

EW0593

### A neuro-developmentally sensitive and trauma informed service delivery approach for child and youth mental health and psychiatry

T. Wilkes<sup>1,\*</sup>, E. Wang<sup>2</sup>, B. Perry<sup>3</sup><sup>1</sup> Foothills medical centre, psychiatry, Calgary, Canada<sup>2</sup> Hull services, NMT service director, Calgary, Canada<sup>3</sup> Child trauma academy, psychiatry and behavioral services, Houston, USA

\* Corresponding author.

This presentation will introduce the innovative approach to child and youth mental health and psychiatry using the neurosequential model of therapeutics (NMT). This is a neuro-developmentally sensitive and trauma informed approach and acknowledges the importance of early experiences shaping the organization of the brain. An outline of the stress response and its relevance to hyperarousal and dissociative responses will be discussed as this impacts attachment and the reward neuro-biology. The hierarchy of brain development will be emphasized in the clinical approaches to child psychiatry especially in reference to child maltreatment and neglect. The critical role of sensory integration, self regulation, relational health and cognitive development in treatment planning will be discussed versus the categorical diagnosis of ADHD, autism, bipolar disorder and depression. This has profound economic and psychopharm practice implications in child and youth mental health treatments. Consequently the importance of these concepts in informing public policy for early child development and school mental health literacy will be emphasized. Additionally the outcome of these approaches on the reduction of staff turnover, critical incidents in schools and residential placements will be shared.

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### Family-based whole exome sequencing of autism spectrum disorder reveals novel de novo variants in Korean population

H. Yoo<sup>1,2,\*</sup>, S.A. Kim<sup>3</sup>, M. Park<sup>4</sup>, J. Kim<sup>5</sup>, W.J. Lim<sup>5,6</sup>, D.H. Noh<sup>1</sup>, D.W. Han<sup>7</sup>, C. Shin<sup>8</sup>, N. Kim<sup>5,6</sup><sup>1</sup> Seoul national university Bundang hospital, psychiatry, Seongnam, Republic of Korea<sup>2</sup> Seoul national university college of medicine, psychiatry, Seoul, Republic of Korea<sup>3</sup> Eulji university, pharmacology, Deajon, Republic of Korea<sup>4</sup> Eulji university, epidemiology, Deajon, Republic of Korea<sup>5</sup> Korea research institute of bioscience and biotechnology, personalized genomic medicine research center, Deajon, Republic of Korea<sup>6</sup> Korea university of science and technology, functional genomics, Deajon, Republic of Korea<sup>7</sup> Konkuk university, school of medicine, stem cell biology, Seoul, Republic of Korea<sup>8</sup> Konkuk university, school of medicine, pharmacology, Seoul, Republic of Korea

\* Corresponding author.

*Objectives* The objective of this family-based whole exome sequencing (WES) is to examine genetic variants of autism spectrum disorder (ASD) in Korean population.

*Methods* The probands with ASD and their biological parents were recruited in this study. We ascertained diagnosis based on DSM-5<sup>TM</sup> criteria, using Autism Diagnostic Observation Sche-

dule and Autism Diagnostic Interview–Revised. We selected probands with typical phenotypes of ASD both in social interaction/communication and repetitive behaviour/limited interest domains, with intellectual disability (IQ < 70), for attaining homogeneity of the phenotypes. First, we performed WES minimum 50× for 13 probands and high-coverage pooled sequencing for their parents. We performed additional WES for 38 trio families, at least 100× depth. De novo mutations were confirmed by Sanger sequencing. All the sequence reads were mapped onto the human reference genome (hg19 without Y chromosome). Bioinformatics analyses were performed by BWA-MEM, Picard, GATK, and snpEff for variant annotation. We selected de novo mutation candidates from probands, which are neither detected in two pooled samples nor both parents.

*Results* Fifty-one subjects with ASD (5 females, 40~175 months, mean IQ 42) and their families were included in this study. We discovered 109 de novo variants from 46 families. Twenty-nine variants are expected to be amino acid changing, potentially causing deleterious effects. We assume CELSR3, MYH1, ATXN1, IDUA, NFKB1, and C4A/C4B may have adverse effect on central nerve system.

*Conclusions* We observed novel de novo variants which are assumed to contribute to development of ASD with typical phenotypes and low intelligence in WES study.

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## e-Poster Walk: Comorbidity/Dual pathologies and guidelines/Guidance - Part 2

EW0595

### Dual diagnosis and treatment: The experience of a multiprofessional team in mental health

J. Jaber\*, J. Verissimo Jr, J. Mendonça, M. Schwartz, S. Leite, S. Humel, A. Moravia, T.T. Raposo, M. Garrido, E. Halabi, A. Hollanda, B. Reys

Clínica Jorge Jaber, Saúde Mental, Rio de Janeiro, Brazil

\* Corresponding author.

*Introduction* The work was developed with the people hospitalized in the period of 1 year in a psychiatric clinic in Rio de Janeiro city, Brazil. 175 patients who presented dual diagnosis were evaluated.

*Objectives* The research aims to know the distribution of the most frequent psychiatric diagnosis associated with the disorders for the use of psychoactive substances. The work also has as objective to assess the treatment of patients carrying these disorders so that there is a better efficiency of the individual treatment plan.

*Methods* The work consisted of the evaluation of all patients who were admitted to the clinic in the period of 1 year, using the ICD-10 for the diagnosis of dual pathologies. All the patients were assessed by the multiprofessional team, composed by general practitioner, psychiatrist, psychologist, pharmacist, therapist in chemical dependence, family therapist and physiotherapist. The patients were treated with the use of psychopharms, cognitive behavioral psychotherapy, 12-step program, art therapy and moderate physical activity. Family members of all patients were also interviewed.

*Results* In the evaluation conducted by the team, it was found the following distribution of the most frequent diagnosis associated to disorder for the use of psychoactive substances: depression (26.3%), personality disorder (22.9%), bipolar disorder (22.3%), non-