ACCESS TO SERENE NATURE CONTRIBUTES TO IMPROVED MENTAL HEALTH AMONG WOMEN - RESULTS FROM A LONGITUDINAL COHORT STUDY IN SOUTHERN SWEDEN

Matilda Annerstedt, Swedish University of Agricultural Sciences, Faculty of Landscape Planning, Alnarp, Sweden Per-Olof Astergren, Lund University, Faculty of Medicine, Lund, Sweden

Patrik Grahn, Swedish University of Agricultural Sciences, Faculty of Landscape Planning, Alnarp, Sweden Jonas Bjak, Lund University, Faculty of Medicine, Lund, Sweden

Erik Skaback, Swedish University of Agricultural Sciences, Faculty of Landscape Planning, Alnarp, Sweden Peter Wahrborg, University of Agricultural Sciences, Faculty of Landscape Planning, Alnarp, Sweden

Background/aims: Despite the fact that average life length is increasing internationally, escalating problems with mental disturbances are reported, especially among women. One way of approaching this issue is by promoting public health through the means of restorative environments. The aim of this observational study was to explore whether number of recreational values and/or any certain characters of the nature could determine change in mental health in a population and whether any difference could be found due to gender.

Methods: We used data from a large health survey distributed to a stratified sample of a southern Swedish population at two occasions (1999/2000 and 2005), facilitating a longitudinal analysis. People from rural, suburban, or smaller town areas were studied (n=9230). Geographical residence codes for every individual were linked to preformed evaluations of restorative landscape characters. Any change in number of recreational characters within 300 meters distance, or change in any single character between baseline and follow-up, was correlated to change in mental health by logistic regression models. Mental health was measured by the General Health Questionnaire (GHQ-12).

Results: On average (in varied subsets of the data) access to a large number of recreational characters was rare, and we found no impact on mental health development from change in number of recreational characters between the two occasions. The specific nature character *Serene* turned out to be a significant factor for women: the odds of improved mental health was 4,5:1 if access to Serene was gained at follow-up. For men no significant explanation model was found.

Conclusions: The study showed that the character *Serene* in nature might be a specific mental health factor for women which could render a positive development in public health. This may influence landscape and urban planning as well as health policies and potentially create a higher life quality.