

## Accepted Manuscript

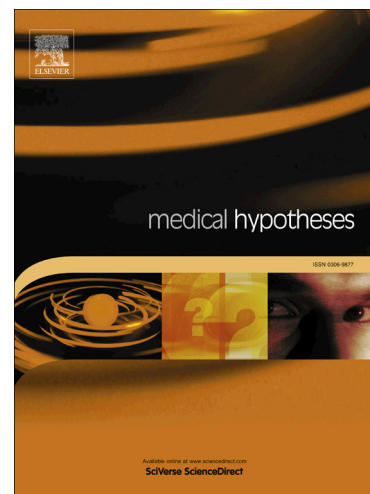
Visceral theory of sleep and origins of mental disorders

Mariam M. Morchiladze, Tamila K. Silagadze, Zurab K. Silagadze

PII: S0306-9877(18)30630-3  
DOI: <https://doi.org/10.1016/j.mehy.2018.07.023>  
Reference: YMEHY 8942

To appear in: *Medical Hypotheses*

Received Date: 20 June 2018  
Revised Date: 12 July 2018  
Accepted Date: 25 July 2018



Please cite this article as: M.M. Morchiladze, T.K. Silagadze, Z.K. Silagadze, Visceral theory of sleep and origins of mental disorders, *Medical Hypotheses* (2018), doi: <https://doi.org/10.1016/j.mehy.2018.07.023>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## Visceral theory of sleep and origins of mental disorders

Mariam M. Morchiladze<sup>a</sup>, Tamila K. Silagadze<sup>a</sup>, Zurab K. Silagadze<sup>b</sup>

<sup>a</sup>*Tbilisi State Medical University, Tbilisi, Georgia*

<sup>b</sup>*Novosibirsk State University and Budker Institute of Nuclear Physics, 630 090, Novosibirsk, Russia.*

---

### Abstract

Visceral theory of sleep states that the same brain neurons, which process external information in wakefulness, during sleep switch to the processing of internal information coming from various visceral systems. Here we hypothesize that a failure in the commutation of exteroceptive and interoceptive information flows in the brain can manifest itself as a mental illness.

*Keywords:* Visceral theory of sleep; Psychiatry; Schizophrenia; Bipolar disorder.

---

### 1. Introduction

Bipolar disorder is a nasty mental illness characterized by alternating episodes of mania, hypo-mania and depression, intertwined with periods of remission [1, 2, 3].

Bipolar disorder affects more than one percent of the world's population irrespective of nationality, ethnic origin, or social status, which is similar to that of schizophrenia — another major psychiatric disorder [1, 2].

At present there is no generally accepted theory of the origin of mental disorders, and what exactly causes the illness is still unknown. The modern neurobiological evidence of functional and structural abnormalities, as well as gray-matter and white-matter changes related to the bipolar illness strengthen

---

*Email addresses:* Marmorchila@gmail.com (Mariam M. Morchiladze), tamila1705@rambler.ru (Tamila K. Silagadze), silagadze@inp.nsk.su (Zurab K. Silagadze)

Download English Version:

<https://daneshyari.com/en/article/8515096>

Download Persian Version:

<https://daneshyari.com/article/8515096>

[Daneshyari.com](https://daneshyari.com)