

The World Incidence and Prevalence of Autoimmune Diseases is Increasing

Aaron Lerner

AESKU.KIPP Institute, Germany

Epidemiological data provide evidence of a steady rise in autoimmune disease throughout Westernized societies over the last decades. Multiple publications exist, describing past or actual incidences/prevalence of individual autoimmune diseases, however, long term studies on selected populations are scarce. Aims: to calculate the % increases per year of autoimmune diseases frequencies worldwide, analyse the differential increases per country and disease, and identify epidemiological trends. Results: The means \pm s.d. of the net % increased/year incidence and prevalence of autoimmune diseases worldwide were 19.1 ± 43.1 and 12.5 ± 7.9 , respectively. Rheumatic, endocrinological, gastrointestinal and neurological autoimmune diseases revealed the following annual % increases per year: 7.1, 6.3, 6.2, and 3.7, respectively. In all of these, differences between old vs new frequencies were highly significant ($p < 0.0001$). Comparing various autoimmune diseases, celiac disease increased the most

and the highest increase in incidence, comparing old to new surveys is allocated to myasthenia gravis. Despite considerable variations between the countries, celiac, type 1 diabetes and myasthenia gravis frequencies increased the most in Canada, Israel and Denmark, respectively. Frequencies of the autoimmune diseases increased significantly in the West and North when compared to East and South, respectively. Conclusions: Despite multiple reports on autoimmune diseases frequencies, long-term longitudinal follow-ups are scarce. Incidences and prevalence's have increased significantly over the last 30 years. Rheumatic, endocrinological and gastrointestinal autoimmune diseases in Israel, Netherlands, USA and Sweden increased the most. These observations point to a stronger influence of environmental factors as opposed to genetic factors on autoimmune disease development.

e: aaronlerner1948@gmail.com