

A meta-analysis of alterations in specific brain structures in clinically depressed patients

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The brain consists of different structures that are continuously interacting to regulate and control bodily activities, interpret sensory impulses and help organs and muscles function. It is also known to control consciousness, thought, memory and emotion. During acute and chronic clinical depression specific brain structures are altered both in function and size. For further research on this matter a meta-analysis was conducted by reviewing 25 medical studies of the adult population, the focus was specifically in the changes involving the Amygdala, Hippocampus, Prefrontal Cortex and Anterior Cingulate Cortex. Out of the 25 articles, 8 found major changes in the hippocampus, 10 in areas of the prefrontal cortex, 7 in the amygdala and 4 in the anterior cingulate cortex. In general the major overlap involved changes in the amygdala and hippocampus. The importance of focusing on structural changes involved in clinical depression is not only to help in creating major awareness of this pathology but more specifically to help in the future aim of its treatment. We recognize that the prevalence of clinical depressions diagnosis has grown from 3.33% in 1991-1992 to 10% in 2012 in the United States of America. Thus, the importance of recognizing and treating depression can improve the quality of life in 1/10 patients in the United States of America today.

Biography

Adriana Garza López is currently a medical student at University of Monterrey, Mexico. She has completed a program for IVHQ medical volunteers in Faridabad, India. She participated at AAAS 2011 as a poster presenter for the student division and as a session aid. She has served as a member of the annual medical congress of her university. She is currently completing a 2-month observership for the internal medicine division at Washington Hospital Center.

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