of information for the pathway of detecting the genetics of antidepressant response even if results must be verified on larger samples.

## P0209

Comparison of rural and urban SOCIAL environment for development of depression among pregnant women in Sindh, Pakistan

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**Background and Aims:** Social environment is closely related to Mental health. We examined the role of various social relations and conditions variables in the determination of depression among urban and rural pregnant women in Pakistan.

Methods: Both qualitative and qunatitative method was employed. 292 pregant women in urban and 375 pregnant women in rural areas of the province of Sindh Pakistan were included in the study. Social condition variables included socioecnomic status, illness and work related concerns, environmental issues and social problems. Social relations included relations with husband, in-laws, children and parents family. These were given scores when it applied to a situation of the women. Simultaneously, hassles related to pregnancy were also inquired from each women. Concurrently, in a blind set-up, translated and validated Center for Epidemiological Scale for Depression (CES-D) was administered. In multivariate regression linear analysis, scores of social relations and social condition variables were related with the scores of CES-D scores.

**Results:** Social context vary in urban and rural areas. There is high prevalence of depression among pregnant women in urban (39%) and rural (64%) areas of Pakistan. Social relations are more important in determining depression in urban areas, while social conditions have stronger association with depression in rural areas of Pakistan.

**Conclusions:** Social environment has major contribution for the development of depression among pregnant women (52% variance in Urban and 40% variance in rural areas). Social environmental variables vary with the social context and its importance varies for the women of urban and rural areas.

## P0210

Relation between job stress and migraine, chronic fatigue syndrome, anxiety & depression in Ahwazian nurses with considering hardiness as a mediator

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**Background:** Few studies have examined people with comorbid schizophrenia-spectrum personality disorder and antisocial personality disorder, a subgroup who may differ psychophysiologically and behaviourally from those with either condition alone.

Aims: Purpose of this study is investigating the relation between job stress and it's sequels with hardiness as a mediator. In this study, nursing stress and its subscales (death and dying; conflict with physicians, peers, supervisors, patients and their families; workload; inadequate preparation; uncertainty concerning treatment and discrimination) were considered as prediction variables and migraine, chronic fatigue syndrome, anxiety and depression were considered

as target variables. The mediate variable in this study was psychologic hardiness.

**Method:** Research sample included 400 nurses that worked in different hospitals in Ahvaz. These samples were selected with stratified random sampling method.

Data analysis was carried by inferential statistic methods. Pearson correlation factor was used in simple correlation data section, and linear regression was used firstly in mediator theories data and then Sobel statistic formula was used for diagnosis statistical significance of mediator effect on relation between prediction and target variables.

**Results:** THE relation between nursing stress (independent variable) and its subscales with dependent variables had statistical significance. Differ with death; conflict with physicians;inadequate preparation and discrimination are variables that hardiness still can not eliminate or reduce their statistical significance effect on somatic, psychosomatic and psychologic problems that consequent to stress.

**Key words:** Job stress; psychologic hardiness; mgraine; chronic fatigue syndrome; Anxiety; dpression; nurses.

## P0211

Increased alcohol sensitivity to stress in mice lacking a functional natriuretic peptide-A receptor

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**Background:** Recent results suggest that the endocrine system can affect as well as modulate ethanol drinking behavior. In mice and humans a correlation has been found between ANP plasma concentration and craving, anxiety as well as the severity of the withdrawal symptoms. To further elucidate the involvement of the natriuretic peptide system in neurobehavioral effects of alcohol, we examined ethanol drinking behavior in mice lacking a functional natriuretic peptide-A (NPR-A) receptor.

**Methods:** NPR-A heterozygote, -knockout and wild-type mice were given a free choice between water and increasing concentrations of ethanol. Once a stable baseline of 16% ethanol consumption was established, access to ethanol was withdrawn for 2 weeks and then reinstated to measure the alcohol deprivation effect (ADE). A forced swim stress was performed thereafter on 3 consecutive days.

**Results:** Data analysis revealed a higher ethanol preference and voluntary ethanol intake in NPR-A-transgenic mice. Throughout the experiments the ethanol intake was highest in heterozygote animals. Stress-induced drinking led to an immediate increase in ethanol consumption in the homozygote subgroup. Deprivation from alcohol resulted in a classical ADE in wild-type and heterozygote animals. The homozygote mice do not show an increase in alcohol intake during the ADE.

Conclusions: We demonstrated that the NPR-A receptor gene is involved in free choice ethanol consumption, preference and ethanol consumption following stress. Mice lacking a functional NPR-A receptor represent a useful animal model to adress the question of whether a dysfunctonal natriuretic peptide receptor system influences longterm alcohol self-administration and stress induced alcohol drinking.