Profile of medically unexplained symptoms associated with adverse childhood experiences

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Objective: Pediatricians commonly see children reporting symptoms without a plausible medical explanation, even after extensive investigations. Such patients frequently present with multiple co-morbidities. We report the prevalence of children with multiple medically unexplained symptoms in a pediatric neurology clinic, describe their symptom profiles, and explore their association with adverse childhood experiences (ACEs).

Study Design: We retrospectively reviewed medical and social histories of 100 consecutive patients who had been treated at an outpatient pediatric neurology clinic. Patients were included if they were 5 years or older, and reported 4 or more medically unexplained symptoms (MUS) for longer than 3 months. Symptom profiles across six functional domains were recorded: 1) executive dysfunction, 2) sleep disturbances, 3) autonomic dysregulation, 4) somatization, 5) digestive symptoms, and 6) emotional dysregulation. ACEs were recorded and scored for all patients.

Results: Seventeen patients reported 4 or more MUS. Somatization, sleep disturbances and emotional dysregulation occurred in 100% patients, with executive dysfunction (94%), autonomic dysregulation (76%) and digestive problems (71%) in the majority. Forty-two children reported ACEs (42%); children with 4 or more MUS were more likely to report ACEs in comparison to other children (88% vs. 33%; p<0.0001). Of the 42 patients reporting ACEs, children with 4 or more MUS had a higher median ACE score (3 vs. 1; p<0.001).

Conclusions: Children with multiple medically unexplained symptoms should be screened for potential exposure to ACEs. A clinical profile of unexplained medical symptoms across multiple functional domains within the nervous system suggests putative neurobiological mechanisms involving nervous system dysregulation that require further study.

Biography
Jorina Elbers is working as an Assistant Professor of Neurology at Stanford University. She received her BSc from the University of Victoria before completing Medical School at the University of British Columbia in Vancouver, Canada. She continued her training in Pediatric Neurology at the Hospital for Sick Children and University of Toronto. Following her residency, she pursued a two-year Fellowship in Pediatric Stroke, also at the Hospital for Sick Children. In 2011 she joined the Child Neurology Team at Stanford, where her clinical work includes attending General Child Neurology Clinics and running a Pediatric Stroke Program. Her clinical research interests involve the study of arteriopathies, such as moyamoya arteriopathy, and novel neuroimaging techniques to study stroke and inflammation.

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