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Preliminary Studies: Relationship between Serum Level of Vitamin D and Symptoms of Schizophrenia Measured by Positive and Negative Syndrome Scale in Sumatera Utara

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Abstract : Background: Schizophrenia is a psychotic disorder that most often encountered. Nearly 1% of the world population suffers from schizophrenia during their lifetime. Schizophrenia is a severe form of psychotic disorders, and tend to be chronic. Vitamin D plays crucial roles in neuroprotection and neurodevelopment, and low levels are commonly associated with schizophrenia. Lower vitamin D levels were correlated with more severe positive, negative, and overall symptoms in schizophrenia patient men and women. Methods: 54 schizophrenic patients, male and female, who are diagnosed with semistructured MINI ICD-X. A symptom of schizophrenia was measured by using positive and negative Syndrome Scale (PANSS). Examination of serum vitamin D using ELFA. Analysis to compare the serum levels of vitamin D male and female with Independent T-test, and the relationship between serum level of vitamin D and symptom with correlation. Results: In this study serum levels in male schizophrenic patients 22.12 (4.16), and 16.54 (2.88) in female schizophrenic patients. There are differences in male schizophrenic patients and women ($p < 0.001$). The negative correlation between serum levels of vitamin D in the PANSS total score in patients with schizophrenic male with r -0.58, p (0,016), and the female schizophrenic patients with r -0.69, p (0.031). Conclusion and Suggestion: There is a negative correlation between serum levels of vitamin D with a total score of PANSS, the lower the serum levels of vitamin D, the higher the total score of the PANSS.

Keywords : PANSS, schizophrenia, serum levels of vitamin D, severity illness
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