Promotion of health and wellbeing through nature in project Moved by Nature.

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Background

Increasing prevalence of a sedentary lifestyle, physical inactivity, obesity, and mental health problems present a major challenge for modern society. These lifestyle changes associated with an alarming epidemic of Type 2 diabetes are causing enormous health care expenses to the society. In addition, these factors are significantly lowering the quality of life at an individual level. Research shows, that environment significantly modifies lifestyle factors.

Extensive literature suggests that natural areas and urban green space provide multiple benefits on human health and wellbeing (Hartig et al. 2014). These benefits are partly associated with increased physical activity and the health outcomes received from physical activity in general. However, green exercise appears to be more beneficial to mental health over indoor activities (Barton & Pretty 2010). Contact with nature has restorative effects on people, which help us cope and recover from physical and mental stress (Tyrväinen et al.2014). Preliminary evidence exists on physiological outcomes (e.g. positive effect on heart rate, blood pressure) associated with natural environment. Furthermore, nature has beneficial effects on social interaction, and on the sense of belongingness, as well as on psychological determinants such as mood and perceived health (Keniger et al. 2013). Increasing knowledge of health benefits of contact with nature has yielded efforts to connect professionals within park and health sector worldwide. However, so far nature has been underutilized as a health promotion context in Finland.

Metsähallitus Natural Heritage Services (NHS) manages Finnish national parks and other stateowned protected areas. In 2010, NHS launched Healthy Parks, Healthy People Finland programme that aims to improve public health by activating people to get out into natural settings, enjoying genuine nature experiences, and improving their physical health through a wide range of outdoor activities. It also aims to promote collaboration between park and health sectors. A Moved by Nature-project was launched as an implementation project of the Healthy Parks Healthy People Finland programme in Eastern Finland in April 2013. The aim of the project is to increase the use of natural areas and urban green space in health promotion by developing services in public, private, and third sector that improve the access to nature among different population groups.

Project design and implementation

Primary target groups of the project include practitioners in private and public sectors, as well as voluntary workers in the third sector. Included sectors cover park, health and social sectors, educational sector, as well as nature tourism. Development work is based on building new networks between these sectors, increasing knowledge and skills, and facilitating the product development based on physical activity and outdoor recreation in natural areas. The project also provides education for all sectors on the health benefits of having contact with nature. Mass media is extensively utilized to promote participation in nature-based physical activities. In addition, project prompts general discussion on the role of nature in human health and wellbeing and on the concern about the consequences of the loss of nature contact in urbanized societies.

To develop health and wellbeing services, several pilot studies are being conducted in the project (Table 1). These pilots are especially targeted to four target groups including individuals at risk of type 2 diabetes, and individuals at risk of exclusion; i) immigrants, ii) unemployed, and iii) youth with low education. Practical activities conducted with pilot groups in nature will serve as a learning tool for the professionals in different sectors, and also as an opportunity to collect data on participants' and organizers' experiences of the nature activities and their impact on participants' wellbeing. Groups will participate in health enhancing physical activities in four nature destinations in Eastern Finland. As an outcome of the pilot studies, services and models grounded for the natural environment and physical activity will be developed for the promotion of health and wellbeing.

Aims		Host partners of Metsähallitus	Primary target groups	Secondary target groups	Intervention/actions
1	To develop nature- based models to promote youth health and to prevent exclusion from school.	Metsäkartano Youth and Wilderness Centre, Savo Consortium for Education, Rautavaara municipality	Social and youth workers, teachers, instructors, professional hiking guides	Young people in general, and at risk of health problems and social exclusion	3 field trips with youth at risk (n≈12). 3 field trips with 4 student classes (n≈80).
11	To integrate nature into social integration and health promotion of immigrants.	City of Lieksa: - Immigrant services	Health and social workers, volunteers, professional hiking guides	Immigrants	3 field trips with Somali mothers and children (n≈15). 3 field trips with young Somali men (n≈8).
III	To integrate nature into employment activities and health promotion of unemployed people.	City of Lieksa: - Social services	Health and social workers, professional hiking guides.	Unemployed	6 field trips with long- term unemployed men and women (n≈8).
IV	To develop models to motivate lifestyle change through nature-based activities.	Rehabilitation and wellness centre Kunnonpaikka	Health promotion professionals - Nurses - Physicians -Instructors (PA & diet)	Working aged-people at risk of metabolic syndrome and Type 2 diabetes	6 field trips with men with elevated waist circumference (n=20).
V	To integrate health benefits of nature into higher education curriculum.	Savonia university of applied sciences Karelia university of applied sciences	Teachers and students at the university of applied sciences (health studies)	Families, older people, obese and inactive people, rehabilitation clients etc.	Lectures and practical lessons (e.g. organizing nature activities at dementia home).
VI	To improve the access to nature by developing facilities and services	City of Kuopio, and city of Lieksa	Managers of the nature conservation and recreation areas	Citizens of all ages, entrepreneurs, sport clubs	Multi-sectorial workshops

Table 1. Summary of the Moved by Nature project's main actions to integrate nature into promotion of health and wellbeing

Project is due to January 2015 with a total budget of 335 000 \in The project is managed by Metsähallitus, Natural Heritage Services in Southern Finland. The main funders of the project are the European Social Fund and the Centre for Economic Development, Transport and the Environment. Project is co-operated with Savo Consortium of Education and several public, private and third sector organizations.

Preliminary results

To promote health through outdoor recreation, there is an evident need for sharing the expertise between practitioners in nature and health and wellbeing sectors. In general, there is currently vast insufficiency in skills and knowledge related to health benefits of interacting with nature, as well as practical skills to combine nature and health promotion. Pilot studies, as well as media interest towards the actions of the project have indicated so far that there is a large interest towards providing more opportunities for people to promote their health and wellbeing by having stronger contact with nature. However, including nature in health promotion practices requires multisectorial co-operation.

Conclusion

Nature provides an important environment for the promotion of health and wellbeing. However, there is an evident need for enhanced co-operation and education to strengthen the role of natural environment and outdoor recreation in the prevention of physical, mental, and social health problems. The Moved by Nature-project will provide new models to promote health and wellbeing through physical activity in nature.

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