# CHECK LIST OF SYMPTOMS SCL - 90 - R AT PERSONS WITH EXTREMITIES AMPUTATIONS

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# **ABSTRACT**

Multidimensional Inventory Check List of Symptoms (SCL-90-r) is based on self-evaluation and it has been used for determination of level of: somatisation, obsessive-compulsive symptoms, interpersonal sensitivity, depression, anxiety, hostility, phobias, paranoia and psychosis at persons which are exposed to long term emotional and physical stress. Our goal was to determine relations of physical trauma and psychological changes at persons with lower extremities amputations and to determine factors which influence those changes. Thirty seven persons with lower extremities amputations were examined. The sample included 26 (70,2 %) veterans and 11 (29,7%) civilians with diseases related amputations. They voluntarily filled Check List of Symptoms SCL-90-r. Symptoms Inventory includes 9 dimensions of primary symptoms: SCL1somatisation, SCL2-obsessive-compulsive symptoms, SCL3-interpersonal sensitivity, SCL4depression, SCL5-anxiety, SCL6-hostility, SCL7-phobias, SCL8-paranoia, SCL9-psychosis and SCL10-extra scale. Inventory includes 90 statements, each evaluated with five-level scale of disorder. Every answer is graded with 0-4 points. Thirty seven persons with lower extremities amputations and average chronological age 46,2  $\pm$  10,92 years were analyzed. Considering marital status 30 (81,1 %) of them were married, 4 (10,8 %) were not married and 3 (8,1 %) were widowers. Considering level of amputation 27 of them (73,0 %) had amputation below knee, 5 (13,5 %) of them amputation above knee and 5 of them (13,5 %) foot amputation. SCL-90-r in both groups determined high level of sensitivity, anxiety, hostility and paranoia. Veterans showed higher level of paranoia comparing to civilians (p<0,002), and younger veterans and married ones had higher level of paranoia comparing to other veterans (p<0,01). Persons with amputations below and above knee showed higher level of paranoia comparing those with foot amputation (p<0,001). Persons with lower extremities amputations have considerably more expressed sensitivity, anxiety, hostility and paranoia. These dimensions are related to age, marital status and level of amputation. These determinants are very helpful for planning and creation of psychological support and rehabilitation of persons with lower extremities amputations.

KEY WORDS: amputation, SCL-90-r, physical trauma

## INTRODUCTION

Multidimensional Inventory Check List of Symptoms (SCL-90-r) is based on self-evaluation and it has been used for determination of level of: somatisation, obsessive-compulsive symptoms, interpersonal sensitivity, depression, anxiety, hostility, phobias, paranoia and psychosis with persons who are exposed to long term emotional and physical stress. Individuals who experience mutilation without previously being ill or exposed to stress go through psychological crisis mutilation as a result of illness or trauma represents strong psychological trauma that can cause a spectrum of different psychological reactions (1). According to the same author, psychological reactions of mutilated patients are divided in four phases of grievance:

- Phase of acute psychological reactions (or phase of acute crisis) that occurs immediately after the trauma and is expressed as nihilism, depressive impressions, suicidal thoughts and actions, hysterical reaction, etc.
- 2. Phase of creation of emotional balance.
- 3. Late phase of psychological reactions.
- 4. Phase of adaptation which occurs after psychological reactions discontinue, and in which phase the patient is adapting to new reality.

Amputation is not only a loss of a part of the body, it also results in the loss of body integrity and it has a profound impact on patient's mental status (2). Problems encountered in this regard depend more on attributes and personality of a specific patient that the level of amputation (3). The goal of this work is to determine relation between physical trauma and psychological changes with persons with lower extremities amputations and to determine factors which influence those changes.

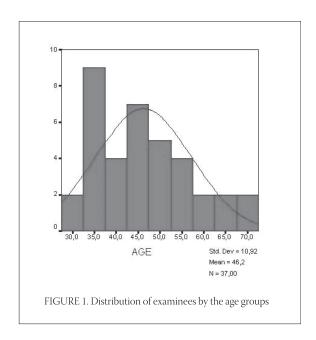
# SUBJECTS AND METHODS

Thirty seven persons with lower extremities amputations were examined. The sample included 26 (70.2%)

veterans and 11 (29,7 %) civilians with disease related amputations. They voluntarily filled Check List of Symptoms SCL-90-r (4). Symptoms Inventory includes 9 dimensions of primary symptoms: SCL1-somatisation, SCL2-obsessive-compulsive symptoms, SCL3-interpersonal sensitivity, SCL4-depression, SCL5-anxiety, SCL6-hostility, SCL7-phobias, SCL8-paranoia, SCL9-psychosis and SCL10-extra scale. The inventory includes 90 statements, each evaluated with five-level scale of disorder. Every answer is graded with 0-4 points. Beside SCL-90-r subjects have filed personal questionnaires. Statistics made in SPSS 10.0 for Windows.

# RESULTS AND DISCUSSION

Thirty seven persons with lower extremities amputations and average age of  $46.2 \pm 10.92$  were analyzed, which includes 11 civilians (average age  $52.7 \pm 4.2$ ) and 26 individuals with war-related amputation (average age  $43.5 \pm 1.6$ ) (Figure 1). In accordance with marital status, there were 30 (81.1 %) married examinees, 4(10.8 %)



MARITAL STATUS -	GROUPS			TOTAL
		VETERANS	CIVILIANS	TOTAL
MARRIED -	Count	25	5	30
	% of Total	67,60 %	13,50 %	81,10 %
SINGLE -	Count	1	3	4
	% of Total	2,70%	8,10 %	10,80 %
WIDOW -	Count		3	3
	% of Total		8,10 %	8,10 %
TOTAL -	Count	26	11	37
	% of Total	70,30 %	29,70%	100,00%

TABLE 1. Distribution of examinees as per marital status

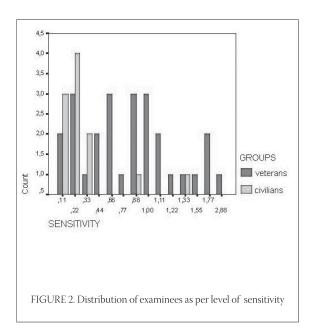
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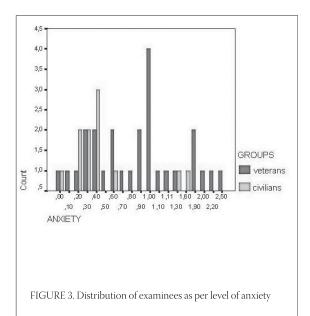
		VETERANS	CIVILIANS	TOTAL
BELOW KNEE	Count	20	7	27
	% of Total	54,10 %	18,90 %	73,00 %
ABOVE KNEE	Count	1	4	5
	% of Total	2,70%	10,80 %	13,50 %
FOOT	Count	5		5
	% of Total	13,50 %		13,50 %
TOTAL	Count	26	11	37
	% of Total	70,30 %	29,70%	100,00%

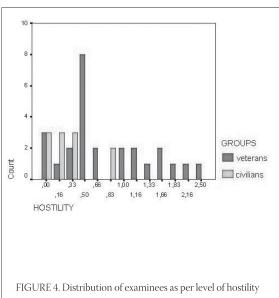
TABLE 2. Distribution of examinees by amputation level

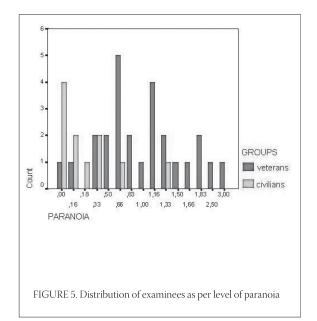
single and 3 widower (8,1 %) (Table 1). In accordance with amputation level, 27 (73,0 %) examinees have had below-knee amputation, 5 (13,5 %) have had above-knee amputation and 5 (13,5 %) have had foot amputa-

tion (Table 2). In many studies in the world, authors followed psychological reaction persons with amputation, and conclusion is that they have normal life after long time in spite lot of physical limitations (5). For all



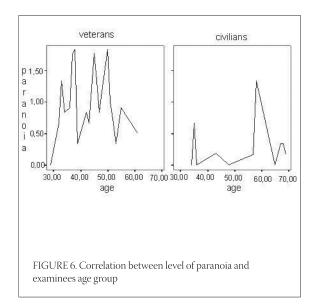


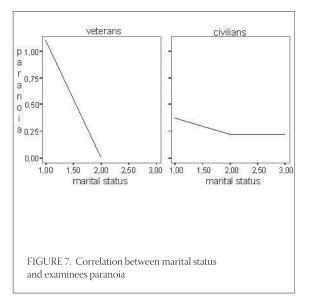




samples average time is 10,8 years after amputation. In accordance with SCL-90-r, both groups had high level of sensitivity, anxiety, hostility and paranoia (Figure 2, 3, 4, 5). Paranoia is more visible with veterans than civilians (p<0,002); younger veterans and those married ex-

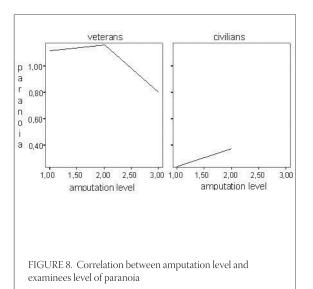
pressed higher level of paranoia (p<0,01) (Figure 6 and 7). Paranoia is more expressed by examinees with below-knee and above-knee amputation than by examinees with foot amputation (p<0,001) (Figure 8).







Persons with lower extremities amputations express significant levels of sensitivity, anxiety, hostility and paranoia. These dimensions are related to age, marital status and level of amputation. These determinants are very helpful for planning and creation of psychological support and rehabilitation of persons with lower extremities amputations.



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