

High family stress can impact a child's immune system

February 19 2014

High family stress can lead to the child's immune system being affected, as a research group at the School of Health Sciences at Jönköping University and the Faculty of Health Sciences at Linköping University in Sweden shows in a study being published in the renowned American periodical *Journal of Immunology*.

Our immune system has the task of protecting us against bacteria and viruses. Our bodies are also equipped to handle everyday <u>stress</u>-that is, stress that lasts only briefly. On the other hand, a difficult, stressful situation or long-term increase in stress can negatively affect the immune system. This kind of long-term stress can develop when a close family member dies or when adults are caught in tough, unmanageable situations.

The research study shows that <u>children</u> in highly-stressed families had a high level of cortisol, which is a biological marker of stress. This supports the idea that the children were stressed. The research study also points towards the fact that a high level of stress negatively affects the immune system–that is, it is not as resistant when the body is exposed to a high level of stress. Instead, the <u>immune system</u> reacts to substances in the body that should be left alone, which perhaps is linked to an autoimmune reaction.

The study included families with five-year-old children (derived from the ABIS [All Children in Southeast Sweden] study). The parents answered questions regarding stress and prospective difficulties that had



impacted the family, such as divorce or unemployment. The answers led the researchers to identify a group of children who probably experienced high levels of stress in their families, and a group of children who presumably had grown up with normal stress levels.

The research group at the School of Health Sciences in Jönköping will work further on the project to understand more about how a high level of stress can affect the body. This time, the researchers will turn to young people in the 18-22 age group.

"These young people can themselves report negative experiences in their daily lives and also <u>negative experiences</u> during their childhood" says Maria Faresjö, professor at the School of Health Sciences, which will also lead the continued research project.

More information: The article, "Psychological stress in children may alter the immune response", is being published in *Journal of Immunology* (2014, <u>DOI: 10.4049/jimmunol.1301713</u>). www.jimmunol.org/content/early ... nol.1301713.abstract

Provided by Expertsvar

Citation: High family stress can impact a child's immune system (2014, February 19) retrieved 25 April 2024 from https://medicalxpress.com/news/2014-02-high-family-stress-impact-child.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.