Anxiety, Depression and Aggression in Adolescents with Vegetative-Vascular Dystonia in The Arctic Region

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Living on the territory of the Arctic region with a harsh climate, short daylight hours and sudden changes in temperature adversely affect the health and mental state of adolescents. There is an increase in chronic functional diseases in adolescents, among the initial presentations of which are anxiety, aggression and depression.

We examined 52 adolescents with vegetative-vascular dystonia, residents of the Arctic region, whose average age was 13.6 years. The results were compared with data obtained from 52 healthy adolescents, similar in sex, age, and length of stay in the Arctic region. The adolescents with vegetative-vascular dystonia and healthy adolescents were examined in the conditions of medical and educational institutions on the territory of Yamal in the Arctic climate zone. For the study of depression, anxiety and aggression, we used Self Rating Depression (SDS), Taylor Manifest Anxiety Scale (TMAS), Buss-Durkee Inventory (BDI).

High anxiety, depression and aggression are presentations of emotional disorders in adolescents with vegetative-vascular dystonia. Half of the examined adolescents with vegetative-vascular dystonia manifested high anxiety, measured using TMAS. The study found that the anxiety level as per TMAS in female adolescents with vegetative-vascular dystonia is higher than in healthy girls (p

There were no differences in the level of anxiety between male adolescents with vegetative-vascular dystonia and healthy boys. Depression indices in adolescents with vegetative-vascular dystonia were higher compared with healthy adolescents ($p < .0001$).

Gender differences between boys and girls with vegetative-vascular dystonia were not fixed for depression. The aggression index obtained using BDI is higher in adolescents with vegetative-vascular dystonia ($p < .0001$), and the hostility index is lower than in healthy adolescents. Adolescents with vegetative-vascular dystonia have higher indices of physical aggression, auto-aggression and sense of guilt than healthy adolescents.

Adolescents with vegetative-vascular dystonia, living in the conditions of the Arctic region, present high anxiety, depression and aggression. Timely diagnosis using personality questionnaires may be important for early preventive measures. It is necessary to create new organizational approaches that could ensure the continuity of primary psychological and medical (general and specialized) assistance to adolescents in the Arctic region.