## Hospital Landscape Design in Denmark - Staff Experiences in Using the Garden

Shureen Faris Abdul Shukor, Kjell Nilsson, Ulrika Stigsdotter, University of Copenhagen, Denmark Ulrika Stigsdotter, University of Copenhagen, Denmark Kjell Nilsson, University of Copenhagen, Denmark

**Background and Aims:** Healthcare occupations traditionally are stressful because they involve an overload from work demands and stress from rotating shifts. However, numerous studies have shown that gardens in healthcare facilities used by staff gave positive outcomes in terms of restoration and recovery-relief from work place stress. This study investigates hospital landscape in five acutecare hospitals located in the Capital Region of Copenhagen, Denmark. It aims to identify how the landscapes are used by the staff and their experiences of restoration while being in the garden.

**Methods:** The Perceived Restorative Scale (PRS) ranging from 0 (no) to 10 (completely) was used in the questionnaires and Nvivo 8 was used to organize and evaluate the interview results. A total of 183 staff answered the questionnaires and 15 staff (three from each hospital) were selected for an in-depth interview.

Results: Preliminary findings show that hospital staffs, due to their nature of work, have limited time to spend in the hospital garden. The duration of time spent in the garden ranges from five to ten minutes. The result also indicates that two of the most frequent involving the staff while in the garden are having lunch and smoking. Gardens were also utilised as a quick passing through from buildings. Majority of staff mentioned that hospital landscape should be designed with priority to the needs of patients before theirs (the staff). The results also indicate that due to the limitation of time to take breaks while working, the gardens are underutilised by staff. Conclusions: Recommendations such as easy accessibility to gardens from their work stations and view of the garden from their work windows should be considered for the Danish hospitals.

## References:

Barnhart , S. K., Perkins N. H. and Fitzsimonds. J. Behaviour and outdoor setting preferences at a psychiatric hospital, Landscape Urban Plan, 42, 1998; 147-156

Barnes and Cooper Marcus,. Research report: Applying the therapeutic benefits of gardens. Journal of healthcare design. 1996; Vol.8,

Cooper Marcus, Clare and Marni Barnes. Gardens in Healthcare Facilities: Uses, Therapeutic Benefits, and Design Recommendations. Martinez, CA: The Center for Health Design. 1999

Dannenmaier, Molly. "Healing Gardens." Landscape Architecture, 1995; Vol. 85, No. 1: 56-80

Gerlach-Spriggs, Nancy, Richard Enoch Kaufman and Sam Bass Warner, Jr. Restorative Gardens: The Healing Landscape. New Haven, CT and London: Yale University Press. 1998.

Hartig, T., Staats, H. Restorative environments, Journal of Environmental Psychology, 2003; 23:103-107

Kaplan, R. and Kaplan, S. The Experience of Nature: A Psychological Perspective. Cambridge: Cambridge University Press. 1989.

Schweitzer, M. et al. Healing spaces: elements of Environmental Design that make an impact on health. The Journal of Alternative and Complementary Medicine. 2004; Vol.10, Supplement 1: 71-83