

**OP-114****Healing and meditation: ‘PNEI’s quantum theory and energy interaction in healing and care’**

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This report focusses on the change of paradigm introduced by quantum theory in human sciences, through entanglement theory. In a scientific field, this term stands for a reality’s representation in a subatomic level as a unified whole that is defined by energy fields, information. The really interesting part is that entanglement is effectively imposing itself in a macroscopic way too; thus, each of our subject of research (biological, medical and psychological) seems to work as a relations network, an information-permeated system, characterised in an inseparable way by interconnection and interdependence. Psychoneuroendocrinology (PNEI) itself, introducing a new vision of illness, care and health, reshapes its theoretic structure around mental quantum theory’s process, surrounded by quantum neurodynamics. That is why quantum PNEI opens new Care’s horizons to the health professional people, permitting to create a strategy that is directed to health in the making and provides a deeper understanding of the interaction of energy in the caring relationship.

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**OP-115****Measuring stress: the search for a multisystemic index of allostatic load–stress pathophysiology**

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Increasing evidence supports the view that repeated, protracted stress exposure may cause progressive ‘wear, tear’ on the body’s regulatory systems, leading to multisystem physiological dysregulation (allostatic load, AL), thus affecting well-being and disease trajectories in the long run. Although much work on the effects of chronic stress has focussed on specific, individual biological parameters, the AL framework proposes that stress-related biological risk can be more effectively conceptualised from an integrated, multisystem view. However, how to operationalise AL remains today a matter of debate, mainly concerning the range of physiological parameters to be included, as well as the scoring methodologies to be implemented for summarising multiple data into reliable cumulative index. The AL model was initially validated on healthy geriatric populations using an array of 10 biological parameters reflecting four major regulatory systems (neuro-endocrine, autonomic, cardiovascular and metabolic) and subsequently incorporating additional data on inflammatory markers these studies demonstrated that baseline AL correlates (far better than single parameters do) with increased risks for a range of major health outcomes. Using a multisystemic index based on variant biomarker inclusions and alternative algorithmic formulations, the functional

significance of high AL scores has been clearly confirmed by further studies, showing that different clusters of neuro-endocrine versus metabolic parameters might contribute independently to health risks, with gender-specific differences. Assessing multiple biomarkers, therefore, appears as a powerful tool to improving biomedical detection strategies and eventually implementing (and controlling the efficacy of) earlier interventions to promote well-being and longevity.

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**OP-116****One-year follow-up results from the randomised study STEP IN AMI (Short Term Psychotherapy In Acute Myocardial Infarction)**

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**Background:** Psychosocial factors play an important role in the pathophysiology of acute myocardial infarction (AMI); however, it is not known if psychotherapy after medical and interventional treatment of myocardial infarction may be beneficial.

**Aim:** To assess the effects of a short-term psychotherapy (STP) on the clinical outcomes of patients who underwent an emergency angioplasty for AMI.

**Methods:** A total of 101 consecutive patients undergoing an emergency angioplasty were randomised 1 week after AMI to medical therapy (MT group) or to MT + STP (STP group). STP consists of individual and group meetings at 6 months’ intervals after AMI onset. Clinical follow-up visits are scheduled at 6 months, 1 and 5 years while psychometric tests (for evaluation of stress level, vital exhaustion, depression, social support, quality of life, main life events before AMI and type D personality) are scheduled 1 week after AMI and at 1 year. The primary composite end points of the study are the incidence of new cardiologic events (reinfarction, death, stroke, life-threatening ventricular arrhythmias and recurrence of angina) and the occurrence of new medical pathologies. Secondary end points are the incidence of re-hospitalisations due to cardiologic problems, the prevalence of patients with New York Heart Association (NYHA) class  $\geq 2$  and mean score of psychometric tests in the two groups at follow-up.

**Results:** Six patients were lost to follow up. Ninety-five patients completed 1-year follow-up. The two groups were similar concerning baseline risk factors, psychometric test scores, clinical characteristics and echocardiographic and cath-lab variables. At follow-up, the STP group showed a statistically significant lower incidence of primary composite cardiologic end point and medical end point, as compared to the MT group (15/54 pz vs. 29/47  $p=0.006$  and 7/54 pz vs. 24/47 pz,  $p=0.0003$ , respectively). Only one patient in the STP group showed an NYHA class = 2, while 9/47 patients of the MT group were in functional class  $\geq 2$  ( $p=0.007$ ). More-