

significant relation was found between intensity of depression and intensity of anxiety.

Conclusions: It seems interesting that no co-relation between the clinical symptoms and cognitive functions was found. It may be consistent with some of the observations, according to which a pharmacological treatment of depression causes an improvement in cognitive functioning of the patients which is independent of the clinical improvement.

P0206

Costs and productivity losses associated with changes in antidepressant treatment in a managed care population with major depressive disorder

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Objective: To determine whether subjects with major depressive disorder (MDD) that switch/augment therapy have higher health care costs and productivity losses compared to those who stay on therapy.

Methods: Data were derived from a national-employment-based medical and pharmacy claims database. Index date was defined based on pre-specified antidepressant prescription claims between 7/1/2002–3/31/2005. Subjects were treatment-naïve 6-months prior to index-date, continuously enrolled, and had at least one outpatient-based medical claim for MDD (ICD-9=296.2x/296.3x) during study period. Study cohorts [switchers/augmenters/maintainers] were defined based on antidepressant prescription refill pattern 12-months post index therapy. Productivity losses were defined as days absent from work for medical visits multiplied by average daily wage. Per-patient-per-year (PPPY) post-index costs were statistically (Type-1 error <0.05) compared multivariately (generalized-linear-model) and productivity losses were compared univariately (Wilcoxon-tests).

Results: Of 7,273 individuals who meet study criteria, 40.3% (n=2,931), 1.5% (n=109), and 58.2% (n=4,233) were classified as switchers, augmenters, and maintainers, respectively. Baseline characteristics were similar across the three cohorts. Average total and depression-related healthcare costs were 1.51-1.92 times (p<.01) and 1.52-1.42 times (p<.001) greater for switchers (\$9,288 and \$1,388) and augmenters (\$9,350 and \$1,027) vs. maintainers (\$6,151 and \$723) after controlling for baseline characteristics. Average total and depression-related productivity losses PPPY were \$2,081/\$680 for switchers, \$2,010/\$587 for augmenters and \$1,424/\$437 for maintainers. These productivity losses were greater for switchers and augmenters compared to maintainers (p<.001).

Conclusions: MDD subjects that change therapy within 12-months of treatment initiation have higher resource costs and productivity losses compared to those who stay on the same therapy.

P0207

The changes of sexual behavior and sexual activity of menopause women: Relation with sex hormones, social factors and emotional status

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Objective: The purpose of this research was to measure women's changes of sexual activity according to the phases of sexual intercourse and to show the dependency from sex hormones, social factors, also relation with depression, anxiety and menopause symptoms. During menopause women's sexuality and sexual activity changes related with the changes in sex hormones, social and emotional status. Sex hormones are responsible for the female sexual functioning. As a result low sexual desire, the decrease of orgasmic potential and lack of satisfaction during the intercourse occur during menopause. Changes in sex hormones influence mental health, especially emotional sphere. On the other hand, depressed mood, anxiety, sleep disturbances, decrease of energy can cause the dysfunctions of sexual activity. Social factors such as female education, working, usable medications, decreased partner's sexual potency also influence sexual activity of women.

Methods: Two groups of women were examined: one with hormone replacement therapy (HRT), another group without HRT. The expression of anxiety and depression symptoms was rated with Hospital Anxiety and Depression Scale, sexual dysfunctions were measured with Female Sexual Function Index, the relationship between the partners valued by Dyadic Adjustment Scale, menopause symptoms valued by Greene Climacteric Scale.

Conclusions: Results of this project will be presented. It is expected that these data will support the efforts of health policy in preventing sexual dysfunctions.

P0208

HTR1A polymorphisms are associated with the antidepressant response in patients with major depressive disorder

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Variability in antidepressant response is due to genetic and environmental factors. Among genetic factors, the ones controlling for availability of the drug at the target site are interesting candidates. Rs6295C/G SNP for 5-HT1A gene (HTR1A) has been found to effect the expression and function of HTR1A. In fact rs6295C/G was in strong linkage disequilibrium with other polymorphisms of HTR1A suggesting that those functional effects could be associated with polymorphisms other than the synonymous rs6295C/G. In the present study we examine the possible association of a panel of markers in strong linkage disequilibrium of the HTR1A with SSRI/SNRI response in 137 Japanese major depression sample followed for 6 weeks. We observed the significant association of better response to antidepressant with rs10042486C/C (p<0.0001), rs6295G/G (p<0.0001) and rs1364043T/T (p=0.018) genotype carriers, that is mutant allele homozygote, independently from clinical variables. Furthermore mutant allele homozygote carriers in all these 3 SNPs was associated more solidly with treatment response by various assessment such as HAM-D score change over time (p=0.001), week 2 (p<0.0001), 4(p=0.007), and 6(p=0.048) as well as response rate (p=0.0005) and remission rate (p=0.004).

In conclusion, this is the first study that reports the significant association of antidepressant response with rs10042486C/T and rs1364043G/T variants of HTR1A and also with rs10042486-rs6295-rs1364043 combination. This finding adds an important piece

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 quantitative method was employed. 292 pregnant 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 socioeconomic 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 psychophysiological and behaviourally from those with either condition alone.

Aims: Purpose of this study is investigating the relation between job stress and its 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 psychological hardiness.

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

Data analysis was carried by inferential statistical 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 psychological problems that consequent to stress.

Key words: Job stress; psychological hardiness; migraine ; chronic fatigue syndrome; Anxiety ; depression; 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 address the question of whether a dysfunctional natriuretic peptide receptor system influences longterm alcohol self-administration and stress induced alcohol drinking.