

Chronic post-traumatic stress disorder in mine victims".

(Clinical study of 20 cases in the Wilaya of Tlemcen Algeria

Otmani Naima naima.otmani@univ-saida.dz	psychology	Doctor at the University of Dr Moulay Tahir Saida, Algeria
DOI :		

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Abstract:

This study was on the topic: 'Post-traumatic neurosis in mine victims'. Where we made field visits to different areas of the state where the mine victims are located, and we filled out a data form prepared by the International Organization of Disabled Persons, with the purpose of collecting data and information on the variables of the study.

The problem we started with: do mine victims suffer from post-traumatic stress disorder?

To answer this, we used some techniques of clinical examination based on observation, interview, and a tool embodied in a questionnaire by a psychiatrist (Crocq Louis) and his colleague, psychiatrist Steinitz Albert), as well as the diagnostic criteria of the DSM mental manual of disease Tlemcen.

The study came to the conclusion that mine victims suffer from post-traumatic stress neurosis, due to the intervention of a number of factors:

Date of the event, age of the victim, impact of the accident, latency period.

In order to limit this study to the cases studied, the date and location of the study

Keywords: mine victims ; post-traumatic stress disorder

1. Introduction and problematic:

Individuals are constantly subject to accidents, we cite in this context the mine accidents where the individual is facing death, and, in case of

survival, finds himself with serious injuries including the loss of some of his limbs.

Mines dating from the time of the Algerian war of liberation. During this period two armed defense lines made up of anti-personnel mines, the Challe line and the Morice line, were established by the colonizer along the eastern and western Algerian borders. The war is over, but the effects and repercussions of the mines on individuals remain.

The presence of mines in the Tlemcen region threatens the lives of the people living there. We still hear about mine explosions and their consequences on individuals despite the relentless efforts to clean up these areas that threaten the existence of all living beings.

Mine victims suffer from various physical consequences. All parts of the body can be affected: the sense organs, the lower and upper limbs, the soft parts can be indelibly scarred. Victims may be disabled with reduced mobility.

Individuals who have been hit by a mine explosion are left with permanent physical scars. Isn't their physical suffering accompanied by psychological suffering? Do mine victims only suffer from physical disorders without any effect on their mental health? For the victim who has been threatened with death at a given moment, does the effect of the shock come to an end or will it accompany him/her forever in the same way as the physical after-effects?

A series of questions arise; and in this study the following problematic is then posed:

Do the victims suffer from a "chronic post-traumatic stress state?"

2. Bibliographic reference:

Human life is full of risks and accidents. These threats are rarely objectified because man has integrated the representation of "deferred" death, which is why he remains surprised in front of death; his state can even degenerate into the total loss of his health and psychological balance.

The sudden unexpected accident is characterized by the force and the intensity, the individual is then exposed to a violent emotional experience, which can cause a shock being able to shake its psychological order and to deteriorate its stability and its balance. This results in various psychological and physical consequences on the individual.

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In this regard, we quote (Sillamy.N, 1996: 266) who describes the shock as follows:

"A violent incident that can generate physical and psychological disorders affecting the structure of the personality, and if these symptoms do not appear we can consider it to be an undergone crisis; it is always followed by a series of mental and physical disorders that are often continuous and recognized as post-traumatic symptoms, including mainly: instability, vulnerability, psychological fatigue, amnesia, regression to the infantile stage".

As for the term "shock" in psychology and according to (Miloud Ouahab, 1999; 81) "it is used to refer to the phenomenon of breach and rupture of the personality through violent and powerful effects creating distortions and changes in the components of the personality and affective relationships".

After the First World War, which shook up many of his theoretical concepts, S. Freud, in "The Pleasure Principle and Traumatic Neurosis" (Essays on Psychoanalysis; 13), raised a new issue related to the repetition of dreams in traumatic neurosis. These reflections gradually led him to the elaboration of a drive dualism: life drive / death drive. He defines death anxiety as an equivalent of castration anxiety and thus links war neuroses and civil neuroses.

Also for S. Freud, the traumatic war neurosis leads to "a very pronounced weakening and disorganization of almost all the psychic functions".

"Up to now, we have not been able to form an exact notion of war neurosis or of traumatic neurosis in peacetime. What seemed to clarify and confuse the situation at the same time in the case of war neuroses was the fact that the same morbid picture could, on occasion, occur without any brutal mechanical violence. As for the common traumatic neurosis, it offers two features that can serve as a guide, namely that surprise and fright seem to play a role of the first order in the determinism of this neurosis, and that it seems incompatible with the simultaneous existence of a lesion or an injury... Fear represents a state that is provoked by a present danger, for which one was not prepared: what characterizes it principally is the surprise.

"The dreams of patients suffering from post-traumatic neurosis are characterized by the fact that the subject is constantly brought back to

the situation constituted by the accident and wakes up each time with a new fright. This fact is not surprising enough. It is seen as proof of the intensity of the impression produced by the traumatic accident, this impression, it is said, having been so strong that it returns to the patient even during sleep. There would be, so to speak, a psychic fixation of the patient to the trauma.

And in war neuroses, observers such as Ferenczi and Simmel believed they could explain certain motor symptoms by the fixation of the trauma.

Ferenczi had a different approach to trauma than Freud, for him trauma was not a resurgence of memory, but on the contrary an impossibility to verbalize. However, these after-effects can evolve into post-traumatic neurosis if the individual is not taken care of. The victim remains impregnated with the idea of imminent death, thus exacerbating his obsession and anxiety.

3. The study hypothesis:

Given the problem posed, the study hypothesis was formulated as follows:

Victims suffer from a chronic post-traumatic stress state.

4. Choice of study topic :

Personal (subjective) reasons:

The choice of this theme as a study reflects our interest. Indeed, our work as a volunteer psychologist in the Association "El Hayat for the motor handicapped" of the Daira of Sebdou, Wilaya of Tlemcen brought me into contact with various mine victims who suffer from problems whose various repercussions are a function of: age, social position and the responsibilities entrusted to them... The choice of the subject was therefore the natural progression of our fieldwork.

Objective reasons:

a. The absence in Algeria of any psychological study on mine victims.

b. The imperative need to take care of and take into account the psychological and physical danger that threatens the victims of mines

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who endure significant suffering due to: physical after-effects and psychological disorders, have pushed us to invest this complex and multidimensional field.

5. Importance of the study:

The importance of this study lies in the importance of the results that will be achieved following a clinical study of 20 cases of victims in Tlemcen.

Moreover, the importance of our study lies in the fact that it highlights the impact of the mine explosion shock on mine victims and allows us to draw up psychological care and support programs for these victims who remain in pain.

6. Objective of the study :

This study in its content aims to apprehend the reality of the experience of mine victims and their suffering of "Post Traumatic Stress". We will specify how this variable stands in relation to the mine victims and will dissect what is inapparent in their suffering.

7. Study Method:

Since this study is a descriptive research, a descriptive approach was considered. To do this, we considered the theory on the subject and we contacted people with motor disabilities who were victims of mines through the association "El Hayat for the motor disabled". This step allowed us to identify mine victims and to identify the "people" selected for this study.

8. Definitions and concepts related to the study :

The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) classifies post-traumatic

The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) classifies post-traumatic stress disorder as "Post-Traumatic Stress Disorder," the diagnostic criteria for which are specified as follows:

A. The subject has been exposed to a traumatic event in which both of the following were present:

(1) the subject experienced, witnessed, or was confronted with an event or events during which individuals may have died or been very seriously injured or threatened with death or serious injury or during

which his or her physical integrity or that of others may have been threatened.

(2) the subject's reaction to the event was one of intense fear, helplessness or horror. NB. In children, disorganized or agitated behavior may substitute for these manifestations.

B. The traumatic event is constantly relived, in one (or more) of the following ways:

(1) repetitive and intrusive memories of the distress-inducing event involving images, thoughts, or perceptions.

(2) repetitive dreams of the distressing event. NB. In children, there may be frightening dreams without recognizable content;

(3) sudden feelings or actions "as if" the traumatic event is going to happen again (including feelings of reliving the event, delusions, hallucinations, and dissociative episodes (flashbacks), including those that occur upon awakening or during intoxication) NB. In young children, specific reenactments of the trauma may occur;

(4) intense feelings of psychic distress upon exposure to internal or external cues that evoke or resemble some aspect of the traumatic event in question

(5) physiological reactivity upon exposure to internal or external cues that may evoke or resemble an aspect of the involved traumatic event.

C. Persistent avoidance of stimuli associated with the trauma and blunting of general reactivity (not pre-existing the trauma) as evidenced by the presence of at least three of the following:

(1) efforts to avoid thoughts, feelings, or conversations associated with the trauma;

(2) efforts to avoid activities, places, or people that evoke memories of the trauma;

(3) inability to recall a significant aspect of the trauma;

(4) a marked reduction in interest in, or participation in, important activities

(5) feeling of detachment from others or becoming alienated from others

(6) restriction of affect (e.g., inability to experience tender feelings);

(7) feeling that the future is "blocked" (e.g., feels that he/she cannot have a career, get married, have children, or have a normal life course).

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D. Presence of persistent symptoms reflecting neurovegetative activation (not pre-existing the trauma) as evidenced by the presence of at least two of the following:

- (1) difficulty falling asleep or interrupted sleep ;
- (2) irritability or angry outbursts;
- (3) difficulty concentrating;
- (4) hypervigilance;
- (5) exaggerated startle response.

E. The disturbance (symptoms in criteria B, C, and D) lasts for more than one month.

F. The disturbance results in clinically significant suffering or impairment of social, occupational, or other important functioning.

Specify if:

Acute: if the duration of symptoms is less than three months ;

Chronic: if the duration of symptoms is three months or more.

Specify if:

Delayed onset: if the onset of symptoms occurs at least six months after the stressor."

9. Limitations of the study :

This study is a survey of the experiences of mine victims at the level of the Dairas of the Wilaya of Tlemcen. It was conducted from 2011 to 2013.

It focused only on mine victims whose accidents occurred in the Wilaya of Tlemcen and who are registered at the association "El Hayat Association of the motor disabled of Sebdou", wilaya of Tlemcen, and was limited to mine victims who agreed to participate in the study; they are twenty (20) people: 19 men and 1 woman.

To do this, after the census of the mine victims' files, we summoned the 43 people and presented the study to them. Thus, 20 mine victims accepted to participate in this study.

10. Methodology of the field study :

A. Near-survey:

It is very important in any research work; this is confirmed by (Abdul-Kadir Taha Fath: 194) who says "it is a sub-study or several sub-studies where the researcher undertakes prolegomena near-

investigation attempts before he engages in his basic research to ensure the validity of his research plan, tools and appropriate conditions of the research work he intends to carry out".

- Location of the study: Starting from the headquarters of the Association "El Hayet for the Motor Handicapped" in Sebdou Wilaya of Tlemcen we targeted the municipalities where the victims reside for field visits: El Abed, Bouihi, Sidi Djilali, Ain Ghraba, El Aricha, Henaya and Beni Senous.

- Study tools: At this stage of the study, we have based ourselves solely on the questionnaire for collecting information on people directly disabled by mines developed by Handicap International (see Appendix 1).

- Summary of the survey's conclusion and general perception of the near-survey

With regard to the conduct of the pre-survey, we conclude the following:

- The questionnaire developed by Handicap International to collect information on people directly affected by landmines is not sufficient in itself to conduct the study.

- Our clinical observation of "mine victims" allowed us to adjust the post-traumatic stress variable to be treated in the core study.

- Based on the clinical interviews with the landmine victims we confirmed that some of the "landmine victims" were willing to cooperate with us in conducting the study, while others refused and left the study; thus we left the field open to all those who wanted to be part of the Study.

- The pre-survey allowed us to adjust the scope of the Study and to determine what needed to be done during the Study.

B. The Core Study :

Location of the study: the study took place at the Association's headquarters in Sebdou.

Cases studied: 20 cases from various municipalities in Tlemcen (El Henaya, El Bouihi, El Aricha, Sebdou; Ain Gharaba, Beni Senous, El Abed). The "mine victims" were contacted through the Association "El Hayat pour les Handicapés Moteurs à Sebdou". The study was carried out with the people who responded favorably to the invitation and introduced themselves.

Study tools :

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A. The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

B. The Case Study.

C. The clinical interview: the interview is a dynamic relationship and exchange between two people: a psychologist and a second person who is waiting for help (ATTOUF Mohamed Yassin, 1981: 432) and so in our study the second person is one of the mine victims.

D. During our study, we first used the Direct Individualized Clinical Interview to get to know the case; then, in order to facilitate the establishment of a relationship of trust, we used the Semi-directive interview. Afterwards, we used the Direct Interview to ask specific questions about the subject of the study in order to prevent the "landmine victim" from becoming dispersed and distracted from the subject of the study.

*Duration of interviews: variable between 30 and 45 minutes.

*Number of interviews: a minimum of four interviews per "mine victim

E. Observation:

*We used free observation as a basis for our near-investigation, which enabled us to understand the reality of the experiences of mine victims. This also allowed us to specify what is decisive and what is necessary in the context of a study with people suffering from chronic post-traumatic stress.

*Methodical scientific observation: By this we mean focusing on specific behavioural aspects. To do this, we focused on questioning the "mine victim" about the exact circumstances of the event during which she was exposed to a mine explosion. We also asked about the psychological and behavioral consequences of the accident. In some situations we were assisted by the victims' relatives to confirm the behavioral changes.

We also took an interest in the physical state induced by the accident and its impact on the daily life of the "mine victim".

F. Psychiatrists' questionnaire: Professor Louis Crocq and Albert Steinitz:

This tool is divided into four parts:

1st part: -a- dedicated to investigate the shock.

2nd part: -b- dedicated to the history and events of the person concerned

3rd part: -c- dedicated to the investigation and evolution of the clinical picture.

4th part: -d- self-evaluation of the clinical pathological state of the person concerned by

the person concerned himself

(Cf. Annex n°2)

Protocol of the study :

A- Application protocol:

We conducted interviews with a group of mine victims at the headquarters of the "Association El Hayat des handicapés moteurs de Sebdou", wilaya of Tlemcen and who expressed the desire to collaborate with us.

The total number of victims was 20 (19 men and one woman), we explained to the victims of the study what we wanted to do and we gave them complete freedom to answer or not to answer the questionnaire used (Annex N1). Our intrusion as a researcher was limited to explaining the technical terms of the scale in a simple way, taking into account the level of education of the "mine victim" and to make them understand the expectations, as well as to record their answers.

The "landmine victims" took between 30 and 45 minutes to answer the questions on the scale.

At the end of the test, the researcher reviewed the personal information and responses to ensure that all information had been written down (checked off or filled in), all fields filled in, and that none had been forgotten.

B - the method of correction the Louis Crocq questionnaire:

Panel A:

It is based on the traumatic event: the date, time, place of occurrence, duration, nature and description of the accident by the victim. This chart contains 46 items, divided into five sections:

Part I: addresses the data and violence of the trauma.

Part II: deals with the share of human responsibility in the event.

Part III: deals with the physical effects of the trauma.

Part IV: deals with the psychological effects of the shock.

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Part V: the possibility of the existence of an early emotional event, hence the usefulness of knowing the extent of the stability of the conditions.

Each part contains several elements that give rise to a score ranging from 0 to 5. The scores vary according to intensity and severity, with "5" representing the highest degree.

Thus, the total in Plate - A - is 25.

- Plate C:

The scoring for this section is similar to that of Plate -A-. This panel allows the researcher to give an assessment of the clinical course of the psychological sequelae. To do this, 21 symptoms are subdivided into 15 parts, and thus a total of 75 points.

Cf. : appendix n° -2-

11. Study findings and formulated in light of the hypothesis:

Hypothesis: the "mine victims" suffer from chronic post-traumatic stress. After conducting the study the following conclusions were reached:

11-1 Characteristics of the sample,

Period and time of occurrence of the accident:

- The average age of the sample: 60 years.

- The sample is characterized by a set of characteristics, which are listed in

Table (1)

The accidents of the mine victims in the study sample took place between 1958 and 1996.

All the accidents took place in the morning and this is due to the fact that these victims were going about their usual business or going to their place of work, especially in the early morning.

Table (1) - Characteristics of the sample of mine victims in terms of gender, marital status, standard of living and level of education.

	Specificity	Number	Percentage
Distribution of mine victims by gender	Men	19	95 %
	Female	01	5 %
Distribution of mine victims according to their civil status	Single	01	5 %
	Married	18	90 %
	Widowed	01	5 %
Distribution of mine victims according to their standard of living	Low	02	10 %
	Medium	18	90 %
Distribution of mine victims according to their level of education	Without instruction	16	80 %
	Primary	03	15 %
	Medium	01	5 %

Table (1) shows the number of "mine victims" as 20: 19 men and 01 woman. Most of them are married (90%), 1 widow (the only woman in the sample), and 1 single.

In terms of standard of living, we find a large percentage of medium level (90%) and the remaining 10% are of low standard of living.

Regarding the level of education, the majority of the "mine victims" are illiterate (80%), the primary level does not exceed 15% and those with an average level of education are estimated at 05%.

11-2 Symptoms presented by mine victims in the study sample :

The landmine victims in the study sample suffer from a variety of conditions that are summarized in the following table:

Table 2: Pathological history of the study sample

Nature of the disorder	Number	Percentage
Nervous depression	01	5%
Arterial hypertension	03	15%
Problems related to hearing	10	5%
Renal pathologies	01	5%
Cholesterol	01	5%
Having undergone various surgical	02	10%

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procedures		
Presenting at the same time several symptoms affections: Arterial hypertension, affections having required one or more surgical interventions, attack of one or more sense organs.	05	25%
No	06	30%

Table 2 shows that the conditions presented by the mine victims in the sample studied are diverse and what draws attention is the multiplicity of these disorders by the same person; in fact, 25% of mine victims present more than one condition at a time. High blood pressure comes second with 15% of victims suffering from it. Hearing problems, nervous breakdowns, cholesterol levels and kidney diseases account for 5%.

It should be noted that 30% of the sample studied do not suffer from any pathological condition.

11-3 Nature and location of mine blast injuries to "mine victims":

Injury: As a result of the mine explosions, the "mine victims" in the sample suffered a variety of injuries that affected one or more parts of their bodies; including Tables 3 and 4.

Table 3 - shows the organs and/or limbs affected in the explosion of the sampled persons

Location of the injury	Number of hits per person	Percentage
Head / Neck	03	15%
Lower limb	04	20%
Chest	01	5%
Multiple injuries	01	5%
Limb (upper and lower)	01	5%
Head / Lower limb	01	5%
Head / Chest	01	5%
No damage	08	40%
Total	20	100%

- In Table 3, we note that the people in the sample had been subjected to various injuries as a result of the mine explosion. What is noteworthy is the predominance of injuries to the lower limbs, which

represent 20% (the highest percentage), followed by injuries to the head/neck, 15%; then we find the chest, multiple injuries, limbs (lower and upper), head/lower extremities, each of which represents 5%, the rest of the sample, representing %, had no injuries.

Organs and/or limbs affected Number of victims	Vue	View	Upper limbs		Lower limbs				Variations	No violations (*)
			Bras	Fingers / Hand	Feet	Top of the knee	Below the knee	toes/Foot		
1										*
2						R/L				
3					L		L		-	
4			R							
5						R				
6	R									
7							R / L			
8					R		R		-	
9	R			R		R			-	
10					R		R		-	
11	R									
12					R / L		R		-	
13			R	L	R / L				-	
14					R / L		R / L	L	-	
15	L									
16	R					L				
17		R	G		R	R	R	R	-	
18		L		R	L		L		-	
19		R		R					-	
20					L		L		-	
Number	4	0	1	1	0	3	1	0	10	0

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Percentage	20%	%00	%5	%5	%0	%15	5%	0%	50%	0%
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Table -4- shows the loss of some limbs or senses in the sample studied on the right & left side.

R:Right L: Left

From Table -4, we note that more people in the sample were exposed to the loss of some limbs or functions or sense organs as a result of mine explosions on the right side of their body than on the left side.

7 landmine victims were affected on both sides of their body which represents (35%).

The highest locations are represented by 4 people Lower limbs (Feet, Above the knee Below the knee toes/ Foot) (30%, and 10%) while those above the knee Limbs Upper limbs

11-4- Clinical picture of the victims

Referring to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) in which post-traumatic disorders are classified as "post-traumatic stress disorder", it appears that all the members of the sample present the following manifestations

A. Post-traumatic disorder where the subject has been exposed to a series of traumatic events, thus the victim presents the following two elements

A.1. all of the mine victims in the study sample experienced a traumatic event represented by a mine explosion. As a result, they were confronted with death or the risk of serious injury, and during this tragic event their own safety and that of others was put at risk.

This is confirmed by the contents of tables 4 and 5, which list the numerous physical injuries of mine victims → injuries, loss of part or all of limbs or other body parts, loss of function or sense organs → and their locations. These injuries concern both the lower and upper right and left parts of the bodies of the victims in the study.

A.2. All the people in the sample of the study translated their reactions to the shocking incident and we find this clearly in their answers on Plate A of the Louis Crocq questionnaire

And table - 5- we note that the responses of the samples in the 1st part of Plate A are very high. This section deals with the data of trauma and its violence.

Table - 5 - shows the response of the sample for Plate A of the questionnaire.

	File number of surveyed mine victims																				Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Number of points of the 1st part	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	100
Number of points of the 2nd part	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	60
Number of points of the 3rd part	3	5	4	5	3	5	4	5	5	5	5	5	5	4	4	5	5	5	5	5	92
Number of points of the 4th part	3	5	5	5	3	5	4	5	5	5	5	4	4	4	5	5	5	3	5	5	90
Number of points of the 5th part	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	95

A. All surveyed mine victims constantly relive the traumatic event in the following persistent ways:

- Mental rumination: 2 mine victims (No. 1 and 20) in the study sample.
- Repetitive nightmares: 13 landmine victims (No. 1, 6, 7, 10, 11, 12, 13, 14, 15, 16, 17, 18 and 19).
- Mental re-enactment of the events experienced; the victim behaves as if the incident is happening again: 3 people who were victims of mines (N° 1, 2 and 9)
- Invasive memories: 2 mine victims (N° 7 and 20)

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- Running away in an excess of activity: 8 mine victims (N° 5, 8, 9, 10, 11, 12, 14 and 15).

- Hallucinations: 3 persons victims of mines (N° 2, 3 and 5).

- Significant physiological reactivity when representing or relating events: 13 mine victims (N°: 2, 3, 6, 7, 10, 11, 12, 13, 14, 15, 17, 18 and 19) of the study sample.

B. The landmine victims in the study sample continuously avoid stimuli associated with the trauma or blunted reactivity; and this is reflected by the observation of at least three of the following responses:

- Efforts to avoid thoughts, feelings, or conversations that relate to the accident: 10 mine victims (Study sample numbers: 1, 3, 4, 7, 2, 15, 20, 10, 19, and 17).

- Efforts to avoid activities, places, or even people that might evoke memories related to the accident: 01 mine victim (N°: 19)

- Inability to remember anything important about the accident. 05 mine victims (N°: 2, 11, 16, 18 and 20).

- Feeling of detachment from others or feeling of being an outsider to others: 10 mine victims (N°: 1,4,5,8,12,13,15,16,18 and 20).

- Thoughts related to the impossibility of marriage and procreation found in 01 mine victims (N°: 1)

C. The study sample suffers from the persistence of some of the symptoms of neuro-vegetative activation as evidenced by the presence of at least two of the following manifestations in the landmine victims listed below:

- Difficulty falling asleep or interrupting sleep, which was found in 17 mine victims (N°: 1,2,3,4,6,7,10,11,12,13,14,15,16,17,18,19 and 20).

- Hypervigilance found in 10 mine victims (N°: 1, 2, 3, 5, 6, 8, 9, 12, 16 and 19).

- Difficulty concentrating, which was found in 5 mine victims (N°: 1, 3, 5, 10 and 17).

- Irritability or angry outbursts found in 03 landmine victims (N°: 4,6, and 12).

- Exaggerated startle reaction found in 110 landmine victims (N°: 2,5,8,9,10,11,13,15,16,17 and 20).

D. E - Disruption (symptoms of criteria "B", "C", "D") plus years.
E. This is true for 19 mine victims whose disturbances have lasted for more than one month; with the exception of person N° 4 of the study sample.

F. F. - The disruption causes clinically significant suffering (as for duration):

- Poor job performance found in mined individuals 3, 4, 12 of the study sample.

- Coldness towards and avoidance of friends and acquaintances; this was found in 03 mine victims 1, 3, 4 of the study sample.

- Absence of marriage proposal is found in person 01 of the sample studied.

- Attempted suicide found in person 02 of the sample studied.

- No activity was carried out by 07 mine victims: (N°5, 6, 7, 8, 9, 10 and 11).

- Low social functions were found in 15 mine victims (N°2, 5, 6, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19 and 20) in the study sample.

11-5 Sample response to questionnaire:

- Plate A: Depends on the traumatic event, date, time, where the accident occurred and how long it took, nature and description of the incident by the victim.

Contains 46 articles, divided into five sections:

- Section I: in relation to the data of the trauma and its violence.

- Section II: deals with the part of human responsibility in the event.

- Section III: in relation to the physical effects of the trauma.

- Section IV: deals with the psychological effects of the shock.

- Section V: deals with the possibility of the existence of an early emotional event, hence the usefulness of

- Section V: deals with the possibility of the existence of an early emotional event, hence the usefulness of knowing the extent of the stability of the affections.

Panel B :

Allowed us to identify the psychological state of each person of the sample studied and the search for family history. Where we cancelled the intervention of genetic factors, so that the diagnosis is accurate.

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The personal pathological or surgical history remains different from one person to another.

PANEL C: This panel allows us to provide a clinical evaluation of the occurrence of psychological effects.

Table -6- represents the answers of the sample on the panel C of the questionnaire.

Number of people	Response of the person on board C
1	72
1	68
4	67
1	64
1	63
3	62
1	61
1	60
1	59
1	58
1	56
1	55
1	54
1	47
1	46

This table -6- allows us to note that the responses of the sample studied on the items of the board C are very high, ranging from 46 to 72.

In Panel D, the self-assessment scale for patient responses varies by sample.

Thus, the mine victims in the study suffer from Post Traumatic Stress, with the exception of the fourth victim, and this comes back to the fact that the symptoms of boards "b", "c", "d", have dysfunctions that lasted less than a month.

12- Recommendations:

After having carried out this modest study, which remains to be perfected, the researcher recommends the following:

In relation to mine victims

The need for special attention for this segment of society, including

The need for special attention for this segment of society, particularly through psychotherapy and social support for all mine victims.

The need to organize and implement technical training in this area and to provide scientific reference material for professionals working with mine victims.

Study on the evaluation of mental health among mine victims: the degree of psychological trauma, the impact on physical health and the repercussions on mental health.

Study on the future of mine victims and their daily life in their professional, family and relational environment.

Suggestions for studies to be developed or encouraged from researchers:

Study on suicides and suicide attempts among mine victims.

Study on psychosomatic diseases among mine victims.

Sleep disorders and their relationship to mine shock.

Study on behavioral disorders in child mine victims.

Study on the prevalence of mental illness in mine victims.

Study on the impact of physical trauma following a mine explosion on self-esteem.

BIBLIOGRAPHY

حجازي م. (1982). الفحص النفسي مبادئ الممارسة النفسانية تقنياتها وخطواتها وإشكالاتها. بيروت: دار الطباعة.

سي موسى ع. ا., & زقار ر. (2002). الصدمة النفسية عند الطفل والمراهق. الجزائر العاصمة: جمعية علم النفس.

عبد المعطي ح. م. (1998). علم النفس الإكلينيكي. القاهرة: دار قباء للطباعة والنشر والتوزيع.

فرج عبد القادر ط. (2000). معجم علم النفس والتحليل النفسي (ط1). بيروت: دار النهضة العربية.

Crocq Louis, V. M. (2000). dossier documentaire : prise en charge psychologiques des enfants traumat. , seminar of the training of trainers, programme de coopération Algérie Unicef,.

Dorons, J. (2001). , la méthode du cas en psychologie et en psychopathologie. Paris: édition DUNOD.

France 1, C. C. F. 1. (2000). , soigner les blessures invisibles, Humanitaire (2 ط) , magazine de l'action et du droit international humanitaire.

**Chronic post-traumatic stress disorder in mine victims".
(Clinical study of 20 cases in the Wilaya of Tlemcen Algeria)**

Judith, D. (1993). Les traumatismes psychiques, le bloc not de la psychanalyse (N°12). George edition.

Lopez, G. (2002). Psychothérapie des victimes le traitement multimodal du psychotraumatisme (1st edition). Paris: DUNOD .

Muchielli , R. (1986). L'entretien de face a face dans la relation d'aide, (10th edition). entreprise moderne d'édition.

Zagury, D. (1986). neuroses traumatic reflections and contribution of the expert practice in the civil situation (N°5.). French psychiatry Serge Bornstein.

Dictionaries

1. Le grand Dictionnaire de la psychologie.
2. Dictionary of psychoanalysis, Larousse bookstore, Paris, 1974.
3. Protoplasmics, or Domart A, Nouveau Larousse médical, Larousse bookstore, 1981.
4. Sillamy.N, dictionary of psychology, Paris, 1996.