

**The prevalence and associated socio-demographic variables of Posttraumatic Stress Disorder (PTSD) among patients attending Primary health care centres in the Gaza Strip**

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**Background:** This study is part of an epidemiological investigation of mental health problems among patients in primary health care clinics in the Gaza Strip. It was conducted in 10 primary health care clinics selected at random, both amongst governmental and the main non-governmental primary health care providers. **Objective:** of the present study was to investigate the prevalence of PTSD among patients attending primary health care clinics in the Gaza Strip and the association between socio-demographic variables and PTSD. **Method:** Every second patient in each clinic aged between 16 and 55 years, except those who came for referrals, vaccinations, insurance or driver's license examinations, prenatal care, reports, pregnancy problems or emergencies, was approached and invited to participate. A total of 670 patients were asked to participate in the study, after consulting their GP, with 661 agreeing to take part. **Results:** It was found that the overall prevalence of PTSD symptoms in primary health care patients was 29%, and significantly higher among females than in males ( $P=0.001$ ). Prevalence of PTSD among those exposed to traumatic events was 36%. Highly educated patients were more often exposed to traumatic events, but the prevalence of PTSD was lower than among less educated patients. Males exposed to traumatic events reported a lower prevalence of PTSD than traumatized females.

### **Introduction:**

The Gaza strip is one of the most densely populated areas in the world, with around 2000 people per Km. More than 79% of the population are registered as refugees, and 54.6% are living in camps (UNRWA, 2001). The total population of Gaza is around 1.200.000 living on 60% of the land, while only a few thousand Israeli settlers have settled in the remaining 40%. (PCBS, 2000). In December 1987, the first Palestinian uprising (the Intifada) took place in the largest refugee camp, Jabalia. Children and youths, who chose to face Israeli occupation with stones, burning tyres and roadblocks, led it.

During the last 50 years, the Palestinian population has been exposed to a series of traumatic events including imprisonment, torture and human rights abuse, house demolitions, land confiscation and the resulting indignities of unemployment. Thousands of Palestinians were put in jail. Upon their release, they faced enormous social pressures as they attempted to re-integrate into both community and family life. In prison, many were subjected to systematic physical and psychological torture (El Sarraj et al, 1996), hundreds were killed, and many

thousands became disabled (HDIPI, 2001). Al Helou et al (1994) found that (89%) of a teenage group studied had a close family member who had been beaten by the Israeli army. Of those interviewed 56% had witnessed the arrest of their close family members, while 31% reported that they had close relatives in prison. Of the teenagers, 95% said that Israeli soldiers had broken into their homes on at least one occasion.

In a population-based study in Gaza, the prevalence of traumatic experience was 36% and PTSD was reported to be 19,5% (Qouta, 1998). However, among groups who have been exposed to exceptionally stressful situations, such as former prisoners, the prevalence was higher. El Sarraj et al (1996) reported that the prevalence of PTSD among survivors of torture was 40%. A recent survey conducted during the second Intifada (Al-Aqsa) in the Southern region of Gaza among children between the ages of 3-16 years and mothers between the ages of 21-55 years showed that, the prevalence of PTSD among children was 39% and 10% among mothers (GCMHP, 2001). Another study from the Middle East showed that the prevalence of PTSD among the Kuwaiti citizens four years after the Iraqi invasion of Kuwait was 28% (Al Naser et al, 2000).

Therefore, an epidemiological study of PTSD in this population would be of great theoretical and practical interest for several reasons:

- 0 Traumatic events are prevalent in the Palestinian community because of its long history of occupation and the Intifada.
- 1 There are no previous studies of the prevalence of PTSD in primary health care or of the behaviour of sufferers who seek help.
- 2 Mental disorders are the cause of stigma within the community and tend to be even worse among political prisoners. The Palestinian public views these individuals as heroes when they return from prison, and do not feel that they should therefore have psychological problems. These beliefs result in the denial of mental health problems. We have found that ex-political prisoners are using denial as a defence mechanism in order to establish a state of psychological balance. Qouta et al (1997) showed that achieving heroic fulfilment was the most common way of coping with political trauma among ex-detainees.

Previous PTSD studies have focused on the effect of exposure to specific forms of acute traumatic events (Hauff et al, 1994; Schnyder, 1996 and Mollica, 1998). Eberly et al (1991) indicated that the prevalence rate of PTSD among prisoners of war was 70.9%. In their meta-analysis of risk factors for developing PTSD when exposed to traumatic events, Berwin et al (2000) showed that female gender, lack of education, youth at the time trauma and previous exposure to traumatic events increased the vulnerability for PTSD. In a Norwegian study, Ingebrigtsen et al (1995) showed that prevalence of PTSD among Norwegian women (13.5%) was much higher than among Norwegian men (3.6%), and that males were exposed more to traumatic events (80%) than females (73%).

### **Study Objectives**

The main study objective was to investigate the prevalence of PTSD in primary health care clinics in the Gaza Strip. The study also aimed at investigating possible associations between PTSD and sociodemographic factors (place of residence, age, sex, marital status, educational status and employment).

### **Population and methods**

This study is part of an epidemiological investigation on mental health problems among patients in primary health care clinics in the Gaza Strip. In the Gaza Strip, primary health care (PHC) services are largely offered through two main health sectors: the governmental or public sector and the United Nations Relief and Work Agency (UNRWA). Public health services are available both to refugees and citizens who are covered by health insurance. Approximately 40% of the population are not insured (Barghouthi and Daibes, 1996). The remaining uninsured residents receive health services through charitable societies, non-governmental organizations, and/or the private sector. It is estimated that 33 PHC clinics are administered by the public sector in the Gaza Strip. UNRWA offers free primary health care only to registered refugees. UNRWA operates approximately 16 primary health care clinics throughout the Gaza Strip. The study was conducted in 10 primary health care clinics in the Gaza Strip. The clinics were selected randomly from the five regions that compose the Gaza Strip (the South, Gaza City, Middle region, Khan-Younis and Rafah). Five of these clinics belonged to UNRWA health services and 5 clinics to the public sector.

The systemic random patients' sample in this study was drawn from patients coming to consult primary health care physicians in these 10 clinics. Every second patient in each clinic aged between 16 and 55 years, except those who came for referrals, vaccinations, insurance or driver's license examinations, prenatal care, reports, pregnancy problems or emergencies, was approached and invited to participate in the study conducted by trained field workers during the months of June to December 1998. A total of 670 patients were asked to participate in the study, after consulting their GP, with 661 agreeing to take part. Of the 9 patients who refused to participate in the study, lack of time was the main reason given. Of the 661 patients who agreed to participate and received the questionnaire, 112 (17%) were excluded because they did not complete the questionnaire and declined their participation in the middle of their answers. The reasons for that were various; some were suspicious of the main reasons for the study, others were not convinced about confidentiality although they were not asked to write their names. The PHC clinic director provided the research team with a room to give patients privacy while completing the questionnaire. After assuring patients of confidentiality, the right to participate and the importance of the study, patients were given the self-reported checklist to complete. The field researcher was present to help participants to respond and clarify questions. If the patient was unable to read the questionnaire, the field researcher helped in reading and marking the responses. Each session took around 45 minutes to complete.

The PTSD symptom checklist used in this study lists 15 symptoms and asks respondents to answer «yes» and «no» to their presence (Allodi 1990). The cultural validity of the instrument was evaluated by El Sarraj et al (1996) through analysing its dimensions. A factor analysis performed revealed four factors accounting for 30% of the total variance of PTSD symptoms. The subsequent dimensions were “Re-experiencing”, “Avoidance of stimuli”, “Arousal exposure” and “Disturbance of social life”. «Re-experiencing,» included intrusive recollections of traumatic events, intrusive memories, and constant dreaming of trauma. Three items in the questionnaire ask if the person is having intrusive re-experience. According to DSM-III, at least one item is needed for the diagnosis of PTSD. The second dimension «Avoidance of any stimuli», is associated with traumatic events, and includes symptoms such as avoiding thoughts, feelings, activities, or people arousing recollections of traumatic events. There are six items in the questionnaire are concerned with avoidance. According to DSM-III, at least three items are required to be answered for a diagnosis of PTSD. «Arousal exposure»

includes numerous impairments such as concentration problems, and sleep difficulties. Five items in the questionnaire ask the person to indicate arousal exposure. According to DSM-III, in order to judge whether the person has this symptom he/she must answer positively on at least three items of the above. «Disturbance of social life», indicates significant impairment in social and other important areas of functioning. There are two items in the questionnaire indicating whether the person is experiencing disturbance of social life. All positive answers are given the value of “one”, and if the sum of symptoms for all dimensions exceeds 9, a person is considered to have PTSD.

Traumatic experience was assessed by the filter question: *«throughout a person’s lifetime, very distressing events sometimes happen that disturb them a lot; these events do not happen to most people. The kinds of very distressing events I mean are things like very serious accidents, seeing people killed, imprisonment, being tortured by soldiers or others, and so on. Have you ever experienced any events like these that disturbed you a lot and which you still remember?»*

### **Statistical methods**

Data analyses were undertaken using the Statistical Package for Social Science (SPSS). The chi-square test was used in order to detect possible relations in prevalence between groups. Logistic regression analysis was used in order to analyse possible associations between PTSD and selected sociodemographic factors in individuals exposed to traumatic events. The level of significance was set to  $P \leq 0.05$  (95% confidence intervals).

### **The Results**

The mean age of the participants was 30 years. Females represent 57% of the sample (table 1). Sixty-nine percent of the sample were refugees and 31% were citizens. When we looked particularly at refugees’ distribution with respect to where they were living, almost all those people living in camps are refugees (93.5%), while around 40% of those living in villages and half of those living in cities are refugees. Most of those who live in new areas are refugees (86%).

*(Table 1 is around here)*

### The prevalence of PTSD

The prevalence of PTSD symptoms among primary health care patients was 29%, and higher among females (34.4%) than males (21.7%),  $P= 0.001$  (table 2). With respect to educational levels, less educated individuals demonstrated a higher prevalence of PTSD than those with a higher education ( $P=0.005$ ). There were no significant differences in prevalence of PTSD between refugees and citizens of the Gaza Strip, likewise between the different marital status and age groups.

*(Table 2 is around here)*

Patients' re-experience of traumatic event was the most common symptom. Among the subjects with PTSD 76.7% met the DSM-IV criteria of persistent re-experiencing of traumatic event and 72.9% of the subjects reported intrusive memories while 35.7% had dreams or nightmares of the trauma. As an indication of the avoidance of stimuli associated with the traumatic event according to DSM-IV, 76.0% of the subjects met the avoidance criteria. Almost half of the subjects (49.4%) avoided reminders of their traumatic experiences, and more than half (55.2%) reported unhappiness and loneliness. Thirty five percent (35.5%) had poor concentration as an indication of patient hyper-arousal criteria. Finally, 47.4% of the subjects reported a change in their social life, and 37.3% reported changes in their values and personal philosophy or worldviews. Only 29.3% reported feelings of guilt. These results are not shown in the table.

### The prevalence of traumatic experience

Highly educated individuals reported a higher prevalence of exposure to traumatic events as compared to less educated patients ( $P= 0.002$ ), while there was no significant association between exposure to traumatic events and the other sociodemographic variables. (table 3).

*(Table 3 is around here)*

### Prevalence of PTSD among those exposed to traumatic experience:

Of those who were exposed to traumatic events, 36.4% met the DSM-IV criteria for PTSD. As was expected from the distributions of PTSD and traumatic event, those with less education who had been exposed to traumatic events reported PTSD more often than highly

educated participants ( $P= 0.000$ ) (table 4). Females who were exposed to traumatic events reported a higher prevalence of PTSD than males did ( $OR= 0.51$  ( $0.34- 0.77$ ),  $P= 0.001$ ).

*(Table 4 is around here)*

In order to analyse the association between PTSD among those exposed to traumatic events and other demographic variable such as gender, age and educational status, a logistic regression analysis and backward elimination method was performed (table 5). Using the PTSD status as the dependant variable and the patient's gender, age and educational level as independent variables. This analysis showed that only sex and educational levels were independently associated with PTSD when other variables were removed. The logistic regression model that fits the association between PTSD with gender and educational level shows that the educational level has more association with PTSD than sex

*(Table 5 is around here)*

### **Discussion:**

The study showed that the prevalence of PTSD among patients attending primary health care clinics was 29%, and higher among females (34.4%) than males (21.7%). The prevalence of PTSD among those exposed to traumatic events was 36.4%. Females subjects, and subjects with less education, are more likely to report PTSD than males and highly educated subjects, when exposed to traumatic events. .

The main strengths of the study was that it is considered the first to explore the prevalence and associated socio-demographic variables of PTSD among patients attending primary health care in the Gaza Strip, and the large patient sample decreases the chances of standard errors. The primary health care clinics were randomly selected from the main primary health care providers, which gave us the chance of getting patients from both refugee and citizens.

The limitations of the study were that despite showing the prevalence of PTSD within a PHC setting, this prevalence might not reflect the real mental health sufferings of the populations because on one hand, not all patient attending primary health care clinics were included in the study, on the other, many patients go to traditional healers and private sector. Those patients were not considered in this study, which raise the possibilities for future studies.

The results of the study must be interpreted in the context that it was conducted during a time of high stress due to the generally difficult situation in Gaza, and the stalemate in the Palestinian/Israeli peace negotiations. Indeed, when the Oslo Accord was signed Palestinians



invested lot of hope and high expectations that such an agreement would bring a bright and peaceful future. However, the failure of four years of Oslo agreement to bring tangible results has led to overwhelming frustration and a state of hopelessness and despair within the Palestinian community.

The study showed that males are less likely to develop PTSD than females. This result is consistent with other findings (Berwin et al, 2000; Ingebrigtsen et al, 1995). Other studies in the Middle East showed that Lebanese women reported higher psychological symptoms than males at the time Lebanese war (Farhood et al, 1993). During the Iraqi invasion to Kuwait, Al Khawaja (1997) indicated that, females were exposed to less traumatic event than males but scored higher psychiatric symptoms. In the Palestinian context, the vulnerability of PTSD among Palestinian women might possibly be explained by the fact that women often experience more stressful and negative events than men. A study carried out by GCMHP, Research Department showed that 63% of Palestinian women in Gaza were exposed to traumatic events (Qouta 1999). During the first Intifada, women were more actively involved in the struggle and their new duties intruded upon their traditional role as child bearers and carers. However, when the Intifada was over and the peace agreement was signed, the role of women returned to the original traditional position of housewife, where they are more likely to suffer from reduced social network than men who maintains their relations at least at work. In a recent study conducted by Hatab (2002) showed that family and social pressures imposed on Palestinian women are the most important stressors face women compared to political and economic ones. Also, women get less social support in crisis situations compared to men.

The study showed a significant association between educational status and PTSD. Despite highly educated patients being exposed to more traumatic events, they seemed less vulnerable to developing PTSD, which is consistent with previous studies (Shalev et al, 1996; Epstein et al, 1998; Armenian et al, 2000 and Brewin et al, 2000).

The relation between educational status and PTSD is of considerable interest in the international literature, especially the role of cognitive processing and its relation to post trauma reaction. Lazarus et al (1974) confirmed the importance individual's cognitive abilities to decrease anxiety and achieve adjustment through the individual's competence to recognise stressful situation and identify possible coping mechanisms. The cognitive process

theory proposed that mental schemata contained detailed information about the individuals' post-experience as well as the assumption and expectations regarding future events (Hollon & Kriss, 1984).

In the Palestinian context, it could be that highly educated patients repress and or deny the consequences of their traumatic experiences because of cultural stigma. Ullman and Judit (1996) indicated that educated patients are more likely to present their psychological sufferings in the form of medical conditions. In our culture, highly educated people usually seek the help of the private sector, believing that private sector is more confidential than public and non-governmental sectors. Moreover, in our clinical experience, a large proportion of educated people report their complaints in terms of "nervousness" and "forgetfulness", because it may be easier for educated in the Palestinian culture to admit these symptoms in comparison to other symptoms, which may seem to reflect weakness.

In fact, some other factors such as pre-trauma personality, post-trauma social support and the level of expectation of the occurrence of trauma have partially explained some of the differences in developing PTSD (McFarlane et al, 1998; Gold et al, 2000). It could be that highly educated people are more able to adjust stressful situations because of their greater intellectual maturity. Qouta et al (1995) showed that the more creative and intelligent Palestinian children were, the better they were able to cope and the greater their mental stability/health when exposed to traumatic events.

## References

- Al Helou M., and Johnson P.** (1994) The effects of the Palestinian Intifada on the behaviour of teenagers in the Gaza Strip. *Journal of Child and Youth Care*, **9**(4): 63-70
- Al Khawaja J** (1997) the impact of traumatic events on the psychological well-being of Kuwaitis who lived in Egypt and England during the Iraqi invasion of Kuwait. *Derast Nafseyyah J*, **7**(4): 628-641
- Allodi F** (1990) *Posttraumatic Stress disorders diagnosis criteria DSM-III-R modified* Toronto: Toronto Western Hospital
- Al Nase F, Al Khulaifi M and Martino C** (2000) Assessment of Posttraumatic Stress disorder four and one half year after the Iraqi invasion. *Int J Emergency Mental Health*, Fall **2**(3): 153-156.
- Armenian H, Masahiro M, Arthur M, Ashort H and Nune H** (2000) Loss as a determinant of PTSD in a cohort of adult survivors of the 1988 earthquake in Armenia: implications for policy. *Acta psychiatr Scand*, **102**: 58-64
- Barghouthi M and Daibes I** (1996) Infrastructure and health services in the Gaza Strip.  
[www.hdip.org/publication/gzsum96.html](http://www.hdip.org/publication/gzsum96.html)
- Brewin C, Andrews B and Valentine J** (2000) Meta-analysis of risk factors for posttraumatic stress disorder in traumatic-exposed adults. *Journal of Cardiology and clinical psychology* **68**(5): 748-766
- Eberly R, and Engdahl B** (1991) prevalence of somatic and psychiatric disorders among former prisoners of war *Hospital and Community Psychiatry* **42**(8):907-813
- El Sarraj E, Punamaki R L, Salmi S and Summerfield, S** (1996) Experiences of torture and ill-treatment and posttraumatic stress disorder symptoms among Palestinian political prisoners *Journal of traumatic Stress* **9**(3): 595-606
- Epstein R, Fullerton C and Ursano R** (1998) Posttraumatic stress disorder following an air disaster: a prospective study. *The American Journal of Psychiatry*, **155**(7): 934-938
- Farhood L., Zurayk H., Chaya M., Saadeh F, Mesheffdjian G and Sidani T** (1993) The impact of war on the physical and mental health of family: the Lebanese experience. *Soc. Sci. Med.*, **36**(12): 1555-1567
- GCMHP** (2001) Gaza Community Mental Health Programme report [www.gcmhp.net](http://www.gcmhp.net)
- Gold P, Engdahl B., Eberly R., Blake R., Page W and Fruch B** (2000) trauma exposure, resilience, social support, and PTSD construct validity among former prisoners of war. *Soc. Psychiatry Psychiatric Epidemiol*, **35**: 36-42
- Hatab S** (20002) Stress and coping styles as perceived by Palestinian Women in the Gaza Strip. MA theses, Ein Shamis University, Cairo, Egypt.
- Hauff E and Per Vaglum** (1994) Chronic PTSD in Vietnamese refugees: A prospective Community study of prevalence, course psychopathology and stressors. *J Nerv Ment Dis*, **182**: 85-90
- HDIP** (Health Development, Information and Policy Institute) (2001) *Health care under Siege II: the health situation of Palestinian during the First 4 months of the Intifada*. West Bank, Palestine (<http://www.hdip.org>)
- Hollon D and Kriss M** (1984) Cognitive factors in clinical research and practice. *Clinical Psychology Review*, **4**: 35-75
- Ingebrigtsen G, Sandanger I, Sorensen T and Dalgard O S** (1995) *Psotraumatisk stressforstyrrelse I Norge, forekomst og relasjon til sosialt nettverk* In Sosoalt helse and samfunn (eds.) Odd Steffen Dalgard, Elsa Dohlie and Mette Ystgaard Unierstetsforlaget
- Lazarus R, Averill J and Opton E** (1974) the psychology of coping: issues of research and assessment. In G.V Coelho, D Hamburg & J Adams (eds) *Coping and Adaption*. Basic Books, New York.
- McFarlane A and Yehuda R** (1998) Resilience, Vulnerability and the course of PTSD reactions. In Kleber R, Figley Ch and Berthold G.(eds.) *Beyond Trauma: cultural and societal dynamics*. NUM publishing corporation, New York.
- Mollica R, Mcinnees K, Pham TH , Fawzi M, Rphy E and Lien L** (1998) The Dose-effect relationships between Torture and Psychiatric symptoms in Vietnamese Ex-political detainees and a comparison group. *The Journal of Nervous and mental disease*, **186**: 543-553.

**PCBS** (Palestinian Central Bureau of statistics) (2000) *Press release of the survey: impact of the Israeli Measures on the Well-being of the Palestinian children, women and household*. Gaza, Palestine

**Qouta S** (1999) Depressed moods among Palestinian Women and its relation to some other variables, Paper presented at the *Third International Conference: Women in Palestine*. Gaza, Palestine.

**Qouta S., El-Massry M. and El-Sarraj E** (1998) *An Epidemiological study on the prevalence of stress related psychiatric disorders among Palestinians in the Gaza Strip*. Research department, Gaza community Mental Health Programme, Palestine

**Qouta S., El Sarraj, E and Punamaki RL.** (1997) Prison experiences and coping styles among Palestinian men: Peace and conflict. *Journal of Peace Psychology*, **3**(1): 9-36.

**Qouta S., Punamaki RL and El Sarraj E** (1995) the impact of the peace treaty on psychological well being: follow-ups study of Palestinian children. *Child Abuse and Neglect*, **10**: 1197-1208

**Schnyder U, Valach L and Dieter H** (1996) Trauma related disorders in psychiatrists' and general practitioners' private practice in Switzerland. *Journal of Trauma and Stress*, **9**(3): 631-640

**Shalev A, Peri T, Canetti L and Schreiber S** (1996) Predictors of PTSD in injured trauma survivors: a prospective study. *American Journal of Psychiatry*, **135**(2): 219-225

**Ullman S. and Siegel J** (1996) Traumatic Events and physical health in a community sample. *Journal of Traumatic Stress*, **9**(4): 703-721.

**UNRWA** (2001) *Fact sheets of the Gaza Strip*. Public Information Office, UNRWA, Gaza

Table (1) Sociodemographic characteristics of patients

Demographic variable	Total	
	No.	%
<b>Civic status</b>		
Citizens	171	31.
Refugees		1
	378	68.9
<b>Gender</b>		
Male		42.8
Female	314	57.2
<b>Age</b>		
16- 20	127	23.
21- 25		1
26- 30	128	16.0
31- 35	129	14.4
36- 40	130	14.9
41 and more	131	12.4
	132	18.4
<b>Marital status</b>		
Married	354	64.
Single		5
Previous married	355	31.
		7
	356	3.8
<b>Place of living</b>		
Camp	232	4
Village		2.
City		3
New areas	233	2
		3.
		9
	234	2
		5.
		9
	235	7.
		8
<b>Educational level</b>		
Primary school	38	6.
Not finished secondary school		9
Finished second but not univ.	39	54.
BA and postgraduate studies		8
	40	31.
		9
	35	6.4

Table (2) The prevalence of PTSD by socio-demographic variables

	Has PTSD		P-value
	NO.	%	
<b>All</b>	159	29	
<b>Gender</b>			0.001
Male	51	21.7	
Female	108	34.4	
<b>Place of living</b>			NS
Camp	80	34.5	
Village	34	26.0	
City	34	23.9	
New areas	11	25.6	
<b>Civic Status</b>			NS
Citizens	46	26.9	
Refugees	113	29.9	
<b>Age</b>			NS
16- 20	35	27.6	
21- 25	29	33.0	
26- 30	19	24.1	
31- 35	19	23.2	
36- 40	22	32.4	
41 and more	35	34.7	
<b>Marital status</b>			NS
Married	107	30.2	
Single	43	24.7	
Previously married	9	42.9	
<b>Educational level</b>			0.005
Primary school	16	42.1	
Not finished secondary school	93	30.9	
Finished second but not univ.	45	25.7	
BA and postgraduate studies	5	14.3	

Chi-square test for differences between categories

Table (3) The prevalence of trauma by socio-demographic variables

	Has trauma		P-value
	NO.	%	
<b>Gender</b>			NS
Male	184	(78.3)	
Female	250	(79.6)	
<b>Place of living</b>			NS
Camp	185	(79.7%)	
Village	107	(81.7)	
City		(73.9)	
New areas	36	(83.7)	
<b>Civic Status</b>			NS
Citizens	129	(75.4)	
Refugees	305	(80.7)	
<b>Age</b>			NS
16- 20	107	(84.3)	
21- 25	73	(83.0)	
26- 30	61	(77.2)	
31- 35	58	(70.7)	
36- 40	52	(76.5)	
41 and more	79	(78.2)	
<b>Marital status</b>			NS
Married	278	(78.5)	
Single	141	(81.0)	
Previous married	15	(71.4)	
<b>Educational level</b>			0.002
Primary school education	21	(55.3)	
Not finished secondary school	237	(78.7)	
Finished second but not univ.	146	(83.4)	
BA and postgraduate studies	34	(97)	

Chi-square test for differences between categories

Table (4) The prevalence of PTSD among traumatised, by gender and education

	Has PTSD		P - value
	NO.	%	
<b>Total</b>	158	36.4%	
<b>Gender</b>			0.001
Male		27.7)	
Female	107	(42.8)	
<b>Educational level</b>			0.000
Primary school	15	(71.4)	
Not finish secondary school	93	(39.2)	
Finished second but not univ.	45	(30.8)	

BA and postgraduate studies	5	(16.7)	
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Chi-square test for differences between categories



**Table (5) Association between PTSD among patients exposed to traumatic events and selected independent variables**

<b>Independent variables</b>	<b>B</b>	<b>SE (B)</b>	<b>DF</b>	<b>Sign.</b>
<b>Gender</b>				
Male	-0.4988	0.2151	1	0.0204
Female	reference			
<b>Educational level</b>				
Primary school	2.4588	0.7210	1	0.0006
Not finish secondary school	1.0389	0.5133	1	0.0430
Finished second but not univ.	0.7061	0.5262	1	0.1796
BA and postgraduate studies	reference			
<b>Constant</b>	- 1.2777	0.5101	1	0.0123