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COLLECTIVE TRAUMA TRANSMISSION AND TRAUMATIC REACTIONS AMONG DESCENDANTS OF ARMENIAN REFUGEES

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ABSTRACT

Background: It has been suggested, mainly by case reports, that the collective trauma generated by mass calamities may be transmitted to, and have long-lasting effects on, new generations.

Aims: To investigate the psychological impact on contemporary Armenians of traumatic events suffered by Armenians during the period 1914–1918.

Methods: A descriptive, cross-sectional study investigating demographic and cultural characteristics of a population of 689 people of Armenian origin, residents of Greece and Cyprus. Subjects were recruited during a range of Armenian cultural, athletic or charitable events. The participants completed a version of the Post-Traumatic Stress Disorder (PTSD) (Self-Rating) Scale and a questionnaire including ad hoc questions regarding their relationship to the Armenian community, their attitudes and their source of information about the 1914–1918 events.

Results: Over a third (35.7%) of participants presented at least sub-clinical forms of such reactions during long periods of their lives. Women, older people, participants with a close relative lost during the events and those with strong connections to the Armenian community were more vulnerable.

Conclusion: The results are indicative of a long-lasting (though gradually fading) cross-generational traumatizing effect of the discussed events. Clinicians having to deal with patients belonging to cultural or ethnic groups that suffered persecutions in the past should take into account the probable effects caused by a trauma-transmission mechanism.

Key words: post-traumatic stress, Armenian, transgenerational transmission

BACKGROUND

Psychological trauma is a concept often used in the field of mental health originating from the era of Freud and Janet. The definition of the term 'trauma' has been the subject of debate. However, there is general consensus about the following elements: (a) an event having caused intensive stress; (b) the psychological difficulty of a person to control, assimilate and cope with the event; and (c) a cluster of symptoms including spontaneous re-experience of the event, autonomous arousal, behavioural and emotional withdrawal.

Modern psychiatric classification systems (DSM-IV, ICD-10) have adopted a rather restrictive approach with regards to the definition of traumatic stressors in order to avoid diagnostic overuse. Even so, it is reported that as many as 3%–10% of the general population present at some period of their life a post-traumatic stress disorder (PTSD), with half of the afflicted developing chronic syndromes (Kessler *et al.*, 1995; Zlotnick *et al.*, 1999; Cohen *et al.*, 2001). Many others present sub-clinical yet distressing expressions of PTSD (Vila *et al.*, 1999; Cohen *et al.*, 2002).

It has been argued that trauma-related conditions with distressing or disabling effects on the personality and social interactions can be caused not only by directly experiencing or witnessing a traumatic event, but also by indirect exposure through relating or communicating with the victims.

Terms such as trauma transmission, indirect, unconscious, secondary, or empathic traumatization, have been used to describe the phenomenon (Nagata, 1990; Major, 1996; Baranowsky *et al.*, 1998; Weiss & Weiss, 2000; Daud *et al.*, 2005).

Trauma can be transmitted either at a personal level or collectively (often, cross-generationally) (Yehuda *et al.*, 1998; Kira, 2001; Lev-Wiesel, 2007). The latter form of transmission was first studied in the children of Holocaust survivors (Barocas & Barocas, 1973; Kellermann, 2001a; Kellermann, 2001b). The mechanism of cross-generational transmission of trauma has been the subject of numerous studies (Prince, 1985; Auerhahn & Laub, 1998; Weingarten, 2004; Altounian, 1999). The following mechanisms have been proposed:

- Psychological processes (especially projective identification, by which thoughts and feelings of the victim are projected to persons in close proximity) (Rowland-Klein & Dunlop, 1998; Schwartz *et al.*, 1994).
- Family and societal influences (conveying fears, shame, guilt, group humiliation, schemata of revenge or reparation) communicated through narratives (Bar-On *et al.*, 1998; Volman, 1999; Linder, 2001).

During the 20th century, aside from the victims of the Nazi Holocaust, many ethnicities, minorities and other social groups have suffered persecution. Among them a large Armenian minority (about 2,600,000 people) living at the end of the 19th century in the eastern area of the Ottoman Empire suffered systematic persecutions that culminated during 1914–1918. Probably hundreds of thousands died during this period and the survivors became refugees. A total of about 20,000 persons of Armenian origin, descendants of these refugees, live nowadays in Greece or Cyprus, the rest being dispersed all over the world.

For Armenians the historical events of 1914–1918 are labelled as a genocide, the first of the 20th century. Many historical researchers have adopted this characterization, which has also been accepted by official resolutions of several European countries' parliaments (Campaign for Recognition of the Armenian Genocide, n.d.). Regardless of the exact character of these events (persecution, expulsion, genocide), the refugees and their descendants are likely to have been subjected to traumatizing influences.

The aim of the present study was to search for signs of secondary trauma related to the events of 1914–1918 among Armenians currently living in Greece and Cyprus. The main research hypothesis was that at least the older, second-generation Armenians, especially those having a close relative killed during those events, would often present characteristic post-traumatic symptoms. An additional aim of the study was to identify some common mental schemata and feelings generated by the same events among contemporary Armenians.

SAMPLE

The research protocol was approved by the Ethics Committee of the University General Hospital of Alexandroupolis and by the board of the Armenian Church of Greece.

A sample of 689 people of Armenian origin living in Greece or Cyprus participated in the study. Their participation was obtained through the following procedure.

Appropriate explanation of the study was given to the administrative boards of 15 Armenian cultural, athletic and charitable associations residing in Athens or other cities in Greece or Cyprus. Subsequently, questionnaires were distributed to 1,600 members of these associations. By taking the opportunity of a meeting or gathering at the premises of these associations, one of the members of the research team provided the attendants with information about the study and invited them to participate in an anonymous research aiming to register the psychological effects of the events of 1914–1918 on Armenians. The questionnaires were then given out and the attendants were informed that they could complete and return them at another meeting on a later date.

Additionally, these questionnaires were distributed to 150 people of Armenian origin who were personal acquaintances of the members of the research team and who did not have an active participation in Armenian community activities. These procedures were carried out during 2007. Eventually, a total of 689 individuals (560 members of Armenian associations and 129 non-members) returned completed questionnaires.

In order to avoid, as much as possible, the bias of gathering responses from members from the same family, we ensured that no respondent was a first or second degree relative of another. It is also worth noting that the sample ratio 560:129 of members and non-members of an Armenian association is roughly representative of the fact that the vast majority of Greek or Cypriot Armenians are members of Armenian cultural associations.

The sample consisted of 203 (29.5%) male and 486 (70.5%) female participants. The age range was very broad (16–91) with a median of 41 years. According to their age, participants were divided into those older than 60 (217, 31.6%), those 31–60 (297, 43.2%) and those up to 30 (173, 25.2%). These groups were regarded to be the second, third and fourth generation, respectively, of Armenians after the one who was contemporary to the events.

The majority of the participants (440) lived in Athens (62.2%). Of the rest, 125 (18.5%) resided in other cities of Greece and 110 (16.3%) in Cyprus. A small number of participants (14 people) reported another place of residence. With regards to level of education, 60 (8.7%), mostly elderly people, mentioned six years of education or less, 100 (13.6%) seven to nine years of education, 208 (30%) 10–12 years and 321 (47.5%) over 12 years (Table 1).

MEASURES

Each questionnaire included an introductory paragraph, which mentioned that the aim of the research was to study the psychological effects on contemporary Armenians, of the events of 1914–1918. The questionnaire consisted of three parts.

The first part included 10 statements, formed *ad hoc* for the aims of this study, intending to look into the relationship of the participant to the Armenian community (e.g. ‘I consider myself Armenian above everything else’, ‘I keep the traditions of the Armenian people’). The answers were given

Table 1
Demographic characteristics of the sample

		<i>n</i>	%
Gender	Male	203	29.5
	Female	486	70.5
Educational history (years)	< 6	60	8.7
	6–9	100	13.8
	9–12	208	30.0
	> 12	321	47.5
Age (years)	< 30	173	25.2
	31–60	297	43.2
	> 60	217	31.6
Residence	Athens	440	62.2
	Greece (other cities)	125	18.5
	Cyprus	110	16.3

on a five-part Likert type scale (least; a little; quite a lot; much; very much). The score range was 10–50. A high score indicated a stronger relationship to the Armenian community.

Furthermore, the participants were asked to report the following:

- Their main source of information about the events (answer options: (1) narratives by survivors; (2) other sources)
- The experience of a loss of a family member due the 1914–1918 events (answer options: (1) at least one loss; (2) no loss)

The second part of the questionnaire used PTSD Self Rating Scale (Davidson *et al.*, 1997) to search for traumatic experiences among the respondents. This scale has been recently translated and validated in Greek (Papageorgiou & Kontoagelos, under submission). For the purposes of the present study the scale was adapted in such a way as to search exclusively for traumatic reactions related to the events of the 1914–1918 period. After a very brief and emotionally neutral reference to these events, the respondent was asked to recall and report if there had ever been a period (of at least one month) during which the above events had had a strong impact on his/her life. He/she was then asked to report if during that period he presented, due to his/her knowing about those events, the symptoms described by the following 17 questions of the scale. There were three questions related to the revival of the trauma (e.g. ‘Have you ever had nightmares related to these events?’); four avoidance questions (e.g. ‘Have you avoided having thoughts or experiencing emotions related to these facts?’); 11 questions registering emotional arousal (e.g. ‘Have you felt irritable or been easily upset because of these events?’). The participants were asked to report how often they had had each described symptom during that period of time (never, rarely, quite often, often, constantly). There were two additional questions of a more general marking: (1) How intense, as a whole, was the experienced distress during the above-mentioned period (minimal, low, quite strong, strong, very strong)? (2) How long did this period of distress last (several months, several years, is constantly present)?

In the third part of the questionnaire, the participants were asked to write down other emotions and emotionally (positively or negatively) loaded attitudes generated by the events of 1914–1918. An open-ended list with 21 statements describing such attitudes (e.g. the recollection of those events brings about anger and/or feelings of guilt and/or pride for my origin and/or reinforces my volition to support all those who are being persecuted) was provided to them and they were encouraged to write down other analogous attitudes.

METHOD

The participants were divided in two groups: (1) those with clinical or subclinical expression of a traumatic reaction for (at least) one month during their lifetime; (2) those without such (clinical or subclinical) characteristics.

The first group consisted of those who fulfilled both of the following criteria:

- They reported (by answering the 17 questions of the PTSD Self Rating Scale) that for a period of at least one month they had had at least one symptom of re-experiencing the event, at least one avoidance symptom and at least three emotional arousal symptoms, each of them at least quite often.
- Considering the question about the intensity of their psychological distress during this period, they reported that it was at least ‘quite strong’.

The second group consisted of the rest of the sample.

The distinction between the two groups is based on DSM-IV criteria. According to this diagnostic system, a diagnosis of PTSD requires: (a) a traumatic stressor that (a_1) is persistently re-experienced, (a_2) causes at least three symptoms of avoidance, (a_3) causes at least two symptoms of increased arousal; (b) a duration of the disturbance of at least one month; and (c) clinically significant distress and/or functional impairment. Given this, it was considered that the reporting by some respondents of the minimum required number, kind and duration of symptoms, their direct causative attribution to the discussed historical events and their strongly distressing character constituted a sufficient reason for classifying these respondents to the group with subclinical characteristics of PTSD.

The two groups were compared to one another by the χ^2 method regarding demographic parameters (gender, age, place of residence, level of education). They were also compared using χ^2 concerning the main source of their knowledge about the events, as well as concerning the occurrence of at least one death among their close relatives during the events of 1914–1918. The two groups were also compared using the *t*-test on the mean scores in the questions about their relationship to the Armenian community.

The emotionally loaded attitudes that were the most commonly reported were been registered. The χ^2 method was used for exploring differences in the frequency of these beliefs between participants with and without at least subclinical forms of PTSD.

Logistic regression was conducted in order to investigate how much each of the above-mentioned independent variables (demographic characteristics, source of information about the events, existence of a death among relatives, degree of relationship to the Armenian community, attitudes

about the events), independently from one another, affect the dependent variable of belonging or not belonging in the group with at least subclinical expressions of PTSD.

RESULTS

A total of 246 participants (35.7% of the sample) reported a symptomatology compatible to at least subclinical traumatic reactions (as defined previously). The majority (166, 66.3%) had permanently active symptoms; for 44 (17.9%) they had lasted several years; while for a further 39 (15.8%) they had lasted several months.

Subclinical traumatic reaction was reported more frequently: (a) by women (39.3% women, 21.7% men, $p = 0.002$); (b) by the elderly (> 60 44.7%, 30–60 34.4%, < 30 21.4%, $p = 0.000$); (c) by residents of Greece (residents of Athens 39.1%, residents of other Greek cities 36.1%, residents of Cyprus 22.7%, $p = 0.000$); (d) by those who were informed about the events from eye witnesses' narrations (41.3% vs. 24.1%, $p < 0.000$); (e) by those who had lost a member of their family during the events (42.2% vs. 28.1%, $p < 0.000$) (Table 2).

Table 2
Comparison between subgroup of the sample with and without traumatic reactions

	Without traumatic reactions <i>n</i> (%)	With traumatic reactions <i>n</i> (%)	Comparison χ^2 (R)
Gender			
Male	148 (72.9)	55 (27.1)	9.294 (0.002)
Female	295 (60.7)	191 (39.3)	
Age (years)			
1–30	136 (78.6)	37 (21.4)	23.470 (0.000)
31–60	186 (62.69)	111 (37.4)	
> 60	120 (55.3)	97 (44.7)	
Education (years)			
< 6	28 (50.9)	27 (49.1)	5.448 (0.0142)
6–9	69 (69)	31 (31)	
9–12	136 (65.4)	72 (34.69)	
> 12	209 (65.1)	112 (34.9)	
Residence			
Athens	268 (60.9)	172 (39.19)	10.247 (0.006)
Greece (other cities)	80 (64)	45 (36)	
Cyprus	85 (77.3)	5 (22.7)	
Source of knowledge			
Eyewitnessing narrative	273 (58.7)	192 (41.3)	19.444 (> 0.000)
Other	170 (75.9)	54 (24.1)	
Victims in the family			
Yes	215 (57.89)	157 (42.2)	14.883 (> 0.000)
No	228 (71.9)	89 (28.1)	
Total	433 (64.3)	246 (35.7)	

Almost all of the participants (682, 98.3%) expressed the view that the 1914–1918 events amounted to genocide. The following attitudes were also expressed more often in relation to these events:

- Enhance community bonds between Armenians (74.9%)
- Enhance solidarity and support towards other persecuted people (72.1%)
- Generate anger (70.8%) and grief (64.4%)
- Create a feeling of sustained, uncompensated wrong (63.4%)
- Are a cause for national pride (52.4%)
- Increase the tendency for pro-social activities (50.5%) and hard working in order to achieve social uprising (40.8%)
- Reinforce family bonds (35%)
- Generate the belief of belonging to a persecuted community (30.8%)
- Cause thoughts of revenge (28.9%)
- Contribute to personal maturation (26%)
- Generate permanent distress (25.3%), fears (13.4%), shame (11.2%), helplessness (8%) and guilt (4.2%)

Many of these attitudes (supporting the persecuted, cause of national pride, pro-social attitudes, hard working, family bonds, revenge, sense of maturation, persisting distress, fears, shame, helplessness, guilt) were more often reported by the subgroup with subclinical PTSD (Table 3).

The results of the logistic regression indicate four variables that contribute significantly to belonging to the group with at least subclinical PTSD:

Table 3
Attitudes towards the events of 1914–1918

Attitudes	Within the total sample (%)	Within the subgroup with traumatic reactions (%)	<i>p</i>
Enhancement of community bonds	74.9	72.4	0.272
Supporting the persecuted	72.1	77.2	0.027
Uncompensated wrong	63.4	64.6	0.680
National pride	52.4	60.2	0.003
Prosocial attitudes	50.5	57.3	0.009
Will for hard working	40.8	46.7	0.019
Endurance	38.3	49.6	0.000
Family bonds	35	45.5	0.000
Thoughts of revenge	28.9	35.4	0.007
Sense of maturity	26.1	35.8	0.000
Persistent distress	25.3	36.2	0.000
Fears	13.4	21.1	0.000
Shame	11.2	20.3	0.000
Helplessness	8	13	0.001
Guilt	4.2	8.9	0.000

- Gender (odds ratio: 1.78, *CI* 95%: 1.25–2.52, $p = 0.009$)
- Age (odds ratio: 2.33, *CI* 95%: 1.60–3.69, $p = 0.001$)
- Place of residence (odds ratio: 1.91, *CI* 95%: 1.18–2.93, $p = 0.001$)
- Relationship to the Armenian community (odds ratio: 1.11, *CI* 95%: 1.05–1.20, $p = 0.001$)

Being female, being old, residing in Greece and being strongly related to the Armenian community increase the probability of belonging to the subgroup with subclinical PTSD.

The logistic equation yielded the correct classification (either to the group with or without subclinical PTSD) of 526 participants (76.13% of the sample). Among those with subclinical PTSD, the equation differentiated correctly 137 persons (56.1% of the subgroup).

DISCUSSION

The main finding of this study is that a large proportion of the Armenian people who participated (35.7%) reported various distressing symptoms of a traumatic character, which originated from knowing about the 1914–1918 events. Most of them reported that these symptoms have been present throughout their life.

The burden is heavier on women, the elderly and those who were more directly involved (either by having been informed about the events by an eyewitness or by having had a death in their family). The first finding is in agreement with the known higher prevalence of other forms of PTSD among women; the second and third are probably to some degree interdependent. Previous research has suggested that temporal distance and indirect involvement seems to appease the intensity of traumatic reactions (Danieli, 1981; Danieli, 1985; Sorcher & Cohen, 1997).

People with more intense traumatic experiences reported a stronger connection to the Armenian community. This connection continues to exist even when the rest of the variables are controlled using logistic regression. Previous research has also indicated that the more vulnerable members of a persecuted community have greater difficulty in becoming autonomous and independent of family and community influence (Barocas & Barocas, 1980; Ofman, 1981; Gertler, 1986; Rose & Garske, 1987; Shiryon, 1988). Another possible explanation of the above-mentioned findings is that the most vulnerable people develop strong community bonds in order to alleviate their strong negative experiences (such as fear, insecurity, guilt, helplessness) through the support offered by the community.

There is a widely shared view among Armenians that Cypriot-Armenians are more incorporated into modern Cypriot society than their Greek-Armenian counterparts are incorporated into modern Greek society. This incorporation may have a protective role and may be one explanation for Cypriot-Armenians being less affected by the trauma.

The total sample and especially the subgroup with the subclinical symptoms often reported not only undesirable but also desirable attitudes (e.g. pro-social tendencies, increased endurance, sense of maturity) related to the experience of the 1914–1918 events. Some case reports have also indicated the probability of analogous positive consequences following traumatic experiences, especially collective ones (Felsen, 1998; Felsen & Erlich, 1990).

The present study has some limitations. The sampling methodology could not ensure that the sample was entirely representative of the Armenian community. For example, women were over-represented, probably because they attended social meetings more often. The fact that people who

attend such meetings, made up the majority can also be considered to have biased the sample. The majority of those who participated in this study were probably more closely related to the collective identity and memory of Armenians, if compared to the whole Armenian community in Greece and Cyprus.

Another restriction of the study is that it did not exclude the possibility that some (or all) of the reported symptoms could have been caused by another traumatic experience. The design of the study does not allow such a distinction to be made.

Furthermore, the questionnaire used aims mainly to register the traumatic effects of a direct personal trauma. The effects of collective trauma transmission to new generations may take various forms surpassing the standard symptomatology. Some writers have mentioned that these effects are expressed rather as a sensitization towards additional personal stress experiences rather than as standard clinical syndromes (Sigal & Weinfeld, 1989).

It is possible that the participants were prone to either exaggerate their distress (e.g. for reasons of political or ideological condemnation of the discussed events), or minimize it (e.g. in order to avoid presenting themselves or their community as being psychologically afflicted and therefore 'weak'). The distribution of the frequency of subclinical reactions among the subgroup of the sample (e.g. considering the gender of the respondent or the source of his/her knowledge) brings some evidence for the sincerity of the given answers.

As already mentioned, this study does not aim to determine the prevalence of a clinical symptom or disorder but to explore some dimensions of the distress caused by a collective trauma. The presented results indicate that, almost a century later, the negative consequences along with forms of positive elaboration of the same traumatic experience though fading from generation to generation are still present, active and widespread.

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