The Second International Anxiety Congress
Shefa Neuroscience Research Center, Tehran, Iran, 1-3 October, 2014
The Neuroscience Journal of Shefaye Khatam
Volume 2, No.3, Suppl 1

Poster Presentation Research

Anxiety Symptoms Prevalence and Its Relationships with Plasma Cortisol Level in Nursing Students

Seyedeh Maryam Mosavi[1*], Davoud Pourmarzi[2], Shady Dehganzadeh[1], Babak Ruzbehan[1], Glzar Pourhamed[1]

[1] Rasht Branch, Islamic Azad University, Rasht, Iran.
[2] Epidemiologist, Guilan University of Medical Sciences, Rasht, Iran.

Published: *1 Oct 2014*

Abstract

Anxiety is one of the prevalent mental health disorders. Stressors by changes in physiology can increase risk of physical diseases. High levels of cortisol have many negative effects on health. This study aimed to determine Anxiety symptoms prevalence and its relationships with plasma cortisol level. This study was a descriptive- analytical cross-sectional that was conducted on 100 nursing students in Islamic Azad University of Rasht in 2013. For data collection we used demographic questions such as age, sex, occupation and marital status, also we used depression, anxiety and stress scale (DASS-21). Plasma concentration of cortisol was measured by enzyme linked immunosorbent assays (ELISA). Mean of anxiety scale was 8.98±7.60. Nineteen percent of students were in severity and high severity category. Mean of depression scale was 9.18±7.96. Ten percent of students were in severity and high severity category. Mean of stress scale was 15.36±7.85. Thirteen percent of students were in severity and high severity category. Mean of cortisol level was 14.08±5.08 (µg/dl). Cortisol level was significantly correlated with depression scale (r=0.255, *P*=0.01) and anxiety scale (r=0.202, *P*=0.044), but between cortisol level and stress scale there was no significant correlation (*P*=0.515). Based on our findings with increase in depression and anxiety scales, cortisol level is increased. But changes in stress scale don't have any effects on cortisol level. Concentration of cortisol as stress biomarker should be interpreted with considering personality, level of stress and type of chronic and acute stress.

Keywords: Depression, Anxiety, Stress, Cortisol.

***Corresponding Author:** Seyedeh Maryam Mosavi

E-mail: *Mmousavi.msc@gmail.com*