**Conclusion:** Higher level of exposure and higher intensity of traumatic experiences is leading to decreased perception of self competency and lower self- esteem within survivors.

## P0007

Genetic variation in stress response: The role of the arginine vasopressin lb receptor and the glucocorticoid receptor genes

D. van West<sup>1</sup>, D. Deboutte<sup>1</sup>, S. Claes<sup>2</sup>.<sup>1</sup> University Center of Child and Adolescent Psychiatry, University of Antwerp, Antwerp, Belgium<sup>2</sup> <sup>2</sup> University Psychiatric Centre K.U.Leuven, Campus Gasthuisberg, Leuven, Belgium

**Background:** Appropriate responsiveness to everyday-life stressors is crucial for adequate functioning in a natural environment. Conversely, depending on individual's genetic makeup, prolonged stress, coupled with inappropriate responsiveness may lead to physiological and psychiatric disorders. Various psychiatric conditions have been associated with stress and alterations in hypothalamic-pituitary-adrenal (HPA) activity. Yet while stress is a general phenomenon, illness is only seen in a proportion of individuals, suggesting genetic modifiers of ability to cope with stress. In children, relatively little research has been conducted to estimate the impact of genetic factors on the variability in HPA axis functioning.

**Methods:** In the present explorative investigation, 106 prepubertal children were studied to estimate the impact of four glucocorticoid receptor gene (NR3C1) polymorphisms (NR3C1-1, ER22/23EK, N363S, N766N) and five arginine vasopressin (AVP) receptor 1b gene (AVPR1b) polymorphisms (AVPR1b\_s1, AVPR1b\_s2, AVPR1b\_s3, AVPR1b\_s4, AVPR1b\_s5) on cortisol responses after a psychosocial stress test (public speaking task).

**Results:** ER22/23EK carriers displayed significant lower cortisol responses to psychosocial stress compared to noncarriers. This particular polymorphism has earlier been associated to the vulnerability to develop MDD by our own research group (1) and independently by another publication (2).

**Conclusion:** These findings support the relevance of the ER22/ 23EK polymorphism in HPA axis regulation and in the vulnerability for psychiatric disorders.

1. van West D et al, Neuropsychopharmacology 31: 620-627, 2006.

2. Van Rossum EFC et al., Biol Psychiatry 59: 681-688, 2006.

## P0008

Promoting mental health - Evidence of the Salutogenic Framework for a positive health development

M. Eriksson, B. Lindstrom. Folkhalsan Research Centre, Health Promotion Research Programme, Helsinki, Finland

Social trends point to a major upset of the traditional social structures such as the rupture of local and intimate networks because of migration into urban areas, changed function and structure of family networks and changes in the patterns of working life. At the same time there are concerns regarding a decreasing mental health. All this makes it difficult to find and run a coherent life. However, there are theories and frameworks contributing to stress research. One of them is the salutogenic theory developed by Aaron Antonovsky, a positive concept exploring the origin of health (salutogenesis) not disease (pathogenesis). Stress has generally been seen as a negative event that increased the risk of people "breaking down". In contrast, Antonovsky stated that chaos and stress are part of life and natural conditions. The fundamental concepts of Salutogenesis are Generalized Resistance Resources (GRRs) and Sense of Coherence (SOC). GRRs help the person to construct coherent life experiences. Even more important than the resources themselves is the ability to use them, the sense of coherence (SOC). The presentation reports findings from an ongoing extensive worldwide systematic review of the salutogenic research, based on about 500 scientific articles. The findings show the SOC to be strongly related to perceived good health, especially mental health. SOC seems to have a main, moderating or mediating role in explaining health. SOC is able to reduce stress. SOC predicts good health and QoL. The salutogenic framework could guide public health, particularly mental health promotion, in a new direction.

# P0009

Prevalence of risk for mental disorders among paramedical students at the Fatemeh nursing college. Shiraz-Iran

S. Gholamzadeh, N. Passyar, A. Haghshenas. Shiraz University of Medical Sciences, Fatemeh (PBUH), Nursing and Midwifery College, Shiraz, Iran

**Background:** Physical and mental health has been found to be affected by occupational factors that cause psychological strain. The aim of this cross-sectional study was to investigate the Prevalence of risk for mental disorders among paramedical students at the Fatemeh nursing &Midwifery college in Iran.

**Methods:** The studied population included 184 paramedical students from First year and fourth year of education. Self-administered questionnaires were used to solicit demographic information and Psychological ill health was measured using a standard instrument—the General Health Questionnaire (GHQ 28). In this study a cut-off point of 23 was used for prevalence estimations. By this scoring, if the total score was 23 or less (from84) then the person was regarded healthy. The higher the GHQ-28 scores indicated the subject might suffer from a psychiatric distress.

**Results:** The majority of the respondents (68.5%) were between the ages of 20-24 years and 80.8 % were female.47.3 percent of paramedical students had GHQ scores of 24 and above, indicating an increased likelihood of psychological disorder. The average score was 25.93 +/-14.93.Depression has the lowest mean score (3.92+/-7.2), while social dysfunction has the highest mean score (8.12+/-3.97) among the subscales. GHQ scores between the dissatisfied and satisfied groups were statistically significant (P = 0.001).

**Conclusions:** This study suggests that paramedical students have high levels of stress, so counseling and other support services should be made available to them.

### P0010

Prevalence of risk for mental disorders among paramedical students at the fatemeh nursing and midwifery college.Shiraz-Iran

S. Gholamzadeh<sup>1</sup>, A. Haghshenas<sup>2</sup>. <sup>1</sup> Shiraz University of Medical Sciences/ Fatemeh Nursing and Midwifery College, Shiraz, Iran<sup>2</sup> Shiraz University of Medical Sciences, Shiraz, Iran

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**Conclusions:** This study suggests that paramedical students have high levels of stress, so counseling and other support services should be made available to them.

# P0011

The dynamics of stress and changes in the working conditions

E.N. Gruber<sup>1</sup>, M. Katić<sup>2</sup>, M. Agius<sup>3</sup>.<sup>1</sup> Neuropsychiatry Hospital "Dr. I. Barbot", Popovaca, Croatia<sup>2</sup> "A.Štampar" School of Public Health, University of Zagreb Medical School, Zagreb, Croatia<sup>3</sup> Bedfordshire Centre for Mental Health Research in Association With The University of Cambridge, Cambridge, UK

**Aims:** To determine whether the change in working conditions related to the privatisation of Primary Health Care increased stress among GPs and to obtain insight into the most prominent stressors.

**Methods:** Two questionnaires (the Holmes and Rache social readjustment questionnaire and a special test for investigating stressors derivered by the "emic" method) were used. SUBJECTS: 120 GPs with private practices (response rate of 75%) and 90 hospital doctors (response rate 92%).

**Results:** 2/3 of participants in both subgroups were females. In both subgroups, around 1/2 of participants were up to 45 years old. Significant findings were that 30.3% of GPs reported progress having been made regarding their working place and finances, 78.8% reported that their work responsibilities had increased and 57.6% reported that they had changed their working hours and work conditions. 24.2% of GP s reported a reduction in the time spent with their families, 6.1% stated that their children had altered their behaviour in a negative manner, 26.3% of GPs stated that their partners had altered their behaviour for the better and only 16.2% took time off for sickness in the last three years. The most common stressors found were disruption to family life due to consultation with patients after working hours (46.9% cases) and feeling overloaded with new administrative commitments (68.4% cases).

**Conclusion:** Privatisation of PHC produced stress among GPs without severe negative consequences to the private lives and health of GPs.

## P0012

Classical and alternative pathways complement activity in patients with Post-Traumatic stress disorder

L.P. Hovhannisyan<sup>1</sup>, G.M. Mkrtchyan<sup>1</sup>, A.S. Boyajyan<sup>1</sup>, S.H. Sukiasyan<sup>2</sup>. <sup>1</sup> Institute of Molecular Biology, Armenian National Academy of Sciences, Yerevan, Armenia<sup>2</sup> Stress Center of Armenia, Yerevan, Armenia Post-Traumatic Stress Disorder (PTSD) is a clinical syndrome characterized by prominent affective symptoms and by a 'hyperactive' sympathetic nervous system. A high percentage of combat veterans, survivors of catastrophic events experience symptoms of PTSD. PTSD is accompanied by a number of specific and non-specific "somatic" pathologies, such as immune and physical complaints/chronic pain. The present study emphasizes the important role of the immune reactions in the pathogenesis of PTSD.

Our study was aimed at the determination of the total hemolytic activity of the complement by the classical and alternative pathways and the activities of individual complement components, C3 and C4 in the blood serum of patients with PTSD and healthy volunteers. A hemolytic assay was based on the standard 50% complement hemolysis test for the classical and alternative pathways.

There was detected a significant increase in the mean values of the total hemolytic activity of the complement activation by the classical pathway as well as C3 and C4 hemolytic activities and significant decrease in the mean values of the total hemolytic activity of the complement activation by the alternative pathway in patients of PTSD compared to healthy subjects.

Our results emphasize the important role of complement classical pathway activation in pathogenesis of PTSD and our data has raised a number of important questions relevant to PTSD pathomechanisms, especially from the point of view of immunity.

# P0013

Muslim Suicide -Kashmir experience

A. Hussain. Department of Psychiatry, GMC, Srinagar, India

**Background:** Kashmir, a predominantly Muslim society had lowest rates of suicide in whole India(0.5/100,000) but not any more, 17yrs of conflict has brought trauma and turmoil PTSD,MDD,SUB-STANCE USE are at all time high. Suicide is becoming the second common cause of unnatural death.

**Methods:** This study was based on data from, longititudinal medico legal registers of S.M.H.S Hospital.The registers were surveyed for all suicide, Para – suicide and deliberate self harm cases. Medical record number – a unique registration number – was used for identification of case files of suicide, Para suicide and deliberate self harm cases. The case files were then used to reflect on various socio – demographic variables and psychiatric assessments.

**Results:** The result of the study reveals that on an average 3.5 persons report / day to SMHS causality with suicidal behavior. Most of the people who complete suicide are males of the age group 25 - 34. Most of the attempts are made by female- 4 times Para suicides and 7 times more DSH. . . Violent methods of suicide like cut throat and burns are a new phenomenon. All types of suicidal behavior are common in age group 25 - 34 except DSH in females were 63 % are in age group 19 - 24yrs

**Conclusion:** Suicide has arrived in an unlikely socioreligious scenario and perhaps taking all health planners unawares. And preventive strategies at all levels from primordial to primary to secondary to tertiary need to be taken to address this problem.

### P0014

Tracking stress and personality changes daily via Internet

Y. Ishizuka. Independent Private Practice, Rye, NY, USA

**Objective:** To demonstrate that stress can be seen as warning signals that the mind sends out when it's past experience and current