➡ Fri. Sep 26, 2025 4:30 PM - 6:00 PM JST | Fri. Sep 26, 2025 7:30 AM - 9:00 AM UTC **➡** Session Room 2 (Main Hall B)

[Symposium 48] Dialogue in PTSD: clinical support and basic science

Moderator: Yoshiharu Kim (National Center of Neurology and Psychiatry), Daniel Shuen Sheng Fung (Institute of Mental Health)

[SY-48]

Dialogue in PTSD: clinical support and basic science

Yoshiharu Kim¹, Daniel Fung², SeungMin Bae³, Tomoko Inoue⁴ (1.National Center of Neurology and Psychiatry(Japan), 2.Institute of Mental Health(Singapore), 3.Gil Medical Center, Gachon University(Korea), 4.Nagoya City University(Japan))

[SY-48-01]

Cl;inical and molecular perspective of PTSD treatment: from the viewpoint of fear extinction *Yoshiharu Kim (National Center of Neurology and Psychiatry(Japan))

[SY-48-02]

Healing Invisible Wounds: Clinical and Trauma-Informed Approaches to Childhood Trauma in Singapore

*Daniel Shuen Sheng Fung, Daniel Weng Siong Ho (Institute of Mental Health (Singapore))

[SY-48-03]

Support Systems for Victims of Sexual Violence in Korea: The Current Reality of Digital Sexual Violence and Its Psychiatric Consequences, including PTSD

*Seungmin Bae (Gachon University Gil Medical Center(Korea))

[SY-48-04]

A longitudinal study of the association of blood unsaturated fatty acids with posttraumatic stress disorder (PTSD)

Yoshiharu Kim¹, Daniel Fung², SeungMin Bae³, *Tomoko Inoue⁴ (1.National Center of Neurology and Psychiatry(Japan), 2.Institute of Mental Health(Singapore), 3.Gil Medical Center, Gachon University(Korea), 4.Nagoya City University(Japan))

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[SY-48] Dialogue in PTSD: clinical support and basic science

Yoshiharu Kim¹, Daniel Fung², SeungMin Bae³, Tomoko Inoue⁴ (1.National Center of Neurology and Psychiatry(Japan), 2.Institute of Mental Health(Singapore), 3.Gil Medical Center, Gachon University(Korea), 4.Nagoya City University(Japan))

Keywords: ptsd、disaster、child、omega-fatty acid、memantine

PTSD is a complex field involving social, psychological, and biological medicine. Effective support and treatment require an integrated understanding of these elements. In Asia, stigma surrounding trauma and administrative misunderstanding have been observed, but recently, many countries have seen significant improvements in trauma literacy within society. In addition, research on the biological basis of trauma and fear memory mechanisms is also actively underway in Asia. As demonstrated by meta-analyses of PTSD onset risk following natural disasters, for disorders associated with social factors such as PTSD, it is more important to provide support tailored to the social circumstances of those affected and to reduce stress rather than simply treating symptoms. On the other hand, for chronic PTSD that has developed, effective treatment based on the underlying pathology is required. As with many diseases, prevention and treatment measures should be promoted through a combination of elucidating the pathogenesis of the disease, developing treatments, and implementing public health measures to reduce risk. PTSD is no exception. The importance of nutritional intervention in the acute phase has been repeatedly pointed out for the prevention of chronic PTSD, and treatment methods based on basic research on fear memory are being developed. On the day of the event, we will discuss comprehensive support for trauma victims through dialogue between clinical and basic research.

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Moderator: Yoshiharu Kim (National Center of Neurology and Psychiatry), Daniel Shuen Sheng Fung (Institute of Mental Health)

[SY-48-01] Cl;inical and molecular perspective of PTSD treatment: from the viewpoint of fear extinction

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Keywords: PTSD、memantine、exposure therapy、fear extinction

PTSD is a mental disorder that causes destructive and long-term suffering in individuals who were previously healthy. It is estimated that there are 700,000 patients in Japan, but many patients prioritize legal and social assistance and delay seeking medical care due to fear of stigma, with only approximately 7,000 to 15,000 receiving mental health care. Effective treatment is essential for raising social awareness and supporting these individuals. Currently in Japan, sertraline, paroxetine, and prolonged exposure therapy are covered by insurance. Drug therapy is simple but their effect size is less than 0.4. The speaker invited Edna Foa to Japan in 2002 and has been working to promote prolonged exposure therapy since then. This treatment has high effect size, usually greater than 1.5, but can be used for only a small number of patients. Therefore, there is a need to develop a treatment that is both simple and highly effective. Research using rodents on fear memory has provided various useful insights into extinction learning. Exposure therapy is also a type of extinction learning. Based on the results of basic research indicating that memantine is effective for extinction learning, we administered it to 10 human PTSD patients and demonstrated improvement in an open trial. The effect size before and after treatment was 1.35, significantly exceeding the effect sizes of many pharmacological treatments in psychiatry. Memantine is an antagonist at the NMDA receptor and is used in clinical practice as a cognitive enhancer. The effect of memantine in humans may be due to its promotion of learning functions, which facilitates extinction learning. The fact that exposure therapy, which promotes extinction learning, and memantine are effective in PTSD treatment suggests that the core of PTSD lies in a disorder of extinction learning of fear memories.

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[Symposium 48] Dialogue in PTSD: clinical support and basic science

Moderator: Yoshiharu Kim (National Center of Neurology and Psychiatry), Daniel Shuen Sheng Fung (Institute of Mental Health)

[SY-48-02] Healing Invisible Wounds: Clinical and Trauma-Informed Approaches to Childhood Trauma in Singapore

*Daniel Shuen Sheng Fung, Daniel Weng Siong Ho (Institute of Mental Health (Singapore))
Keywords: Childhood trauma、Trauma-informed care、Culturally attuned interventions、
Post Traumatic Stress Disorder

Childhood trauma is increasingly recognised as a public mental health concern in urban Southeast Asia. In Singapore, the confluence of high developmental expectations, cultural reticence around emotional expression, and growing awareness of intergenerational trauma creates a distinctive landscape for post-traumatic stress presentations among children and adolescents.

This presentation outlines clinical and trauma-informed approaches adopted by the FRIENDS team (Forensic, Rehabilitation, Intervention, Evaluation, and Network Development Service) at the Institute of Mental Health, Singapore. FRIENDS is a multidisciplinary forensic child and adolescent mental health service that supports youth offenders, children at risk of offending, survivors of abuse, and families involved in complex custody disputes, among others.

Recent innovations include the introduction of Trauma Systems Therapy (TST) (Saxe et al., 2007), integrated with inpatient services to enhance caregiver engagement and multiagency coordination. Adaptations have been made to suit Singapore's multicultural and multireligious context. In parallel, the PRESENCE framework (Bloom, 2021), a traumaresponsive organisational approach, has been piloted to cultivate safety, emotional regulation, and relational trust not only in clinician-patient interactions but also within care teams and institutions.

These initiatives highlight the importance of culturally attuned, developmentally informed trauma care that accounts for collectivist values, interdependence, and systemic resilience. The presentation will also discuss the broader opportunities and systemic challenges in embedding trauma-informed principles across services, as aligned with Singapore's National Mental Health and Well-being Strategy (MOH, 2023).

By centring the lived experiences of young people and their ecological environments, this presentation advocates for scalable, context-sensitive models of trauma intervention in contemporary Asia.

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[Symposium 48] Dialogue in PTSD: clinical support and basic science

Moderator: Yoshiharu Kim (National Center of Neurology and Psychiatry), Daniel Shuen Sheng Fung (Institute of Mental Health)

[SY-48-03] Support Systems for Victims of Sexual Violence in Korea: The Current Reality of Digital Sexual Violence and Its Psychiatric Consequences, including PTSD

*Seungmin Bae (Gachon University Gil Medical Center(Korea))
Keywords: PTSD、Digital Sexual Violence、Sexual Abuse

Digital sexual violence is a relatively recent concept, but it has become a rapidly growing crime worldwide. In South Korea, where access to the internet is relatively easy and mobile device penetration is high, the rate of increase in digital sexual violence and the evolution of related crimes are occurring at a rapid pace, drawing considerable concern from experts. In South Korea, there are two major national support systems for victims of sexual violence operated by public institutions. The first is the *SUNFLOWER Center*, which specializes in supporting victims of sexual crimes against children, adolescents, and women, and is operated with the support of the Ministry of Gender Equality and Family. The second is the *SMILE Center*, which is operated with the support of the Ministry of Justice, provides psychological support not only for sexual violence victims but also for victims of other serious crimes. This session aims to examine the characteristics of these centers and explore the current state of digital sexual violence, as well as its psychiatric consequences including PTSD, based on the experiences of these centers.

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Moderator: Yoshiharu Kim (National Center of Neurology and Psychiatry), Daniel Shuen Sheng Fung (Institute of Mental Health)

[SY-48-04] A longitudinal study of the association of blood unsaturated fatty acids with posttraumatic stress disorder (PTSD)

Yoshiharu Kim¹, Daniel Fung², SeungMin Bae³, *Tomoko Inoue⁴ (1.National Center of Neurology and Psychiatry(Japan), 2.Institute of Mental Health(Singapore), 3.Gil Medical Center, Gachon University(Korea), 4.Nagoya City University(Japan))

Keywords: PTSD、unsaturated fatty acids、linoleic acid、omega-6

There are no established prevention methods for PTSD, and there is a need for treatment and prevention methods for PTSD. The phospholipid hypothesis, which proposes a correlation between the fatty acid composition of membrane phospholipids and neuropsychiatric function, has been proposed, and relationships between blood unsaturated fatty acids and clinical symptoms of psychiatric disorders have been reported. It is presumed that there is a certain relationship between anxiety, including PTSD, and unsaturated fatty acids, and that adjusting the amount of unsaturated fatty acids in some way can suppress the onset of PTSD. We analyzed the association between blood fatty acid fractions and posttraumatic stress disorder (PTSD) symptoms at 1 month and 3 months after injury in patients admitted to the emergency department due to physical trauma, with the aim of investigating the association between blood fatty acid fractions and PTSD symptoms in people who experienced physical trauma. Blood samples were taken on admission, and PTSD symptoms were assessed using a questionnaire at one and three months after the injury. Multiple regression analysis showed that linoleic acid and total omega-6 were significantly associated with PTSD symptoms at both 1 and 3 months. Our study suggest that there may be a relationship between blood fatty acid fractions and the development of PTSD symptoms in individuals who have experienced physical trauma. A detailed examination of blood fatty acid fractions and PTSD symptoms may lead to the prevention of subsequent progression to PTSD by regulating blood fatty acids through diet in various patients transported to emergency rooms and victims of disasters. To date, there is no preventive method for PTSD, and we hope that the study of blood fatty acids will help develop a preventive method that can be easily and effectively implemented for a large number of subjects.