

Recommendations include pursuing strategies emphasizing mental health promotion, protection of the rights and freedom, reduction of the burden, and consequences of mental ill-health of older people.

Policy of full disclosure: None

PS241

Problem solving style, stress, anxiety and depression

JuneHee Lee, Ik-Seung Chee

Chungnam University Hospital, Republic of Korea

Abstract

Negative problem-solving ability is associated with a number of psychological, behavioral and health problems. This study includes mood disorder, anxiety disorder and possibility of suicide. The objective of this study is to investigate the correlation between depression, anxiety, stress, suicidal tendencies and problem solving style, in young Korean adults. The study was conducted on young adults living in Daejeon. A questionnaire survey was conducted from January 12th through to June 7th in 2015 with a total of 270 people, of which 119 were men and 151 were women. We used a problem solving style scale and a Korean version of the Depression Anxiety Stress Scale to assess relevance of them as research methods. By using descriptive statistics, we examined demographic characteristics and significance. In order to investigate the correlation between the sub 6 scales of problem solving style and the K-BDDE-SR score, multiple linear regression analysis was used. The average age was 26.02 ± 3.53 , height was 167.74 ± 8.27 cm, weight was 60.71 ± 12.15 kg and BMI was 21.40 ± 2.87 kg/m². As a result, the explanatory power of this model could be about 29.8% (F of the model = 12.265, $df = 9$; $p = .000$; $R^2 = .298$, adjusted $R^2 = .274$). Helplessness, problem solving confidence, and problem solving control are statistically significant variables in predicting K-DASS-21. The helplessness had the greatest predictive power in these variables ($Beta = .320$, $t = 5.097$, $p < .001$). In addition, the problem solving confidence score had a negative correlation with K-DASS-21. So the higher confidence score showed the lower scores for depression, anxiety, and stress. This was not a significant effect depending on the age, sex, BMI degree. Further studies are required in a variety of target samples comparing the effects of the problem solving style.

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Comparison of depression between the elderly living alone and those living with a spouse

Seungjeon Kim

Chonnam National University

Abstract

Objectives: This study aimed to investigate the spouse effects on depression in community-dwelling elderly Korean population. We examined the gender difference in the influence of living arrangement on depression. We also sought to clarify the role of cognitive function in the influence of living arrangement on depression.

Methods: This study was a community-based, cross-sectional study that included 395 elderly subjects aged 60 years or more. Subjects completed the questionnaire including sociodemographic characteristics and chronic medical illness. Korean version of Short Form of the Geriatric Depression Scale (SGDS-K) and Korean MMSE in the Korean version of the CERAD (Consortium to Establish a Registry for Alzheimer's Disease)

assessment packet (MMSE-KC) were also evaluated. Depression was identified as SGDS-K score of 8 and above.

Results: The mean score on SGDS-K was 5.9 ($SD=4.52$), and the mean score on MMSE-KC was 23.3 ($SD=4.67$) in all samples. The prevalence of depression was 35.4%. In univariate analyses, the elderly living alone had a higher risk of depression than those living with a spouse (Odds ratio, $OR = 2.32$, 95% Confidence Interval, $CI = 1.51 - 3.58$, $p < 0.001$). After adjusting for sociodemographic characteristics and chronic illness state, this association was attenuated ($OR = 1.80$, 95% $CI = 1.01 - 3.21$, $p = 0.048$). But, after further adjusting for MMSE-KC scores, the association was further attenuated and it remained statistically insignificant. In the full adjusted model, more number of elderly females living alone had depression than those living with a spouse with marginal statistical significance ($OR = 2.03$, 95% $CI = 1.00 - 4.13$, $p = 0.051$).

Conclusions: These findings suggest that cognitive function is a possible confounding factor in the influence of living arrangement on depression. Living alone is likely to be a significant risk factor for depression among community-dwelling elderly females.

Keywords: Elderly living alone, Elderly living with a spouse, Depression, Cognitive function

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Is depression clustering or contagious in adolescents?

Yi-Ju Pan, Shuu-Jiun Wang

Far Eastern Memorial Hospital, Taiwan

Abstract

Purpose of the study: The influence of peers' behavior on the youths' own behavior through clustering or contagion effects has been suggested to peak during adolescence. The current study aimed to explore whether the youth's level of depressive symptoms would be influenced by his/her friend's depressive symptoms.

Methods: A school-based cohort of 570 ninth graders were included in the current analysis. We used generalized estimating equations to explore the potential associations between the youth's depressive symptoms and those of his/her first degree friends.

Results: After controlling for gender, body mass index and other covariates, the youth's depressive symptoms were associated with his/her friend's depressive symptoms, with a 14.3% increase in the youth's depressive symptom score by one point increase in the friend's depressive symptom score ($OR=1.14$, 95% $CI=1.09, 1.20$).

Conclusion: The current study suggested the presence of clustering effects in depression among young adolescents. The underlying mechanisms warrant further research.

Key word: Depression, adolescent, social network, friendship, clustering

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Depression severity and related characteristics correlate significantly with activation in brain areas selected through machine learning

Yu Shimizu¹, Kenji Doya², Go Okada¹, Yasumasa Okamoto¹, Masahiro Takamura¹, Shigeto Yamawaki¹, Junichiro Yoshimoto³

¹Hiroshima University, Japan, ²Okinawa Institute of Science and

Technology, Japan, ³Nara Institute of Science and Technology, Japan

Abstract

Functional Magnetic Resonance Imaging (fMRI) data acquired during semantic and phonological verbal fluency tasks were shown to allow for diagnosis of Major Depressive Disorder (MDD) with 90% accuracy [1]. We demonstrate that the activation in the brain areas selected through the so-called group LASSO algorithm [2] applied in [1] significantly correlate with symptoms as well as other commonly MDD associated characteristics.

31 MDD patients and 31 age and sex matched healthy controls underwent a detailed interview, where following common MDD scores were assessed: BDI2, PHQ-9, HRSD17, GAF, CATS, LES, PANAS, STAI (for abbreviations see [3]).

fMRI data acquired during a phonological and a semantic verbal fluency task were processed in conventional way and the activation-maps of all subjects subjected to the group LASSO algorithm [1]. This resulted in a weight map for each verbal fluency task. The mean brain activation during the respective tasks was calculated for each region of interest indicated in the maps. Finally, the correlation between each region of interest and the interview scores was evaluated.

Five ROIs located in precentral cortex, pars triangularis, inferior frontal operculum, insula and postcentral gyrus of the left hemisphere showed significant correlation with the interview data ($p < 0.001$).

Correlated MDD characteristics were several depression severity measures (BDI, PHQ9, GAF), but also diathesis (CATS and negative LES) and specific symptoms (SHAPS, PANAS and STAI). All of the above, except for LES showed significant correlation with the post central gyrus.

The results elucidate the relation of the brain areas relevant for the classification model evaluated in [1] with depression severity, diathesis and certain MDD characteristics. Even though causality remains to be investigated, the results give insight into how integrative effects might finally induce depression.

Reference

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- [2] Friedman J, Hastie T, Tibshirani R. Regularization Paths for Generalized Linear Models via Coordinate Descent. *J Stat Softw.* 2010;33(1)
- [3] Beck's Depression Inventory 2 (BDI2), PHQ-9, Hamilton Rating Scale for Depression (HRSD17), General Assessment of Functioning (GAF), Child Abuse and Trauma Scale (CATS), Life Experience Survey (LES), positive and negative affect scale (PANAS), State Trait Anxiety Inventory (STAI).

PANIC DISORDERS: PS245 – PS250**PS245**

Outcome of naturalistic pharmacological treatment in panic disorder patients with the respiratory subtype

Title: Outcome of naturalistic pharmacological treatment in panic disorder patients with the respiratory subtype

Authors:

Rafael C Freire

Clarissa R Valle

Mariana C Cabo

Silvia H Clapauch

Antonio E Nardi

Abstract

Introduction: According to DSM5 (1) panic disorder (PD) is a unitary diagnosis, however, recent studies point to distinct PD subtypes. The respiratory subtype (RS) is the most studied subtype and there is abundant evidence of its validity. (2, 3) Compared to non-respiratory subtype (NRS) patients the RS patients have more psychiatric comorbidities, more familial history of PD and higher sensitivity to carbon dioxide, hyperventilation and caffeine. (2–5)

Objectives: Ascertain if RS patients have a more severe form of PD and respond poorly to pharmacological treatment, compared to NRS patients.

Methods: 60 PD patients without treatment were recruited for the current study. Clinical evaluation and administration of scales and questionnaires were made in the first hospital visit. The clinicians chose the medications freely and started the treatment, after 4 weeks doses were adjusted and medications were switched if necessary. All subjects were evaluated again with the same instruments after 8 weeks of treatment. The instruments used were: Mini International Neuropsychiatric Interview (MINI)(6); Panic and Agoraphobia Scale (PAS)(7); Clinical Global Impression - severity and improvement (CGI-S and CGI-I)(8); Beck Anxiety Inventory (BAI)(9); Beck Depression Inventory (BDI)(10); Diagnostic Symptom Questionnaire (DSQ)(11).

Results: Only 33 patients concluded the study. In baseline RS patients had more comorbidities with agoraphobia ($P = 0.02$), higher scores in PAS ($P = 0.03$), BAI ($P < 0.01$), BDI ($P = 0.05$) and DSQ ($P < 0.01$), compared to NRS patients. In the comparison between baseline and 8-week evaluations, with all patients, there were significant improvements in CGI-S, PAS, BAI and BDI (all with $P < 0.01$). 56.4% of the patients responded to treatment. There were no statistically significant differences between RS and NRS regarding the improvement and response to treatment.

Conclusion: RS patients presented initially a more severe form of PD, but they had a good response to treatment, indistinguishable from the response of NRS patients.

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