

Michael Deuschle is a psychiatrist and psychotherapist by training. Clinically, he is deputy medical director of the department of psychiatry and psychotherapy.

Regarding research, he is head of the research group stress-related disorders. The focus of this group is on the activity and dysregulation of stress-responsive systems (HPA, ANS) in stress-related disorders as well as the consequences thereof (allostatic load, metabolic risks). Stress is conceptualized as an adaptation to strains that allows coping of the challenge. The stress reaction that comes along with the activation of the hypothalamus-pituitary-adrenal (HPA) system and sympathoadrenergic activation, is essential for the short-term survival of the stressor, but may have deleterious effects on physical and mental health in the long run. Stress in childhood and youth may have lasting effects on the risk for adult diseases. Also, stress is suspected to be directly associated with mental diseases, especially depression. A long-lasting activation of stress-responsive systems, like HPA activation during depressive episodes, may contribute to incident cardiometabolic and neurocognitive symptoms. Against that background, the research group deals with lasting effects of strains and environmental challenges in childhood and youth on adult health and phenotype, second with the disease-related activation of stress-related systems in disorders being related with increased risk for depression and, third, with health-related effects of lasting activation of stress-responsive systems, especially during depressive episodes. The stress concept is applicable for an array of psychiatric and physical problems. Therefore, the research group uses a spectrum of neuroendocrine, diabetological and psychometrical methods and cooperates with research groups in the field of neuroimaging, biochemistry, genetics and epigenetics, developmental psychology and behavioral biology.

Key output of the years 2020 – now

The RG stress-related disorders worked on several large (e.g. POSEIDON, n=410) and smaller cohorts (STEP ONE I and II, each n=50) cohorts of subjects that were first characterized during pregnancy and then, for various periods, longitudinally studied in order to analyze the association of transgenerational stress as well as stress during pregnancy and infancy on the health-related outcomes. For example, these studies showed that prenatal stress is related to birth weight, and regulation of stress-responsive systems in the offspring. Maternal stress in childhood, long before pregnancy is associated with the regulation of neuro- and somatotrophic factors in the descendants. In the field of prevention of mental disorders, Michael Deuschle initiated Mental Health First Aid (MHFA) and organized the national roll-out of the program in Germany. So far, about 10.000 subjects were qualified as Mental Health First Aiders. Together with the department of public mental health (head: Prof. Ulrich Reininghaus), Michael Deuschle works on the effects of the course on mental health knowledge and stigma in lay persons.