



Special edition on the occasion of Jan K. Buitelaar's 65th anniversary

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Jan K. Buitelaar, MD, Ph.D., is undoubtedly one of the most famous scientists and psychiatrists in the field of attention-deficit/hyperactivity disorder (ADHD) worldwide. In 2018, he celebrated his 65th birthday, which led colleagues and friends to dedicate this special edition to him. Jan's broad expertise, ranging from clinical work in children, adolescents, and adults with ADHD to multiple aspects of etiological and treatment research of the disorder, is reflected in this issue. It contains papers on ADHD diagnosis and treatment, comorbidity and cognition, neuroimaging and genetics.

Jan Buitelaar studied medicine and philosophy at the University of Utrecht in The Netherlands, where he subsequently also obtained his Ph.D. In 1995, only 4 years after his doctorate, he was appointed professor of Biopsychosocial Determinants of Human Behaviour in Utrecht. Seven years later, in 2002, he moved to the Radboud University Medical Center in Nijmegen, where he took over the

chair of Psychiatry and Child and Adolescent Psychiatry. Throughout his career, Jan has been incredibly productive in a wide range of areas. His curriculum vitae currently lists an impressive 680 peer-reviewed publications. Not surprisingly, Jan has been listed in Clarivate Analytics for several years, where he rates among the top one percent of the most cited scientists in the field of psychiatry and psychology worldwide. In 2018, he was listed as the third most productive author in the field of ADHD. In 2019, his 100th doctoral student will receive his doctoral degree. Jan has also been highly successful in obtaining research grants from multiple funding agencies in The Netherlands and internationally. To this day, he has been the coordinator, work package leader, and member of 16 different large EU-funded consortia.

Throughout several decades, Jan helped to shape international ADHD research. For more than 15 years, he has been an active member of the European Network for Hyperkinetic Disorder (Eunethydis) and has been serving as treasurer and Steering Committee for the past 5 years. He is also very active in the World Federation of ADHD, where he serves as one of the Vice Presidents since 2015.

Jan has had a major impact on the management of ADHD over the past few decades. In numerous clinical trials, he and his team investigated the efficacy and safety of pharmacological and non-pharmacological treatment options for children, adolescents, and adults with ADHD as well as common comorbid psychiatric disorders, such as conduct or autism spectrum disorder. As a core member of the European ADHD Guidelines Group (EAGG), he has also had a major impact on translating these findings into guidelines and best practice recommendations for the management of ADHD. Throughout this work, he made an important point of not just concentrating on core symptoms, but also considering functional improvements and quality of life outcomes. It is fair to say that Jan became a pioneer in the development of personalized diagnosis and treatment strategies for ADHD, which helped to improve the life of patients and their families.

Among the most important research legacies of Jan's career is the development of the NeuroIMAGE longitudinal

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ADHD study (von Rhein et al. 2015). For this cohort, which is based on Dutch participants of the International Multisite ADHD Genetics (IMAGE) study (Müller et al. 2011a, b), he and his colleagues in Amsterdam and Groningen obtained funding to re-assess participants and to further extend the cohort. Meanwhile, the cohort has been studied for 15 years, and the fourth assessment is pending. Numerous Ph.D. students have successfully completed their doctoral theses on research questions related to this deeply phenotyped cohort, which is one of the very few large and long-term samples available in the field of ADHD.

For many postdocs and junior faculty members, including several authors and one of the editors of this issue, Jan served as excellent mentor. His energy and scientific prowess have been a source of inspiration, and he has actively facilitated and supported many researchers who now lead their own research groups. Jan is now 65 years old, but we hope he will remain a strong innovator in ADHD research in the years to come.

This special issue includes 10 papers on diverse ADHD-related research topics, that fit well with Jan's research interests. The issue discusses new questions in the diagnosis of ADHD, like circadian rhythm regulation (Bijlenga et al. 2019) and rater differences in the presence and severity of ADHD symptoms (Nobel et al. 2019). Neuropsychological and neuroimaging analyses are presented for several cognitive domains. These include an assessment of the impact of successful learning of self-regulation on reward processing in children with ADHD (Baumeister et al. 2019). We also take up the question of the specificity of reaction time variability for ADHD (Salum et al. 2019), and the mediation of the link between ADHD symptoms and procrastination by prospective memory (Altgassen et al. 2019). Furthermore, this issue discusses whether the Test of Variables of Attention (TOVA) has a practical effect on adult ADHD (Manor 2019) and focuses on ADHD as a frequent, hidden comorbidity in adult psychiatric patients (Bitter et al. 2019). For molecular genetics work, authors present analyses on effects of disease-associated SLC9A9 mutations on protein–protein interactions networks and their implications for ADHD and autism (Faraone et al. 2019) and discuss the potential role of functional α -synuclein polymorphisms in ADHD (Gerlach et al. 2019). Comorbidity is the subject of the final contribution, in which social-communicative and attention problems in infancy and toddlerhood are studied as precursors of preschool autistic traits (Mörnicke et al. 2019). We hope you will find this issue enjoyable and informative.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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