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Mental disorders and the internal armed conflict in Guatemala

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Introduction. The Guatemalan society was exposed to an internal armed conflict during the period from 1962 to 1996. During these years, the civil society suffered multiple traumatic events. The objective of this study is to understand the psychological impact that the conflict had on the mental health of the Guatemalans.

Methods. A review of articles published between 1962 and 2004, in the databases Medline, Lilacs, Embase, PsycLit-Infon, Cochrane Library and Pilots was conducted. The articles that were selected found mental disorder prevalences in Guatemalans through standardized instruments.

Results. Eight studies were found to demonstrate, in general, elevated prevalences for mental disorders in different population groups affected by the violence. For the depression ranges, the prevalence was between 38.8 % and 41.8 %; for anxiety symptoms intervals between 27.7 % and 54.4 %; for sleep problems, 75 %, and for posttraumatic stress disorder (PTSD) studies with low frequencies from 2 % to 11.8 % and other studies that demonstrated higher prevalences from 32 % to 52 %.

Conclusions. These mental disorders prevalences can be interpreted as elevated when compared with population studies of persons not exposed to armed conflicts where the PTSD ranges generally go from 0.5 % to 11.7 %. This permits the inference that these high frequencies are probably related to traumatic experiences of the war in Guatemala and in exile.

Key words:
Combat disorders. Mental health. Psycho-social intervention. Posttraumatic stress disorder and Guatemala.

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Trastornos mentales y conflicto armado interno en Guatemala

Introducción. La sociedad guatemalteca estuvo expuesta a un conflicto armado interno durante el período

de 1962 a 1996. Durante esos años la sociedad civil estuvo sometida a múltiples eventos traumáticos. El objetivo de este estudio es conocer el impacto psicológico que tuvo el conflicto sobre la salud mental de los guatemaltecos.

Métodos. Una revisión de artículos publicados entre 1962 a 2004 en las bases de datos Medline, Lilacs, Embase, PsycLit-Infon, Cochrane Library y Pilots. Se seleccionaron los artículos que originaron prevalencias de trastornos mentales en guatemaltecos a través de instrumentos estandarizados.

Resultados. Fueron encontrados ocho estudios epidemiológicos que demuestran en general elevadas prevalencias de trastornos mentales en diferentes grupos de poblaciones afectadas por la violencia. Para la depresión, rangos entre 38,8 a 41,8 %; para los cuadros de ansiedad, intervalos entre 27,7 y 54,4 %; para problemas del sueño, 75 %, y para el trastorno de estrés postraumático (TEPT), estudios con frecuencias bajas que van entre un 2 a un 11,8 %, y otros estudios que demuestran prevalencias mayores, entre un 32 a un 52 %.

Conclusiones. Estas prevalencias de trastornos mentales pueden ser interpretadas como elevadas cuando se comparan con estudios poblacionales de personas no expuestas a conflictos armados y en donde los rangos de TEPT van de manera general entre el 0,5 al 11,7 %, permitiendo inferir que estas frecuencias altas están probablemente relacionadas a las experiencias traumáticas de la guerra en Guatemala y del exilio.

Palabras clave:
Disturbios de guerra. Salud mental. Intervención psicosocial. Síndrome de estrés postraumático. Guatemala.

INTRODUCTION

Guatemala forms a part of the countries of the Central American isthmus, with an approximate population of 11 million inhabitants¹. This country has a recent history of 34 years of internal armed conflict, which ended with the peace agreement between the government and the Revolutionary National Unity of Guatemala (URNG) in December 1996.

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The civil society was the one that directly and indirectly suffered the policy of violence and military control by both armed forces (Guatemala Army and URNG).

In its work of documenting violations of human rights and acts of violence linked to armed confrontation, the Commission on Historical Clarification of the United Nations (CHC) in Guatemala recorded a total of 42,275 victims, including men, women and children, based on 7,338 testimonies collected. About 23,671 of the victims corresponded to arbitrary executions and 6,159 to forced disappearances. Of those fully identified, 83 % were indigenous Mayas and 17 % were non-indigenous ladinos². Another equally important report was performed by the Archbishop's Office in Guatemala, in its Recovery of the Historical Memory (REHMI) project. Until 1998, this report received 5,180 testimonies of victims and witnesses of human rights violations, documenting a total of 55,021 violations³.

The CHC verified that responsibility for 93 % of the violations recorded falls on the State of Guatemala, including the National Army, the Civil Self-defense Patrols, the Military Commissioners, other State safety forces and the Death Squadrons in this category. The CHC attributes 3 % of the responsibility of the violations to the guerrilla force and 4 % to others/unidentified².

Other authors⁴⁻⁶ also estimate between 150,000 and 200,000 civilians killed and one million internal displaced persons. Melville and Lykes⁶ report about 350,000 exiled Guatemalans mainly living in Mexico and the USA.

The magnitude of these damages is reflected by the number of violations of human rights committed during this conflict, as well as by the long and short term effects it had on mental health, negatively affecting not only the personal setting but also interpersonal relationships and socio-cultural and political interactions of the country⁷.

This review aims to make a comparative analysis of the different studies on the prevalence of mental disorders related with the war experiences in the Guatemalan population, both inside as well as outside of the country, and the recognition of the traumatic events related with the armed conflict in Guatemala. This knowledge should serve as a basis to establish future research projects and psychological care in Guatemala.

METHODS

Study design

A review of the literature on epidemiological studies, within the context of war and mental harm in Guatemalans.

Database

A review was performed of the articles published during the period from 1962 to 2004 in the following databases:

Medline, Lilacs, Embase, Psycit-Infon, Cochrane Library and Pilots. A search was done in the following languages: English, Spanish, Portuguese and Italian.

To document the traumatic acts in the Guatemalan population, the REHM and CHC reports were also reviewed.

Inclusion criteria

Selection of articles that provided mental disorder prevalences or that used standardized instruments (structured interviews or tracking questionnaire) in Guatemalans somehow affected by the war.

Only those articles that contemplated Guatemalans with traumatic experiences related with internal armed conflict in both their origin country of origin and in exile were included.

Exclusion criteria

- Articles that do not describe mental disorders in their studies or psychology care interventions were excluded.
- Studies with absence of standardized instruments.
- Studies that do not report prevalences or frequencies of mental disorders.
- Studies published before the armed conflict began in Guatemala in 1962.

Data collection

In the first stage, a search for information was performed in the electronic databases aimed at the health field (see data bank).

In the second stage, eight studies that fulfilled the previously proposed inclusion criteria were selected.

Data analysis

- For data systematization, eight of the studies that describe prevalence or mental disorder frequencies through standardized instruments were considered.
- A database was created on the psychological mechanisms and sequels, in order to systematize the acts and effects of the violence mentioned in each article.
- The data were analyzed jointly with two psychiatrists to discuss the findings discovered.

STUDY RESULTS

As can be seen in Table 1, eight publications that fulfilled the inclusion criteria were found. These cross-sectional obser-

vational studies and the REHM and CHC reports were mainly used as the basis for the analysis and discussion of the results.

Cervantes et al.⁸ studied 258 Central American and Mexican immigrants and compared them with 329 Anglo-Americans and Mexicans born in the United States, using the Symptom Checklist-90-Revised (SCL-90-R) and the Center for Epidemiology Depression Scale (CES-D). They found higher scores of stress and demoralization among the group that migrated to the USA in relationship with the non-emigrant group, demonstrated through the CES-D ($t = 2.02$; $df = 585$; $p < 0.05$). They also indicated that the group that immigrated for war reasons have a higher PTSD (52 %) and those that immigrated for other reasons 25 % ($F = 52.2$; $df = 4,582$; $p 0.0001$). On the other hand, no significant differences were observed between the groups for depression, somatization and anxiety disorders.

Clark et al.⁹ evaluated 472 Latin Americans (345 were Mexican, 77 were Salvadorans and 50 were Guatemalans), using the Minnesota Multiphasic Personality Inventory (MMPI). They found diagnoses of major depression (41.8 %),

generalized anxiety (27.7 %), adjustment disorder (27.1 %) and PTSD (2 %).

During the 1985 to 1992 period, Aron¹⁰ evaluated 44 Guatemalans and Salvadorans who lived in the USA. Sleep disorder prevalence was found in 75 % of the cases, 64 % of which spontaneously reported having nightmares related with traumatic experiences in their of origin countries.

Locke et al.¹¹ interviewed 22 immigrant (exiled) women and 22 immigrant (exiled) children with the Achenbach Child Behavior Checklist (CBCL) instrument and structured interviews and reported 32 % of children with PTSD and 9 % of women with the same diagnosis. They also concluded that many of the caretakers were not aware of the psychological symptoms of their children. No significant differences were found between the child genders.

Boyle¹² interviewed for four weeks 132 Guatemalans living in Guatemala. Their age and gender distribution was as follows: 66 women, 68 men, 43 % of whom were under 15 years and 57 % older than 15 years. The author made home

Table 1

Description of the articles included in the review of the literature

Author	Population	Traumatic events	Instruments	Diagnosis and prevalences
Sabin ¹⁴	183 Mayans exiled in Mexico	Political violence and exile	Harvard Trauma Questionnaire and Hopkins Symptom Checklist-25	PTSD: 11.8 %; anxiety: 54.4 %, and depression: 38.8 %
Locke ¹¹	22 exiled women and 22 exiled children	Political violence and exile	CBCL and structured interview	PTSD: 32 % (children) and 9 % (women)
Aron ¹⁰	44 Guatemalans and Salvadorans in the USA	Immigration and political violence	Interviews	75 % had sleep problems (nightmares)
Clark ⁹	472 Latin adults in the USA	Immigration, exile and political violence	MMPI	Major depression: 41.8 %; generalized anxiety: 27.5; adjustment disorder: 27.1 %; PTSD: 2 %, and others: 1.4 %
Miller ¹³	58 children in Guatemala and 36 children exiled in Mexico	Immigration, exile and political violence	CBCL semistructured interviews, WHQ	Reports little evidence of significant psychic trauma as PTSD
Melville ⁶	32 children in Guatemala and 36 children exiled in Mexico	Political violence exile and being orphaned	AQ	Intense fear (fright) in 87 % in children who lived in Guatemala and 57 % for those who lived in Mexico
Cervantes ⁸	258 Central American and Mexicans in the USA	Immigration	SCL-90-R CES-D	Central Americans who migrated due to the war with 52 % of PTSD
Boyle ¹²	135 adults and children in Guatemala	Violence related with armed conflict	Family Health Calendar Recording	10.3 % showed emotional symptoms related with: rage, anger, anxiety, depression and somatization

Source: Medline, Lilacs, Embase, Psycit-Infon, Cochrane Library y Pilots.

visits where she was informed on the symptoms and personal perception of the causes of this symptomatology. She indicated emotional or psychological symptom indexes such as: rage, anger, anxiety, depression and somatization, up to 10.3 % of her sample.

Miller¹³ used the CBCL instruments, semi-structured interviews and Women's Health Questionnaire (WHQ). The sample was made up of 58 children, between 7 to 16 years, living in exile in Mexico. There being little evidence of significant psychic trauma as PTSD or other psychiatric diseases in their sample, the author attributed this lack of psychiatric disease to the familial and community support that these boys and girls had in the refugee camps in Mexico and also because most of them were not witnesses of the political violence in Guatemala.

Through the Affect Questionnaire (AQ) instrument, Melville and Lykes⁶ compared two groups of guatemalan children. One of these groups ($n = 32$) lived in Guatemala and the other ($n = 36$) in Mexico. They reported larger percentages of psychological stress among those living in Guatemala: intense fear (fright) in 87 %, in relationship with those who lived in Mexico (57 %). No prevalences of psychiatric disorders were described in their study.

Finally, the most recent study is that of Sabin et al.¹⁴ who described a population of 183 Mayan-Guatemalan refugees in Mexico in their article. They state that 20 years after their settlement in Mexico, there was an 11.8 % prevalence of PTSD, 54.4 % of anxiety and 38.8 % of depression. They reported that women are more vulnerable to develop PTSD (65 %) and depression (68 %) in regards to men (35 % and 32 %). The authors also perceived a relationship between being a witness of disappearance of other persons (relative risk [AOR]: 4.58; 95 % CI: 1.35-15.50) and feeling close to death (AOR: 4.19; 95 % CI: 1.03-17.00) to develop PTSD, compared to non-exposure to these traumatic experiences.

DISCUSSION AND CONCLUSIONS

The range of traumatic events occurred due to the internal armed conflict, it being important to stress for their analysis that many of the impacts on mental health occurred in different historical contexts, under different policies of counterinsurgency and with socially, culturally and politically different groups, thus, readers should pay special attention when interpreting mental disorder prevalences in the different studies reviewed herein.

It is admitted that the dynamics during war, such as forced displacement, militarization of civil structures, creation of inter and intracommunity conflicts, culture destruction, especially of the Mayan culture, dismantling of any social organization, rupture of the social fabric, direct harm to persons and groups through torture, massacres and assassinations, sought to obtain the military control of the civil po-

pulation through destruction and extermination of persons, families or whole communities³. Recognition of these experiences is important because the traumatic events had different intensity and frequency for the persons and social groups that lived in urban areas in relationship to those that lived in rural areas during the war. The trauma and its psychological interpretations also have a different meaning when Mayan (indigenous) groups are compared with non-Mayan ones³. For example, the cultural interpretations that Mayan groups have of dreams and nightmares would not necessarily reflect mental disorders so that the frequency presented by Aron (75 %) should be distinguished in relationship to who the people presenting these sleep disorders are and in what social-cultural context they are found.

Since the 1980's, Garfield¹⁵ admits that the acts of violence during the war, such as «insecurity, family breakdown and the loss now being experienced in the region until now will likely affect the mental health of future generations». This has been partially demonstrated with the studies published up to now, finding studies that show that there is a high prevalence of mental disorders in the Guatemalans who have suffered acts of violence and repression^{6,8-14}. There is also a correlation between traumatic experiences and mental damage demonstrated in several studies^{9-11,14,16-18}. These data are also correlated with the international publications on war and mental disorder experiences^{19,21}.

We found that six of the eight studies were performed with exiled or refugee populations in Mexico, the USA and Canada^{8-11,13,14}. These exiled populations also had other experiences related to exile, in addition to the war experiences, such as, for example, the impact of the refuge, acculturation, being undocumented, among others. This makes the power of generalization difficult for the populations that have never been exiled or as refugees in other countries. This does not mean that the exiled population has more traumatic events in relationship with those who do not migrate, since it may also be considered that these non-emigrant persons were exposed for more time during the conflict and thus were exposed to a greater number of traumatic experiences.

Another aspect to consider in the results of the investigations is the cultural validity of the instruments. For example, the study that used the MMPI⁹ had two limitations, one in regards to the validity of this scale in the Latin refugee population and another in the accuracy of the MMPI to evaluate PTSD. Thus, the 2 % frequency of PTSD in their study should be considered cautiously. Therefore, in future studies that want to use the MMPI, it is recommended to review the scales derived from it (MMPI-2 with its sub-scales PK and PS) that have better specificities for Latin populations and for the PTSD disorder, respectively, should be reviewed.

In the case of Cervantes et al.⁸, accuracy of the SCL-90-R to generate PTSD diagnoses was improved with the addition of 11 items specifically developed for PTSD symptoms. The

author describes a 0.64 value for «Cronbach's alpha» coefficient in his instrument.

Finally, some authors^{6,12,13,22,23} described psychological effects that do not necessarily fit in a psychiatric nomenclature but which have great importance among the Guatemalans due to the community, social, cultural and political ways that this society manages. Some of these effects are described by Prilleltensky²³ in a qualitative study mainly as harm in the culture, social cohesion, communication and feelings of marginalization.

As main limitations, the scarcity of epidemiological studies with larger and representative samples of the population that was not exiled and that was also exposed to different experiences during the war is mentioned. These are, for example, the groups of internal displaced subjects, the population in resistance, indigenous populations and groups with different social, cultural and political roles. Knowledge of these specificities among the groups would logically lead us to a better understanding of the psychological impact of the armed conflict in Guatemala.

In spite of the limitations observed in the different studies, we could consider that there is evidence that the internal armed conflict in Guatemala has had a negative impact on the mental health of the Guatemalans, specifically for those who emigrated due to the war. The investigations show high prevalences of mental disorders and especially of PTSD. These prevalences have been described by some authors with low ranges that go from 2 %⁹ to 11.8 %¹⁴ until such high ranges as 32 %¹¹ or 52 %⁸ for PTSD. In other disorders such as those of depression, the prevalences are approximately 40 % [38.8 %¹⁴ and 41.8 %⁹] and we find frequencies for presentations of the anxiety pictures from 27.7 %⁹ to 54.4 %¹⁴. These mental disorder prevalences may be interpreted as high when compared with population studies of persons not exposed to armed conflicts and in whom the PTSD ranges are globally between 0.5% and 11.7 %²⁴⁻²⁶.

In summary, it can be stated that the high indexes of mental disorders in general and of the PTSD specifically reported in the studies make it possible to conclude that these disorders are probably very related with war situations and exile experienced by this population.

We recommend that more epidemiological studies be performed in Guatemala, with emphasis on the populations that were more exposed to traumatic experiences, to the high risk groups and, above all, to those who never migrated to other countries. The objective of this would be to establish mental health programs to decrease or reverse the damage produced by the war and political repression in this society.

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