

Research on Green care in Norway – an overview

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What is Green care?

Definitions and goals

In Norway Green care refers to adapted and quality-assured welfare services on farms. In Norway the term *Inn på tunet (IPT)* is a common used term that combines farming with teaching and care. The main goal is that the services shall provide coping skills, development and well-being. Green care farms are defined as properties that are used for farming, forestry or gardens, and the activities offered are related to the farm and its daily life and operations. The service areas include child and youth services and education (general pedagogy, special needs education, leisure, etc.), health and care services (addiction, disability, mental health, dementia, immigrants and refugees etc.), and occupational training.

The Ministry of Agriculture and Food and the Ministry of Local Government and Regional Development have recently prepared a new national strategy of Green care (2012) to ensure development in important areas such as quality assurance, research, and the future division of roles and responsibilities. By autumn 2011 there were approximately 1,100 farms providing Green care services in Norway. An overview in 2009, including 152 providers and 13 different services in five counties, showed that the greatest share of Green care services were school and day care services for people with psychiatric disorders. Together these two categories constituted of approximately 40 percent of the services offered (Statistisk sentralbyrå (SSB) 2010).

Quality assurance and approval

To ensure legitimacy and predictability of IPT, a *quality assurance system* was established for Green care farms during 2010. The work was developed in collaboration between the agreement partners in the agricultural sectors, the Norwegian Association of Local and Regional Authorities, the insurance industry, the Norwegian farmers' association for HSE services, and the Norwegian Agricultural Quality System and Food Branding Foundation. The standard was developed as an Agricultural Quality System standard, and it is included in the list of Agricultural Quality System subsidiary standards. It has been decided that the Norwegian Agricultural Quality System and Food Branding Foundation shall operate and further develop the standard. The standard came into use in 2011.

An *approval system* for IPT started in 2012. All farms that want offer these services must gain approval based on the care quality assurance system. The Norwegian Agricultural Quality System and Food Branding Foundation operate the system. The services must be designed based on requirements stipulated by the purchaser for the services, and must comply with professional/sector-based legislation and guidelines.

Knowledge-status

Finished research projects

Until now there is a wide range of research projects at different levels. A report of the status of knowledge and research needs for Green care in Norway pointed out that there is need for more evidence-based knowledge, and that future research must include all agricultural resources, including forestry and other nature-based resources, buildings, plants, animals and people (Berget & Braastad 2008a). Furthermore the report concludes that it is important to document positive effects of Green care, such as animal-assisted therapy, horticultural therapy, and pedagogical measures on farms in order to become fully legitimate and accepted by the health, education, work and welfare authorities, and by medical and pedagogical personnel.

Below is a short description of finished research studies of Green care in Norway from 2006-2012 (table 1).

Table 1. An overview over research projects on Green care in Norway (2004-2012), author, design, journal, sample and main findings.

<i>Author, design, journal</i>	<i>Sample</i>	<i>N</i>	<i>Intervention</i>	<i>Main findings</i>
RCT-design				
Berget et al. 2008b <i>Clinical practice and epidemiology in mental health, 4:9</i>	Adults with psychiatric disorders	69	12-week farm animal-assisted intervention	Increase in generalized self-efficacy in intervention compared to control group six months after end of interventions
Berget et al. 2011 <i>Occupational Therapy in Mental Health 27(2), 50-64.</i>	Adults with psychiatric disorders	69	12-week farm animal-assisted intervention	Decline in state anxiety in intervention compared to control group six months after end of intervention
Pedersen et al. 2012b <i>Anthrozoös, Vol. 25 (2), 149-160 (July) 2012.</i>	Adults with clinical depression	14	12-week farm animal-assisted intervention	Decline in clinical depression and increase in self-efficacy during intervention
Quasi-experimental				
Berget et al. 2007 <i>Occupational Therapy in Mental Health 23(2), 101-117.</i>	Adults with psychiatric disorders	35	Behavioural study during a 12-week farm animal-assisted intervention	Among persons with affective disorders, increased intensity of work correlated with increase in self-efficacy and decline in anxiety
Pedersen et al. 2011 <i>Issues in Mental Health Nursing, 32 (8): 493-500.</i>	Adults with clinical depression	14	Behavioural study during a 12-week farm animal-assisted intervention	Decline in depression and anxiety and increase in self-efficacy are related to performance of complex work tasks
Gonzales et. al. 2009 <i>Research and theory for nursing practice, 23(4), 312-328.</i>	Adults with clinical depression	18	12- week therapeutic horticulture intervention in a Green care context	Decline in depression and improved attention capacity

Gonzalez et al. 2010 <i>Journal of Advanced Nursing</i> , 66(9), 2002-2013.	Adults with clinical depression	28	12- week therapeutic horticulture intervention in a Green care context	Decline in depression and improvement in attention capacity were mediated via fascination and being away
Gonzalez et al. 2011a <i>International Journal of Mental Health Nursing</i> , 20, 119-129.	Adults with clinical depression	46	12- week therapeutic horticulture intervention in a Green care context	Decline in state anxiety and positive correlation between change in anxiety and group cohesiveness
Gonzalez et al. 2011b <i>Issues in Mental Health Nursing</i> , 32(1), 73-81 (9).	Adults with clinical depression	46	12- week therapeutic horticulture intervention in a Green care context	Depression severity declined during both intervention and follow-up. The therapeutic horticulture was described as meaningful and influential for the view of life
Qualitative design				
Pedersen et al. 2012a <i>DOI: 10.3109/09638288.2011.650309</i>	Adults with clinical depression	8	Qualitative study of persons who had completed a 12-week farm animal-assisted intervention	Flexibility and adapted work tasks important, also possibility to experience ordinary work life and distress of illness
Bjørgen and Johansen 2007 <i>Mental helse i Sør- Trøndelag. Prosjektrapport 1/2007.</i>	Adults with mental disorders	15	Stay at Green care farms with work rehabilitation	The farmers' commitment and the social setting on the farm important
Survey				
Fjeldavli and Meistad 2004 <i>Centre for Rural Research, NTNU. Report Vol. 2/2004, 0-50</i>	Farmers with Green care services	325 farms	Type of service, target group and motivation	30 % of Green care farms had a service for people with mental health problems.
Berget et al. 2008c <i>Journal of Psychiatric and Mental Health Nursing</i> , 15(7), 576-581	Health care professionals and farmers	60 15	Therapists with clients at farm animal-assisted interventions and farmers	Both groups thought that Animal-assisted therapy could enhance better communication with other people and improve mental health
Berget and Grepperud 2011 <i>European Journal of Integrative Medicine</i> , 3 (2), 91-96	GPs, psychiatrists and psychologists	1100	Questionnaire of Animal-assisted intervention (AAI) for psychiatric patients	Strongest degree of usefulness was reported for mental retardation and belief in treatment effects highest for improved physically capacity
Berget et al. 2012 <i>Society & Animals, in press</i>	GPs, psychiatrists and psychologists	1100	Questionnaire of Animal-assisted interventions for psychiatric patients	About two thirds had some or significant knowledge of AAI and were motivated to adapt AAI to own practice. Almost 9 out of 10 thought that AAI should be used more in psychiatric treatment

Ongoing research projects

1. The effect of the horse on adolescents' self-efficacy, self esteem and social skills (2008-2013)

Norwegian University of Life Sciences

Hilde Hauge, Bjarne Braastad and Bente Berget (Norwegian University of Life Sciences), Ingela Lundim Kvalem (University of Oslo), Marie- Jose Enders-Slegers (University of Utrecht).

The PhD project comprises 80 teenagers aged 12-15 years from different areas of Norway. The main aim is to examine what teenagers can learn from being on a farm with horses, and how this can enhance their self esteem and feeling of mastery. Each teenager participating in the project is given an intervention with horses once a week for approximately 4 months. Around 20 farms take part in the project, all being small, agricultural farms with horses as their main activity. The teenagers learn to care for the horse, brush and handle it from the ground and through riding. The project has a cross-over design with control group where all participants are given the intervention with horses, but at different times.

2. A Nationwide Survey of People Out of Work Participating in Green Care Interventions on Farms in Norway (2010-2014)

Norwegian University of Life Sciences

Lina Harvold Dalskau, Bente Berget and Camilla Ihlebæk (Norwegian University of Life Sciences, Gunnar Tellnes (University of Oslo)

The main objective is to systematically describe participants in, and content of, Green Care interventions on farms for people out of work in Norway. Elements that are perceived as important and effective for the participants will be documented and further associations of Green Care interventions on psychological and physiological factors important to stimulate return to work (RTW) will be investigated. A nationwide survey is designed specifically for this purpose. Relevant questions from a Dutch survey are also included. The study population are all adults out of work participating in different ongoing Green service programmes in Norway, who were on different kinds of welfare benefit arrangements from The Norwegian Labour and Welfare Administration (NAV). In addition, all farmers offering Green care services for adults with mental health disorders, addiction problems and occupational training answer a questionnaire regarding the farm, the interventions offered, and experiences with engaging in Green care interventions.

3. Inn på tunet" (IPT) in the municipal service (2012)

Møreforskning

The main aim is to identify knowledge and use of IPT in the municipalities and what, if any, success criteria or preclude such use. The aim is also to look at challenges for the implementation of IPT in municipalities in order to understand more of what is critical

to integrate in public service production. The project is addressed to the western counties Hordaland, Sogn og Fjordane and Møre og Romsdal. Collected data will be systematized and analyzed on the basis of subject, organization, formal foundation, geography and demographics. The study will be completed by the end of 2012.

4. Mental Health Promotion by Recovery-Oriented Green Care Services (2010-2014)

University College of Hedmark

The main aim of the project is to obtain knowledge about factors of Recovery-Oriented Green Care Services that influence the way back to work and school for participants, and the improved functioning of defined indicators, and the recruitment model's impact on how early in the process participants are offered the services. Further, by use of the data gathered from users' subjective experiences, there will be identified which factors are most crucial in the recovery process, how the factors work together, how it is possible to build a flexible system in which individual needs are taken care of, and to what degree recovery-oriented green care services can constitute an alternative and supplement to traditional medical services. The project consist of four sub studies: i) a quantitative study of people between 16-30 years old who is out of work or school because of mental and/or drug related problems, and who are going through a Green Care program. The aim is to measure effects on connection to job or education, and other aspects of individual functioning before, during and after an intervention ii) a qualitative study of users experiences with Green Care iii) a qualitative process study of young people's experiences with Green care, and iv) discourse analytic approach of different languages and discourse among participants in the field such as farmers, activity leaders, participants, work and welfare officers, and health and agricultural professionals.

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