Immune diseases in children: Can a better environment bring them down

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Immune diseases are caused by suppression or over stimulation of the immune system. It is a well-known fact that allergic and autoimmune diseases are less common in the developing world than the industrialized world. This lead to the “Hygiene Hypothesis” formulated by Strachan, which postulated that lack of early childhood exposure to infectious increases susceptibility to allergic diseases by suppressing the natural development of the immune system. The hygiene hypothesis however cannot explain the rise in incidence of several TH1-mediated autoimmune diseases such as inflammatory bowel diseases, multiple sclerosis etc. This lead to the “Old Friends Hypothesis” by Graham Rook which postulates that vital microbial exposures are “Old Friends” such as helminthes, non-pathogenic environmental pseudocommensal bacteria or certain gut commensals and probiotics that could persist in small hunter gatherer groups as microbiota. However what is conveniently forgotten is the fact that environment we live is not only a physical one but it also has an important mental/psychological component. Urbanization brings it with many psychological, emotional problems. There are many studies which show a relationship between psychological stress and parameters of the immune system. In Eastern philosophy which originated in India consider that all things in the universe, both living and non-living are joined together as everything in the universe is actually made of the same natural elements. Diet, exercise, profession and relationships all have the potential to create physical, emotional or spiritual imbalances. This imbalance causes a lack of harmony and makes us more susceptible to disease.

Biography
Ajith Amarasinghe was graduated from Colombo Medical Faculty in 1993 and obtained DCH and MD from Post Graduate Institute of Medicine of University of Colombo. He was trained in General and Community Pediatrics in Sri Lanka and UK and obtained MRCP and MRCPCH. He has obtained a MBA in Healthcare from Manipal University and has followed a Postgraduate Diploma in Allergy and Asthma at Christian Medical College, Vellore, India. He is a Member of European Academy of Allergy, Asthma and Clinical Immunology and a Member of environmental working group of International Pediatric Association. He is currently the Head of Allergy and Asthma Center, Colombo, Sri Lanka.

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