

10-year trends in cardiovascular risk factors in Switzerland: non-traditional risk factors are on the rise in women more than in men

M Hänsel¹, K Steigmiller², AR Luft¹, C Gebhard³, U Held², S Wegener¹

¹Department of Neurology and Clinical Neuroscience Center, University Hospital Zurich and University of Zurich, Switzerland, ²Department of Biostatistics at Epidemiology, Biostatistics and Prevention Institute, University of Zurich, Switzerland, ³Department of Nuclear Medicine, University Hospital Zurich and University of Zurich, Switzerland

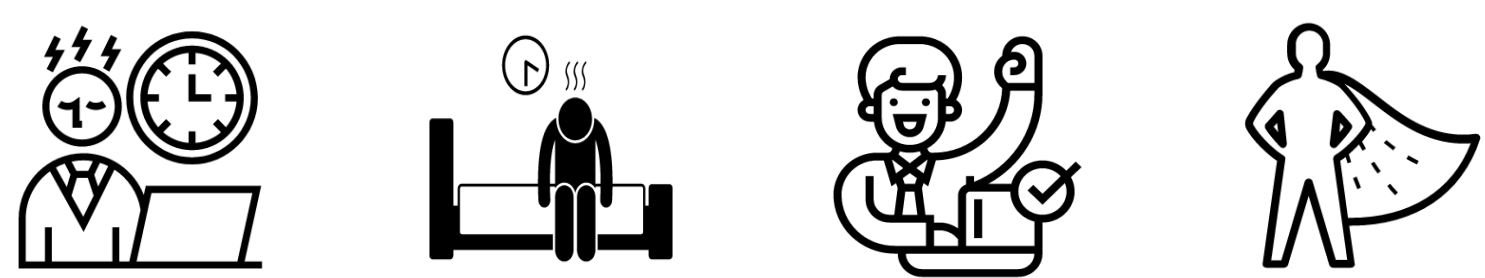
Background

Effective control of cardiovascular risk factors is the prerequisite to prevent cardiovascular disease. It is increasingly clear that non-traditional cardiovascular risk factors (nt-cvrf) such as stress significantly add to cardiovascular risk arising from traditional cardiovascular risk factors (t-cvrf). To determine sex-specific changes and 10-year trends in prevalence of t-cvrf and nt-cvrf in Switzerland.

Methods

We obtained anonymized data from 22'134 participants (51% women) of the governmental Swiss Health Survey, performed every five years (2007, 2012, and 2017). Epidemiological parameters, t-cvrf and nt-cvrf were analyzed in a cross-sectional approach and observational study design.

A



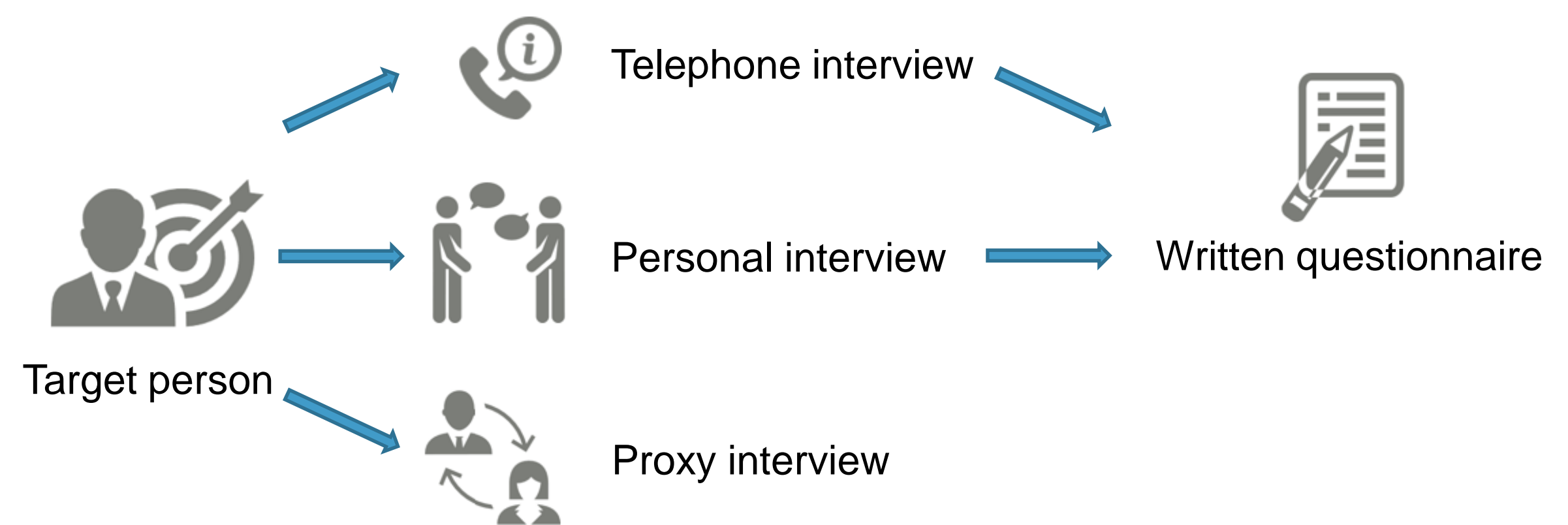
Non-traditional cardiovascular risk factors: stress at work, sleep disorder, job satisfaction, locus of control, energy and vitality

B



Traditional cardiovascular risk factors: obesity, cholesterol level, hypertension, diabetes, smoking

C



Interview methods: 1 telephone interview, 2 personal interview, 3 proxy interview, 4 Written questionnaire

Results

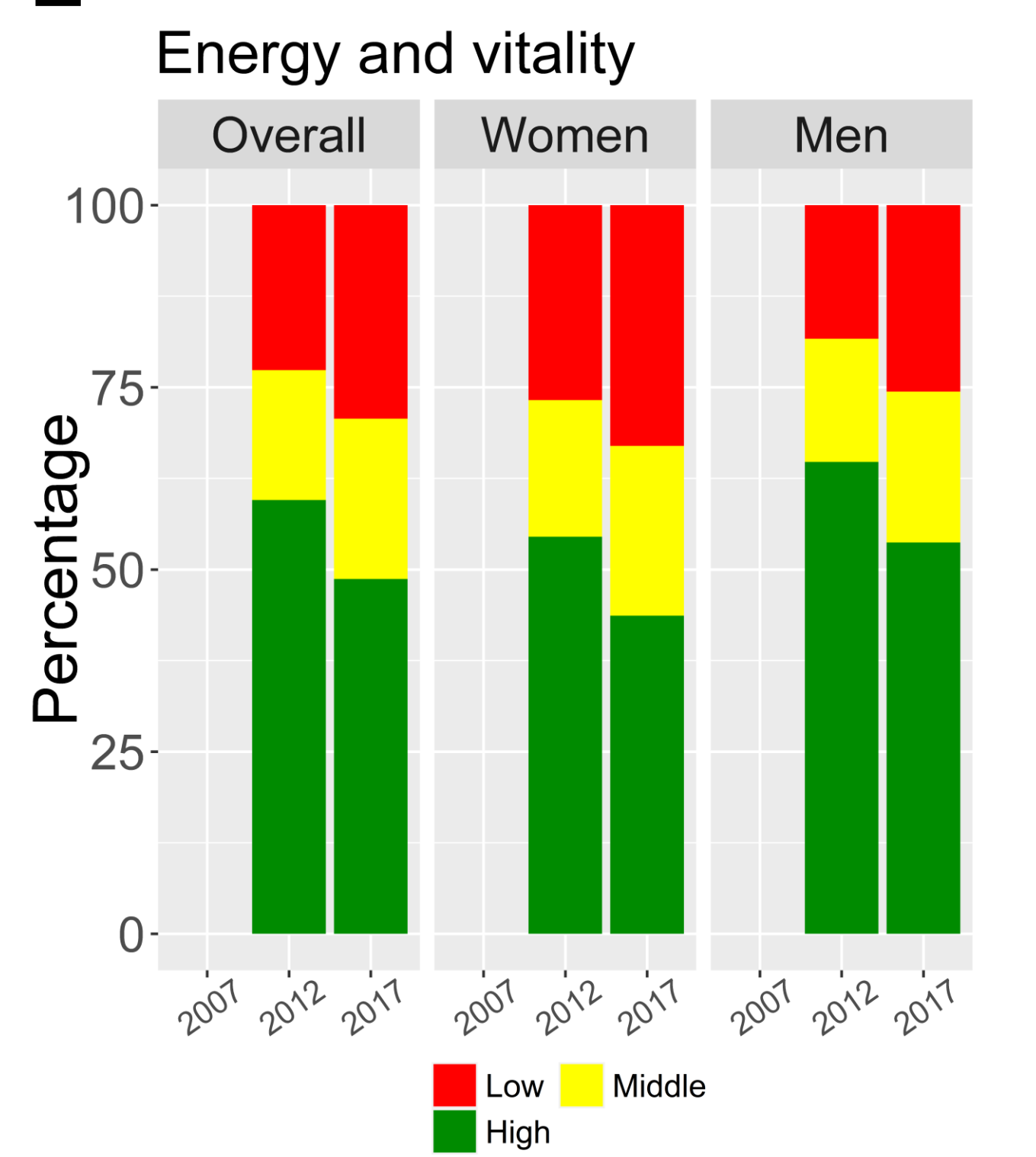
Over the observation period, the number of women having full-time jobs increased considerably (2007: 38%, 2012: 39%, 2017: 44%). This was accompanied by a substantial rise in the prevalence of nt-cvrf including stress at work (2007: not available, 2012: 59%, 2017: 66%), reduced feeling of energy and vitality (2007: not available, 2012: 23%, 2017: 29%), and sleep disorders (2007: 26%, 2012: 24%, 2017: 29%) in women. This trend was less pronounced in men. Amongst t-cvrf, only the prevalence of obesity and hypercholesterolemia increased over time in both sexes, while other t-cvrf remained stable (hypertension [27%], diabetes [5%]) or decreased (smoking [9.4 cigarettes/day]).

D



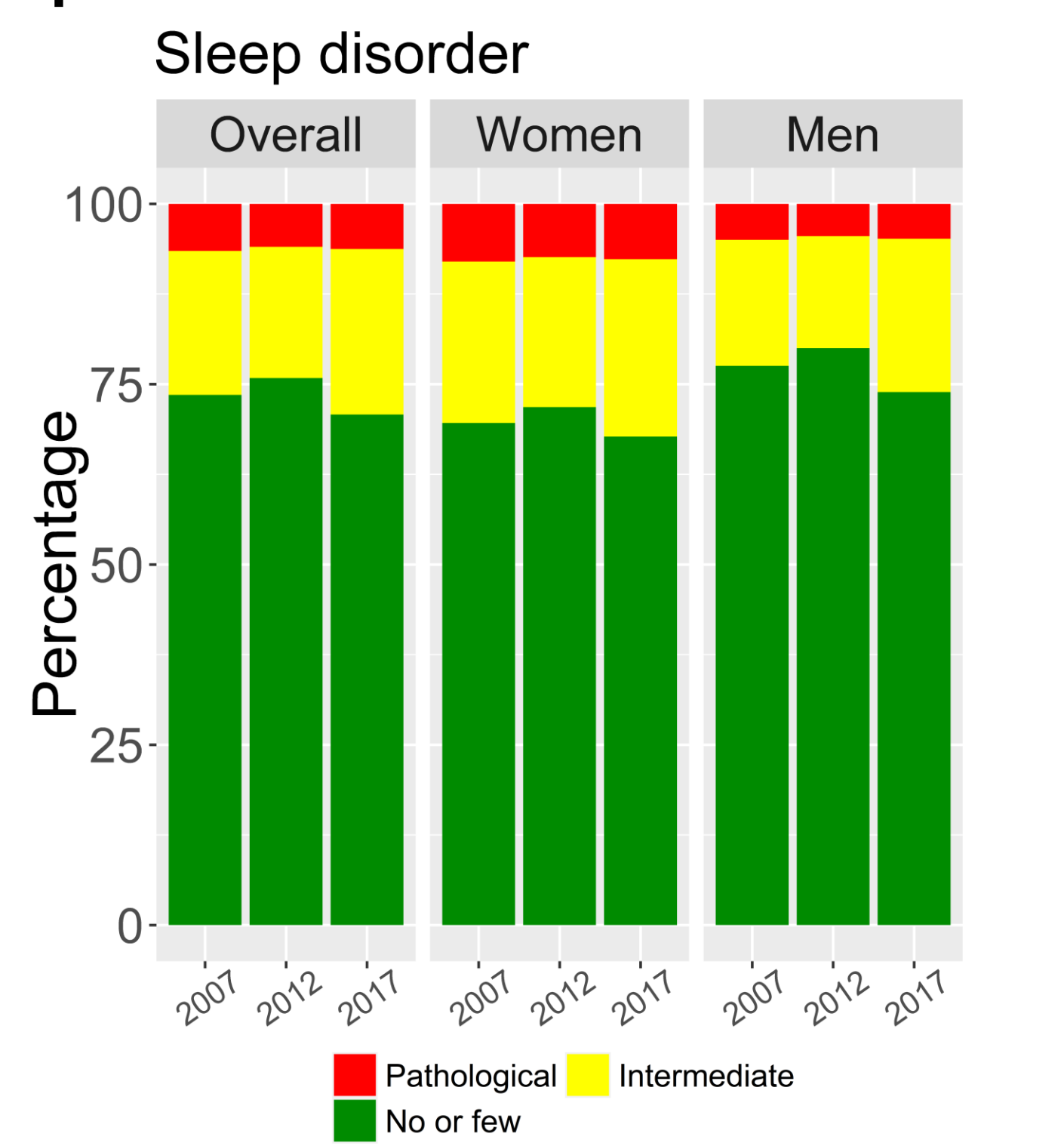
Stress at work of all Swiss people, separated by sex, for the years 2007/2012/2017

E



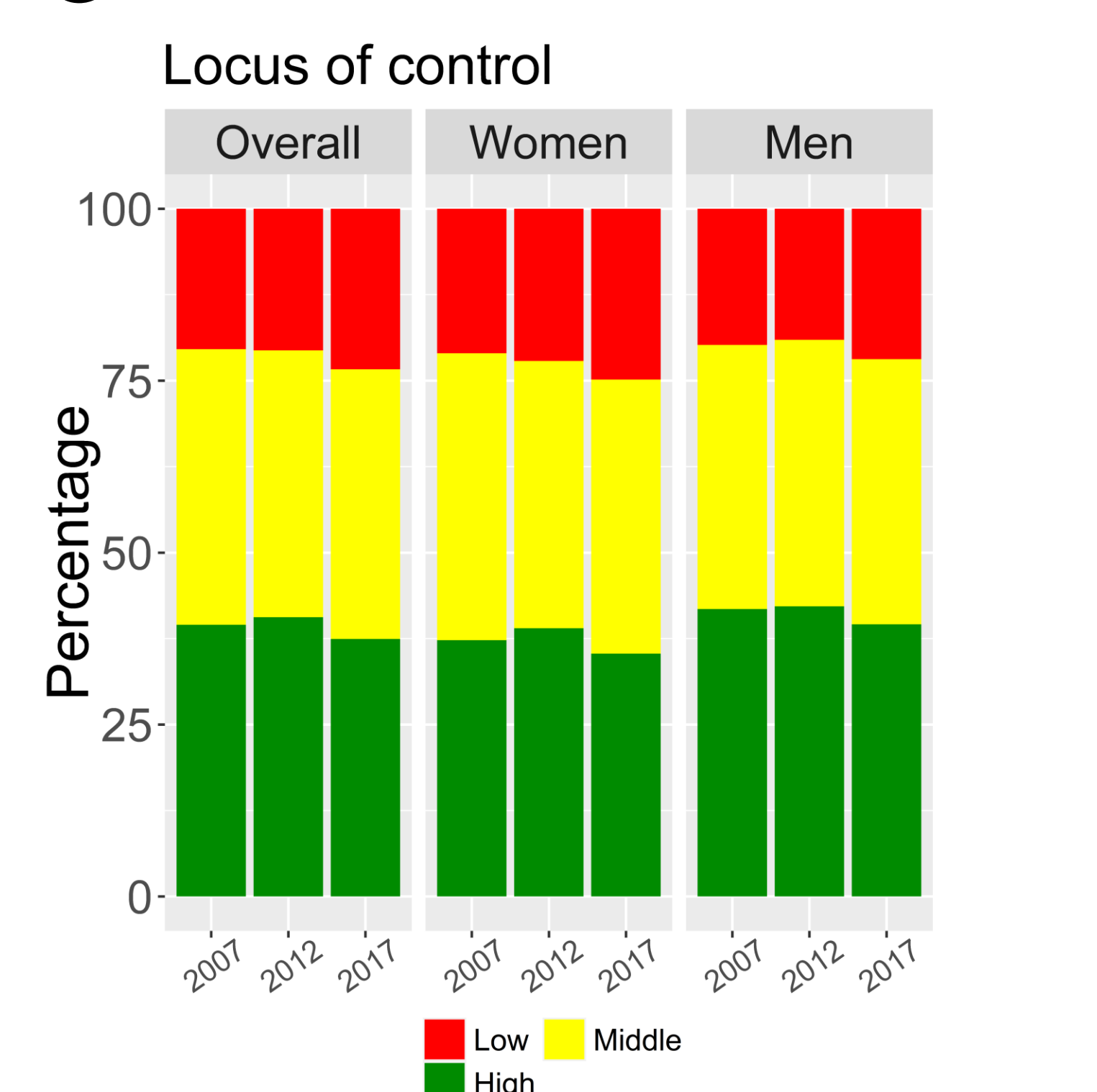
Energy and vitality of all Swiss people, separated by sex, for the years 2007/2012/2017

F



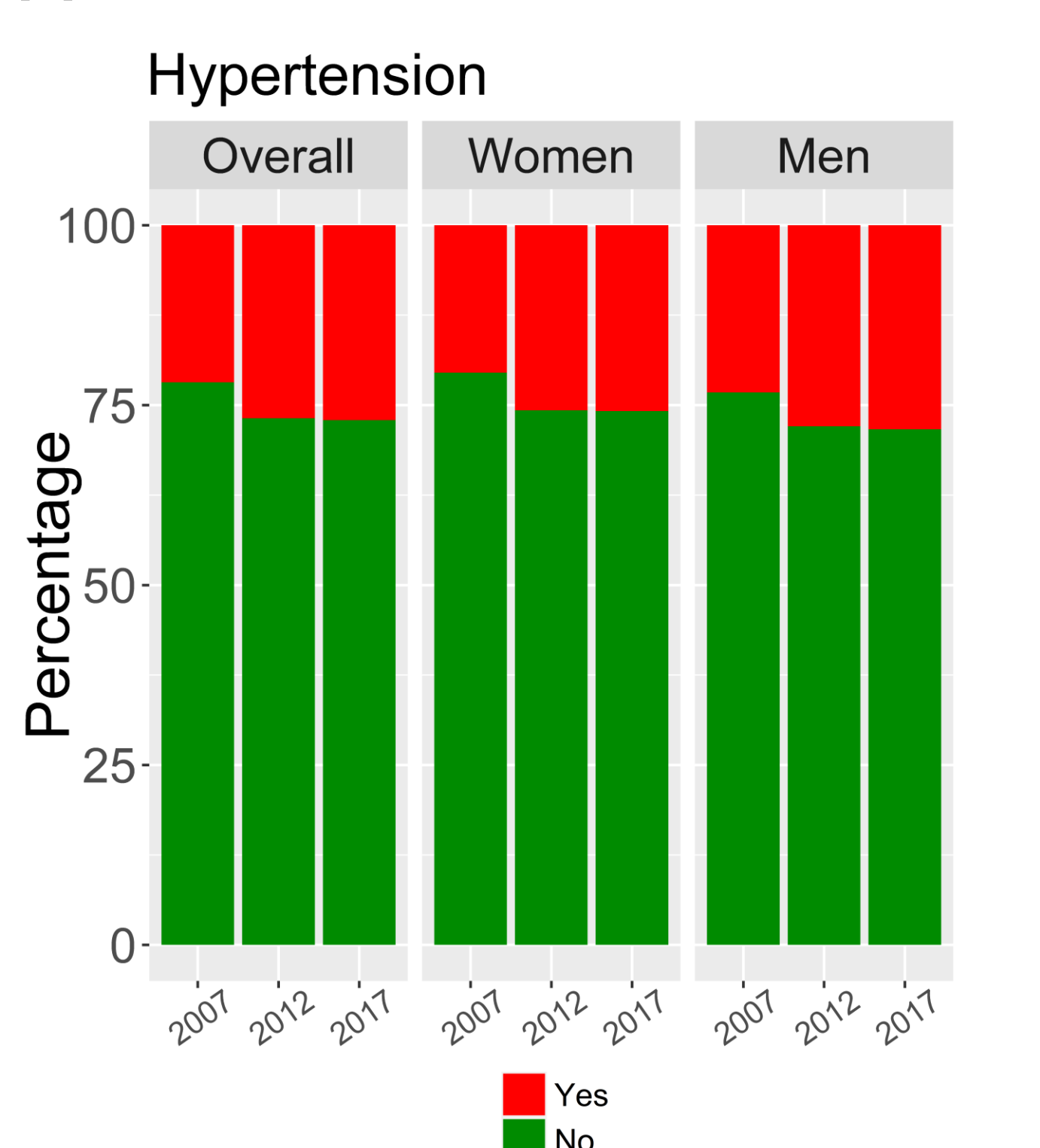
Sleep disorder of all Swiss people, separated by sex, for the years 2007/2012/2017

G



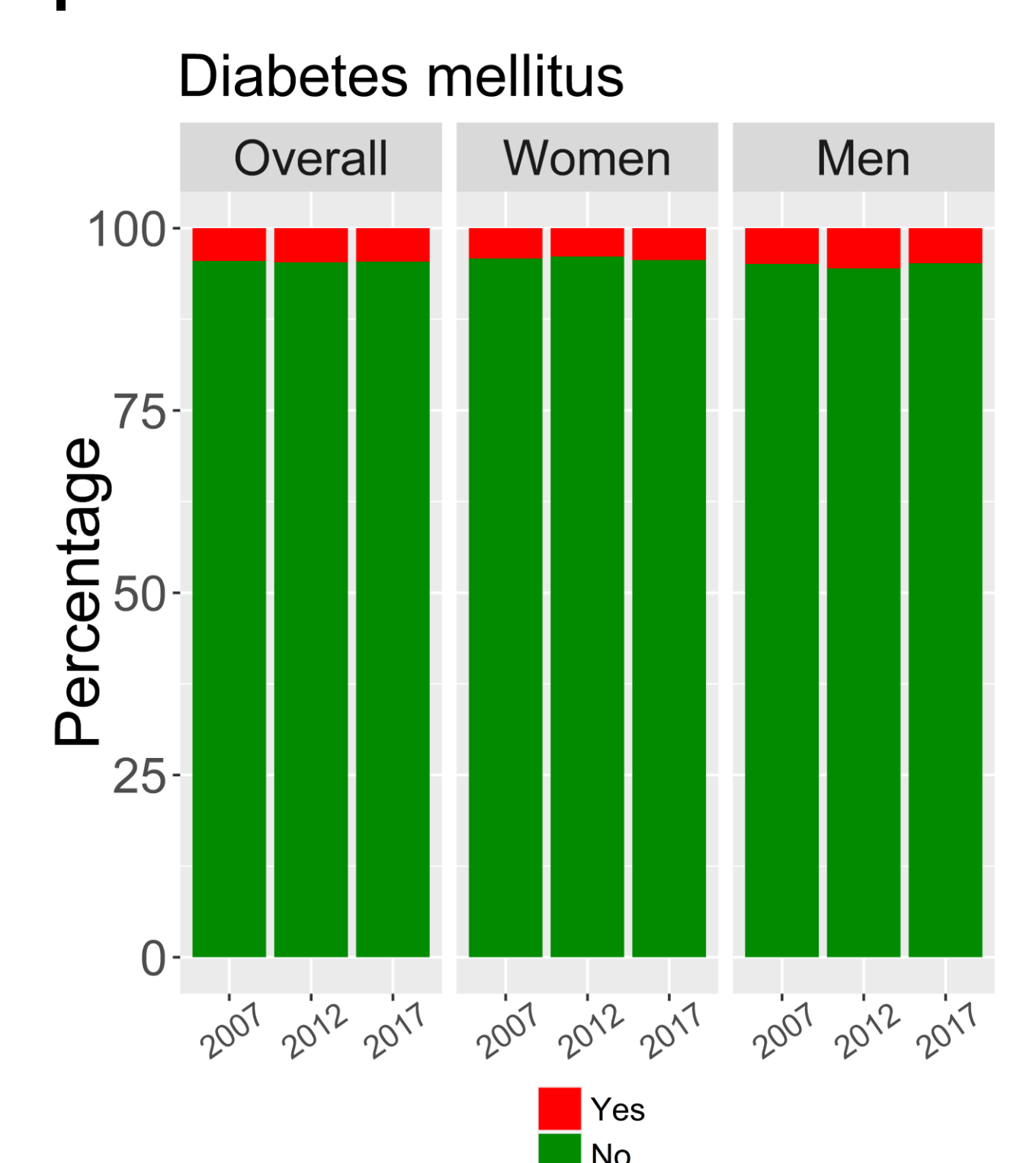
Locus of control of all Swiss people, separated by sex, for the years 2007/2012/2017

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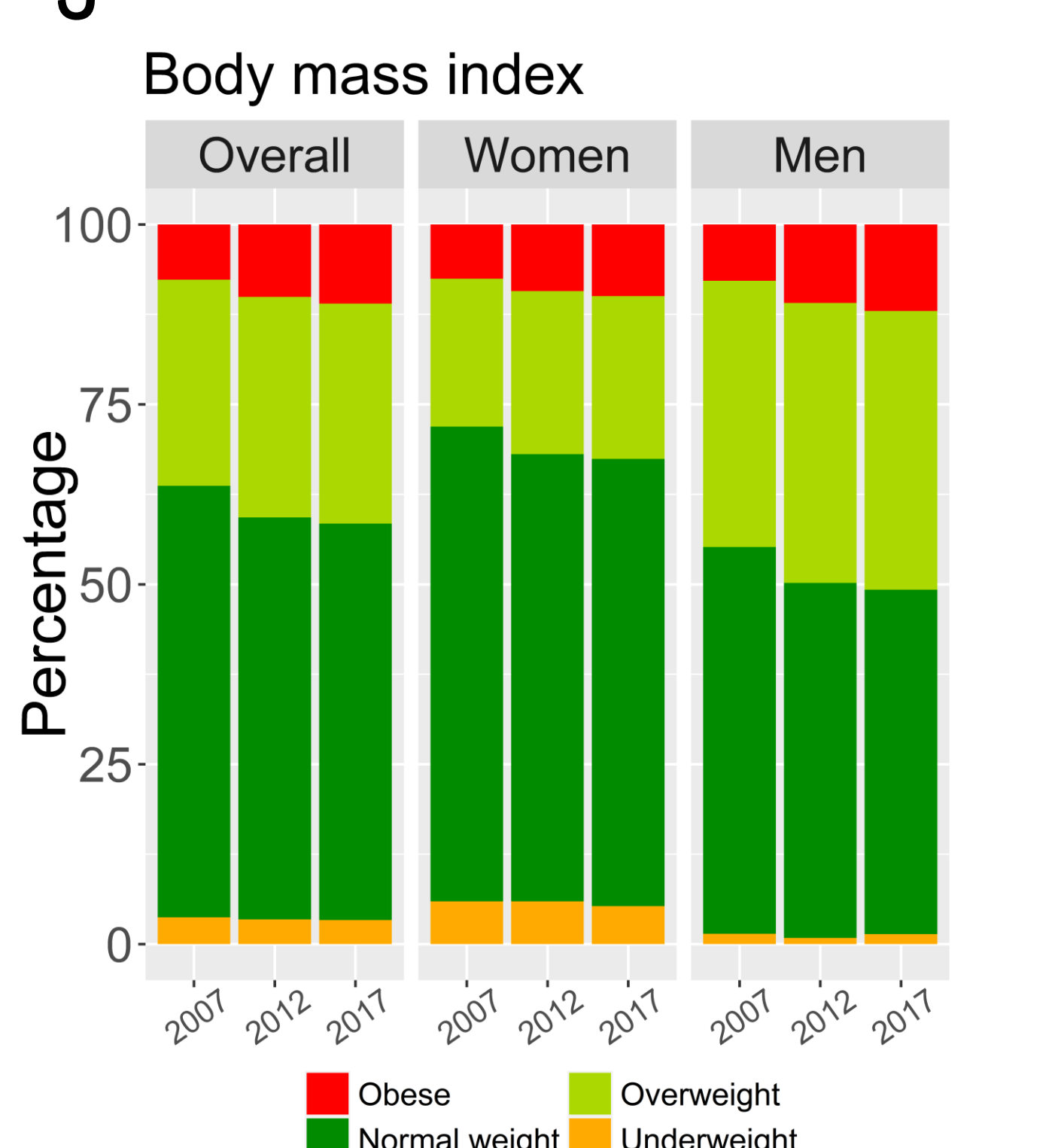
Hypertension of all Swiss people, separated by sex, for the years 2007/2012/2017

I



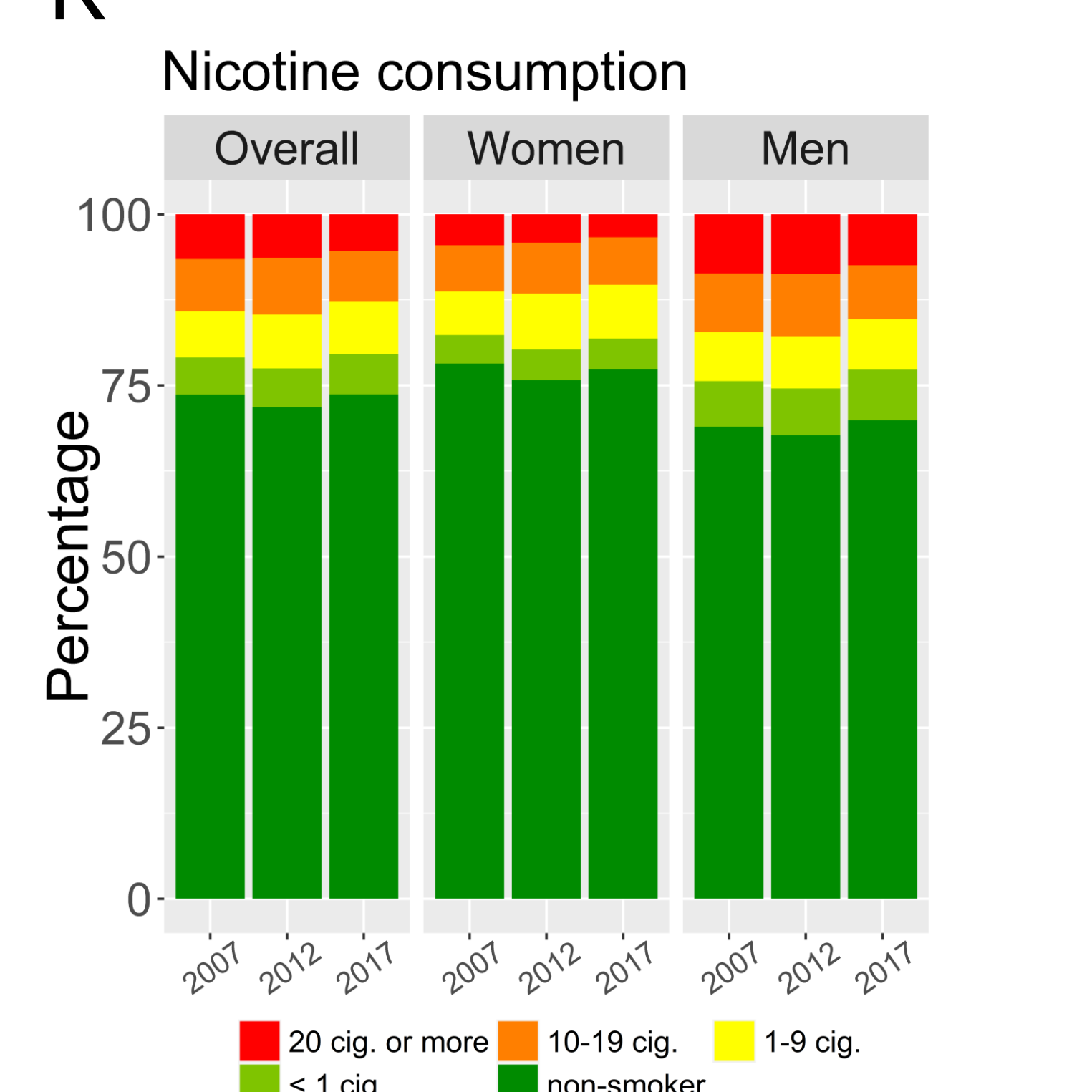
Diabetes mellitus of all Swiss people, separated by sex, for the years 2007/2012/2017

J



Body mass index of all Swiss people, separated by sex, for the years 2007/2012/2017

K



Nicotine consumption of all Swiss people, separated by sex, for the years 2007/2012/2017

Conclusion and Outlook

A rise in women's economic participation alongside a pronounced increase in nt-cvrf in the female Swiss population emphasizes the need to improve cardiovascular risk stratification and implement effective preventive measures for neuro- and cardiovascular disease.