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# E-CONSALTING BY TELEPSYCHIATRIC SERVICES AND WAR RELATED POSTTRAUMATIC STRESS DISORDER

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Abstract:

BACKGROUND AND AIMS:

This study was examination e-consalting by Telepsychiatry of war related posttraumatic stress disorder (PTSD).

METHODS: Patients with PTSD have different symptoms.

The authors' objective is to analize component of symptoms in PTSD.

The subjects were 180 male psychiatric patients by Telepsychiatry and e-consulting with war related PTSD by videoconferencing via broadband ADSL by 2 Mbps. Posttraumatic stress syndrome-PTSS scale and 20-item.

Zung self-rating scale was used to assess state measures of symptom severity.

RESULTS: The symptoms of prolonged PTSS (posttraumatic stress syndrome) with duration between six moths and two years had been founded at 138 (76,7%) and 42 (23,3%) of patients had no PTSS: symptoms of depression had been found at 148 (82,2%) patients. The enduring personality exchange after catastrophic expiriense (F62.0), had been found at 25 (13,8%) patients (P< 0.01); symptoms of depression had been found at 61 (33,8%) patients after two years.

CONCLUSIONS: Evolution of PTSD symptoms and continued examination and follow-up by Telepsychiatry service and e-consalting may be important in predicting the eventual development of depressive symptoms and precipitation of F 62.0 enduring personality exchange after catastrophic experience in the war related PTSD. Consequently, Telepsychiatry service and e-consalting it is able to serve not only PTSD but also wide range of other patient.

Keywords: PTSD, Telepsychiatry, E-consulting, psychiatry, disorders, war

## INTRODUCTION

The term "telepsychiatry" refers to the use of telecommunication technologies with the aim of providing psychiatric services from a distance. Telepsychiatry and emental health services primarily involve videoconferencing over high (broadband) networks to enable natural interactions between patients providers. Telepsychiatry patients and mental health professionals, permitting effective diagnosis, treatment, education, transfer of medical data and other activities related to mental health care. Traditionally, this has required leasing specialized high speed telephone

dedicated for circuits that were videoconferencing. Modern approach to news and in the treatment of subjects with psychological consequences catastrophic events such as war, include service for telepsychiatry. Telepsychiatric services and e-consalting it is able to serve not only PTSD but also wide range of patient population. Continued examination and follow-up evolution of symptoms by Telepsychiatry service may be important in predicting the development of depressive eventual and precipitation of the symptoms enduring personality exchange after catastrophic expiriense in the war related

PTSD (F62.0). Telepsychiatry can be quite helpful in providing this type of service for patients with PTSD. A telepsychiatry service, using wireless technologies (WADSL) was established in order to provide psychiatric assessments and/or treatment for patients with PTSD. A telepsychiatry service providing mental health care by videoconference in real time on patients' own language was realized (1,2,3,4,5).

This study was examination by Telepsychiatry and E-consulting (telecommunication technologies with the aim of providing psychiatric services from a distance) of war related posttraumatic stress disorder (PTSD), there preliminary evidence to support the use of telepsychiatry for PTSD specialty care among combat veterans. The subjects were patients 120 male psychiatric Telepsychiatry and e-consulting with warrelated PTSD by videoconferencing via broadband ADSL and WADSL by 2 Mbps. Posttraumatic stress syndrome-PTSS scale and 20-item Zung selfrating scale was used to assess state measures of symptom severity. Telepsychiatry and emental health services could improve the quality and efficiency of mental health services delivery. Furthermore, clinical needs could be addressed by telehealth using the same infrastructure. This type of service E-consulting include items F43 Reaction to Severe Stress, and Adjustment Disorders (ICD-10-International Statistical Classification of Diseases and Related Health Problems 10th Revision, WHO Geneva, Version for 2006)

F43.0 Acute stress reaction,

## F43.1 Post-traumatic stress disorder,

F43.2 Adjustment disorders,

F43.8 Other reactions to severe stress,

F43.9 Reaction to severe stress,

unspecified

This category differs from others in that it includes disorders identifiable not only on grounds of symptomatology and course but also on the basis of one or other of two:

#### 1. Causative influences:

- An exceptionally stressful life event (e.g. natural or man-made disaster, combat, serious accident, witnessing the violent death of others, or being the victim of torture, terrorism, rape, or other crime) producing an acute stress reaction
- Significant life change leading to continued unpleasant circumstances that result in an adjustment disorder
- 2.Stressful event is thought to be the primary and overriding causal factor, and the disorder would not have occurred without its impact. Posttraumatic stress disorder (PTSD) is a delayed and/or protracted response to a stressful event of an exceptionally threatening or catastrophic nature. The three major elements of PTSD include
- 1. Re-experiencing the trauma through dreams or recurrent and intrusive thoughts ("flashbacks"),
- 2. Showing emotional numbing such as feeling detached from others,
- 3. Having symptoms of autonomic hyper arousal such as irritability and exaggerated startle response, insomnia.

Commonly there is fear and avoidance of cues that remind the sufferer of the original trauma. Anxiety and depression are commonly associated with the above symptoms. Excessive use of alcohol and drugs may be a complicating factor. The onset follows the trauma with a latency period, which may range from several weeks to months, but rarely more than half a vear. A telepsychiatry service test methods include different scales:Selfreported scales: Beck scale for depression & Zung scale for depression, Interview with physician: Hamilton scale (HAMD) & Posttraumatic stress syndrome scale (PTSS). There can be several potential barriers to the diffusion of telepsychiatry, e consalting and e-mental health. Some of these are concomitant with the adoption of any new technologies and practices in health care, licensure, identify technology

infrastructure need, equipment purchases etc. An activity that is never free. It requires money to begin services for telepsychiatry, money to continue and has as a goal the making of more money (6,7,8,9).

## **SUBJECTS**

Extensive study included 521 subjectsveterans with combat exposure. The target population to continue for this research have been veterans with combat exposure from war affected regions, currently residing in Bosnia-Herzegovina, Serbia, Montenegro or Croatia, between 30 and 60 years of age, with diagnosis of PTSD. The subjects were 180 male psychiatric patients.

#### **METHODS**

The subjects were assessed with the use of the PTSS scale and Zung self rating scale. Posttraumatic stress syndrome-PTSS scale and 20-item Zung self rating scale was used to assess state measures of symptom severity. The subjects were 180 male psychiatric patients by Telepsychiatry and e-consulting with warrelated PTSD by videoconferencing via broadband ADSL and WADSL by 2 Mbps.

## RESULTS

The symptoms of prolonged PTSS (posttraumatic stress syndrome) with duration between six moths and two years had been founded at 138 (76,7 %) and 42 (23,3 %) of patients had no PTSS:

Symptoms of depression had been found at 148 (82,2 %) patients.

The enduring personality exchange after catastrophic experience (with duration more than two years), had been found at 25 (13,8 %) patients (P< 0.01); symptoms of depression had been found at 61 (33,8 %) patients after two years.

#### DISCUSSION

Many patients with PTSD have different symptoms.

The authors' objective is to analyze component of symptoms in PTSD by PTSS-scale and Zung-scale.

How in this domain still has no scientific papers, so we were unable to compare our results with similar experiences.

Telepsychiatry patients appear to be satisfied with the service, equipment, and setting. All participants reported a high level of acceptance and satisfaction with telepsychiatry. Patients also prefer telepsychiatry to in-person appointments, because travel time, time off from work, and child care is not an issue with telepsychiatry.

Reasults with The enduring personality exchange after catastrophic experience had been found at 25 (13,8%) patients show statistically significance (P< 0.01).

## CONCLUSIONS

Telepsychiatry, as suggested by this review, is a growing field with the potential to deliver high-quality, much needed assistance in a variety of settings to persons in need of mental field of telepsychiatry will keep up with this moving target.

Evolution of PTSD symptoms and continued examination and follow-up by Telepsychiatry service and e-consulting may be important in predicting the eventual development of depressive symptoms and precipitation of F62.0 enduring personality exchange after catastrophic experience in the war related PTSD.

Consequently, Telepsychiatry service and e-consulting it is able to serve not only PTSD but also wide range of other patient population. Telepsychiatry is currently one of the most effective ways to increase access to psychiatric care for individuals living in underserved areas Continued follow-up by Telepsychiatry service will address the evolution of PTSD symptoms in war related PTSD.

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## REFERENCES

- 1. Hilty, D.M., Marks, S.L., et all., Clinical and educational telepsychiatry applications: A review. Canadian Journal of Psychiatry, 49, 12-23...
- 2.Stojakovic B.M., Posttraumatic stress disorder and telepsychiatry, 16th European Congress of Psychiatry, Nice, France, 2008, in press.
- 3.Stojakovic B.M., Telepsychiatry and war-related posttraumatic stress disorder, The 2nd Congress of Psychiatrists of Bosnia and Herzegovina with international participation, Sarajevo, 2007.
- 4. Stojakovic B.M., Traumatic expirience and PTSD, First congress of psychiatry of Bosnia and Hercegovina, Sarajevo, 2003.
- 5. Stojakovic, B.M., Posttraumaticc stress disorder, University Banjaluka, 2003.
- 6.Green, C., & Morland, L. (2004). PTSD anger management in the Pacific Island, Poster to be presented at the International Studies of Traumatic Stress Society Conference, New Orleans.
- 7. Stojakovic, B.M., WIRELESS systems for medical communication, Medici.com, No7, Banjaluka, 2005. 8. Stojakovic, B.M., Mental health and informatical technology, Tucepi, Croatia, 2005.
- 9.Hilty, D.M., Marks, S.L., Urness, D., Yellowlees, P.M., & Nesbitt, T.S. (2004). Clinical and educational telepsychiatry applications: A review. Canadian Journal of Psychiatry, 49, 12-23.

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