

Translation by Patrizia Rustichelli-Stirgwolt

The review of the Italian association of psycho-neuro-endocrine-immunology

Edited by Francesco Bottaccioli

PNEI NEWS

The new knowledge of science and health



PSYCHE, HEART AND ...BELLY

Stress, cardiopathies, diabetes, obesity...how they are related

Pnei News – bimonthly review – nr 2 – year VIII – March – April 2014

PNEI NEWS NR 2 – March –April 2014

EDITORIAL

**Page 3. Turning point in cardiology.
Depression is now considered as a risk factor.**
Adriana Roncella

STRESS AND METABOLISM

Page 4. The two sides of the same coin: obesity and depression.
There is a bidirectional relationship between obesity and depression. Obesity increases the risk of depression and vice versa depression represents a higher risk of obesity, especially visceral obesity.
Roberta De Bellis

Page 6. Metabolic syndrome and diabetes mellitus type 2. The role played by stress.
The most recent studies have confirmed Selye's hypothesis. Cortisol has been identified as one of the main mediators of the stress impact on metabolism, especially on glucidic metabolism.
Laura Gianotti, Gemma Falco

Page 8. A mark left on the psyche.
Recent studies show that traumas occurring during child age increase the risk of developing a metabolic syndrome at adult age. This syndrome varies according to the kind of trauma and sex of the traumatized child. Physical and emotional traumas affect both sexes, whereas sexual abuse seems to increase the risk only for women.
Anna Giulia Bottaccioli

Page 10. Thyroid is sensitive to food.
A clinical experience of reducing or eliminating the thyroid hormone replacement therapy by implementing an appropriate diet and lifestyle.
Luca Speciani

DOSSIER

BRAIN PLASTICITY AND NEUROGENESIS

Interview with Gerd Kempermann

Page 12. New neurons for new stimuli
The brain never stops developing. These are real potentialities and they play an important role to ensure the normal brain functioning. They are essential to face changes, provide resilience and the possibility to adapt to external stimuli.
Paola Emilia Cicerone

**Page 14. Neurogenesis in the adult brain
The end of a hundred year old dogma.**
It is now proven that there are three areas in the brain that generate new neurons. Although they are not yet definitive, new evidences indicate that also other cerebral areas can do the same.

Francesco Bottaccioli

THE HEALING THERAPY. Narrative medicine

Page 18. My name is Tatiana Melis and I am a nurse.

Tatiana Melis

Page 19. The enigma of suicide.

With the author's approval, we publish an excerpt from the last book written by Fabrizio Benedetti "Il caso G.L. Medicina narrativa, le dinamiche nascoste della mente"*. Carrocci, Roma

*(The G.L. Case. Narrative medicine, the hidden dynamics of the mind)

Page 21. PNEIMED: science, ancient philosophy, exercises: a new meditative method scientifically proven.

In the May issue, Explore, The Journal of Science and Healing edited by Elsevier has published the results of one of our studies carried out on a sample of participants who attended PNEIMED courses (Psychoneuroimmunology-based Meditation courses).

Francesco Bottaccioli et al.

EDITORIAL

Turning point in cardiology.

Depression is now considered as a risk factor as well as smoke and cholesterol

Adriana Roncella

Cardiologist and psychotherapist. Hemodynamics Care Division, Cardiovascular Diseases Dept. at San Filippo Neri Hospital, Rome. Sipnei member.

An article published on the 2014 March *Circulation* issue¹ has reported the results of a thorough bibliographic research on the relationship between depression and acute cardiovascular events (angina and myocardial infarction) led by a committee of experts assigned by the American Heart Association.

The committee selected 53 epistemological studies and 4 meta-analyses according to which depression represents a negative prognostic risk factor in patients with acute cardiovascular events as it triggers an increase of new cardiovascular events and mortality both for cardiovascular causes and for other ones. Particularly the 53 studies were carried out mainly in the United States, Canada, European countries and Japan on a total population of 40,327 subjects that were cumulatively evaluated. In 2009, *Circulation* had already published a very detailed review² on the psychosocial risk factors. It had come to the same conclusion, reporting the results of 16 epistemological studies on 24,675 subjects. Furthermore, in 2004, *Lancet*³ had published the Interheart study that was carried out on 52 nations in the world on 15,152 patients with acute myocardial infarction and it highlighted how the relationship between psychosocial risks (especially stress due to family, work and financial problems) and myocardial infarction was at the third place after hypercholesterolemia and smoke but before diabetes mellitus, arterial hypertension and obesity. Again, already at that time, the 2012 European guidelines were recommending to consider a psychotherapy or medication in case of significant symptoms of depression, anxiety and hostility in cardiomyopathy patients⁴.

The guidelines were concluding that this approach could improve the psychological symptoms and the quality of life even though there were not yet definitive evidences of a beneficial effect on the follow-up.

Perhaps the medical and cardiological world show uncertainty and skepticism towards this approach since the psychological treatment is not able to assess an improvement on the cardiovascular prognosis. I believe it is now time to stop arguing about the influence of depression in the prognosis but rather to start preparing an effective methodology for psychotherapy intervention.

The STEP-IN-AMI study led at the Department of Cardiovascular Diseases at San Filippo Neri Hospital in Rome (published on the *International Journal of Cardiology* in 2013)⁵ identified a first reference point. A methodology of humanistic-based psychotherapy intervention (from ontopsychology) was specifically adapted and tested on a group of 101 patients who had had an acute myocardial infarction.

The patients were randomized in the following way:

- a) traditional therapy
- b) traditional therapy + short psychotherapy.

The one-year later follow-up reported that the patients showed a significant reduction on the level of depression as well as cardiovascular events and new medical pathologies.

I believe it is now time to make a step forward and start to implement effective techniques for treating depression as a part of the secondary prevention for patients who have recently suffered from acute cardiovascular events.

References

1.Lichtman JH, et al. Depression as a Risk Factor for Poor Prognosis Among Patients With Acute Coronary Syndrome: Systematic Review and Recommendations: A Scientific Statement From the American Heart Association. *Circulation*, 2014; March 25.

2.RozanskiA,Blumenthal JA, KaplanJ. Impact of psychological factors on the pathogenesis of cardiovascular disease and implications for therapy. *Circulation* 1999;27:2192–217. 3.Rosengren A, Hawken S, Ounpuu S, et al. Association of psychosocial risk factors with risk of acute myocardial infarction in 11 119 cases and 13 648 controls from 52 countries (the INTERHEART study): case–control study. *Lancet* 2004;364:953–62. 4.Joint ESC guidelines 2012. Recommendations on the management of psychosocial factors. *Eur Heart J* 2012; vol 33, 13.

5.Roncella A, et al, One-year results of the randomized, controlled, short-term psychotherapy in acute myocardial infarction (STEP-IN-AMI) trial, *Int J Cardiol* (2013), <http://dx.doi.org/10.1016/j.ijcard.2013.08.094>