence since during the period participants were interviewed, the city of New York was in a state of alert out of fear for future attacks; to this we should add as a stressing factor the economic problems the city was involved in (we should remember its effect on the stock market). It is risky, therefore, to generalize the data, since there may have been other concomitant variables that have an influence.

We have herein commented on the most important results, but it should be mentioned that in this paper, Vlahov *et al*. take methodologically into account a large number of variables which though they do not show significant results have complicated the design, which is a commendable fact worthy of note.

Henry, D. B., Tolan, P. and Gorman-Smith, D. (2004). Have there been effects associated with the September 11, 2001, terrorist attacks among inner-city parents and children? *Professional Psychology: Research and Practice, 3*, 542-547.

This article is very innovative in spite of the fact that it analyzes, as many others, the effects that the 09/11 attacks have had on the citizens' mental health. Most of the studies conducted so far lack a base line of data prior to the attacks that might determine the role of the pre-existing stressors in the posttraumatic reactions to the attacks. In this respect, we have chosen this paper because it is one of the few that analyzed measures pre- and post-09/11 of different psychological variables, and for the support that it may mean as regards the results. Therefore, it gives us the possibility of knowing to what an extent stress symptoms were really due to the psychological impact suffered as a consequence of the attacks or if, on

the contrary, such possible alterations were already present before such attacks.

The study was conducted within the context of a thorough longitudinal prevention investigation (*School and families educating children: SAFEChildren*) that Henry and his team were already conducting. Their main objective was the analysis of risk predictors for crime and drug-addiction in African American and Latin children in Chicago. Therefore, the authors planned the investigation independently of the attempts of September 11; they had already made six assessments at that time, prior to those analyzed in this paper. Due to the nature of the investigation, the instruments they administered were not selected for the assessment of the direct effects of the attacks. However, they had the chance of assessing the possible consequences with measures of psychological wellbeing, feelings of safety and, educational practice, both in parents and children.

In this article, the authors studied on a comparative basis the results of two assessments carried out 100 days before and 100 days after the attacks, with respect to the results of the six assessments which had already been made. It is worth pointing out that it lacks a detailed description of the sampling; however, it appears in prior investigations conducted by the authors to which they refer. As regards its composition, we can observe the reduction in number of participants in the last assessments (from 281 participants in the first six assessments to 53 in the last or post 09/11 assessment); despite the economic reward participants were offered.

The data was collected by means of individual interviews conducted with the parents (or guardians) and the children conducted by qualified and trained professionals randomly assigned to each family. Standardized instruments with appropriate psychometric properties were used, specifically: the *Parent Observations of Classroom Adaptation-Revised Scale* (POCA-R, Kellam, Brown, Rubin and Ensminger, 1983), the *Sense of Safety Scale* (Henry, 2000), the BDI (Beck, Emery, Rush and Shaw, 1979), the *Fear of Harm Scale* (Richters and Martinez, 1993), the subscale *Family Beliefs of the Family Relationships Scales* (FRS; Tolan, Gorman-Smith, Huesmann and Zelli, 1997), and the subscale *Supervision and Rules* of the questionnaire *Parenting Practices* (Gorman-Smith, Tolan, Zelli and Huesmann, 1996).

The studied variables were: fear of harm caused by parents' violence, shy behaviour, feeling of safety in children, anxiety, depression, beliefs of parents as regards the family and, supervision and rules both in parents and children. Also, they considered the possible effect of the season (summer/autumn) in which they obtained the information on the characteristics studied.

As regards results, after the application of the t-test and Welch's procedure to offset the inequality of variances, the authors did not find increases in depression or anxiety symptoms either in parents or in children after the attacks. However, contrary to what was expected, they found a significant effect on the measures of fear of harm caused by violence, those obtained post-09/11 being lower than those obtained pre-09/11. The authors explained that this result was due to the decrease (from the year 2000) in the number of violent crimes in the City of Chicago. Measures of family beliefs increased post-09/11, which was possibly associated with the historical events of September 11th. But the most outstanding effects were those caused on the measures of supervision and rules both in parents and children, with higher scores in both cases, that is to say, they became stricter after the attacks (when concern about future attacks increased) both as regards the time to go out and compliance with the rules, In general, Henry *et al*. attributed the differences between their findings and those of other studies mainly to the explicit reference of the consequences of the attacks both in the interviews carried out, and in the media and the immediate social context.

All in all, according to the authors, the historic events that occurred on September 11, in accordance with the results obtained and in comparison to the predictions made by several psychologists, do not appear to have long-lasting effects on parents and children (not directly affected), as far as symptoms of depression, anxiety or the feeling of safety are concerned. However, in spite of the significance of all the aspects described, several considerations could be made: in the first place, research was conducted in a population with elevated rates of criminality and within a crime prevention program. Second, the families studied belonged to the most economically disadvantaged areas of the city.

Third, the persons studied were not direct or indirect victims of the attacks, and fourth, the effect of the time that passed (specifically, 100 days) from the attacks until the gathering of information was not controlled. Lastly, it should be highlighted, as the authors themselves point out, that the persons who are accustomed to daily crime and violence in the neighbourhood they live are likely to have a certain tendency to stress inoculation in relation to the psychological effects that terrorist acts may cause.

And finally, we want to mention other publications which, although they are not included among the preceding ten, constitute significant contributions to the subject-matter discussed. In this respect, worthy of note is the journal *Psychiatric Annals*, directed at continuous psychiatric training, two successive issues of which, published in the year 2004 (volume 34, N° 8 of August, and volume 34, N° 9 of September), dealt with the study of psychiatric effects related to disasters and terrorist activity. In the first part (issue number 8) there is a description of the usual reactions to disasters, the assessment of the mental health needs after the disasters, the effects thereof, and terrorism in culture (collective trauma), psychological *resilience* and the psychological effects of the handling of human remains (the importance of the mental health of the security and health forces that intervene after an attack). This issue contains details of the psychiatric consequences following the bombings in 1998 of the United States Embassy in Kenya. In the second part there is a description of the effects of the "weapons of mass destruction", methods to handle behavioural responses to potential terrorism are identified, the effects of this kind of events and of disasters on children and their families are discussed, and background

and proposals to respond to the psychological repercussions of *agroterrorism* or of the disruption of the nutritional chain are provided. We also underscore that the journal *Families, Systems & Health* has a special section in its issue Nº 1 (volume 22) which contains articles providing guidance about how to carry out investigations after the attacks of September 11, taking into account the changes and outcomes, and other aspects relative to how adolescents and young adults live in these times of frequent terrorist attacks. Also, this publication underlines that the American Congress must recognize the need of investigating psychological *resilience* and includes one article about the promotion of health and *resilience*. On the other hand, stress is laid on the recently published book "*Superar un trauma: el tratamiento de las víctimas de sucesos violentos*", which is more focused on the intervention with persons who have been exposed to traumatic events. The author of this book (E. Echeburúa), deals with, among other issues, the assessment processes and therapy with persons who have sustained psychological harm as a consequence of a trauma. Also, Echeburúa has analyzed this time, on the opinion pages of the newspaper EL PAÍS (November 30, 2000) and with relation to ETA-related terrorism, the psychopathological components of the fanatic supporters of a political ideology, the risk and maintaining factors that makes a person become a terrorist and keep that line of action, as well as the fronts on which action should be taken to prevent this kind of social phenomenon. In Spain, worthy of note are the contributions of Urra, Navarrete, amongst others, who have examined different psychological aspects of the victims of terrorism in some of their publications.

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