Abstract
Among previous studies on monoamine metabolites in human cerebrospinal fluid (CSF) of depressed patients and normal controls, inconsistent results have been observed and those may have been partly caused by the confounding background factors. The aims of the present study are following: first, relatively large sample size were used; second, only patients with major depressive disorder (MDD) (not including bipolar disorder) were included; third, background variables such as sex and age were strictly controlled; lastly, diagnosis, medication and severity of depression were simultaneously analyzed on CSF monoamine metabolite levels.

Human subjects, including healthy control, were recruited from the outpatient clinic of the National Center Hospital, National Center of Neurology and Psychiatry (Tokyo, Japan), or through advertisement in magazines and our homepages. CSF was collected from 75 patients with MDD and 87 healthy controls. As previous reports, the strong correlation between HVA and 5-HIAA was observed in CSF of our healthy subjects and its correlation was weaker in CSF with MDD patients. Although HVA level did not show any difference between healthy controls and MDD patients, when MDD group were divided into the severity of depression, it was significantly decreased in CSF of MDD patients with high points (HIGH; more than 13 points) of GRID Hamilton Depression Rating Scale, 17-item version (HAMD-17) score. Antidepressant treatments did not affect the HVA reduction. 5-HIAA level was also decreased in HIGH group. Unlike HVA, 5-HIAA level was affected by both antidepressant and severity of MDD. 3-methoxy-4-hydroxy-phenylethylene glycol (MHPG; noradrenaline metabolite) level was only decreased by antidepressant treatments. Based on these results, we reinterpreted the monoamine hypothesis in MDD and these results suggest some clues for the next generation of anti-depressant.

PS239
The ‘WikiGuidelines’ Smartphone application: Bridging the gaps in availability of evidence-based smartphone mental health applications
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Abstract
Background: Over the past decade, there have been massive advances in technology. These advances in technology have significantly transformed various aspects of healthcare. With the advent of technology, healthcare professionals could access information via the web or via various smartphone applications on the go. In the field of Psychiatry, one of the commonest mental health disorder to date, with significant morbidity and mortality is that of Major depressive disorder. Routinely, clinicians and healthcare professionals are advised to refer to standard guidelines in guiding them with regards to their treatment options. Given the high prevalence of conditions like Major Depressive Disorder, it is thus of importance that whatever guidelines that clinicians and healthcare professionals refer to are constantly kept up to date, so that patients could benefit from latest evidence based therapy and treatment. A review of the current literature highlights that whilst there are a multitude of smartphone applications designed for mental health care, previous systematic review has highlighted a paucity of evidence based applications. More importantly, current literature with regards to provision of treatment information to healthcare professionals and patients are limited to web-based interventions.

Methodology: Along with the help of an international workgroup, a concise set of guidelines was developed. Making use of cross-platform techniques in smartphone application programming, the Wiki Guidelines application for doctors and patients were launched since December 2015.

Results: Since inception to date, there has been a cumulative downloads of 32 and 12 for the Wiki Guidelines Application Doctor and Patient respectively.

Conclusions: Harnessing the advances in E-Health made it possible for clinicians to have immediate access to guidelines that are developed. Any modification of guidelines could be done in real-time and clinicians will be able to keep abreast with the latest developments in treatment.

PS240
Socio-demographic Profile and Mental Health Conditions of Older People: An Enhancement of the Community-Based Mental Health Program
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Abstract
Background and Objectives: Longevity is one of the characteristics of today’s world. In the Philippines, those who are 60 years old and above, are now the fastest growing segments of the population. The importance of mental health to aging is that one cannot age well without good mental health which is frequently lost in discussions of older adults’ physical health. Limited research, however, has evaluated the mental health conditions of older people. This study was conducted to determine the mental health conditions of the older people in selected urban and rural areas in the Province of Iloilo, Philippines.

Methods: Two-hundred sixty four older people were the respondents of the study. The scaled General Health Questionnaire by Goldberg (GHQ-28) was used in determining the mental health conditions of the older people. The statistical tools employed were means and frequency distribution, t-Test, and ANOVA, respectively.

Summary of Results: In the four subscales, the data show that most of the older people have good mental health. Among the four mental health conditions, depression was the least that the respondents were afflicted, with 81.8 % of them exhibiting good condition. Majority of them displayed proper adjustment socially and least likely to experience somatic complaints, anxiety and insomnia. The mental health conditions of older people do not significantly differ when grouped according to age, marital status, educational attainment, family monthly income, sources of income, living arrangement, and benefits availed, however, significantly vary according to work status, sex, presence of physical illness, and district classification. Among all the respondents, those who stopped from work, male, have no signs of physical illness, and living in rural areas had better mental health conditions than their counterparts.

Conclusion: A good mental health among older people is characterized as the ability to make good life choices, having healthy relationships, and maintain physical health and well-being.
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
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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/m^2. As a result, the explanatory power of this model could be about 29.8% (F of the model = 12.265, df = 9, p = .000; R2 = .298, adjusted R2 = .274). Helplessness, problem solving confidence, and problem solving control are statistically significant variables in predicting K-DASS-21. The helplessness had the greatest predicitive 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.

PS242
Comparison of depression between the elderly living alone and those living with a spouse
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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

PS243
Is depression clustering or contagious in adolescents?
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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

PS244
Depression severity and related characteristics correlate significantly with activation in brain areas selected through machine learning
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