

## PERSONALIZED MEDICAL AND PSYCHOLOGICAL CORRECTION OF RISK FACTORS FOR CARDIOVASCULAR DISEASES USING REMOTE TECHNOLOGIES

Natalia Sirota<sup>1</sup>, Oksana Sivakova<sup>1,2</sup>, Vladimir Yaltonsky<sup>1</sup> & Alexandra Yaltonskaya<sup>3</sup>

<sup>1</sup>A.I. Evdokimov Moscow State University of Medicine and Dentistry, Moscow, Russia

<sup>2</sup>National Medical Research Center for Preventive Medicine, Moscow, Russia

<sup>3</sup>V.M. Serbsky National Medical Research Center for Psychiatry and Narcology, Moscow, Russia

**Background:** Cardiovascular diseases are the main cause of death, loss of function, poor quality of life, and the high cost of treatment and rehabilitation measures in the world. Large-scale studies show that up to 90% of heart attacks and strokes can be prevented by prophylactic correction of cardiovascular risk factors. The rapid growth of telecommunication and network health resources thanks to modern means of communication (video calls, SMS alerts, e-mail, etc.) allows to remotely provide personalized psychological counseling for patients with heart diseases.

**Subjects and methods:** The purpose of the study is a comparative investigation of changes in risk factors for cardiovascular diseases under the influence of telemedicine psychological counseling (technology of in-depth preventive and motivational counseling, the formation of coping skills with the disease). 140 patients with chronic heart diseases were examined. They were divided into two comparable groups of 70 people. In the experimental group (No. 1), medical-psychological correction was carried out using remote technologies; comparison group (No. 2) was under standard observation. All patients received supportive pharmacotherapy.

**Results:** The use of remote psychocorrection technologies in the experimental group for 12 months allowed us to reach the target levels of blood pressure ( $p=0.002$ ), physical activity ( $p=0.003$ ), increase the proportion of patients who consume 400 g of fruit and vegetables per day ( $p=0.006$ ), reduce body mass index ( $p=0.0003$ ), reduce waist circumference ( $p=0.002$ ), lower cholesterol ( $p=0.004$ ), in the smoking patient subgroup, reduce the number of cigarettes smoked per day. Between the groups after 12 months of observation, there were no statistically significant differences in the level of blood glucose and the volume of alcoholic beverages consumed.

**Conclusion:** Conducting a personalized remote medical and psychological correction significantly improved the profile of risk factors for chronic heart diseases.

\* \* \* \* \*

## SPECIFIC FEATURES OF DEPRESSIVE DISORDERS IN VICTIMS OF SEXUAL VIOLENCE

Alla Tyuneva & Boris Tsygankov

A.I. Evdokimov Moscow State University of Medicine and Dentistry, Moscow, Russia

There have been examined 104 women who suffered rape. Majority of women examined (56.7%) had suffered rape at an age of 12 to 18 years. The duration of the period assessed from the moment of rape to seeing a psychiatrist varied from 1 month to 30 years (on average was  $9.3 \pm 1.3$  years).

We applied random sampling technique whose only selection criterion was the availability of an episode of sexual violence in anamneses of female patients. We used clinical and anamnestic method, dynamic observation over the condition of those under examination. To determine overall level of subjective distress we used the impact of event scale (IES) developed by M. Horowitz (1978) and revised by Weiss (1996). There was also conducted clinical psychiatric examination.

The sample did not include women in whom psychogenic disorder developed on the backdrop of personality disorder of various geneses. Also excluded were the persons with signs of rough organic brain syndrome and patients with psychotic symptomatology, whether at the time of examination or in the past.

Depressive disorders in victims of rape were presented by the anxio-depressive reactions during acute period of post-traumatic disorders (58 - 55.8%) that subsequently transformed under adverse conditions into prolonged depressive reactions as part of adjustment disorder (19 - 41.3%); mild depressions (11 - 23.9%) and moderate depressions (16 - 34.8%). The majority of the women examined (32 - 69.6%) with depressive disorders in premorbidity had these character features: undue susceptibility and an impressibility with tendency to guardedness in external manifestation of emotions and enduring fixation

on emotionally significant situations. Second most frequent in this group were found to be asthenic persons (14 - 37.8%). In greatest number were presented the female patients who were brought up in conditions of hyperprotection (33 - 71.7%). In overwhelming majority of cases (87.5%), in such families the mother (less often the father) had domineering, authoritative character. In lesser number (13 - 35.1%), those brought up in the conditions of neglect in disadvantaged families.

The most apparent depressive disorders were noted in the women after group violence, who were blamed in their families ( $T > 2$ ,  $p < 0.05$ ), it being of greater significance for rape victims aged below 18 ( $T > 3$ ,  $p < 0.01$ ). In these women the feeling of own guilt was prominent in the structure of depressive disorders.

The apparentness of feeling of own guilt in what has occurred was higher in women brought up in the families where parents instilled the "victim herself is guilty" attitude ( $T > 2$ ,  $p < 0.05$ ). The accusatory position of family members expressed in blaming in what has occurred or suggestions that the victim could do more for her defence in a situation of violence, and "silent" condemnation of the victim (ignoring, avoiding, etc.), strengthened the feeling of own fault in victims of sexual violence.

In 28 (48.3%) of the sexual violence victims surveyed there were noted as part of anxio-depressive reactions in acute period the post-traumatic depersonalisation changes that did not reach psychopathological level and therefore these disorders are better describes by the term "change of consciousness". In the structure of changes being described the leading one was the autopsychic variant of the change of consciousness which manifested in the feeling of a changed nature of the sense of self (10 - 35.7%), disorder of sensory perception (5 - 17.9%). Whereas the intensity of these conditions was defined by degree of maturity of the personality ( $T > 3$ ,  $p < 0.05$ ). The depressive disorders in case of this change of self-consciousness were accompanied by sensitive ideas of attitude, thoughts that people around were noticing changes in them, knew the reason for that and were condemning them.

The allpsychic form of change of self-consciousness was second most frequent to occur and could proceed with prevalence of the feeling of threat emanating from the outside of (6 - 21.4%) or feeling of unusual void (4 - 14.3%). The intensity of conditions with a feeling of threat was determined by degree of intensity of the stress endured during rape related to fear for her life ( $T > 3$ ,  $p < 0.05$ ), and desire to conceal the fact of rape from people around. This form of change of self-consciousness was followed by a feeling of anxiety, agitation, tearfulness and tendency to sudden outbursts of irritation.

For women in all studied cases the situation of violence was an exceptional, highly traumatising experience, with disruption of control of one's life. As a result of these experiences there have been collapsing habitual views of themselves, the world around, which led to the development of cognitive dissonance. The apparentness of manifestations of a change of self-consciousness decreased as the psychologic traumatic experience becomes more remote, and then disappeared completely. However, a consequence of these disorders has been the formation of cardinaly different perception of oneself and the world around, which was becoming the basis for emergence of character changes, which prevailed in a clinical pattern when symptomatology was becoming more complicated.

The formation of more complex and profound depressive disorders in victims of sexual violence occurred by two variants. The first was distinguished by fast formation of depressive neurotic symptomatology - 22 (47.8%) and was accompanied by additional psychotraumatic factors affecting the victim. The second variant of the development of depressive disorders of neurotic level (24 - 52.2%) was characterized by gradual onset of depressive symptomatology with more distinct manifestation of a disturbing component. In this variant the victims of violence found themselves in a situation of "compelled emotional isolation" because of desire to conceal the fact of rape.

Thus, though depressive disorders in victims of rape may differ by the variety of clinical manifestations, but at the same time do not go beyond neurotic level of disorders. Under the influence of additional psychotraumatic factors, depressive disorders tend to have more complicated depressive symptomatology and to be more prolonged in time.