



## Experience of the Air Medical Evacuation Team of Serbian Armed Forces in the United Nations Mission in the Democratic Republic of Congo – Deployment stress and psychological adaptation

Iskustvo pripadnika tima za vazдушnu medicinsku evakuaciju Vojske Srbije u misiji Ujedinjenih nacija u Demokratskoj Republici Kongo – stres i psihološka adaptacija u misiji

Danilo B. Joković\*, Dragan Krstić\*, Zvezdana Stojanović\*, Željko Špirić\*†

\*Clinic for Psychiatry, Military Medical Academy, Belgrade, Serbia; †Faculty of Medicine of the Military Medical Academy, University of Defence, Belgrade, Serbia

### Abstract

**Background/Aim.** Wars of the nineties in former Yugoslavia, Somalia, Rwanda imposed new tasks to the United Nations (UN) forces, such as providing humanitarian aid, protection of civilians, peacekeeping, and in many instances providing armed enforcement of peace. The aim of this study was an observational analysis of Serbian participation in the UNs Mission in the Democratic Republic of Congo with the emphasis on stress and coping techniques. **Methods.** Serbian contribution in this mission dates back to April 2003 till the present days with a military contingent consisting of six members as a part of Air Medical Evacuation Team. The observed stressogenous factors acted before arrival to the mission area and in the mission area. In this paper we analysed ways to overcome them. **Results.** The productive ways of overwhelming stress used in this mission were: honesty and openness in interpersonal communications, dedication to work, maintaining discipline and order, strict following of appropriate regime of work, diet, rest and recreation; regular communication with family and organizing and participation in various social, cultural and sports manifestations. **Conclusion.** This analysis indicates that out of all the observed factors, the most important is appropriate selection of personnel.

### Key words:

stress, psychological; adaptation, psychological; medical missions, official; serbia.

### Apstrakt

**Uvod/Cilj.** Sukobi 90-ih u bivšoj Jugoslaviji, Somaliji i Ruandi nametnuli su dodatne zadatke snagama Ujedinjenih nacija (UN) kao što su obezbeđivanje humanitarne pomoći, zaštita civila, očuvanje mira i primena oružanog očuvanja mira. Cilj ovog rada bio je sprovođenje opservacione analize srpskog učešća u misiji UN u Demokratskoj Republici Kongo sa akcentom na stres i tehnike za prevladavanje stresa. **Metode.** Srpsko učešće u ovoj misiji datira od aprila 2003. godine do danas, u vidu vojnog kontingenta Vojske Srbije od šest članova, koji čine tim za vazдушnu medicinsku evakuaciju. Stresogeni faktori delovali su pre dolaska u područje misije kao i u području misije. U ovom radu analizirani su načini za njihovo prevazilaženje. **Rezultati.** Produktivni načini prevladavanja stresa korišćeni u ovoj misiji bili su: iskrenost i otvorenost u međuljudskoj komunikaciji; posvećenost poslu; održavanje discipline i reda; striktno poštovanje odgovarajućih režima rada, ishrane, odmora i rekreacije; redovna komunikacija sa porodicom i organizovanje i učestvovanje u različitim društvenim, kulturnim i sportskim manifestacijama. **Zaključak.** Ova analiza pokazuje da je od svih razmatranih faktora najvažnija odgovarajuća selekcija ljudstva.

### Ključne reči:

stres, psihički; adaptacija, psihološka; medicinske misije, zvanične; srbija.

### Introduction

Wars of the nineties in former Yugoslavia, Somalia, Rwanda, have imposed new tasks to the United Nations (UN) forces, such as providing humanitarian aid, protection

of civilians, peacekeeping, and in many instances providing armed enforcement of peace. These changes caused the increase in response to stress<sup>1-3</sup>. Factors that affect stress in peacekeeping operations are: individually conditioned factors, separation factors and factors of the mission<sup>4,5</sup>. The de-

gree of stress significantly correlated with mood, psychiatric symptoms and poor morale<sup>6-10</sup>. The most important dimensions of stress in soldier adaptation are: isolation, ambiguity, powerlessness, boredom, and threat<sup>11-13</sup>. Maladjustment can be viewed chronologically<sup>14</sup>, from early up to late maladaptation reactions, and cyclically throughout the duration of deployment<sup>15</sup>.

#### *Air Medical Evacuation Team*

Serbian participation in the United Nations (UN) Mission in the Democratic Republic of Congo (DRC) dates back to April 2003 up to the present days, with a military contingent consisting of six members – two doctors and four paramedics, as a part of Air Medical Evacuation Team (AMET), who are trained and equipped to set up two fully autonomous aeromedical evacuations. AMET has several tasks, the primary one being expert escort, monitoring vital signs, diagnosing and treatment of diseases during medical evacuation, casualty evacuation and medical repatriation by air and by land. The second task is provision of medical support during visits of official delegations and various military, political and cultural events. Also very important tasks are to secure logistical preconditions (repair of devices, procurement of new devices and procurement of expendables) for noninterrupted and continuous functioning and pleasant stay of a contingent in specific terms of the mission area, and, finally, regular, everyday communication and correspondence with the command in the mission and in country and performing numerous regular and *ad hoc* complex administrative duties.

The aim of this article was to illustrate deployment stress and psychological adaptation, as observed from the period of preparation up to the return home.

#### **Methods**

All data presented in this paper were obtained during the author's (DJ) involvement in the Serbian AMET mission as a member, where he participated twice, in 2005 and 2007. All the subjects were participants of AMET, six *per term*, totally 12. The shift took six months. AMET members were employed in the Serbian Armed Forces, and chosen for this mission. The data were collected through the author's observation of stressogenous factors, stress reactions and coping techniques in this mission, before arrival to the mission area (during a one-month preparation period), and during the whole stay in the mission area. The uniqueness of this article is that it talks about the first time in a 20-year history of Serbian participation in the UN Missions to deal with these issues. Table 1 shows some basic demographic data on the Serbian AMET.

#### **Results and Discussion**

##### *Stressogenous factors*

Stressogenous factors were numerous and can be divided into two groups: stressogenous factors before arrival to the mission area and stressogenous factors during the whole stay in the mission area (Table 2).

##### *Stress reactions*

Stress reactions in the mission were individually conditioned and therefore diverse. They include: emotions, somatic manifestations, interpersonal relationships, behavioral manifestations, as described by Logan<sup>15</sup> (Table 3).

**Table 1**

Demographic data of the Serbian Air Medical Evacuation Team (AMET)		
Team data	Year	
	2005	2007
Number of members	6	6
Duration of rotation (months)	6	6
Military status of members		
officers	2	2
warrant officers	2	2
military employees	2	2
Number of previous deployments	1 (nurse)	1 (doctor and a nurse)
Gender of members		
male	4 (officers and warrant officers),	4 (officers and warrant officers),
female	2 (military employees)	2 (military employees)
Occupation of members		
general practitioners	2	2
nurses-paramedics	4	4
Average age of members (years)		
doctors	33	31.5
nurses	36.75	31
Marital status		
married	doctor and 2 nurses	3 nurses,
single	doctor and a nurse	2 doctors
divorced	nurse	nurse
Number of children		
2	doctor and 3 nurses	2 nurses
no children	doctor and a nurse	2 doctors and 2 nurses

Table 2

Stressogenous factors before arrival and during the stay in the mission area	
Stressogenous factors before arrival to the mission area	Stressogenous factors during the stay in the mission area
<p>Reactions of surroundings -misunderstanding, underestimation, sneering, envy, jealousy, maliciousness;</p> <p>Insufficient length and inadequate structure and focus of preparations-selection of candidates, prevailing of theory over practice, lack of focusing in training for specific tasks in the mission, lack of information on conditions in the Democratic Republic of Congo (DRC), incomplete knowledge of rights and obligations, long period between completion of training and departure followed by uncertainty about term;</p> <p>Unresolved issues of advance payments and reimbursements, untimely and incomplete supply with uniforms, equipment, protective equipment, medicines, vaccines, performing regular duties at workplace up to the point of departure</p>	<p>Mutual relationships;</p> <p>Culture shock;</p> <p>Accommodation;</p> <p>Climate;</p> <p>Health threats;</p> <p>Security risks;</p> <p>Difficulties in communication with family and superior command;</p> <p>Delays in payment of fees in Serbia and in the DRC;</p> <p>Imprecisely defined obligations and rights in the mission;</p> <p>Ride in terms of continuous congestion of roads in a disastrous situation;</p> <p>Medical evacuation by air with the use of aircraft not dedicated and equipped for this purpose and whose functioning, accuracy and timeliness of maintenance were often questioned;</p> <p>Contact with patients during medical evacuations on whose medical condition, most of the time there was not enough information and who were diagnosed and treated for the first time.</p>

Table 3

Stress reactions in the mission			
Emotions	Somatic manifestations	Interpersonal relationships	Behavioral manifestations
<p>Feelings of sadness, rage, excitement, restlessness, anxiety, tension, frustration, embitterness, resentment, anger, numbness, confusion, disorganization, indecisiveness, loneliness, vulnerability, irritability, senselessness, despair, hopelessness, impatience, omnipotence, unlimited freedom.</p>	<p>Fluctuations in energy level and mood;</p> <p>Disturbances of sleep and appetite;</p> <p>Polymorphic somatic complaints;</p> <p>Fear of diseases manifested through multiple repetition of tests for infectious diseases (e.g. Malaria test).</p>	<p>Disturbed interpersonal relations in range from gossip, tricks, verbal disputes, creating clans, plotting and physical conflicts;</p> <p>Violations of rules and regulations of Serbian army and the UN-refusal to wear uniform, growing beard, inappropriate behavior, conflicts with other UN personnel, abuse of UN property, refusal to follow orders, theft.</p>	<p>Excessive use of alcohol;</p> <p>Excessive use of nicotine;</p> <p>Occasional use of illicit drugs;</p> <p>Lack of social inhibitions;</p> <p>Promiscuous behaviour;</p> <p>Use of sex workers' services.</p>

#### UN – United Nations.

##### *Coping techniques*

Productive ways of coping with stress, by the author's personal experience, were: honesty and openness in interpersonal communication, respect and fairness in the superior-subordinate relationship, smoothing misunderstandings, dedication to working for achievement of personal and mutual progress and well-being, professional execution of duties, maintaining discipline and order, strict adherence to the corresponding regime of work, nutrition, rest and recreation, regular communication with family, organizing and participating in various social, cultural and sports activities. His

experience was in accordance with data from the literature and confirms that "only members with a high level of mental health will make success in peacekeeping operations in Africa"<sup>16</sup>.

##### *Recommendations*

Although this engagement was specific, there were no substantial differences in deployment stress and psychological adaptation already described in the literature concerning the participation of medical personnel, in general. Factors that influenced deployment stress reactions and coping tech-

niques were very similar for both teams. The author was the member of both teams, as well as the nurse. The author's experience is that the best way around this mission showed younger, unmarried, children less, male doctors, officers, and middle-aged, married, with children, female, paramedics, military employees. The recommendations for stress prevention in this mission besides crucial factors are selection of personnel, also adequate training, equipping with necessary devices, then improvement of communication capabilities with command and families and improvement of living and working conditions, and, finally, maintaining exemplary dis-

cipline with correct interpersonal relationships and designing constructive leisure activities.

### Conclusion

Appropriate selection of mentally stable, mature personality, intelligent, open minded, without prejudice, communicative, resourceful, wise, brave, courageous, devoted and motivated, persistent, competent, skilled and well-trained persons is a guarantee for successful adaptation to the Serbian AMET mission.

### R E F E R E N C E S

1. *Hawthorne G, Sim M, McKenzie D.* Post-peacekeeping: The long-term health status of veteran peacekeepers. Melbourne: Australian Centre for Posttraumatic Mental Health; 2005.
2. *Bartone P, Adler A.* A model for soldier psychological adaptation in peacekeeping operations. Proceedings of the 36th Annual conference of the International Military Testing Association; Rotterdam, the Netherlands; 1994 October 25–7; Heidelberg, Germany: U.S. Army Medical Research Unit – Europe, Walter Reed Army Institute of Research; 1994
3. *Nasveld P, Cotea C, Pullman S, Pietrzak E.* Effects of deployment on mental health in modern military forces: A review of longitudinal studies. *J Military Veteran Health* 2013; 21(1): 14–23.
4. *Bartone P, Adler A.* Peacekeeping operations: Psychological Preparation. Heidelberg, Germany: US: Army Medical Research Unit – Europe, Walter Reed Army Institute of Research; 1995.
5. *Orsillo S, Roemer L, Litz B, Eblich P, Friedman M.* Psychiatric symptomatology associated with contemporary peacekeeping: an examination of post-mission functioning among peacekeepers in Somalia. *J Trauma Stress* 1998; 11(4): 611–25.
6. *Kavanagh J.* Stress and performance: a review of the literature and its applicability to the military. Santa Monica: RAND Corporation; 2005.
7. *Sareen J, Cox BJ, Ajifi TO, Stein MB, Belik S, Meadoms G, et al.* Combat and peacekeeping operations in relation to prevalence of mental disorders and perceived need for mental health care: findings from a large representative sample of military personnel. *Arch Gen Psychiatry* 2007; 64(7): 843–52.
8. *Garrido M, Muñoz M.* Morale as a protection factor against Mission related stress Human dimensions in military operations - Military leaders' strategies for addressing stress and psychological support. Proceedings of the Symposium; 2006 April 24–26; Brussels, Belgium; Paris: NATO Science and Technology Organization; 2006.
9. *Wong A, Escobar M, Lesage A, Loyer M, Vanier C, Sakinofsky I.* Are UN peacekeepers at risk for suicide. *Suicide Life Threat Behav* 2001; 31(1): 103–12.
10. *Bartone PT.* Resilience under military operational stress: can leaders influence hardiness. *Mil Psychol* 2006; 18(Suppl): 131–48.
11. *Bartone P, Adler A, Vaitkus M.* Dimensions of psychological stress in peacekeeping operations. *Mil Med* 1998; 163(9): 587–93.
12. *Johansson E, Larsson G.* A model for understanding stress and daily experiences among soldiers in peacekeeping operations. *International Peacekeeping* 1998; 5(3): 124–41.
13. *Shigemura J, Nomura S.* Mental health issues of peacekeeping workers. *Psychiatry Clin Neurosci* 2002; 56(5): 483–91.
14. *Hall D.* Stress, suicide, and military service during Operation Uphold Democracy. *Mil Med* 1996; 161(3): 159–62.
15. *Logan VK.* The Emotional cycle of deployment. Camp Hill, PA: Center For Safe Schools; 1987.
16. *Van Dyk G.* Strategic challenges for African Armed Forces for the next decade. Stellenbosch: Sun Press; 2008.

Received on January 14, 2014.

Revised on January 25, 2015.

Accepted on January 27, 2015.

Online First December, 2015.