

COURSE MATERIAL

COMMENTS

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Marjale von Schantz & Anu Heinola (eds.)

# EXPERTISE IN HEALTH CARE AND MEDICATION



TURUN AMMATTIKORKEAKOULU  
TURKU UNIVERSITY OF APPLIED SCIENCES

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# PREFACE

The challenges for education in the health care sector are growing year after year because of enormous progress in health care services. Earlier the main focus in educating staff was to teach how to manage completing the tasks in nursing care as skilfully as possible.

Scientific development in health care services, new diagnosis and therapeutic methods and evidence-based practice nowadays require good research and development (R&D) skills from all qualified health care professionals. In health care education the challenges have also increased rapidly and the teachers have been put in front of a new question in their expertise: how to teach the students so that they get enough preparedness for the future to research and develop their work while performing high quality nursing care.

Year 2010 started a new R&D programme at the faculty, where the main themes were expertise in health care and medication. Since that year the teachers have created and started new projects to develop the education as well as working life in health care services according to the goals of the R&D programme. In all projects there are integrations with the students' studies – while they learn the professional substance they also learn how to create and how to work in a project.

This publication *Expertise in Health Care and Medication* shows, through small abstracts, examples of the diversity and variability of projects which are carried out in the Faculty of Health Care at Turku University of Applied Sciences. These presentations show the versatility of projects which give the students a platform for learning means and tools to develop their profession and work in the future.

Turku 23.2.2012

Kaija Lind

Dean

Faculty of Health Care

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# EXPERTISE IN HEALTH CARE AND MEDICATION – R&D PROGRAMME (2010–2013)

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## THE UNIVERSITY OF APPLIED SCIENCES AS PART OF THE INNOVATION ENVIRONMENT

In addition to the provision of higher education, the mission of Finnish universities of applied sciences includes research and development that serves education, supports the working life and regional development, and takes the economic structure of the region into account (Act 564/2009). According to the policies of the Ministry of Education, research, development and innovation (RDI) activities at universities of applied sciences are grounded on the idea of operating within a borderless world, a demand/user-oriented approach, innovative individuals and communities, and a systematic approach to RDI.

Universities of applied sciences must have more active involvement in the planning and implementation of regional programmes and related projects, and they must reinforce their role as intermediary organisations in the middle ground between basic research, applied research and development activities. Involvement in strategic competence clusters should also be strengthened. Success factors include the improved regional impact of education and factors related to the quality of life, such as public health in the region, the availability of public services, and a safe living environment. (Ministry of Education 2010.) The faculty-specific research and development programmes of Turku University of Applied Sciences are specifically designed to respond to the needs of industry and economy in Southwest Finland (Turku University of Applied Sciences 2010, Turku 2009, 2005).

## CHALLENGE: PROMOTION OF HEALTH CARE EXPERTISE

The ever-faster changes in society and working life, and specifically the need for innovation and new competences pose significant challenges for universities of applied sciences. The role of higher expertise, creative industries and innovation takes centre stage in regional development, workplace development and personal professional development. Challenges emerge from demographic changes, the development of technology and information economy, the changing workforce needs of organisations, financial issues, and changes in service structures. (EU 2007, Ministry of Education 2010.)

The R&D Programme for *Expertise in Health Care and Medication* focuses on the promotion of strategic and professional health care competence as well as patient competence by a) creating broader and longer-term thematic project programmes and by improving the visibility and impact of the programme, b) promoting closer collaboration with regional operators to serve and exploit the programme, c) offering opportunities for the integration of education and project activities and by establishing forums for learning and debate, d) reinforcing the university's international status in health care initiatives, and e) by enhancing funding opportunities.

The programme themes are health promotion, expertise in medication and patient safety. The themes are based on Finnish national health policies, social and educational policies which have as their main objectives the optimal health of the population, minimal gaps in health outcomes between different population groups, flexible structures, and a high standard of education (e.g. Ministry of Social Affairs and Health 2011a).

### Health promotion

Health is one of the fundamental values of human life, and national health is considered a cornerstone of economic, social and human development. The current WHO definition of health, formulated in 1948, describes health as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'. For a variety of reasons, an updated definition is now required to better reflect today's world; one such proposal is 'the ability to adapt and self manage in the face of social, physical and emotional challenges' (Godlee 2011).

In the Health 2015 public health programme of the Finnish Ministry of Social Affairs and Health (2001), health is examined from the point of view of different age groups and as a challenge to health care service providers. The new Health Care Act (1326/2010), which came into force in May 2011, requires that health promotion be taken into account in decision-making in different sectors and in all functions of the society. The act provides citizens with more freedom of choice with regard to health care facilities as well as health care personnel. In addition, patients – or customers – have more choice when selecting the health care district or unit where they wish to receive treatment. Furthermore, the strengthened position of the customer/patient and his or her role in the design and implementation of personal care or treatment will pose a significant challenge in terms of service structure reforms (Ministry of Social Affairs and Health 2011a).

## Expertise in Medication

Medical care is primarily provided by and under the responsibility of qualified medical care professionals. The overall responsibility for medical care is borne by authorised health care professionals who have the appropriate medical qualifications; in addition, each individual involved in medical care is responsible for his or her own actions. The provision of medical care in accordance with treatment plans is monitored and controlled by supervisors. Supervisors are also responsible for decision-making with regard to task allocation and cooperation between different personnel groups to ensure optimal use of each group's expertise. (Ministry of Social Affairs and Health 2005.)

Rational medical care and good medical safety promote the well-being of the population, improve public health, and reduce the costs of health care. The objective is to provide medical care that is as effective, safe, appropriate and as financially viable as possible in all circumstances and to all who need it. The customer's personal role and responsibility in health and medical care must be increased, especially with regard to the treatment of long-term illnesses and symptoms for which self-medication is appropriate. Medical safety is globally one of the major development challenges. (Ministry of Social Affairs and Health 2009, 2011b.)

## Patient safety

The core principle of the Finnish Patient Safety Strategy (2009–2013) is to promote patient safety together. The vision is to embed patient safety in health care structures and practices to provide effective and safe patient care and treatment. The promotion of patient safety is part of quality and risk management in social and health care. The purpose of the strategy is to steer Finnish social and health care services towards a cohesive patient safety culture and to promote its realisation. The strategy is implemented both in public and private sectors of social and health care. (Ministry of Social Affairs and Health 2009.) Patient safety is also one of the focus areas of health policy in the European Union. Systematic discourse between member states began in 2005 on issues related to patient safety with the objective of promoting patient safety as an integral part of health care.

## PROGRAMME IMPLEMENTATION

The Programme for Expertise in Health Care and Medication follows the Programme for Health and Well-being in the Future HEAWELL (Saarikoski & Toivonen 2009). The new programme (2010–2013) focuses more closely on the themes of health promotion, expertise in medication and patient safety. Steering group activities, partnerships and the integration of project activities and education were emphasised during the 2010–2011 programme period. Future challenges include improved impact and visibility of the programme, which also improves the opportunities for securing a range of external funding.

This publication presents the projects that were in progress or completed during the 2010–2011 period. The projects are categorised by programme themes; health promotion, expertise in medication and patient safety. In addition to these themes, the publication describes projects which focus on promoting structure and operational preconditions of health care services.

## REFERENCES

Act 564/2009. Finnish Act on Changes and Temporary Changes to the Polytechnics Act. [www.finlex.fi](http://www.finlex.fi). Retrieved on 15 December 2011.

Act 1326/2010. Finnish Health Care Act. [www.finlex.fi](http://www.finlex.fi). Retrieved on 15 December 2011.

EU 2007. Health Strategy. Commission of the European Communities. 2007. White Paper. Together for Health: A Strategic approach for the EU 2008–2013. Brussels. COM(2007) 630 final.

Godlee, F. 2011. What is health? *British Medical Journal* Vol. 343, d4817.

Ministry of Education, Finland 2010. The Polytechnic Research, Development and Innovation in the Innovation System. Reports of the Ministry of Education 2010:8. Ministry of Education. Helsinki.

Saarikoski, M. & Toivonen, H. 2009. (eds.) Terve ja hyvinvoiva tulevaisuus (HEAWELL). T&K-ohjelma terveyden ja hyvinvoinnin edistäjänä Varsinais-Suomessa 2007–2009. Reports from Turku University of Applied Sciences 89. Turku: Turku University of Applied Sciences.

Ministry of Social Affairs and Health, Finland (STM 2001). Health 2015 public health programme. Brochures of the Ministry of Social Affairs and Health 2001:8. Ministry of Social Affairs and Health 2001:8. Helsinki.

Ministry of Social Affairs and Health, Finland 2005. Safe pharmacotherapy. National guide for pharmacotherapy in social and health care. Handbooks of the Ministry of Social Affairs and Health 2005:32. Helsinki.

Ministry of Social Affairs and Health, Finland 2009. Promoting patient safety together. Finnish Patient Safety Strategy 2009 – 2013. Publications of the Ministry of Social Affairs and Health 2009:5. Ministry of Social Affairs and Health. Helsinki.

Ministry of Social Affairs and Health, Finland 2011 a. Asiakkaan asema, itsemäärääminen ja vaikutusmahdollisuudet sosiaali- ja terveydenhuollon kehittämisessä – integroitu kirjallisuuskatsaus. Reports and Memoranda of the Ministry of Social Affairs and Health 2011:16. Helsinki.

Ministry of Social Affairs and Health, Finland 2011 b. Lääkepolitiikka 2020. Kohti tehokasta, turvallista, tarkoituksenmukaista ja taloudellista lääkkeiden käyttöä. Publications of the Ministry of Social Affairs and Health, Finland, 2011:2. Helsinki.

Turku 2005. Turkulaisten korkeakoulujen alueellisen kehittämisen strategia 2006–2012.  
Turku 2009. Turun kaupungin osaamis-, yrittäjyys- ja elinkeino-ohjelma 2009–2013.

Turku University of Applied Sciences 2010. The Strategic Plan of the Turku University of Applied Sciences.





# PROJECTS PROMOTING HEALTH

# THE IOPOINTS PROJECT – MATERNITY AND CHILD HEALTH CLINIC SERVICES 2007–2011

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The Child Welfare organisation of Southwest Finland

The Hospital District of Southwest Finland, Turku University Hospital,  
Women's Clinic

Mannerheim League for Child Welfare, district organization of  
Southwest Finland

Turku Evangelical Lutheran Parish Union

Kaarina Evangelical Lutheran Parish Union

University of Turku

Turku University of Applied Sciences (TUAS)

## **Funding**

The Hospital District of Southwest Finland, Turku University Hospital,  
Women's Clinic

Turku Municipal Health Care and Social Services

TUAS

## **BACKGROUND**

In Finland, maternity and child health clinics are traditional and salient places for the health promotion, counselling and support of the child bearing and child rearing families. Recently, the service system of the maternity and child health clinics has encountered many challenges in terms of development according to national guidance, laws and studies. It has been shown that especially maternity health clinic practices vary greatly in different parts of Finland, and even in the same health centre. Furthermore, the scarcity of resources is clearly perceived. Essential objectives for the development of the maternity health clinics' actions were among others: supporting parenthood more intensively, reinforcing the position of the fathers, multi-professional co-operation, the continuity of care, and local and national standardisation of the services.

## **AIMS**

The 10Points project's goal was to create an innovative health promoting learning environment for the TUAS health care students interested in maternity and child health care. The primary objectives of the project were threefold:

1. To create improved health and welfare promoting methods for the maternity care system.
2. To reinforce continuity between different maternity health care clinics/units in primary care and in special health care.
3. To upgrade the structures of the maternity care services.

The project name, 10Points, describes the project's desired outcomes, such as healthy and perfect new-born babies which are given a maximum of 10 points by the Apgar score after birth.

## IMPLEMENTATION

Areal development is based on the wide implementation of the outcomes of several subprojects, produced by the Master and Bachelor degree students in health care, and two doctoral theses connected to the project.

## RESULTS

Included in the 10Points project, 26 Bachelor's theses and eight Master's theses have been completed. Moreover, results of the ongoing Bachelor's theses (6) will be presented in spring 2012. In addition, new evidence and knowledge reached by the theses, e.g. the following outcomes can be presented: multi-professional models of the antenatal and postnatal family training in the cities of Turku and Naantali, PleaseStop! websites about nausea and vomiting during pregnancy, "Expecting a child to a family with drug and alcohol problems – the care pathway in the area of the hospital district of Southwest Finland" and VIRVA – virtual birth training.

## IMPACT

The 10Points project has enabled the creation of new networks and reinforced co-operation between primary health care and special health care in the field of maternity care in Southwest Finland. Moreover, participants' competence regarding the developing of maternity care and project work has been strengthened. Particularly in relation to family training the 10Points project has provided an innovative foundation for novel multi-professional co-operation between maternity and child health clinics, the Turku and Kaarina Evangelical Lutheran Parish Union, the Evangelical Lutheran Parish of Naantali and the Mannerheim League for Child Welfare.

## CONCLUSION AND SCENARIO FOR THE FUTURE

The 10Points project finished in December 2011. The outcomes of the project (e.g. the family training model) can be globally implemented. Thus, based on the 10Points project, plans for international R&D operation and continuing education regarding maternity care are in the making. *Ready for parenthood – the family training model*, for example, has been introduced in a brochure of TUAS, planned for international use.

## PUBLICATIONS

Ahonen, P. 2010 (ed.) Varsinaissuomalaista äitiyshuoltoa kehittämässä – Kymppi-hanke innovaatioympäristönä. Reports from Turku University of Applied Sciences 98. Turku: Turku University of Applied Sciences.

Tuominen, M. 2009. Valmiina vanhemmuuteen – perhevalmennuksen kehittäminen Turun sosiaali- ja terveystoimessa. Research reports from Turku University of Applied Sciences 30. Turku: Turku University of Applied Sciences.

Coming in spring 2012: Conclusion publication of the 10Points project by Turku University of Applied Sciences.

## Articles in Finnish

Ahonen P, Tuominen, M. 2011. Kymmenen pisteen yhteistyötä – neuvolatyo kehittyä Kymppi-hankkeessa. Terveystoimija 2 (44).

Laitilan Sanomat 12.9.2009. Laitilan-Pyhärannan neuvolat selvittävät asiakastytyväisyyttä.

Rannikkoseutu 10.5.2010. Synnytyskokemuksia miehen näkökulmasta.

Kirkko ja Me 4/10. Seurakunnat mukaan perhevalmennukseen.

Turkulainen 29.5.2010. Neuvoloihin uutta perhevalmennusta.

Turun Sanomat 30.8.2010. Turkulaisneuvolat lisäävät vanhempien valmennusta.

Turun Sanomat (TS Extra) 23.10.2010. Synnytys pelottaa äitejä – mistä tukea äideille.

## Interviews

Interview of project manager Pia Ahonen, 26.5.2010, Radio Auran Aallot and Radio Sata.

## Posters and oral presentations

Tenho, A., Ahonen, P. & Rautava, P. 2008. The 5th G-I-N Conference, 1–3 October 2008, Helsinki, Finland.

Tenho, A., Ahonen, P. & Rautava, P. 2009. Health Promotion in Maternity Health Centres – Clients', Service systems' and Education Organizations' Point of view. 17th International Conference on Health Promoting Hospitals & Health Services, 6–8 April 2009, Crete, Greece.

Valtakunnalliset Neuvolapäivät, Ideatori 2010, 3–4 November 2010, Helsinki, Finland.

19th International Conference on Health Promoting Hospitals & Health Services, 1–3 June 2011, Turku, Finland:

1. Ahonen, P., Tuominen, M., Cornu, T. & Rautava, P. Oral presentation: [http://www.hphconferences.org/fileadmin/user\\_upload/Proceedings\\_Turku/Mini/M1.8\\_Ahonen.pdf](http://www.hphconferences.org/fileadmin/user_upload/Proceedings_Turku/Mini/M1.8_Ahonen.pdf).
2. Cornu, T., Ahonen, P. & Rautava, P. A family expecting their first child as the customer of the maternity and child welfare clinic. From the point of view of the service system, management, planning and planning and developing of contents.
3. Nurmi, M., Laaksonen-Heikkilä, R. & Ahonen, P. How to help women who suffer from nausea and vomiting in pregnancy.

4. Petäjä, H., Laaksonen-Heikkilä, R. & Ahonen, P. Developing the operational model of promoting sexual health. Oral presentation. [http://www.hphconferences.org/fileadmin/user\\_upload/Proceedings\\_Turku/Oral/O2.1\\_Petaejae.pdf](http://www.hphconferences.org/fileadmin/user_upload/Proceedings_Turku/Oral/O2.1_Petaejae.pdf).
5. Tuominen, M., Ahonen, P. & Rautava, P. The status and development of the maternity health clinic services. The public health nurses' and midwives' opinions differ according to the model of the service and the professional education.

Ahonen, P., Tuominen, M., & Rautava, P. 2011. A Development of the Maternity Health Clinic Services in Southwest Finland by the 10points project. Poster and oral presentation. Carpe Networking Conference, 2-4 November 2011, Utrecht, the Netherlands.

### Websites in Finnish

Website of the 10Points project. Available: [www.kymppihanke.turkuamk.fi](http://www.kymppihanke.turkuamk.fi).

PleaseStop! Available: [www.lopujo.fi](http://www.lopujo.fi).

Expecting a Child to a Family with Drug and Alcohol Problems – Pathway in the Area of the Hospital District of Southwest Finland. Available: [www.Terveysportti.fi](http://www.Terveysportti.fi) -> Lääkärin Tietokannat -> Hoitoketjut -> Varsinais-Suomen Shp -> Naistentaudit -> Lasta odottava päihdeperhe.



# HEALTH SERVICES FOR THE LONG-TERM UNEMPLOYED 2007–2011

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Raisio Social and Health Care Centre

The Turku Ekotori

Turku University of Applied Sciences (TUAS)

## **Funding**

Raisio Social and Health Care Centre

TST – Organisation for Sustainable Development Ry

TUAS

## **BACKGROUND**

The purpose of the *Health Services for the Long-term Unemployed* project was to develop a service model that provides and produces health-promoting support services for self-motivated health care of the long-term unemployed. The service model was developed at the Turku Ekotori and Raisio Social and Health Care Centre between the years 2007 and 2011. The development of the service model was initiated at Turku Ekotori in January 2007, by taking health

care services to the (operating) environment of the long-term unemployed that had been employed at Ekotori. The purpose of this was to reach also the persons who, despite their health problems, do not seek health care services. During spring 2007, the operation was also launched in Raisio Social and Health Care Centre.

The purpose of the project was to narrow the socio-economic status-related health differences by engaging the long-term unemployed to taking care of their own health and using the social and health care services when necessary. Public health nurse students participated in the project as a part of their advanced studies. Each group of public health nurse students was committed to the operation for two school years.

## IMPLEMENTATION

Health meeting and the health counselling included are a vital part of supporting the health, welfare and life management of an unemployed person. Health counselling emphasises acknowledging the unemployed person's own experiences, shared expertise and the customer's own responsibility and decision. The employee's job is to help the unemployed persons to process their own experiences, use their possibilities and solve their problems as well as find different ways of acting in society. The purpose is to increase the unemployed persons' trust and commitment to controlling their own actions.

The health meeting focuses on the discussion between the employee and the customer concerning the customer's state of health, lifestyle and life situation as well as the health aspects affecting performance and ability to work. The service provided for the long-term unemployed includes two health meetings. The first meeting concentrates on finding out the customer's state of health and well-being by conducting a health inspection and health questionnaire. The customer's health risks can be surveyed by using different measuring results, interviews and questionnaires. After the first meeting, the customer receives a covering referral to laboratory tests. The second meeting concentrates on discussing the customer's own ways of acting and possibilities to sustain and improve his or her health. The discussion focuses on challenges concerning the state of the customer's health and finding positive recourses and capabilities to answer to these challenges. If necessary, the customer will be forwarded to further tests and treatment in a social and health care centre or other services.

## Experiences from the activities

During the project, feedback has been collected from the unemployed, employees and students who participated in the project. The unemployed that visited the health checks in Turku Ekotori and Raisio Social and Health centre have mainly been satisfied with the checks and felt they were useful. Most of the people who participated in the project also felt that they got new information about their state of health. Health counselling concerning a healthy lifestyle was considered sufficient. After the health check, changes in health habits were reported regarding exercise, smoking and alcohol consumption. Based on the health check, approximately half of the people were forwarded to further tests and treatment, but up to third of them reported that they for one reason or another had not sought further treatment. (Kaleva, Mattila & Viitanen 2008, Mäkelä & Parkkila 2008, Rauanheimo & Sjöblom 2009.)

Also the employees who participated in the project in Raisio were mainly satisfied by the health services provided to the long-term unemployed. Especially the collaboration between co-workers was seen as a functioning method. Guiding the unemployed to the health services for the long-term unemployed via the Employment Office worked well, because this way the unemployed were reached better. Finding many different health problems and sicknesses was seen as central in defining the feeling of meaningfulness in the work. According to the employees' experiences, low-threshold health services are appropriate for the long-term unemployed and thus it would be vital to regularise health services to the long-term unemployed in the municipality's basic health care operations. (Junnila & Kesänen 2009.)

## Development of the activities

From the material collected during the project, two development areas were found: developing the content of the activities and organising the services. Based on the proposals in 2009, the health interview questionnaire used in the health check was improved. Focused questions related to nutrition, exercise and alcohol consumption were added. The importance of lifestyle choices was emphasised by adding a food circle (Nutrition recommendations 2008) and an exercise pie (UKK institute 2008).

Operational methods for activating the unemployed (such as organizing group activities) were aimed at improving the content of the activities. In addition, collecting feedback, motivating the unemployed to use the services

and monitoring the effects of the services were stated as proposals to develop the activities. Suggestions concerning the organisation of the services were improving the fluency and continuity as well as developing the process of monitoring the effects. The employees who participated in the project felt that the monitoring should be improved so that it would be possible to collect information about the realisation of further treatments and planned lifestyle changes.

## CONCLUSIONS

Reaching the unemployed at the earliest possible stage is vital when organising health services for them. This way the possibility of preventing the harmful effects of unemployment on a person's welfare and health is maintained. According to the experiences and feedback received from the project, the health services aimed at the long-term unemployed are appropriate and effective. However, the operations themselves need to be further developed especially in terms of continuity. More attention should be paid to the motivation of the unemployed. Personal influence, concrete research results, repeated mini-interventions and a motivating interview were seen as good ways of motivation.

During the five years the project has provided a genuine and natural learning environment for the public health nurse students of Turku University of Applied Sciences. Students have learned about different, very challenging methods of promoting well-being and health. The project has also lowered the threshold of initiating a conversation about the matters and given confidence to encounter people in different life situations. The project has also helped to improve the guidance of project type learning. The development, implementation and evaluation of the project have partly been completed as thesis work by the students and other curriculum based studies.

## PUBLICATIONS

### Theses

In this project five Bachelor's theses were published.

### Other publications

Dalbom, L., Lehtonen, J., Syrjänen, E. 2008. Metabolinen oireyhtymä tunnetuksi terveystieteiden keinoin. In the publication Paltta, H., Walta, L. & Koivuniemi, S. (eds.) Terveystieteiden kehittäminen haasteena – opinnäytteitä terveystieteiltä 2008. Comments from Turku University of Applied Sciences 46. Turku: Turku University of Applied Sciences, 14–20.

Jalava, J., Mäkelä, K. & Parkkila, J. 2008. Terveystieteiden käytännön kehittäminen pitkäaikaistyöttömille. In the publication Paltta, H., Walta, L. & Koivuniemi, S. (eds.) Terveystieteiden kehittäminen haasteena – opinnäytteitä terveystieteiltä 2008. Comments from Turku University of Applied Sciences 46. Turku: Turku University of Applied Sciences, 8–13.

Junnila, E., Kesänen, I. Rauanheimo, E. & Sjöblom K. 2009. Pitkäaikaistyöttömien terveystieteiden kehittäminen. In the publication Koivuniemi, S. Paltta, H. & Wiirilinna, U. (eds) Terveystieteiden kehittäminen haasteena – opinnäytteitä terveystieteiltä 1/2009. Comments from Turku University of Applied Sciences 53. Turku: Turku University of Applied Sciences, 74–82.

Kaleva, H., Viitanen, K. 2008. Pienryhmätoimintamalli elämän aktivoimiseen. In the publication Paltta, H., Walta, L. & Koivuniemi, S. (eds.) Terveystieteiden kehittäminen haasteena – opinnäytteitä terveystieteiltä 2008. Comments from Turku University of Applied Sciences 46. Turku: Turku University of Applied Sciences, 21–26.

Viljanen, K. & Puodinketo-Wahlsten, A. 2011. Terveystieteiden palveluja pitkäaikaistyöttömille. In the publication Lind, K., Saarikoski, M. & von Schantz, M. (eds.) Tutkien terveyttä 2009–2010. Reports from Turku University of Applied Sciences 102. Turku: Turku University of Applied Sciences, 84–94.

# NORDIC WALKING AND STRENGTH AND POWER EXERCISE PROGRAM (NOWASTEP) 2007–2015

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Arcada University of Applied Sciences in Helsinki

University of Eastern Finland in Kuopio

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University of Turku

Finnish Institute of Occupational Health in Helsinki

National Institutes for Health and Welfare in Helsinki

National Institutes for Health and Welfare in Turku

Turku University of Applied Sciences (TUAS)

## **Funding**

TUAS

Research Council for Physical Education and Sports

Ministry of Education

## BACKGROUND AND AIMS

The NowaStep study is a continuum of the project on exercise, nutrition and glucose uptake which was a substudy of the Finnish Diabetes Prevention Study (DPS) (Tuomilehto et al. 2001), and it has been started in 2005. The NowaStep study is designed based on the results of the exercise, nutrition and glucose uptake project in 2006. Today, both projects will be brought forward within the framework of the NowaStep study described in this article.

The primary aims of the NowaStep study were to determine whether aerobic and/or resistance exercise training without dietary induced weight loss improves impaired glucose regulation (IGR), the components of metabolic syndrome and markers of low-grade inflammation in middle-aged men with IGR. The hypothesis was that supervised exercise could have positive effects on adipokine patterns, glycaemic control and risk factors for the metabolic syndrome (MetS) in middle-aged men with IGR.

## IMPLEMENTATION

Overweight or obese male volunteers (40–65 years), who did not exercise regularly and who were interested in participating in the study and eligible for screening (n=313), were recruited through newspaper advertisements and advertisements in local occupational health care institutes both in Helsinki and Turku (2007–2008). Finally, 144 volunteers were eligible for the study. The subjects were randomised to one of three groups both in Helsinki and in Turku: (1) a control group (C, n = 47), (2) a Nordic walking group (NW, n = 48) or (3) a resistance training group (RT, n = 49).

Adipose tissue biopsies, blood samples, DNA samples and skeletal muscle biopsies are taken before and after intervention. Glycaemic control, risk factors of metabolic syndrome, body composition, dietary intake, endothelial dysfunction, maximal oxygen uptake and oxidative stress are studied before and after intervention. Follow-up studies will be performed after 6 and 12 months after the intervention period.

The NowaStep study was started in the summer of 2007, and data collection ended in December 2009 when the last follow-up samples were taken. During 2010–2012, all collected data will be analysed and several high quality articles

will be submitted to international journals. The study was supported by grants from the Research Council for Physical Education and Sports, the Finnish Ministry of Education and Turku University of Applied Sciences.

## RESULTS

No original data has been published yet. However, four manuscripts are being submitted to journals. The first article is based on metabolic changes during the intervention and the second one deals with the effect of a dose of Nordic walking and resistance training on physical capacity and body composition in men with IGR. The third one is based on the effects of intervention in endothelial dysfunction in men with IGR.

## IMPACT

The first part of the Nowastep study (2007–2009) has provided a great opportunity for biomedical laboratory students to enhance their professional skills in clinical laboratory work and learn new methods in biomedicine. During 2010 and 2011, three Master's Theses projects have been started in collaboration with the University of Eastern Finland (cost-effectiveness, physical activity and comparison of maximal oxygen uptake methods used in the NowaStep study). In the final phase during 2012 to 2015, the NowaStep study results will provide a lot of new knowledge about effects of exercise in the prevention of metabolic syndrome and type 2 diabetes.

## CONCLUSIONS AND SCENARIO FOR THE FUTURE

Adipose tissue biopsies, DNA samples and skeletal muscle biopsies are planned to start the analyses, and several research grants are applied for during 2012. Also a primary goal for the year 2012 is to find international collaborators from the field of cell and molecular biology to strengthen the knowledge in the analytical methods of adipose tissue and skeletal muscle biopsies.



## PUBLICATIONS

### Theses

#### *Doctoral thesis*

Venojärvi, M. 2011. Roles of exercise training with dietary counselling and muscle fibre composition in the regulation of glucose metabolism in middle-aged subjects with impaired glucose tolerance. Publications of the University of Eastern Finland. Dissertations in Health Sciences 64.

#### *Other theses*

In this project three Bachelor's theses and one Master's thesis are published.

### Articles

Siitonen, N., Pulkkinen, L., Lindström, J., Kolehmainen, M., Eriksson, JG., Venojärvi, M., Ilanne-Parikka, P., Keinänen-Kiukaanniemi, S., Tuomilehto, J. & Uusitupa, M. 2011. Association of ADIPOQ gene variants with body weight, type 2 diabetes and serum adiponectin concentrations: The Finnish Diabetes Prevention Study. *BMC Medical Genetics* 12:5, 2011.

Qin, L., Corpeleijn, E., Stolk, RP., Lindström, J., Eriksson, JG., Aunola, A., Venojärvi, M., Keinänen-Kiukaanniemi, S., Ilanne-Parikka, P., Uusitupa, M. & Tuomilehto, J. For the Finnish Diabetes Prevention Study Group. Additive interaction between leisure time physical activity and weight loss in the prevention of type 2 diabetes: The Finnish Diabetes Prevention study (submitted).

Venojärvi, M. 2011. Sauvakävelyllä kuntoon - NowaStep-harjoitusohjelma. In the publication Lind, K., Saarikoski, M. & von Schantz, M. (eds.). *Tutkien terveyttä 2009–2010. Reports from Turku University of Applied Sciences*. Turku: Turku University of Applied Sciences, 95–101.

Venojärvi, M., Aunola, S., Hällsten, K., Virtanen, K., Hämäläinen, H., Marniemi, J., Hänninen, O., Nuutila, P. & Atalay, M. Type 2 diabetes: Decreased protein expression of thioredoxin-1 and increased HSP90 in skeletal muscle (submitted).

Venojärvi, M., Aunola, S., Hämäläinen, H., Marniemi, J., Lindström, J., Halonen, JP., Nuutila, P., Atalay, M. & Hänninen, O. Increased aerobic capacity and weight loss improve glycemic control without changes in skeletal muscle GLUT-4 expression in middle-aged subjects with impaired glucose tolerance (submitted).

Venojärvi, M., Wasenius, N., Manderoos, S., Heinonen, OJ., Hernelahti, M., Lindholm, H., Surakka, J., Lindström, J., Aunola, S., Atalay, M. & Eriksson, JG. Nordic walking decreased circulating chemerin and leptin concentrations in middle-aged men with impaired glucose regulation (submitted).

## Posters

Poster presentation. Planet Xmap Europe Multiplex Symposium, 20–21 October 2010. Vienna, Austria.

Poster presentation. The 3rd World Congress on Controversies to Consensus in Diabetes, Obesity and Hypertension, 13–16 May 2010 Prague, Czech Republic.

Oral presentation. The 16th WCPT congress, WPT2011, 20–23 June 2011, Amsterdam, the Netherlands.

Oral presentation. 19th International Conference of Health Promoting Hospitals and Health Services, 1–3 June 2011 Turku, Finland.

Oral presentation. Turkish – FEPS Physiology congress 3–7 September 2011, Istanbul, Turkey.

Joint Autumn Symposium 2011 Center for Reproductive and Developmental Medicine Finnish Association for the Study of Obesity (FASO), 21 November 2011. FASO the Best thesis award, Venojärvi M.

## REFERENCES

Tuomilehto J, Lindstrom J, Eriksson JG, Valle TT, Hamalainen H, Ilanne-Parikka P. 2001. Prevention of type 2 diabetes mellitus by changes in lifestyle among subjects with impaired glucose tolerance. *N Engl J Med* 344(18):1343–1350.

# DEVELOPING DIALECTICS 2008–2012

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Laurea University of Applied Sciences

Turku Municipal Health Care and Social Services

City of Ylöjärvi

City of Järvenpää

City of Salo

Turku University of Applied Sciences (TUAS)

## **Funding**

Ministry of Social Affairs and Health

Turku Municipal Health Care and Social Services

TUAS

## **BACKGROUND**

In collaboration with Turku University of Applied Sciences and Municipal Health Care and Social Services, the project was carried out for health employees to provide clients with nutritional care and guidance (Mattinen 2003). According to the survey, employees gave clients nutritional guidance, and at best, it was guidance centered on the client's needs, but in most cases, however, the same things were repeated in the guidance, irrespective of the client. Employees longed for nutrition training and consultation help from a

dietician as well as collaboration between different professional groups. The result of this action was to create the Developing dialectics education model.

Developing dialectics gathers various client-centred employees to the same table. This enables multi-professional use of tacit knowledge as well as new approaches to the development of operational structure. In education, employees will solve their own customer examples. Employees learn to see their own activity as a part of the entire care chain, and they realise their own role and potential impact on clients' everyday life, or their day in hospital treatment. The knowledge and approaches which have been created during the process are transferred directly into their everyday work. This requires a commitment from the development supervisors.

The model was developed in relation to the project *Client-centred solutions for health education: Case Nutrition Guidance Project* (2006–2008), which was partially financed by Finland's Ministry of Social Affairs and Health. Universities of Applied Sciences Turku, Pirkanmaa and Laurea as well as the Health department of Turku and the cities of Ylöjärvi, Järvenpää and Salo participated in the project. The selected background training philosophy of the education model was problem based learning, which offers participants a chance to develop their professional skills. These were measured in a licentiate research work in education sciences (Mattinen 2008). The employees' skills increased significantly for example in measuring the nutritional condition of customers or patients and guidance related to one's own knowledge. They saw an opportunity to work with a new way in work communities, which enables them to act in a multi-professional and multi-field manner and across administrative lines.

## CYCLE MODEL OF DEVELOPING DIALECTICS

The Developing dialectics learning is based on operating problems, which arise from work and professions of the real world. This complex information is related to the observation, analysis, integration and synthesis of the target. The problem-solving starts to construct common knowledge and that is one factor for scientific and multi-professional expertise to produce. Developing dialectics' cycle model involves independent learning, group work and shared learning.

Tutorial work is guided by a group tutor. One group focuses on one scenario, which is the starting point for processing. The scenarios are processed one by

one. The processing is done in an eight-phase cycle of the model in two different tutorials. In the first tutorial, cycle phases 1–5 are carried out. The primary objective is to recall the already adopted data and analyse the knowledge in the group. The first tutorial session ends in the learning tasks setting. In the middle of the sessions, participants acquire knowledge and learn in independent ways, for example by seeking information from various sources, doing interviews and observing the clients. In the second tutorial, cycles 7–8 are carried out. The focus is on the independent fact-finding phase of the study and the approach adopted by the new information in relation to the learning task and prior knowledge. The group shares information and works together to create a client-centered health promotion model for the customer. In this stage the group also agrees on how their operating premise has been built on the process and how they did build the content of the process, in particular nutrition and lifestyle management and control of information. All this will be presented to other tutor groups and other seminar participants in the seminar afternoon after the tutorials.

## STRUCTURE OF THE EDUCATION MODEL

Developing dialectics is implemented in work communities using client-centered themes. In the theme *Facing seniors as clients* 209 employees have been involved; public health nurses and registered nurses, practical nurses, home aids, occupational, physio and nutrition therapists, director of nutrition and employees, dental hygienists and dentists. The theme *Facing children and juveniles and their families as clients* has involved 106 employees; public health nurses and registered nurses, paediatricians, dental hygienists, social workers, teachers, kindergarten teachers, nannies, a school psychologist and curator, physiotherapists, physical education instructors, nutrition therapists and a director of nutrition department and representatives of employees. The theme *Facing workers as clients* has involved 12 employees; public health nurses, dental hygienists, physiotherapists and nutrition therapists and a doctor working in occupational health care.

The theme of *Families with children as clients* brought about the opportunities to support families with everyday collaboration in concrete workplaces and between different workplaces. For example, in day care it was noticed that food service employees' knowledge could be exploited when the goal is to support a family's success in dining at home. This supports day care's guiding role to promote healthy eating habits. This kind of strengthening of collaboration is

a big challenge and requires the support of superiors. In the group, the theme Families with children as clients has involved dental hygienist students and health care students, public health students and midwifery students.

In the group *Facing seniors as clients*, the investments in senior clients' nutrition, dental care and exercise have started to increase. In Turku, for example, an individual nutrition care plan and a rehabilitation program and a dental care plan are drawn up for all patients. The whole process is recorded carefully, so the results can be assessed and the quality of action can be developed. Currently the changes in seniors' functions are studied in a doctoral research in the Faculty of Medicine at the University of Turku. The research is interested in the effect of nutrition, dental care and rehabilitation in the recovery process of hip fracture patients. Knowledge transfer seems to be a big problem in the care chain; for example a good implementation of inpatient care may be disintegrated to the home care. Developing dialectic education should be applied to the entire care chain from inpatient to home care. In the group, the theme of seniors as clients has involved dental hygienist students, health care students and public health students.

The theme *Employees as clients* showed that multi-professional collaboration in occupational health care has improved the quality of guidance. At the same time it intensifies the used time of the doctor, nurse and special employee. Overlapping with guidance does not happen and the different professions will support each other's guidance. In order to help individuals to implement lifestyle changes, the keyword is motivation which is brought by supportive resources. Dental hygienist students, health care students and public health students participated in the group Employees as clients.

## EDUCATION GOALS

### Organisational perspective

The purpose is to develop employees' skills in health promotion partly by work-based learning and improve employees' working habits and their preparedness to develop their own working skills. The purpose is also to analyse the client-oriented service chain of health promotion and to make necessary changes in it. The goal is to develop a teaching technology, teaching methods and education material in collaboration with Turku University of Applied Sciences.

## Employee perspective

The aim is to detect employees' own strengths and weaknesses in knowledge and skills concerning health promoting customer service and to improve them. The purpose is to find evidence based practices for health promotion and learn to examine health promotion in the service chain as a whole and find different ways of developing it. The goal is to improve employees' communication skills concerning health promotion with their clients, collaboration organisations and in their own work and increase preparedness for multi-professional collaboration.

## From the TUAS perspective

One purpose is to develop the collaboration between working life and TUAS so that the teaching and learning benefits both participants. The collaboration is executed through projects that are based on TUAS' regional development strategy and a prospective of health promotion. One of the goals is to increase teachers' and students' knowledge and expand learning environments. Another goal is to achieve authentic and natural learning environments and develop teachers' and students' knowledge and skills of project working.

In line with the model, the teaching technology, methods and learning materials are developed in collaboration with the working life organisations, and approaches and opportunities are increased to develop education models in work. The goal is also to develop multi-professional collaboration in nutritional therapy and guidance and also to increase collaboration between the faculties of TUAS.

## REFERENCES

Mattinen, A. 2003. Ravitsemus hoitotyössä – ammattikorkeakoulun rooli terveydenhoitajien ja sairaanhoitajien ravitsemushoidon osaamisessa. Comments from Turku University of Applied Sciences 9. Turku: Turku University of Applied Sciences.

Mattinen, A. 2008. Terveyden edistämisen täydennyskoulutusmallin kehittäminen: case ravitsemusohjaus. Licentiate study, Faculty of Education. Turku: University of Turku.

Mattinen, A. 2011. Kehittävä vuoropuhelu on asiakaslähtöinen työn kehittämismalli. *Premissi* 2011/6, 46-49.

# PATIENT EDUCATION IN PAIN MANAGEMENT 2009–2011

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## **Partners**

Turku Municipal Health Care and Social Services

Turku University of Applied Sciences (TUAS)

## **Funding**

Turku Municipal Health Care and Social Services

TUAS

## **BACKGROUND AND AIMS**

Pain management and patient counselling in regard to pain are the most important of nurses' tasks. Pain assessment and documentation are essential parts of high quality pain management. However, the literature has shown that particularly elderly patients suffer pain in hospitals and pain education is inadequate from the elderly patients' point of view. Suitable pain assessment tools for elderly patients, especially for dementia patients, are almost lacking in Finland. Patients have the right to receive proper pain management and assessment in spite of their age or ability to function. Patients' pain management and assessment as well as patient counselling have to be more systematic and



have to be based on the patient's own needs. The health care professional needs to move on from the traditional patient teaching to the empowering of a patient to manage his/her own pain. Written patient education materials could support patient empowerment. It is also important to regularly estimate the understanding about the patient. This requires the developing of pedagogic skills and pain education of the nursing staff. The need for innovative teaching methods and pain assessment tools is obvious.

The main aim of the cooperation project of the Turku Municipal Health Care and Social Services and Turku University of Applied Sciences was to improve and develop the patient pain education skills of the nursing staff. The aims were also to develop new tools and methods for the help of the patient pain education in the care of pain by the nursing staff.

## IMPLEMENTATION

The patient education in the pain management project started in spring 2009. The themes of the project were as follows:

1. To collect a group of nurses from Turku Municipal Health Care and Social Services
2. Patient education materials from the view point of pain
3. Patient pain assessment tools
4. The pedagogic and pain education skills of the nursing staff. Empowering patient counselling in regard to pain.

## RESULTS

The group of nurses from nine different departments of Turku Municipal Health Care and Social Services included 11 nurses and eight directors of nursing from nine departments. The group, called the KIPO group, has assembled every other month during three years. In the meetings, the nurses reflect their practice and the needs of their patient education and pain management. The KIPO group has also participated in three patient education and two pain management training days. The KIPO group nurses have to take an active role and share information obtained from the group meetings

to their own departments. The KIPO group found in their meetings a great need for written patient education materials. The group and the students of TUAS have drafted together the new written patient education materials for health care professionals. An internet-based website for nursing staff about pain management of the elderly is also being designed.

The other need was patient pain assessment tools, especially for dementia patients. The nurses found that assessing the pain of dementia patients is challenging, because they are often unable to communicate how they experience pain. Hence, we have tested the PAINAD (pain assessment) instrument at the Turku Municipal Health Care and Social Services. We also conducted a survey on nurses' knowledge and attitudes about pain and pain management. With the information obtained from the results, we have arranged two pain management training days for health care professionals.

## **IMPACT**

With the KIPO project, we have managed to increase nurses' knowledge about pain management in the elderly and offer health care professionals a new tool for patient pain assessment and patient counselling.

## **CONCLUSIONS AND SCENARIO FOR THE FUTURE**

Although the KIPO project ended in the end of 2011, it will continue as a part of the NÄYTKÖ project in the future.

## **PUBLICATIONS**

### **Theses**

In this project ten Bachelor's theses were published.

## Posters

Fyysiset ja fysiologiset ikääntymismuutokset

Katsaus keskeisimpiin iäkkäiden sairauksiin

Lääkkeettömät kivunhoitomenetelmät ikääntyneillä

Lääkkeettömiä kivunhoito-ohjeita

Potilasohjeet kivusta ja VAS-mittarin käytöstä

Potilasta voimavaraistava kivun hoidon ohjaus

# IMPROVEMENT OF PUBLIC HEALTH BY PROMOTION OF EQUITABLY DISTRIBUTED HIGH QUALITY PRIMARY HEALTH CARE SYSTEMS (ImPrim) 2010–2012

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## **Partners**

The division of Blekinge County Council in Sweden

Four Countries in the Baltic Sea region: Estonia, Latvia, Lithuania and Belarus

Turku University of Applied Sciences (TUAS)

## **Funding**

Baltic Sea Region Programme 2007–2013

TUAS

## BACKGROUND

The *Improvement of public health by promotion of equitably distributed high quality primary health care systems* (ImPrim) project is one of the flagship projects included in the EU Strategy for the Baltic Sea Region (BSR) Action Plan. The project is mainly sponsored by the EU Baltic Sea Region Programme and Turku University of Applied Sciences.

The project is implemented by 13 partners from six countries around the Baltic Sea: Belarus, Estonia, Finland, Latvia, Lithuania and Sweden. The Blekinge Centre of Competence, a division of Blekinge County Council (Sweden), is the lead partner. The Kaliningrad region is also associated with ImPrim, although externally funded. The Ministries of Health of Belarus, Estonia, Finland, Latvia, Lithuania and Sweden strongly support ImPrim.

In the Baltic Sea region, large health inequalities exist among population groups. These inequalities are related to social problems. Adding to health inequality is the spread of communicable diseases such as tuberculosis and HIV/AIDS. (Wilkens & Ovhd 2011.)

Primary Health Care is the level of care nearest to the community and therefore an efficient tool for health promotion and disease prevention. It coordinates care with other community stakeholders and manages the contact with other health services and thus also helps to control the costs of the public health systems. (Wilkens & Ovhd 2011.)

The ImPrim project aims at promoting equitably distributed high quality Primary Health Care services in the Baltic Sea region in order to increase the cost-efficiency of the public health system and more efficiently counteract communicable diseases as well as health problems related to social factors.

Efficient health systems depend on the availability of high-quality health workforces with appropriate skills. A widely observed problem is the maldistribution of staff between urban and rural areas within countries as well as the brain drain between countries in the BSR region. (ImPrim-brochure 2011.)

The project tackles three core areas:

- Access to Primary Health Care
- Financial resources for Primary Health Care
- Professional development of Primary Health Care staff.

## IMPLEMENTATION

Three work packages (WP) form the work of ImPrim. *Instruments for improving the funding for Primary Health Care* (WP 3) aims to identify, pilot and propose ways to improve the allocation of financial resources to Primary Health Care. The aim of *Measures to enhance and harmonise professional development in Primary Health Care* (WP 4) is two-fold. In the first step, coordinated approaches for the education of Primary Health Care professionals shall be enhanced. In the second step, such coordination of professional development shall facilitate the retention of high-quality Primary Health Care staff within all areas of each country and mitigate irrational brain drain between countries. *Primary Health Care as one pillar of regional development: Strategies to increase regional competitiveness* (WP 5) aims to elaborate, introduce and pilot mechanisms and strategies for the equitable distribution of a high-quality Primary Health Care system. A subproject of Turku University of Applied Sciences belongs to WP 4.

## RESULTS

Already half-way through the implementation, the ImPrim project has produced tangible results which will have an impact on the objectives we aim for in WP 4. Nurses as well as doctors from each project country have been trained in modern family medicine. The courses are designed to provide state of the art models on how to work in a more comprehensive way, in which nurses have an individual responsibility in teams with the family doctor. A salutogenic (health promotion) approach and motivational interviewing have been an important part of these educational activities. (See Wilkens & Ovhed 2011.)

## IMPACT

The ImPrim project targets several aspects that need action on more than one level. Decreasing smoking is one example of an area in which the project acts on both the level of clinicians to change the way of working with patients, and on policy level to change laws, regulations and attitudes. Smoking continues to be one of the most important causes of gender differences in mortality across

Europe and in Russia and the Baltic states in particular. Decreased smoking would make it possible to diminish the gender gap in mortality in the coming decades. To meet this challenge, the ImPrim project has two important levels of action: Primary Health Care – in the form of doctor and nurse consultations and national and local governments in regard to policies in support of public health. (See Brandt et al 1997, McCartney et al 2011, Wilkens & Ovhed 2011.)

## CONCLUSIONS

Primary Health Care is the level of care nearest to the community. The ImPrim project aims at promoting equitably distributed high quality Primary Health Care services in the Baltic Sea region, because it is through Primary Health Care we have the opportunity to reach out with quality health services to all citizens and simultaneously work with health promotion. (Wilkens & Ovhed 2011.)

## PUBLICATIONS

### Theses

In this project, ten Bachelor's theses are published.

## REFERENCES

Brandt, C. J., Ellegaard, H., Joensen, M., Kallan, F. V., Sorknaes, A. D. & Tougaard, L. 1997. Effect of diagnosis of 'smoker's lung'. *Lancet* 349 (9047): 253.  
ImPrim-brochure 2011.

McCartney, G., Mahmood, L., Leyland, A. H., Batty, G. D. & Hunt, K. 2011. Contribution of smoking-related and alcohol-related deaths to the gender gap in mortality: evidence from 30 European countries. *Tob Control* 20 (2):166–168.

Wilkens, J. & Ovhed, I. 2011. Quality health services for all. *Public Service Review*. European Union. Issue 22, 1–2.

# HEALTHY AXIS – INNOVATIVE ACTION TO PROMOTE POPULATION HEALTH FOR ELDERLY PEOPLE 2011–2012

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## **Partners**

Axis Basic Security Federation of Municipalities

Representatives of the Third Sector, for example the Masku Association of Federal Pension (Eläkeliiton Maskun yhdistys)

Turku University of Applied Sciences (TUAS)

## **Funding**

Axis Basic Security Federation of Municipalities

TUAS

## **BACKGROUND AND AIMS**

The municipalities of Masku, Mynämäki and Nousiainen joined together to form the AXIS Basic Security Federation of Municipalities. Different organisations and their cultures merge as the municipalities unite their services under the new AXIS identity. The change and all the issues linked with it invite the Basic Security Federation of Municipalities to join the developmental work.



The project aims to promote the health and wellbeing of the AXIS municipalities' population and to maintain people's functional ability on a high level as long as possible. The population should become active in promoting their health through self-care. Long-term goals are a stronger sense of community in the population and between different groups, formation of peer support networks and exploitation of the clients' expertise and experiments. The citizens and the third sector are active participants in the Healthy AXIS. Also the high-ranking municipal functionaries and employees as well as the Turku University of Applied Sciences health branch students and teachers contribute to the work.

Central themes and objectives of the population health promotion as well as maintaining and enhancing well-being are described in the municipal health policies. The aging population requires increasing the cost-effectiveness of services and, at the same time, new health coaching services are necessary to support preventive work and self-care in all age groups.

The Healthy AXIS (Terve AKSELI) development project aims to connect innovative actions with the services for population health promotion. The purpose is to develop low threshold counselling and services based on the needs of different population groups. This work makes good use of existing good practices.

The operational core of the developmental project consists of sub-projects to promote the health of different client groups (e.g. healthy seniors) and of the development of virtual health coaching in order to increase senior participation and the staff's competence, as in the peer support network "Give a call to a friend". Health screening and counselling services will be organised for seniors. This manifests in the possibility to stay at home longer and have better functional and social capacity. There are about 800 seniors over the age of 72 living in the area. In the Axis Basic Security Federation of Municipalities, the number of the health care staff is about 300.

## IMPLEMENTATION

The project realises the following principles and actions: client-centredness, collaboration of several actors, reflection and development of the work models as well as exploiting good practices. There will be different kind of questionnaires

and interviews. During the year 2011 there was one *questionnaire* for the staff of Axis working with elderly people still living at their own homes or at elderly care homes. There was also a *theme interview* for elderly people. The aim was to ask what the senior health care and guidance centre should be like. There was a *group interview* for representatives of the third sector about the same subject and how to collaborate together. The participants were for example the Finnish Red Cross, associations of senior citizens and the Church.

## RESULTS

The students analysed the answers of the questionnaire, the theme interview and the group interview in 2011. The next phase will be to develop a model for senior health care, screening and a counselling centre. It will be piloted during the year 2012 and feedback will be obtained from seniors and the staff alike.

## IMPACT

This developing project works for future health promotion and counselling services for seniors in the Axis area. There will be a new way to produce services for seniors.

## CONCLUSIONS AND SCENARIO FOR THE FUTURE

This development project acts as a basis for a new way of producing health screening and counselling services for seniors. Students will also write theses about the subject of senior services. The multiprofessional health coaching services will be integrated in the AXIS Basic Security Federation of Municipalities' comprehensive health promotion work and as part of municipal services.

## PUBLICATIONS

### Theses

Two Bachelor's theses about the questionnaire and theme interview were published in *Adult Education in Health Care* in December 2011, and a Master's thesis about developing the model for health promotion and screening services for seniors will be published in May 2012.

### Other publications

Healthy AXIS – Innovative action to promote population health. Poster presentation. 19th International Conference of Health Promoting Hospitals and Health Services, 1–3 June 2011, Turku, Finland.

Kaisa, Kalle haravoi pihasi lehdet. Newspaper article: *Rannikkoseutu* 7 October 2011.

# DEVELOPING THE HEALTH SERVICES FOR THE LONG-TERM UNEMPLOYED 2011-2012

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## **Partners and funding**

Turku Municipal Health Care and Social Services

Turku University of Applied Sciences (TUAS)

## **BACKGROUND**

The Municipal Health Care and Social Services of Turku mentions the long-term unemployed as one of the social groups that are in serious danger of becoming subjected to social exclusion. According to the effective legislation for Health and Social Policy (no 1326/2010), municipals are responsible for organising health education and physical examination also for the people of working age who are not entitled for occupational health care. The goal of the new Health and Social Legislation is to narrow down the gaps in health care between different social groups, and to carry out a policy which supports equality and high quality in fulfilling the needs of health services of the whole population. It is expected that the results for advancements in the well-being of the inhabitants of the municipality and the systematic linking of the health services with the employment and activating processes should be evident sooner or later also in the general budget of the municipality.

Health services that would be particularly directed at the long-term unemployed are not available in Turku. The goal of this project is to develop an operations

model for the execution of the services for the long-term unemployed in Turku. Turku University of Applied Sciences, together with Turku Municipal Health Care and Social Services, will launch the new initiative. The aforementioned actors are also responsible for the budget. The duration of the project is two years, 2011–2012.

## AIMS

The aims of the project are

- to investigate the ways how the long-time unemployed are referred as customers of the health services
- to develop the collaboration between the departments of health care, social services, rehabilitation, the employment agency and the industrial and commercial activity, and the so-called III sector, i.e. civic organisations
- to improve the contents of the health meetings with the unemployed so that they are functional and inclusive
- to compile a description of the process of the chain of health services for the long-term unemployed
- to provide a genuine and natural learning environment for the nursing students of the Turku University of Applied Sciences, in which they are trained to learn how to approach and help customers who are in various, often challenging, life situations.

## IMPLEMENTATION

The pilot for the project is the housing estate of Varissuo. The unemployment rate of the area is 24.8 % (2010), and the proportion of population having an immigrant background is about 36 %. In the beginning of the project, the various ways to reach the long-term unemployed were investigated. The marketing of the services was started by public advertisement. Information about a free health examination was advertised on the local notice boards of the leaseholds and on free distribution bulletins. Information was also provided at the local Association of the Unemployed in Varissuo. After this, the negotiations for the collaboration with specialists and consultants (for example the Turku TE-Centre [an unemployment agency in Turku] and the social clinic of Varissuo)

that provide services for the unemployed were started. The local newspaper Turun Sanomat also reported about the activity. After this, "Varsinais-Suomen Martat ry" and "Turun seudun työttömät ry" (both of them civic organisations) among others contacted us and the collaboration was started. At the same time, the planning was initiated to improve the contents of the health meetings. After that, the pilot programme for the health meetings was launched.

## RESULTS

The result of the project's first year is a prototype of a health meeting, which was developed during 2011 on the basis of the experiences gained from the Varissuo pilot programme. The health meeting consists of two practices. At the first meeting, a health interview and a physical examination are carried out and the customer receives a referral to the laboratory tests. During the second meeting, a discussion concerning the customer's health condition and health behaviour is carried out with the customer on the basis of the physical examination and the laboratory test results. If needed, the customer is referred to further examinations and to therapy sessions in social and health centres or to the reach of other services. In addition, the customer is contacted by phone three times in three months.

## CONCLUSIONS

It has been surprisingly difficult to reach the customers. Public advertisements have not been an effective way to reach people. The most common way for people to come to the health meetings is through the Social Office. Particular risk groups have been reached with the help of personal information. The success in reaching the customers requires that the channels of information have been developed between different officials and civic organisations. A successful practice necessitates that

1. the channels which reach the unemployed and bring them to the reach of the services are strengthened
2. the suitable services which the unemployed can be referred to are mapped
3. multi-professional collaboration needs to be increased.

The next step is to plan a description of the process of the chain of health services for the long-term unemployed. The aim is to describe the channels through which the customer is brought to the health meeting and how he/she is able to reach further services if needed.

## PUBLICATIONS

Viljanen, K., Ipatti, H. & Savunen, L. 2011. Pitkäaikaistyöttömien terveyspalvelujen kehittäminen. In the publication von Schantz, M., Toivonen, H. & Lind, K. (eds.) *Asiantuntijana terveysalan muuttuvilla työmarkkinoilla. Aluevaikuttavuutta ASTE-projektilla*. Reports from Turku University of Applied Sciences 104. Turku: Turku University of Applied Sciences, 64–74.

# ART INTERVENTIONS FOR OLDER PEOPLE IN COLLABORATION WITH ART STUDENTS AND MASTER NURSING STUDENTS 2011–2013

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## **Partners**

Turun Lähimmäispalveluyhdistys ry Kotikunnas

Turun Kaupunkilähetys

Palvelutalo Iso-Heikki

Kaarinakoti

Regional Art Council of South-West Finland

Turku University of Applied Sciences (TUAS) (Faculties of Health Care and Arts Academy)



## **Funding**

Päivikki and Sakari Sohlberg Foundation

TUAS

## **BACKGROUND**

According to the Ministry of Education and Culture's programme, Art and Culture for Well-being, their aim is to promote health and well-being by means of art and culture and to enhance inclusion at the individual, community and societal levels. There are three priorities: culture in promoting social inclusions, capacity building, networking and participation in daily life and living environments (1), art and culture as part of social welfare and health promotion (2), and art and culture in support of health and well-being at work (3). The proposal for education emphasises the joint teaching of cultural, health and social fields as well as art-based courses in professional education. (Liikanen 2010.) This programme, for the years 2010–2014, is a challenge for the education and cooperation between different players.

The experience of art is very subjective and it combines past and present (Blomqvist et al. 2007). It can be experienced as aesthetic, intensive and it can include a flow experience with deep pleasure (Pitkälä et al. 2004). In an art experience, a person is intensively present (Virolainen 1993). Art includes liberating play, but the content is serious with deep wisdom of life (Gadamer 1997). The creativity of a person continues until old age and it can even increase with stimulation (Viramo 1998, Pitkälä et al. 2004). The well-being of older people and coping in everyday activities can be supported with different art interventions (Pitkälä et al. 2004, Savikko et al. 2009). With individually tailored art interventions, the quality of life of older people can be increased, loneliness can be decreased, cognition, mental functions and experience of subjective health can be improved and, furthermore, the use of health services and risk of mortality can be reduced (Pitkälä et al. 2009, Routasalo et al. 2009).

In her study, Liikanen (2003) named four art and cultural activity elements, which affect a person's well-being. Firstly, art gives experiences. Secondly, art and culture activities interrelate with better experienced health and experiences of good life. Thirdly, art hobbies create social cooperation and networks, which help in coping one's life. Fourthly, art increases convenience and beauty in the

living and working environment. Art, cultural activities and celebrations were experienced as signals of caretaking and appreciating, which created trust in oneself and others.

Good everyday life is about feeling safe and content, which creates pleasure. It is based on the day-to-day culture, which is familiar to an aged person and in which he/she can successfully use his/her resources and experience empowerment (Routasalo 2004). According to the study of Eloranta (2009), older home-dwelling clients described their resources in terms of a sustained sense of life control and will. Their life control was supported by being heard, with self-determination and with daily activities. Leisure activities and social networks strengthened their everyday life. With well-developed, person-centered and empowerment-supporting art interventions, it is possible to create content and happiness in the day-to-day life of older people.

## AIMS

The aims are composed of three categories: aims for older people (1), aims for art students (2) and aims for Master-level nursing students (3).

*Aims for older people:* With art interventions, older people's everyday activities can be increased and diversified, their self-efficacy can be enhanced, their empowerment can be supported and interaction with other older people can be encouraged. The purpose is that they can share their experiences with each other, break routines and experience something new and innovative. In this process older people's individuality is emphasised, and art interventions happen according to the conditions of the receiver.

*Aims for art students:* In the intervention process, art students learn to plan and carry out an intervention for older people. They obtain knowledge about older people's life, health and life experiences. They learn to work in a multi-professional team and get readiness for the profession of an artist. In addition, they learn how to refine an art intervention into a product as well as to inform orally and by writing. They participate in Master students' teaching and plan the interventions with their teacher tutors and Master students. They carry out the interventions and write their theses about art interventions.

*Aims for Master nursing students:* Master students learn to plan, carry out and evaluate a development project and work as its project leader. They exercise their expertise in elderly care as well as interview older people about art and discuss it with them. They plan and carry out teaching situations for art students and work in a multi-professional team. In addition, they learn to inform orally and by writing. They make project plans on how to carry out an art intervention project, are in contact with the institutions and agree on arrangements of the interventions in practice. They support art students during the intervention and evaluate its results. They write their Master's theses about the process of the development project.

## IMPLEMENTATION

The contents of the teaching are the same for all art students. Master students teach how to meet older people and what age-centredness means. They teach what has to be understood about the health and limitations of older people, as they are affected by illnesses. They discuss with art students how to support older people's self-efficacy and empowerment. In advance, they discuss older people's hopes from art activities after they have interviewed them.

There are three kinds of intervention workshops and two groups in each: empowering photography, empowering painting and empowering music. In the empowering photography workshop, photography is used in creating a good everyday life for older people. One Master student organises the workshop, which is planned and carried out by 3–4 art students supported by their art teachers. The group consists of 3–4 voluntary older people, who have expressed their interest in photography. The group meets 3–4 times in a short period. The Master student collects feedback from the participants. The other two workshops work by the same format.

The project started in autumn 2011. Six Master students expressed their interest in the project. They made their project plans during the autumn and began to teach art students. The interventions began in winter 2012. The preliminary results of the art intervention project are ready in summer 2012.

## CONCLUSIONS

This is a developing project in which students and teachers learn to work together in cooperation between Health Care and Arts Academy. The big challenge is to combine different educational and professional areas and to work on different educational levels as well as between education and working life. The aims are common to everybody, but the ways to talk about good everyday life of older people are different. This is not a research project, but instead it uses research methods in interviewing older people about their hopes in the beginning and in evaluating the interventions at the end. Earlier studies (Pitkälä et al. 2009, Routasalo et al. 2009, Savikko et al. 2010) support this kind of intervention in which something good is brought to older people's everyday life. This art intervention can also bring the Art and Culture for Well-being programme on to a concrete level in elderly care and in the education of Artists and Masters in health care.

## PUBLICATIONS

Routasalo, P., Toivonen, H. & Rautiainen, M. 2011. Good everyday life for older people with art interventions. Oral presentation. International Congress of Culture, Health and Well-being, 21–24 September 2011, Turku, Finland.

## REFERENCES

- Blomqvist, L.C., Pitkälä, K.H. & Routasalo P. 2007. Images of loneliness: Using art as an educational method in professional training. *Journal of Continuing Education in Nursing* 38 (2), 89–93.
- Eloranta, S. 2009. Supporting older people's independent living at home through social and health care collaboration. *Annales Universitatis Turkuensis, Ser. D, Tom. 869*. Turku: University of Turku.
- Gadamer, H-G. 1997. *Truth and method*. Bokförlaget Daidalos AB, Göteborg.
- Liikanen, H-L. 2003. *Taide kohtaa elämän – Arts in hospital ja kulttuuritoiminta itäsuomalaisten hoitoyksiköiden arjessa ja juhlassa*. Helsinki: Otava.

Liikanen, H-L. 2010. Art and Culture for Well-being – proposal for an action programme 2010–2014. Publications of the Ministry of Education and Culture, Finland 2010:9. Helsinki.

Pitkälä, K., Routasalo, P. & Blomqvist, L. (eds.) 2004. Ikääntyneiden yksinäisyys. Taide- ja virikeryhmät psykososiaalisena kuntoutuksena. Geriatrisen kuntoutuksen tutkimus- ja kehittämishanke. Research report 5. Vanhustyön keskusliitto ry. Helsinki, 176.

Pitkälä, KH., Routasalo, P., Kautiainen, H. & Tilvis, RS. 2009. Effects of psychosocial group rehabilitation on health, use of health care services, and mortality of older persons suffering from loneliness: a randomized, controlled trial. *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences* 64 (7), 792–800.

Routasalo P. 2004. Arjen kulttuuri. In the publication Pitkälä K., Routasalo P.& Blomqvist L. (eds.) Ikääntyneiden yksinäisyys. Taide- ja virikeryhmät psykososiaalisena kuntoutuksena. Geriatrisen kuntoutuksen tutkimus- ja kehittämishanke. Research report 5. Vanhustyön keskusliitto ry. Helsinki.

Routasalo, PE., Tilvis, RS., Kautiainen, H. & Pitkala, KH. 2009. Effects of psychosocial group rehabilitation on social functioning, loneliness, and well-being of lonely, older people: randomized, controlled trial. *Journal of Advanced Nursing* 65 (2), 297–305.

Savikko, N., Routasalo, P., Tilvis, R. & Pitkälä, K. 2010. Psychosocial group rehabilitation for lonely older people: favourable processes and mediating factors of the intervention leading to alleviated loneliness. *International Journal of Older People Nursing* 5 (1), 16–24.

Viramo, P. 1998. Vanhanakin vertyy. Päiväkuntoutuksen ja viriketoiminnan vaikutus ikääntyneen toimintakykyyn ja terveyteen. Vanhustyön keskusliitto. Vireyttä vuosiin -sarja 7. Helsinki.

Virolainen J. 1993. Estetiikan klassikoita. Helsinki: WSOY.

# TOWARDS A HEALTHY FUTURE 2011–2013

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## **Partners and funding**

City of Mynämäki

Turku University of Applied Sciences (TUAS)

## **BACKGROUND**

The advancement of health and welfare is based on the legislation for Health and Social Policy and it is part of public health care. The way of life and environment have an influence on an individual's health. Health promotion is usually understood as various activities which aim to increase health and the ability to function, and to narrow down the health problems and gaps in health between different social groups. Health promotion is conscious work, which is aimed to influence the background factors of health and welfare, such as the way of life and control of life, the environment and milieu as well as the functionality and availability of services.

## **AIMS**

The main aim of the project is to develop new methods and service products for the support and advancement of health and welfare of different age groups.

The other aims of the project are

1. to develop, test and model health information theme days and events that are concentrated on the crucial issues of health challenges of the population
2. to provide educational material on health for various age and social groups, such as families with children, young people, middle-aged men and immigrants
3. to provide a genuine and natural learning environment for the students of the Turku University of Applied Sciences, where they are trained for approaching and helping customers. The aim is to develop the tutor system for project-type learning. The development, realisation and evaluation of the project are partly carried out as final theses and other type of studies that are in accordance with the curriculum.

## RESULTS

The results of the Project will be as follows.

1. A final thesis, which provides educational material on health has been produced during the year 2011. The thesis provides new educational material on health for early interaction and parental growth of fathers with under one-year-old children and young parents.
2. A functional model for the organisation of a *Health promotion and well-being* theme day is formed for the students of the University of Applied Sciences.
3. The health and trouble behaviour of one municipality has been surveyed.

The project is carried out as a multi-professional team work with students of social and art studies. The final thesis has been published in December 2011. During the year 2012 a further goal is to develop a health information packet, which is directed at parents with children under the school age (0–6). The activity will be extended to concern the health promotion of adults and the aged population.

## PUBLICATIONS

### Theses

In this project seven Bachelor's theses are published.





**PROJECTS PROMOTING  
PATIENT SAFETY**

# INFECTION CONTROL FOR THE COURSE OF NURSING 2008–2010

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## **Partners**

Turku Municipal Health Care and Social Services

Turku University of Applied Sciences (TUAS)

## **Funding**

Turku Municipal Health Care and Social Services

TUAS

## BACKGROUND AND AIMS

Health care acquired infections (HAI) are a significant challenge all over the world. At the same time infection control is estimated to be one of the most cost-effective acts in health care. In addition, avoiding infections means reducing human pain and increasing nursing quality as well.

One of the most important objectives in the Turku Municipal Health Care and Social Services is to produce customer-oriented, high quality and cost-effective services. The purpose of this project was for infection control to become a customary manner in nursing all over the organisation mentioned above. The main aim was to increase nursing quality by minimising the arising health care acquired infections in all of the care units in the organisation. The other aim was to enhance and make infection control knowledge more effective and to standardise caring manners at all levels. Originally, the third aim was to develop a structured questionnaire for electronic use with which it

should be easier for workers to recognise their own knowledge level. The fourth aim was to improve students' responsibility for their studies in evidence based infection control.

## IMPLEMENTATION

By nature, the project was a collaboration between the Turku Municipal Health Care and Social Services and TUAS health care. It supported working life and applied research results to practical problems in health care, especially in infection control. It was realised in phases and stimulated a new type of evidence based course of acting in nursing. During the project, the general structured instrument for measuring nurses' and some other workers' knowledge in infection control was developed. The first data was collected during spring 2009 from those who were working in the cleaning environment and maintaining instruments and other equipment. During autumn 2009, the questionnaire was revised as equivalent to those competencies demanded from nurses' knowledge in infection control. The data was collected from nurses and practical nurses who worked directly with patients. During spring 2010, the instrument was further developed.

## RESULTS

The general structured instrument for measuring nurses' and some other workers' knowledge in infection control was developed. Because the instrument developed during the project was not validated enough, the analysis of the collected data is not presented. By reason of some structural changes in the partner organisation, the project realisation deviated from the original plan quite significantly. It was also finished earlier than planned and that is why it is difficult to assess the achievement of the other aims.

## IMPACT

The project enhanced substance and methodological know-how in both organisations. It strengthened collaboration between health care and education as well. Supposedly, both organisations became more conscious about the

importance of evidence based practice at all health care levels and not least in infection control. For health care managers, the collected data gave some tips for finding the most important continuing training subjects and for the personnel, it gave an example for finding out their own developing and training needs.

## SCENARIO FOR THE FUTURE

The instrument developed during the project is a relevant starting point for further developing and validation. It was also important and useful to put it into operation and get information about the personnel's actual knowledge in infection control. Contemporary society and health care also call for using electronic techniques so it was useful to develop simulated and network collaboration. It would be useful and effective to get a validated instrument for national use.

## PUBLICATIONS

### Theses

In this project 25 Bachelor's theses were published.

# THE IMPLEMENTATION OF NURSING DOCUMENTATION 2008–2011

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Turku Municipal Health Care and Social Services

Turku University of Applied Sciences (TUAS)

## **Funding**

Turku Municipal Health Care and Social Services

TUAS

## BACKGROUND AND AIMS

The purpose of the project was to implement the national structured nursing documentation model on all result all administrative units areas in the Turku Municipal Health Care and Social Services. The aim was to carry out a vast change process in the whole organisation so that in the end of the project, the nursing documentation would be uniform and correspond to the national model in all working units.

The more accurate aims were:

- *expert nurses* are able to document according to the national model and commit themselves to assume the responsibility for developing documentation in their own result areas
- *nurses responsible for the change of documentation* in the working units are able to document according to the national model and commit themselves to assume the responsibility for developing documentation in their own working units
- *all other nurses* learn and commit themselves to document according to the national model.

## IMPLEMENTATION

The process started by drawing up *the common nursing view*, which the documentation had to be based on in all working units in the Turku Municipal Health Care and Social Services. The common nursing view was seen as an important means to increase understanding about the documentation model in the sense that it is not only supposed to be a technical matter, but it reflects the common nursing value and knowledge base in the whole organisation, regardless of the setting where care takes place. *The common quality demands* were also drawn up and they were given to all the working units. The quality demands were supposed to be of assistance for everybody in documenting.

In the beginning of the project *two studies* were carried out: an explorative study about preparedness for change of the staff (knowledge, skills and attitudes associated with documentation). The results showed that knowledge about the national structured nursing documentation model and documentation skills were poor, but attitudes were quite positive. The other study was a content analysis of nursing records. The results showed that there was lots of variation in documentation between the working units and a lot to develop in recording.

The expert nurses were first educated in the new documentation model and after that, the nurses responsible for the documentation change in the working units. *The education* was carried out both as lectures to large groups and as case-education in small groups which meant practice in IT classrooms. Every expert nurse was responsible for the developing of documentation in her own result area and the nurses responsible for the documentation change in the working units educated their own staff. Besides this, repeated lectures about

documentation were organised for the whole staff during two years so that in the end, all of them had basic knowledge about the new documentation model.

## RESULTS

Development work on the documentation has now started in the whole organisation, and the new documentation model is becoming rooted in every working unit in its individual time. An estimation on the development of documentation was wanted, and that is why *a meter for estimation* was drawn up and it was brought into use in the whole organisation. The quality of care plans, the systematic documentation and the correspondence of care plans to documentation of daily care can now be evaluated with the assistance of the meter. Outpatient clinics and primary health care got *a different kind of evaluation meter*, because they did not have the same electrical structured documentation programme as the other units. Thus, continuing evaluation and development of documentation has become a normal mode of action in the whole organisation.

The expert nurses committed themselves well to their task. The number of nurses responsible for the documentation change in working units was large and that is why their commitment varied more than the expert nurses' commitment. In addition, some of them had difficulties to understand their tasks deeply enough. They also changed quite a lot during the project which was a problem. In spite of these problems, it can be said that mainly both key person groups contributed to the development of documentation and many of them were excellent in the tasks. Nevertheless, the ultimate change of documentation requires commitment of the whole staff. The final effectiveness of the project was evaluated with the assistance of Bachelor's theses.

## IMPACT

The development of documentation was evaluated with the assistance of the theses of four student groups. All the studies were content analyses of nursing records. The same evaluation meter was used in all analyses so that comparisons of the results could be made. Besides this, experiences of the



nurses about the development process in general were studied and based on these study results, the development process was directed forward. According to the study results, changes in documentation as a whole have been quite small or hard to interpret. The last results were ready in November 2011. However, *a little progress* in documentation has happened in all result areas. Especially care plans are now better than in the beginning of the project.

## CONCLUSIONS AND SCENARIO FOR THE FUTURE

Summary of the results of the project:

- research knowledge of the preparedness for the change and about quality of nursing records
- the common nursing view was drawn up to the direct the contents of documentation
- common quality demands for documentation were drawn up
- the key persons of the development process were educated, they committed themselves to their task quite well and they learned to act as a group
- the whole staff was educated to use the new documentation model
- many kinds of material were drawn up and uploaded to the net to support every nurse's learning
- the evaluation meters of documentation were drawn up, tested and taken to permanent use
- the development of documentation to correspond to the national documentation model more and more is a process which will continue for years; however, now every working unit in the Turku Municipal Health Care and Social Services has the same presuppositions in knowledge and skills to develop their documentation forward.

The challenge of the working units is to make other professions of the care team more acquainted with the nursing documentation model. Then the documentation would better enhance multidisciplinary collaboration as well. One aim from now on is to clarify how the knowledge based on documentation can be utilised in the development of nursing care from the standpoint of nursing management. A Master's thesis connected to this subject has already been started in TUAS' Master's degree programme. Another unfinished Master's thesis is connected to the development of documentation of patient

education. This, in turn, is connected to the quality of nursing education in practice. From patients' standpoint it can be studied whether they have felt that they have received care which corresponds to the quality demands of the documentation. However, to study whether the improvement of the documentation really improves the quality of care is not possible with the randomised controlled trial, because the baseline data should have been collected in the beginning of the project.

Experiences from the project have been utilised in the education of health care as well. The teaching of documentation has been renewed in the nursing programme so that documentation is present in teaching all the time during the whole duration of nursing education. It is taught in theory and it is practised at school and in practical training in health care organisations. It is also one of the themes in TUAS Master's level education in the advanced nursing practice degree programme.

## PUBLICATIONS

### Theses

In this project 34 Bachelor's theses and two Master's theses were published.

# DEVELOPING VOCATIONAL SKILLS AND COOPERATION BETWEEN AUTHORITIES IN EMERGENCY AND ACUTE CARE 2008–2014

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## **Partners**

The Emergency Response Centre of Southwest Finland

The Coast Guard

The Southwest Finland Regional Emergency Department

The Police of Southwest Finland

Private Ambulance Companies

MediHeli 02 (Medical Helicopter)

The Hospital District of Southwest Finland, Turku University Hospital,  
Regional Hospitals

Turku Municipal Health Care and Social Services

Red Cross

The Voluntary Rescue Service

University of Turku

Turku University of Applied Sciences (TUAS)

## **Funding**

The Southwest Finland Regional Emergency Department  
Southwest Finland Ambulance Entrepreneurs' Association  
Turku Municipal Health Care and Social Services  
The Hospital District of Southwest Finland  
University of Turku  
TUAS

## **BACKGROUND**

The importance of cooperation between different authorities is emphasised in various disaster situations, where patients' injuries are serious and the quantities of patients are large in relation to existing transport and treatment resources. This project is designed to anticipate these disaster situations by developing the operation and communication plan, professional skills, and cooperation skills of authorities and professions who will be involved in these situations in the Southwest Finland Health Care area.

## **IMPLEMENTATION**

The project was started in 2008. At that time the Southwest Finland Health Care area was divided into five different sub-areas to plan and develop the operation and cooperation between authorities and professions. The development work is carried out in cooperation between the experts of Turku University of Applied Sciences, the University of Turku and Health Care, Rescue and Safety organizations. The development process proceeds as follows:

- I Initial mapping: Appointing a potential disaster situation, which is typical for each region, and describing the accident scenario.
- II Action Plans: Updating the operation and communication plans of each authority and operator, and planning the resources needed in the disaster situation.

III Disaster Exercise Plan: 1) Designating participants in the exercise, a group of experts who will guide the progression of the exercise, observers to evaluate the success of the action in exercise, the authority which is responsible for the safety of the exercise, and the chief operating officer of the exercise, and 2) Establishing a safety and communications plan to minimise the risks associated with the exercise, and to inform citizens of the exercise.

IV Education: Organising an education day, where the plan for operation and co-operation with authorities in the disaster situation will be presented to all persons involved in the exercise.

V Disaster Exercise: Informing the public of the disaster exercise, and organising and implementing the disaster exercise in accordance with the accident scenario.

VI Debriefing: Organising a feedback day of the disaster exercise, and establishing a report of successes and needs for development.

VII Updating of plans: Updating the operation and communication plans according to feedback and utilising the feedback received in the planning of the next accident scenario and the action in it.

Emergency nursing and nursing students' roles in the disaster exercise are determined in accordance with the phase of their studies. Students will operate as patients, emergency nurses, nurses in emergency departments or medical rescue leaders or as their scribe. During the disaster exercise, students work in pairs with experienced professionals. This will enhance the safety training and its educational role for students.

## Project activities

By autumn 2011, three major exercises have been carried out:

- In 2008–2009: A police-led disaster exercise in Turku – A shooting violence situation in a school.
- In 2010: A rescue-led disaster exercise in Loimaa – A crash between a bus and a truck loaded with ammonia.
- In 2011: A rescue-led disaster exercise in Salo – A power plant explosion.

In 2012, the disaster scenario is located in the western archipelago of Turku, and there will be an explosion on board a ship.

## Project effectiveness

Development has occurred in activities and cooperation between authorities in the following areas:

- cooperation between the responsible authorities in a disaster situation
- communication and cooperation between the authorities of the different organisations
- overall management
- professional competence.

## SCENARIO FOR THE FUTURE

The last disaster exercise will be carried out in 2013. After this, all the feedback received from the exercises will be gathered together. As a final output, there will be guidelines for different organisations how to plan the action and exercises for different kinds of disaster situations.

## PUBLICATIONS

### Theses

In this project two Bachelor's theses are published.

### Other publications

Säämänen, J. 2009. Ammatillisen osaamisen ja viranomaisyhteistyön kehittäminen ensi- ja akuuttihoivossa (AMOVIRKE). In the publication Saarikoski, M. & Toivonen, H (eds.), Healthy and prosperous future (HEAWELL) – R&D program of health and prosperity of Southwest Finland, 2007–2009. Reports from Turku University of Applied Sciences 89. Turku: Turku University of Applied Sciences, 59–63.

# THE FUTURE OF SPECIALIST EXPERTISE IN SPECIALISED HEALTH CARE 2009–2011

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*The future of specialist expertise in specialised health care* formed a research and development subproject of the SOTE project *Forecasting and anticipating the future of the social services and health care sector*, which was managed by the Joint Municipal Authority for Education in South Karelia and funded by the European Social Fund, the National Board of Education and Turku University of Applied Sciences (TUAS). The project was a collaboration between the hospital districts of Southwest Finland and Satakunta and TUAS.

## AIMS

The SOTE anticipation project aimed at producing knowledge about how to reform the field of social services and health care in terms of personnel structure, work processes and the distribution of work between professions in order to manage expenditure and to ensure that a sufficient number of staff is available for different tasks. Further, the aim was to describe what competences and professional groups are needed in different tasks in the field, including various assistant tasks, how legislative reforms affect the competence and skills needed, the structure of professions and the division of work, and what development requirements the reforms pose to education. Another area of interest was how education and training and workplaces should respond to the needs of multiculturalism and how education and training could be developed to meet these needs.

The project *The future of specialist expertise in specialised health care* aimed at producing information about fields of expertise needed in specialised health care in the future. This information is meant to serve as a basis for evaluating and developing the competence of personnel. Information was also produced for developing a competence model and improving the contents and methods of education and training in health care.

The project was divided into the following three independent subprojects:

- Future core and specific competences in the fields and processes of specialised health care (Tuleos)
- Basic and specific competences in the joint health care emergency services in the Southwest Finland Hospital District (YHES)
- Basic and specific competences at the Satakunta Hospital District rehabilitation unit SELMA and the basic and specific competences of laboratory scientists in the field of pathology.

## IMPLEMENTATION

The Delphi method was applied in the research and development work. The data was gathered through questionnaires, and/or interviews and/or documents and expert panels. Altogether, 450 (n) informants participated in the project. The data was analysed through content analysis and statistical methods.



## RESULTS

The future of specialist expertise in specialised health care (Tuleos) / TUAS

- Field-based competence maps comprising of professional core and specific competences were created for specialised health care, nurses, laboratory scientists and radiographers.
- A competence model was developed for the anticipation and continuous development of competence, employing networking as a form of cooperation for education and work organisations.

Satakunta Hospital District and Satakunta University of Applied Sciences (SELMA)

- The project defined the expertise required at the emergency department rehabilitation unit SELMA and the skills needed by laboratory scientists at the pathology laboratory of the SataDiag public utility.

Expertise in joint health care emergency services (YHES) / Southwest Finland Hospital District

- The project defined the field-based basic and specific competences in the new joint health care emergency services in the Southwest Finland Hospital District.

Best practices

- Models and methods for anticipating, defining and developing competences.
- Anticipation methods and practices for the core material of continuing professional education.
- A project operational model based on innovation and participatory working methods.

## CONCLUSIONS AND SCENARIO FOR THE FUTURE

The Southwest Finland Hospital District, the Satakunta Hospital District and the Health Care unit of the Turku University of Applied Sciences will continue to develop the operational model for competence management and leadership

and defining staff competences using the competence knowledge, models and best practices produced in the projects. The model for describing competence has been taken in use in the definition of core and specific competences in the fields and processes of the Southwest Finland Hospital District. Since the project, 15 new development projects have been started as Master's degree theses at universities of applied sciences. The competence model will be piloted in 2012. Competence maps describing the professional basic and specific competences and core and specific competences will be processed into core material and integrated into curriculum planning. Where appropriate, they will also be used in continuing professional education during 2012.

## PUBLICATIONS

During the project, 32 articles, four publications, 5 theses and 12 posters were published. In different stages of the project, results have been presented in four national and one international conference and 12 seminars. The results, conclusions, recommendations and the anticipation model of the SOTE forecasting and anticipation project have been included in a publication that is available at <http://www.ekky.fi/sote/materiaalit.php>. Publications related to the project *The future of specialist expertise in specialised health care 2009–2010* are available at <http://sote-ennakointi-esh.turkuamk.fi>.

# SHARED EXPERTISE IN THE CHANGING WORKING LIFE IN HEALTH CARE 2009–2011

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## **Funding**

European Social Fund (ESF)

Turku Municipal Health Care and Social Services

The Hospital District of Southwest Finland

The Regional Hospital in Salo

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The Centre of Laboratory Services and the Finnish Red Cross Reception Centre in Turku

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## **AIMS AND OBJECTIVES**

The aim of this project was to help health care professionals in their inadequacy in reliable data acquisition and application as well as health care teachers in updating their working skills and confronting patients' authentic health problems. The project was about lowering the barriers between education and working life by bringing them closer to each other, improving organisations' skills in generating and learning competitiveness together and, further, contributing to education to help it meet the new skill and job requirements and in health care.

## **IMPLEMENTATION**

The actions took place during three months long specifically defined developing periods when ten teachers from Turku University of Applied Sciences (TUAS) were placed in different hosting partner health care organisations. The teachers became familiar with health care development needs and tasks while working as development managers. They carried out research and development actions together with the organisations' personnel and offered a pedagogical approach and shared expertise for the development of work placements.

The project developed health care structures and contents, applied research knowledge and best practices to practical work implementation, committed shared long-term development, exploited a variety of learning methods and established and confirmed new networks and ways of co-operation between higher education and working life.

While dealing with work processes, the recognition of operations and development of reporting were under review. In harmonising working practices, the priority was given to patient safety and its main perspectives in acute and life threatening situations and in medication. The development of services also focused on the health promotion of the long-term unemployed and both refugees and asylum seekers. Related to knowledge management, the project also focused on nurses' expertise in laboratory and large-scale nursing tasks. After the developing periods, the results' usability for the implementation of curricula was evaluated by each period. It – similarly to all evaluation in the project – utilised internal evaluation questions for education and working life practitioners for shared expertise.

## RESULTS

The project contributed to health care education in order to help it meet the new skill and job requirements in health care services. It helped partner organisations to raise their competitiveness to a higher level with regard to research and development skills. The developing periods contributed to health, welfare and knowledge for better and longer lasting employment creation for present and future health care professionals. Actors in health care had an opportunity to modernise their theoretical knowledge and increase both their learning and self-developing strategies. A more realistic picture of the current state of and future challenges in health care work was formed. Further, the project influenced patients' care and services indirectly, but positively nevertheless.

## IMPACT

The ultimate innovation of the project was in mutual co-operation where outside expertise was utilised in a positive way for evaluating current activities based on existing research evidence. The quality management model was founded on external evaluation between higher education institutions and working life. There are recommendations for further development and for disseminating good practices. The model will help to notice possible quality deviations and to choose the necessary means to develop the situation.

## CONCLUSION

The co-ordinator, TUAS, has already applied for a further, new Finnish ESF funded project. This project would concentrate on co-operation with higher and vocational education and working life professionals, combining health and welfare technology in shared expertise.

The project and its results have also been presented to the Consortium on Applied Research and Professional Education (CARPE) network between Hamburger University of Applied Sciences, HU University of Applied Sciences Utrecht, Polytechnic University of Valencia and Turku University of Applied Sciences. The international application of the project could be to expand the mutual learning and quality assessment model between TUAS and the Southwest Finland health care working life to a wider network where different countries are combined and mixed. In this new project, teachers from separate HEIs would give their expertise to the receiving host for strategically important development subjects for improving the situation. The development aim and means would come mainly from the workplace, but the local HEI would also participate in the process. For each foreign expert, there should be a defined development goal to which all parties commit. The actual tasks would take place during the exchange contact period. Professional teachers would prepare working staff to carry out the real development work. The project would bring new perspectives and opportunities to workplace learning, increase the mutual awareness and appreciation of the network and help to draw HEIs and working life closer, locally and internationally.

## PUBLICATIONS

von Schantz, M., Toivonen, H. & Lind, K. (eds.) 2010. Asiantuntijana terveystalossa muuttuvilla työmarkkinoilla. Aluevaikuttavuutta ASTE-projektilla. Reports from Turku University of Applied Sciences 104. Turku: Turku University of Applied Sciences.

## Posters

Toivonen, H. 2011. Shared Expertise in the Changing Working Life in Health Care. Poster and oral presentation. Carpe Networking Conference, 2–4 November 2011, Utrecht, the Netherlands.

# THE FUTURE HOSPITAL – DEVELOPMENT PROJECT IN NURSING 2009–2015

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## BACKGROUND

The Future Hospital – Development Project in Nursing (Hoi-Pro) 2009–2015 is a joint project between the Hospital District of Southwest Finland and Turku University of Applied Sciences, Faculty of Health Care. Hoi-Pro is part of the operational development project T2 Hospital (T-Pro). The main objective of T-Pro is to plan process based services of the hospital. The model of process based health services will include the entire Hospital District of Southwest Finland. This requires project participation of the regional specialised care services. In this project, Salo Regional Hospital represents the regional specialised care services.

According to the research results, a process driven organisation has shown to improve the quality of care, shorten internal delays of treatments and care, optimise the use of resources and the management of workload (Kinnunen & Lindström 2005, Kukkonen 2005, Laine 2005, Lillrank & Haukkapää-Haara 2006). The key factors of Magnet Hospitals are related to organisational and management culture (Aiken et al. 2000, Havens 2001, Scott et al. 1999).

## AIMS

1. to prepare and support nursing personnel in the Hospital District of Southwest Finland, when it moves in to the process based action model
2. ensure the know-how among nursing personnel
3. enhance and deepen the co-operation between Turku University of Applied Sciences and the Hospital District of Southwest Finland
4. enhance the magnetism of the Hospital District of Southwest Finland and familiarise nursing students to the process based model of health services.

## IMPLEMENTATION

Hoi-Pro will be implemented in three phases: planning of process based nursing (2009–2012), implementation of process based nursing (2013–2014) and evaluation of process based nursing (2015). Additionally, these phases

have been divided into working packages: nursing procedures, competent and healthy personnel, patient counselling and “godparent” activity. Most of the working packages focus on neurological, cardiological, gastrosurgical, urological and musculoskeletal domains.

## RESULTS

So far nine theses in the Bachelor’s programme and three theses in the Master’s programme have been published. A few Bachelor’s theses focused on patient experiences during unit transfers. According to the results, the majority of the patients were satisfied with patient transfers during their hospital stay. The results also showed some problems concerning patient transfers and they were related, for example, to hospital facilities, schedules and patient information. (Heikkilä & Taponen 2010, Toivonen 2010, Aalto & Hakamäki 2011, Juvonen et al. 2011.)

Some Bachelor’s theses focused on analysing orientation materials of different units. The results showed that the units had only few similarities and more special issues depending on units. (Wilkosz & Sillanpää 2010; Aaltonen et al. 2011, Heikkilä et al. 2011.)

Uimonen, Virta & Vähä-Hakula (2010) made a review about organisational change, well-being and job satisfaction among nursing personnel. According to the results, the reaction to organisational change is usually resisting. Continuous information, open conversation, the manager’s trust to nursing personnel and independent decision-making at work enhance job satisfaction in an organisational change. Successful organisational change reduces stress of the nursing personnel.

A subproject for the anticipation project of the Social and Health sector has defined the levels of competence in nursing (Kurki 2010, Lintula-Göcmen 2011, Meritähti 2011, Nurminen 2011, Nygren & Nurminen 2011). Hoi-Pro continues this task in the working package Competent and healthy personnel.

## IMPACT

Hoi-Pro joins seamlessly the strategy of the Hospital District of Southwest Finland 2007–2015 and the action plan of nursing for 2010–2015. Hoi-Pro also supports the know-how and magnetism of Turku University of Applied Sciences and strengthens its role as a co-operative partner and study place. Hoi-Pro brings education and research, development and innovation together. Students have a possibility to take part in Hoi-Pro by carrying out Bachelor's and Master's theses and other courses as well as taking part in the "godparent" activity.

This long-lasting project is now in the planning phase. When the T2 hospital will be opened in the year 2013, Hoi-Pro moves on to the implementation phase. Several Bachelor's and Master's theses have been carried out in the planning phase and they have focused for example on patient experiences during unit transfers, on nurses' competence in the care of patients as well as on the length of hospital stays among patients. In the implementation phase, some of these issues will be re-evaluated in the T2 hospital. In the evaluation phase these issues will be compared.

## PUBLICATIONS

### Theses

In this project nine Bachelor's theses and three Master's theses are published.

### Other publications

Kummel, M., Nurminen, R. & Pelander, T. 2009. Tulevaisuuden sairaala – Hoitotyön kehittämisprojekti 2009–2011. In the publication Saarikoski M. & Toivonen H. (eds.) *Terve ja hyvinvoiva tulevaisuus (Heawell) – T&K-ohjelma terveyden ja hyvinvoinnin edistäjänä Varsinais-Suomessa 2007–2009*. Reports from Turku University of Applied Sciences 89. Turku: Turku University of Applied Sciences, 44–48.

## Posters

Students of the NSHTS10B group. 2011. Ohjatun harjoittelun ja työssäoppimisen aikaista oppimista edistävät ja estävät tekijät – vuoden 2009 tulokset. Poster presentation. The National Seminar for the Users of the CLES network, 25 March 2011, Turku, Finland.

Students of the NSHTS10B group. 2011. Ohjatun harjoittelun ja työssäoppimisen aikaista oppimista edistävät ja estävät tekijät – vuoden 2010 tulokset. Poster presentation. The National Seminar for the Users of the CLES network, 25 March 2011, Turku, Finland.

Tarr, T. & Kummel, M. 2011. Opiskelijoiden oppimiskokemukset ohjatussa harjoittelussa ja työssäoppimisessa. Poster presentation: Vaikuttavat Oppimisympäristöt Terveysalalla –Conference 30–31 May 2011, Helsinki, Finland.

## REFERENCES

Aalto, L. & Hakamäki, M. 2011. Patient transfers between units – Gastrological and urological patients' experiences. Bachelor's thesis. Turku University of Applied Sciences. Degree programme in nursing.

Aaltonen, T., Halme, L. & Laamanen, J. 2011. Analysis of the orientation materials of musculoskeletal disorder units. Bachelor's thesis. Turku University of Applied Sciences. Degree programme in nursing.

Aiken, L.H., Havens, D.S. & Sloan, D.M. 2000. The magnet nursing service program: a comparison of two groups of magnet hospitals. *American Journal of Nursing*. 100(3), 26–35.  
Havens, D.S. 2001. Comparison of nursing department infrastructure and outcomes: ANCC and nonmagnet CNEs report. *Nursing Economics*, 19(6), 258–266.

Heikkilä, J., Häkkinen, R. & Rantala, N. 2011. Analysis of neurological, neuro- and vascular surgical units' orientation materials. Bachelor's thesis. Turku University of Applied Sciences. Degree programme in nursing.

Heikkilä, M. & Taponen, L. 2010. Patient transfers between units – Trauma patients experiences. Bachelor's thesis. Turku University of Applied Sciences. Degree programme in nursing.

Juvonen, J., Niskakangas, J. & Tammisto, L. 2011. Patient transfers between units – Cardiac patients' experiences. Bachelor's thesis. Turku University of Applied Sciences. Degree programme in nursing.

Kinnunen, J. & Lindström, K. 2005. Rakenteellisen ja toiminnallisen muutoksen vaikutukset HUSin johtamiseen ja henkilöstön hyvinvointiin. University of Kuopio.

Kukkonen, J. 2005. Terveystieteiden vaikuttavuuden arviointi rutiinisti kerätyn tiedon pohjalta. Thesis. University of Kuopio. Department of Health and Social Management. Kuopio.

Kurki, J. 2010. Nurses' competence in the care of patients with acute coronary disease in the Heart treatment line – Competence imaging model. Master's thesis. Turku University of Applied Sciences. Advanced Nursing Practice. <http://julkaisumyynnti.turkuamk.fi/PublishedService?file=page&pageID=9&itemcode=9789522161888>.

Laine, J. 2005. Laatu ja tuotannollista tehokkuutta? Taloustieteellinen tutkimus vanhusten laitoshoidosta. *Stakes, Studies 151*. Helsinki.

Lillrank, P. & Haukkapää-Haara, P. 2006. Terveystieteiden tilaaja-tuottaja-malli. KTM. Rahoitetut tutkimukset 1. Ministry of Trade and Industry. Helsinki.

Lintula-Göçmen, H. 2011. Staff coaching as part of developing staff knowhow of emergency care – In the ear, eye and oral surgery emergency nursing care. Master's thesis. Turku University of Applied Sciences. Degree programme in Management and Leadership in Health Care.

Meritähti, T. 2011. Triagenurse competence in the emergency department. Master's thesis. Turku University of Applied Sciences. Degree programme in Management and Leadership in Health Care.

Nurminen, R. (ed.) 2011. Tulevaisuuden erityisosaaminen erikoissairaanhoidossa. Reports from Turku University of Applied Sciences 113. Turku: Turku University of Applied Sciences.

Nygren, P. & Nurminen, R. (eds.) 2011. Tulevaisuuden osaaminen Varsinais-Suomen sairaanhoitopiirissä. Reports from Turku University of Applied Sciences 114. Turku: Turku University of Applied Sciences.

Scott, J., Sochalski, J. & Aiken, L. 1999. Review of magnet hospital research. *Journal of Nursing Administration* 29, 9–18.

Toivonen, K. 2010. Inter-unit patient transfers – neurological patients' point of view. Bachelor's thesis. Turku University of Applied Sciences. Degree programme in nursing.

Uimonen, S., Virta, L. & Vähä-Hakula, M. 2010. Työhyvinvointi terveydenhuollon muutostilanteessa. Bachelor's thesis. Turku University of Applied Sciences. Degree programme in nursing.

Wilkosz, N. & Sillanpää, S. 2010. Analyysi sydänhoitoyksiköiden perehdytysmateriaalista. Bachelor's thesis. Turku University of Applied Sciences. Degree programme in nursing.

# PROMOTING EVIDENCE BASED NURSING THROUGH NURSING STUDENTS' AND NURSES' SHARED LEARNING 2010–2014

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## **BACKGROUND AND AIMS**

Scientific knowledge is an essential part of evidence based nursing and nurses need competence in searching, evaluating and implementing research findings in their practice. The competences need to be supported by organisations providing education as well as by health care services.

The *NÄYTKÖ* project aims at developing a process that promotes evidence based nursing through nursing students' and professionals' shared learning. The learning objective for the students is to develop skills required for searching, evaluating and communicating scientific research. Learning aims for the professionals are to identify knowledge needs in nursing practice, reflect scientific knowledge to clinical expertise and develop practices according to the best available evidence.

Journal clubs are implemented as the learning method in the *NÄYTKÖ* project. Innovative pedagogy is utilised as the pedagogical approach and the project is strongly working life focused, practice oriented and based on active collaboration between nursing students, professionals and teachers.

## **IMPLEMENTATION**

The *NÄYTKÖ* project started in fall 2010 with a pilot phase. Prior to the pilot phase, a literature search was performed to identify the literature about utilising journal clubs in nursing professionals' or students' education. The literature search resulted in identification of a six phased journal club – a process that was chosen to be implemented in the *NÄYTKÖ* project. The six phased journal club process consists of:

1. Nursing professionals suggest journal club subjects based on their knowledge needs and the organisational strategy.

2. Students and the teacher conduct a literature search according to the subject. The main scientific nursing field databases, practice guide lines and other relevant documents (e.g. legislation) are searched.
3. Students and the teacher evaluate the quality of the identified references and research. The level of evidence is also discussed.
4. Students prepare a written paper that is based on the references and research that has been identified and evaluated as good quality.
5. The professionals read the written paper and reflect their practice and practice developing needs based on the content of the paper.
6. Journal club meeting: The students present their paper in brief. After the presentation, the professionals' discussion continues in collaboration with the students and the teacher.

The pilot phase in fall 2010 involved 150 nursing students, 80 nursing professionals and seven teachers. At the pilot phase, three nursing study modules (3–5 ECTS), located between the 4th–6th study semesters, were carried out implementing the process.

Since the pilot phase, approximately the same amount of students, nursing professionals and teachers have been involved in the *NÄYTKÖ* process every semester and more study modules have been attached to the project. Different types of collaboration between study modules, clinical fields and professional expertise have also been performed within the project.

## RESULTS

According to the systematic evaluation of students' and professionals' experiences, journal clubs promote skills required for producing evidence based nursing. The experiences have been carefully considered as the *NÄYTKÖ* project has developed.



## IMPACT

The project shows promising results according to the experiences of nursing students, professionals and teachers as well as managers. Evidence regarding learning outcomes of students and nurses as well the outcomes on the clinical practice need, however, to be strengthened in the near future.

## CONCLUSIONS AND SCENARIO FOR THE FUTURE

New, innovative ideas and implementations within the *NÄYTKÖ* project will be produced in the near future including wider national and international collaboration. Future efforts are however needed to evaluate both students' and professionals' learning outcomes as well as the clinical outcomes of the project.

## PUBLICATIONS

### Theses

In this project two Bachelor's theses will be published.

### Other publications

Laaksonen, C., Paltta, H., von Schantz, M., Ylönen, M., & Soini, T. 2010. *NÄYTKÖ* project. Oral presentation. Empowering the Professionalization of Nurses through Mentorship (EmpNURS) -project (project group meeting).

Laaksonen, C., Paltta, H., von Schantz, M., Ylönen, M., & Soini, T. 2011. *NÄYTKÖ* project. Oral presentation. TUAS, Health Care, Research and Development day 2/2011, Turku, Finland.

Laaksonen, C., Paltta, H., von Schantz, M., Ylönen, M., & Soini, T. 2011. *NÄYTKÖ* project. Oral presentation. Turku Municipal Health Care and Social Services 3/2011, Turku, Finland.

Laaksonen, C., Paltta, H., von Schantz, M., Ylönen, M., & Soini, T. 2011. NÄYTKÖ project. Oral presentation. TUAS, Health Care, Teacher Students Introduction 9/2011, Turku, Finland.

Laaksonen, C., Paltta, H., von Schantz, M., Ylönen, M., & Soini, T. 2011. NÄYTKÖ – kohti opiskelijoiden ja hoitohenkilökunnan yhteistä oppimista näyttöön perustuvan toiminnan kehittämiseksi. Oral presentation. Vaikuttavat oppimisympäristöt terveysalalla – Conference, 30 May 2011, Helsinki, Finland.

Laaksonen, C., Paltta, H., von Schantz, M., Ylönen, M., & Soini, T. 2011. NÄYTKÖ – Näyttöön perustuvan hoitotyön edistäminen. Sairaanhoitaja 11/2011, 54–56.

Laaksonen, C., Paltta, H., von Schantz, M., Ylönen, M., & Soini, T. 2011. NÄYTKÖ process – Toward nursing students' and professionals' shared learning. Oral presentation. Carpe Networking Conference, 2–4 November 2011, Utrecht, the Netherlands.

Paltta, H., Laaksonen, C., von Schantz, M., Ylönen, M., & Soini, T. 2011. NÄYTKÖ-hanke. Hoitotyön opiskelijaohjauksen laadunarviointi –seminari. Oral presentation. The National Seminar for the Users of the CLES network, 25 March 2011, Turku, Finland.

# IMPROVING THE QUALITY OF CARE BY DEVELOPING THE PATIENT SAFETY CULTURE 2011–2012

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TUAS

## BACKGROUND AND AIMS

Patient safety is an important factor in the quality of health care. Internationally speaking, patient safety is one of the interests of the European Union. International researches have shown that there are serious adverse events in patient safety. It has been estimated that as much as 12% of hospital patients are harmed during their health care. Most of the adverse events in patient safety could be prevented by recognising the risks and encouraging patients to take an active role in the safety of health care. (European commission 2012, Helovu, Kinnunen, Peltomaa & Pennanen 2011, Peltomaa 2009.)

The purpose of the POTU project is to improve the quality of patient safety culture in health centres and to decrease the number of adverse events in patient safety in the future. The main goal is to increase the health care personnel competence in patient safety and to integrate the patient safety culture to be a part of the primary health care system.

## IMPLEMENTATION

The POTU project started in the spring of 2011 by gathering key persons in patient safety from the three different health centres. These key persons were nurses, public health nurses, physiotherapists, dental hygienists and laboratory technicians. The key persons worked together in a multi-professional team in their own health centre. Team members worked regularly in workshops which were guided by teachers from Turku University of Applied Sciences. The workshop goals were to increase the knowledge and skills in patient safety. The workshop topics were e.g. the concept of patient safety and managing and preventing the risks in patient safety. This project enables multi-professional cooperation and it helps to create a network between the health centres.

## RESULTS

In the POTU project, the personnel's competence in patient safety will increase and the patient safety culture will develop in the health centres. The results are monitored by counting the number of patient safety incidents. Patient safety competence has also increased in the faculty of health care at Turku University of Applied Sciences.

This project's effectiveness is valued by measuring the patient safety culture in health centres by using the TUKU questionnaire. The TUKU questionnaire is developed by the Technical Research Centre of Finland (VTI) to measure the organisational and psychological dimensions of patient safety culture. The first batch of data was collected in autumn 2011 and the second batch of data will be collected in autumn 2012.

## CONCLUSIONS AND SCENARIO FOR THE FUTURE

Every health care professional should have patient safety competence (knowledge, skills, attitude and performance). The knowledge should be up to date in order to develop the patient safety culture and to give guidelines for good quality in health care. In the future it is important to engage also the patients, clients and their family members in promoting patient safety.

## PUBLICATIONS

### Posters

Poster presentation. The Second National Patient Safety Conference 8–9 September 2011, Helsinki, Finland.

## REFERENCES

European commission 2012. Euroopan unionin kansanterveysportaali. [http://ec.europa.eu/health-eu/care\\_for\\_me/patient\\_safety/index\\_fi.htm](http://ec.europa.eu/health-eu/care_for_me/patient_safety/index_fi.htm).

Helovuori, A., Kinnunen, M., Peltomaa, K. & Pennanen, P. 2011. Potilasturvallisuus. Helsinki: Edita Prima Oy.

Peltomaa, K. 2009. Joka kymmenes potilas – potilasturvallisuuden lähtökohdat. In the publication M. Kinnunen & K. Peltomaa (eds.) Potilasturvallisuus ensin. Hoitotyön vuosikirja 2009. Helsinki: Edita Prima Oy.

Ministry of Social Affairs and Health 2009. Edistämme potilasturvallisuutta yhdessä. Suomalainen potilasturvallisuusstrategia 2009–2013. Reports from Ministry of Social Affairs and Health 2009:3. Helsinki: Ministry of Social Affairs and Health.

# GOOD PRACTICE IN POINT-OF-CARE-TESTING 2011–2013

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## **Partners and funding**

Turku Municipal Health Care and Social Services

The Hospital District of Southwest Finland

Turku University of Applied Sciences (TUAS)

## **BACKGROUND**

*Good practice in Point-of-Care-Testing* is a project that aims to improve practice concerning Point-of-Care-Testing (POCT) among all health care personnel in the Turku Health Care and Social. This project is carried out in collaboration with Turku Municipal Health Care and Social Services, TYKSLAB (The Laboratory of the Hospital District of Southwest Finland) and Turku University of Applied Sciences, the Faculty of Health Care, Degree Programs in Nursing and Biomedical Laboratory Science. This project also collaborates with Turku Vocational Institute which is an upper secondary level school educating practical nurses. The purpose of this project is to increase the quality of POCT by describing the whole process of POCT, unifying and clarifying the practice of the large variety of health care personnel conducting POCT in diverse working environments.

## IMPLEMENTATION

Point-of-Care-Testing has expanded extensively during the last decade. Most POCT is carried out by health care personnel in different working environments e.g. in wards, emergency rooms, outpatient clinics and even more increasingly in patients' homes. One method in achieving the goals of the VIENO project is to develop and implement education for the health care personnel conducting POCT. The content of this education has a close connection to working life. The education implemented for the personnel is carried out with a diverse and practical approach. The content is based on the demands of the practice as the personnel needs different knowledge in different working environments. In the first year of the project this education has had two topics; measuring blood glucose and the visual analysing of urine with test strips.

## RESULTS AND IMPRESSIVENESS

Regionally in the Turku city area the VIENO project is ensuring and widening the health care personnel's knowledge concerning Point-of-Care-Testing and it also gives the personnel opportunities to develop themselves. The demands of working life are also taken into consideration when planning the contents of the courses in Point-of-Care-Testing in the degree programmes of nursing and biomedical laboratory science at Turku University of Applied Sciences.

## CONCLUSIONS

When the teacher is working with a variety of different actors conducting POCT, it is possible to give students in the degree programmes of nursing and biomedical laboratory science diverse learning opportunities e.g. in thesis work or by letting them take part in health care personnel's' education as co-lecturers with the teacher. Performing as a co-lecturer gives the students opportunities to learn the role of a specialist, which is an important skill that they will need later in their future working life.

## PUBLICATIONS

### Theses

In this project two Bachelor's theses have already been published.

### Other publications

Tuominen, R., Soini, T. & Ylönen, M. 2011. Vierianalytiikan ja näytteenoton koulutuksen suunnittelu ja toteutus. In the publication: von Schantz, M., Toivonen, H. & Lind, K. (eds.) 2011. Asiantuntijana terveysalan muuttuvilla työmarkkinoilla. Aluevaikuttavuutta ASTE-projektilla. Reports from Turku University of Applied Sciences 104. Turku: Turku University of Applied Sciences, 35–41.

Tuominen, R. 2010. Työelämäjaksolla kartoittamassa vierianalytiikan ja verinäytteenoton toteutumista Turun sosiaali- ja terveystoimessa. *Moodi* 6/2010.

Tuominen, R. 2011. Vieritestipassi – Turun sosiaali- ja terveystoimen hoitohenkilökunnan vieritestiosaamisen varmistaminen. *Bioanalyytikko* 2/2011, 12–14.





PROJECTS PROMOTING  
EXPERTISE IN MEDICATION

# ENHANCING HEALTH CARE PROFESSIONALS' MEDICATION COMPETENCE AND MEDICATION SAFETY 2007–2010

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## **Partners and funding**

Different health care organisations in Southwest Finland

The Hospital District of Southwest Finland

Turku Municipal Health Care and Social Services

The Health centre in Kaarina

The Health centre in Naantali

The Health centre in Masku

The Health centre in Mynämäki

The Health centre in Pöytyä

Different municipal consortiums and elderly care facilities

Turku University of Applied Sciences (TUAS)

## **BACKGROUND**

The safety of medication care is an important part of patient safety and quality of care. Ensuring health professionals' adequate competence is a major challenge for all health and social care organisations. Medication safety

has been identified as a major target for development due to the amount of adverse events occurring in health care. Many contributing factors in relation to adverse events in medication care has been recognised, as deficiencies in health care professionals' medication competence and need for supplementary education have been highlighted as part of the factors. Social and health care organisations have an obligation, by Ministry of Social Affairs and Health, to promote medication safety and to ensure and support the competence of health care professionals. Since 2001, Turku University of Applied Sciences has been involved in many development projects in order to enhance medication safety and ensure the competence of health care professionals. Principle lecturer Oili Veräjänkorva developed in her PhD study the model for supplementary education in medication care for nurses. This project was originally based on further development of the model, and on validating and modifying instruments for evaluation of different health care professionals and nursing students' medication competence as well as on developing materials and e-learning environments.

The aims of this projects were

1. to develop products for supplementary education in medication care (the delivery model of education, e-instruments for evaluating medication competence, education packages and e-learning environments)
2. promote medication safety in different health care organisations
3. to strengthen the image of Turku University of Applied Sciences as an expert in the area.

## IMPLEMENTATION

The project was implemented with a variety of partners. The model of supplementary medication education was customised for clients' (organisations') needs and executed in several different health and social care settings. The instruments were further developed and tested with different health care professionals and modified to electronic form. An expert group of teachers developed evidence based material for supplementary education and three e-learning environments were finished by the end of the project. Development of medication safety by consultation and creating a medication plan was conducted in one of the facilities.

## RESULTS

The results of the project are

- the delivery model of supplementary education in medication care (evaluation of participants medication competence, evaluation of the effectiveness of education and experiences of participants)
- Validated and modified instruments for evaluation of medication competence in health care professionals
- E-learning environments: Medication care – learning environment, Medication care of the elderly – learning environment and Vaccination – learning environment
- Evidence based teaching materials
- Consultation framework for developing medication competence.

## IMPACT AND CONCLUSIONS

The project can be evaluated to be impressive. Many of the results are now used through the Continuing education services and agreements on the license for the instrument has been made. Learning environments have also been made in one organisation and negotiations with new partners are ongoing currently. The theses of nursing students have demonstrated good results of the delivery model of supplementary education. However, challenges also exist and further development is needed. The Turku University of Applied Sciences' image of expertise in the development area has been widely recognised.

## PUBLICATIONS

Ojala, S. & Sulosaari, V. 2009. Lääkehoito-osaamisen kehittäminen terveysalalla. In the publication Paltta, H. Walta, L. & Wiirilinna, U. (eds.) Lääkehoito-osaamisen kehittäminen haasteena. Opinnäytteitä terveysalalta 2/2009. Comments from Turku University of Applied Sciences 56. Turku: Turku University of Applied Sciences, 6–11.

Sulosaari, V. 2009. Lääkehoito-osaamisen arviointi ja kehittäminen (e-LÄÄKE). In the publication Saarikoski, M. & Koivuniemi, S. (eds.) terve ja hyvinvoiva tulevaisuus (Heawell). T&K –ohjelma terveyden ja hyvinvoinnin edistäjänä Varsinais-Suomessa 2007–2009. Reports from Turku University of Applied Sciences 89. Turku: Turku University of Applied Sciences, 70–73.

Veräjänkorva, O. 2008. Lääkehoito-osaamisen arviointimittarin kehitysvaiheet vuosina 1998–2008. In the publication Lind, K., Saarikoski, M. & Koivuniemi, S. (eds.) Tutkien terveyttä. Reports from Turku University of Applied Sciences 79. Turku: Turku University of Applied Sciences, 16–33.

Veräjänkorva, O. 2003. Nurses' medication skills. Publications of the Turku University, series C, Scripta Lingua Fennica edita 200. Turku: Turku University.

# MEDICATION PASSPORT – AN INNOVATIVE METHOD TO ASCERTAIN THE MEDICATION COMPETENCE OF GRADUATE NURSE STUDENTS 2008–2012

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Finnish Universities of Applied Sciences (Health Care)

## **BACKGROUND**

Medication care has been found to be a high-risk form of treatment and numerous adverse events have been detected in Finland and other countries. Challenges concerning the improvement of patient and medication safety have been recognised in nursing practice and nursing education. One important part of improving the safety of care is to develop the competence of nurses

delivering the care. Undergraduate nursing education needs to prepare nurses for their future role in medication management and to support the development of the required medication competence. However, according to several studies, graduating nurse students do not have the adequate medication competence and this can jeopardise medication and patient safety. By developing interventions to ascertain nurse students' learning and the development of adequate medication competence it is possible to affect patient safety directly. The medication education had to be made visible and the national consensus on what is the medication competence of graduating nurses had to be achieved in order to ensure the quality of medication education in undergraduate nursing programmes and to ascertain the medication competence of graduating nurse students.

## AIMS

- To make the required medication competence visible to the student him/herself as well as teachers and nurse mentors in clinical practice.
- Describe the key elements and content of medication education.
- To develop intervention to ascertain graduating registered nurses' medication competence during graduation.
- To achieve national consensus on the requirements of graduating nurses' medication competence.
- To develop a standardised *Medication passport* by designing an electronic documentation structure that will support the planning, teaching and learning of medication care.

## IMPLEMENTATION

The preliminary model of intervention to ascertain graduating nurse students' medication competence, the *Medication passport*, was developed in Turku University of Applied Sciences during the academic year 2005–2006. The *Medication passport* is a nurse student's personal document, which contains his/her theoretic studies (pharmacology, clinical pharmacology, medication calculation tests) and skills he/she has practised during clinical practice periods (different learning tasks in medication administration, management and medication calculation). A nurse mentor in clinical practice placements will accept the nurse student's performance by signing the document.



The national requirements of graduating nurses' medication competence were validated and published in spring 2010. The requirements were based on Finnish national guidelines and national and international research. The national *Medication Passport* was approved in autumn 2010 and taken to use in all of the universities of applied sciences with undergraduate nursing programme. The *Medication passport* is available in two forms, in paper and in electronic version. The electronic version has undergone piloting in Satakunta University of Applied Sciences during a few years. The electronic version has undergone final revision and piloting and it came into national use during February 2012.

## IMPACT

In the future, research is needed to evaluate the effectiveness of the developed intervention to support nurse students' learning in medication management. The evaluation process of the feasibility of the *Medication passport* is in the first phase. An instrument for the feasibility evaluation needs to be chosen or developed. The instruments will explore the experiences of nurse students, teachers and nurse mentors. However, it is more challenging to evaluate the effectiveness of the *Medication passport* in relation to graduating nurse students' medication competence and in relation to medication safety. It is possible to explore nurse students' learning on medication management based on the markings on the *Medication passport* and use the markings as an information source to the development of medication education in undergraduate nursing education.

## SCENARIO FOR THE FUTURE

The current version of the *Medication passport* is for nursing students, but in the future it is necessary to continue the work for describing the requirements of other health care professionals such as graduating midwife, public health nurse, dental hygienist and radiographer students' medication competence and based on the requirements to develop modified versions of the *Medication passport*. The development of the national *Medication passport* is a good example of national collaboration. Autumn 2011 saw the beginning of Nordic collaboration for developing medication education in undergraduate nursing

programmes. As part of the collaboration, there is a possibility to modify the *Medication Passport* for use in different Nordic and European countries. There has also been an interest in collaboration outside Europe. Overall the development process of the National Medication Passport has strengthened the professional image of Finnish nursing education.

The final long-term aim of this project could even be that the *Medication Passport* will be a common practise in undergraduate nursing education in Europe. The *Medication Passport* will strengthen the international image of Finnish universities of applied sciences.

## PUBLICATIONS

### Articles

Heikkinen, K., Erkko, P. & Lind, K. 2008. Lääkehoito-osaamisen arviointi kehittämiskeskus – toimintamallin kehittämisen kuvaus. Vaasa: HTTS.

Sulosaari, V. & Erkko, P. 2008. Lääkehoitopassi lääkehoidon oppimisen tukena. In the publication H. Paltta, L. Tiilikka, U. Wiirilinna & S. Koivuniemi (eds.) Vastauksia terveystieteen oppimishaasteisiin 3. Reports from Turku University of Applied Sciences 75. Turku: Turku University of Applied Sciences, 74–87.

Sulosaari, V., Erkko, P. & Walta, L. 2010. Valmistuvan sairaanhoitajan lääkehoito-osaamisen vaatimukset – kohti kansallista konsensusta. Comments from Turku University of Applied Sciences 54. Turku: Turku University of Applied Sciences.

Sulosaari, V., Erkko, P. & Walta, L. 2010. Medication competence requirements of a graduating registered nurse –towards national consensus. Comments from Turku University of Applied Sciences 22. Turku: Turku University of Applied Sciences.

Uurasmaa, J. 2010. Hoitotyön opiskelijoiden kokemuksia lääkehoitopassin käyttöönnotosta. <http://urn.fi/URN:NBN:fi:amk-2010122118838>.

## Posters

Sulosaari, V., Ojala, S. & Ernvall, S. 2007. E-lääkehoitopassi -projekti 2007–2009. Poster presentation. Interaktiivinen tekniikka koulutuksessa Conference, 18–20 April 2007, Hämeenlinna, Finland.

Sulosaari, V., Heikkinen, K. & Lind, K. 2009. Lääkehoito-osaamisen kehittäminen – Työkaluja koulutukseen ja työelämään. Poster presentation. The Finnish Nursing Congress and Exhibition 2009, 5–6 March 2009, Helsinki, Finland.

Sulosaari, V. & Lind, K. 2009. Lääkehoitopassi turvallisen lääkehoidon edistäjänä. Poster and oral presentation. National Conference on Patient Safety, 29–30 January 2009, Helsinki, Finland.

Sulosaari, V. & Lind, K. 2010. Requirements of Graduating Nurses' Medication Competence – Achieving National Consensus for the Development of Undergraduate Nursing Curriculum in Finland. Poster presentation. Networking Education in Healthcare Conference (NET2010), 7–9 September 2010, Cambridge, United Kingdom.

Elo, A. 2011. Hoitotyön opiskelijoiden kokemuksia E-lääkehoitopassin käytöstä. Poster presentation. The Finnish Nursing Congress and Exhibition 2011, 17–18 March 2011, Helsinki, Finland.

Sulosaari, V., Leinonen, T. & Heikkinen, K. 2011. Medication passport - Innovative method to ascertain the medication competence of graduate nurse students. Poster and oral presentation. International Conference on Knowledge Work and Innovations, 2–4 November 2011, Utrecht University of Applied Sciences, the Netherlands.

## Oral presentations

Sulosaari, V. 2008. Development project of improving quality assurance of graduating nurse student's medication knowledge and skills. Conference abstract. Theme -presentation. Oral presentation. Nurse Education Tomorrow (NET2008) conference, 2–4 September 2008, Cambridge, United Kingdom.

Sulosaari, V., Suhonen, R., Leino-Kilpi, H. & Huupponen, R. 2010. Graduating Nurses' Medication Competence – Challenge for Nurse Educators

and Researchers. Oral presentation. Networking Education in Healthcare Conference (NET2010) 7–9 September 2010, Cambridge, United Kingdom.

Sulosaari, V. 2008. Lääkehoito-osaamisen arviointi- ja kehittämiskeskus (Loiste) perusopetuksen ja T&K toiminnan kehittämisen keinona. Oral presentation. Lääkehoidon opettajien foorumi, 20 October 2008, Helsinki, Finland.

Sulosaari, V. 2008. Lääkehoitopassi lääkehoidon osaamisen varmentajana perustutkintoon johtavassa laillistettujen ammattihenkilöiden koulutuksessa. Oral presentation. The Finnish Nurses Association, 2008, Helsinki, Finland.

Sulosaari, V. 2009. Lääkehoidon osaamiskuvaukset ja kriteerit opetussuunnitelman ja lääkehoitopassin kehittämisessä. Oral presentation. Lääkehoidon opettajien foorumi. 2009, Helsinki, Finland.

Sulosaari, V. 2009. Lääkehoidon osaamiskuvaukset ja kriteerit opetussuunnitelman ja lääkehoitopassin kehittämisessä. Oral presentation. Emergency and acute care (University of Applied Sciences) nationwide network – team meeting, 2009, Helsinki, Finland.

Vallimies-Patomäki, M. 2010. Developing the Medication Passport. Finnish example, 2010, Strassbourg, France.

# RATIONAL MEDICATION CARE THROUGH MULTIDISCIPLINARY COLLABORATION 2011–2012

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**Partners**

Pharmaceutical Information Centre

The Hospital District of Southwest Finland

Turku Municipal Health Care and Social Services

Turku University of Applied Sciences (TUAS)

**Funding**

Pharmaceutical Information Centre

TUAS

**BACKGROUND**

Social and health services must respond to patients' needs by providing reliable information on medication care. The main objective of pharmaceutical services is to enable effective, safe, appropriate and economical medication care for all of those in need. Multidisciplinary collaboration is one of the underlying premises for rational medication care and use.

The ageing population, chronic diseases and advances in drug therapy have given rise to an increasing range of medicines in patient care. Patients' adherence to the medication regimen has been found to be a global challenge. Adherence to long-term therapy for chronic illnesses averages only 50%. Poor adherence to long-term therapies severely compromises the effectiveness of care, making adherence a critical issue in people's health both from the perspective of quality of life and of health economics. Patient medication education is an important means of intervention in promoting adherence to medication. The lack of education and insufficient knowledge of medication care have been identified to be associated to increased morbidity and mortality and high rates of hospital readmissions. The lack of knowledge can also jeopardise safety of the care. Improving the quality and content of medication education, adherence to medication and enhancing patient safety is a mutual challenge for all health professionals involved with patient care.

Medication education and medication management by health care professionals is based on their knowledge and professional judgment in the best interests of their patients. Medicine information needs to be reliable and evidence based. The preparation and administration of medicines as well as patient medication education are at the core of nursing practice. Yet, little is known on medicine information sources used by nurses when administering medications and educating patients, and on nurses' role in patients' medication education and supporting adherence to medication. It is necessary to identify not only the information sources, but also the best and the most feasible methods and instruments for nurses in everyday use. It is also important to describe nurses' role in patient medication education in the multidisciplinary team in order to increase the quality of medication education and to develop methods for enhancing patients' adherence to medication.

In this project, the ultimate goal is to enhance patient safety and rational use of medicines. We aim to develop methods for nurses to use in medication administration and patient education, by exploring the sources of medicine information used by nurses and their role in patient medication education, and supporting adherence to medication in multidisciplinary team.

## IMPLEMENTATION

In the first phase of the project (spring 2011) a systematic review was conducted for the purpose of identifying the need for research and for instrument development. Based on the review, the multidisciplinary project group developed two instruments: a survey for evaluating medicine information sources used by nurses, and a survey for exploring the quality and content of patient medication education and methods used in providing education and supporting patients' adherence to medication. The decision was made to engage five Bachelor level theses and one Master's thesis (Master of Health Care) in the project for providing more insight to research interests and to develop intervention for nurses conducting medication education. A variety of research methods will be used.

The second phase of the project was data collection and preliminary analysis (autumn 2011). Research permissions were applied from and approved by the Hospital District of Southwest Finland and Turku Municipal Health Care and Social Services. The survey data collection began in November.

In the third phase of the project (spring 2012) the Bachelor level students participating in the project will collect data by interviewing and doing data analysis for both the survey and the interview data for their theses. The reports will be finished by the end of May 2012. The Master of Health Care student will plan and pilot the intervention for medication education and start the implementation. The project group will, through multidisciplinary collaboration, also plan possible interventions and methods identified from the survey data.

In the last phase of the project, evaluation of the developed interventions and methods will be made. The thesis of the Master of Health Care student will be finished and reported by the end of 2012. The project will end in December 2012.

## CONCLUSIONS AND SCENARIO FOR THE FUTURE

Nurses have an important role in the multidisciplinary team responsible of patients' medication care. In order to fulfil their role safely and effectively, reliable medicine information sources are needed and evidence based methods for patients' medication education and for supporting adherence to medication regimen. Through the multidisciplinary collaboration, we will produce new knowledge and innovative, practical tools for nurses and enhance the quality of patient education and rational medicine use as well as the safety of the care.

## PUBLICATIONS

A presentation accepted to the Finnish Nursing Conference in 2012 (Nurses' medicine information sources).





PROJECTS ENCHANCING  
STRUCTURE AND OPERATIONAL  
PRECONDITIONS

# TOWARDS BETTER EXPERTISE VIA CO-OPERATION IN SALO 2008–2013

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## **Partners**

The City of Salo

Turku University of Applied Sciences (TUAS)

## **Funding**

Employment and Economic Development Office (TYKES)

TUAS

## BACKGROUND AND FUNDING

Salo is a coastal city of about 55,000 inhabitants in Southwest Finland. The marginalisation among minors is common in Salo and the reasons for psychosocial problems of youngsters are often due to mental health and substance misuse problems of their parents. The project *From Special to Promotion* started in the autumn of 2008. The project was divided into three different parts: 1) the employees in Salo working with families, 2) the employees working in the area of mental health and substance misuse in Salo plus 3) in the private sector. The aim of the project was to improve the knowledge and

skills of social and health care from public and private sectors including e.g. schools, the Salo parish, and voluntary work. This development has continued by multi-professional co-operation in Salo.

## AIMS

The aim of the project is to improve the knowledge and skills of employees in the area of mental health and substance misuse problems and the health promotion of families by using the model of case workshops which was created in the project *From Special to Promotion*. The purpose is to support and develop multi-professional teamwork and collaborative learning.

## IMPLEMENTATION

The model of problem based learning was chosen as the main learning method of the project. This included several case meetings with participants from all the fields of social and health care, from the public and private sector (including e.g. schools, the parish, and voluntary work). Every group had three meetings of two hours each, focusing on different age groups: children, adolescents and adults. All the group meetings were based on case studies with a problem from “real life”. Cases were discussed and homework was given. Evidence based research was as well presented by group members from the local university and furthermore the project produced also seminars, with top lecturing experts from Finland. These case meeting activities have been evaluated through electronically sent questionnaires and the material was analysed through content analysis.

## RESULTS

The case work method was seen as a positive form of learning and developing the work. It was seen as a flexible cross-sector activity that enhances professional networking. Work counselling practices became more used in the entire area, basic-level consultation practices were created, and the work of cross-organisational work pairs was developed through the project. The final goal of

this project was to connect professionals from different fields of psychosocial services, aiming to get to know each other, to compare different work practices, to get knowledge produced by academic research and most importantly to learn from each other and create new practical working models for the mental health services of the city of Salo. In multi-professional team work we managed to bring together professionals from different fields to get to know each other. We got opportunities to learn from each other and compared different work practices. We got evidence based knowledge to support our work and created new practical working models.

## CONCLUSIONS

The model for multi-professional teamwork has been created and tested. This kind of multi-professional co-operation is based on a win-win strategy and benefits all partners. The model will be presented in national seminars.

# HUMAN IMPACT ASSESSMENT AS A TOOL 2010–2012

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## **Partners and funding**

City of Salo

Municipality of Ranua

Municipality of Kolari

The Welfare Centre in Lamminniemi

Turku University of Applied Sciences (TUAS)

## **BACKGROUND**

The basis for health promotion in municipalities is awareness of the local situation. Health promotion is a common challenge of all the sectors of administration. *The Report of Welfare and Health* is an innovation to find the real health needs of the population and to make strategies for health promotion. This tool was developed in the TEJO project together with THL (National Institute for Health and Welfare), the City of Salo and Turku University of Applied Sciences. The first report of welfare and health in Salo was written in 2004 and a new report is provided each year. The report consists of the data of the health situation of the population in Salo and the factors influencing

health and well-being, such as the environment, employment, economics and education. The target is to reduce health disparities between population groups and to focus on prevention. The Report of Welfare and Health is published in the internet and is available to the citizens in Salo.

The aim of the City of Salo is to increase the use of human impact assessment (HuIA) in municipal decision-making. Decisions which directly affect the well-being of individuals will be dealt in the form of municipal co-operation and multiprofessional dialogue. Education in and initiation to the method is required before HuIA could be implemented in the decision-making processes. The education was carried out in Salo by doing several exercises and deepening the theoretical basis of the HuIA. The target group of the education was the officials of the local administration. The education has been essential for implementing rapid HuIA in decision making. In Salo, the municipal officials carry out health impact assessment of different decision alternatives and attach those assessments to the agenda. The assessment process will be carried out in intersectoral co-operation and the officials can also consult other experts.

## **AIMS**

The aim of Ennakkoarviointi työkaluksi project is to provide education and support to the partners in the use of HuIA. The aim is that partners get to know the basis of Human Impact Assessment and its implementation. The purpose is to help the municipalities in the process of application of HuIA in decision making. The partners can take part in the development of the net based tool which provides educational support for using Health Impact Assessment.

## **IMPLEMENTATION**

The net based tool to give educational support in using HuIA was made in 2011. Education was given in the City of Salo, in Ranua and Kolari and in Lamminniemi welfare centre.

The application of HuIA in municipalities has been presented in several national seminars in 2011: the Terve Sos-seminar, and in the presentation seminar of the new law on health care and in national health promotion seminars in Turku and Pori.

## CONCLUSION

The web based tool and educational support for municipalities in application of HuIA has been created. The model will be presented in national seminars and in the website of National Institute for Health and Welfare introducing good practices in the field of social welfare and health care.



# EMPOWERING THE PROFESSIONALISATION OF NURSES THROUGH MENTORSHIP (EmpNURS) 2010–2013

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## **Project consortium**

The EmpNURS consortium consists of 11 full partner organisations. Seven of these organisations are Higher Education Institutions (HEI) and four are teaching hospitals working in collaboration with each other. The organisations are located in the Czech Republic (CZ), Finland (FI), Hungary (HU), Lithuania (LI), Romania (RO), the Netherlands (NL) and the United Kingdom (UK). The role of the partners from Finland, NL and the UK will focus on supporting the implementation of the Mentorship pilot programmes. Turku University of Applied Sciences (TUAS) is the coordinator of the EmpNURS project. The project is funded by European Commission's Lifelong Learning Programme and TUAS.

## **Funding**

European Commission's Lifelong Learning Programme

Turku University of Applied Sciences (TUAS)

## BACKGROUND

The profession of nursing varies greatly both in how it is viewed by others and operationalised across Europe. In part, this is a consequence of the significant differences in the way nurses are educated. One of the important aspects of this educational experience is the contribution of qualified nurses in the supervision of student nurses during their clinical placements. It is noted that a crucial factor within nurse education systems should therefore be the educational relationship between the qualified nurses and students, which would ensure a successful learning experience in clinical practice. In many countries this is known as mentorship, and a provision is made for the formal education of qualified nurses as mentors to students in the clinical learning environment. However, such approaches are not universal, because the mentorship models used by organisations in these countries are relatively unknown in others; there already are countries where qualified nurses do not engage in this process at all. This is in part due to the different ways in which the nursing profession has developed in different countries. With the modernisation of European nursing education, we now seek to address such incongruence, and in so doing, promote an empowered and better educated nursing profession across Europe.

## AIMS

The EmpNURS project is aimed at benefiting nurse educators, student and qualified nurses. The thematic field of the project is in advancing empowerment of nurses and the operational focus is in Mentorship programmes and their delivery and enactment in the clinical environment. The Action model of the project is based on previous work by members of the project team (Saarikoski et al., 2008, Warne et al., 2010).

## IMPLEMENTATION

The project started with an exploration study, which explored students' experiences of current practices during their clinical placements. The survey-type study gave a common picture of current practices in four teaching hospitals in the Czech Republic, Hungary, Lithuania and Romania before the project interventions. The research instrument used in the survey is the modified

Clinical Learning Environment, Supervision and Nurse Teacher (CLES+T) evaluation scale (Saarikoski et al. 2008). It is a validated research instrument, which can be used as a part of the total quality assessment of nurse education.

The next step will be the Mentorship training courses, which will be developed and then implemented in these four moderately new member states within the European Union. Each Mentorship course will be specifically geared to the cultural, professional and organisational needs of the participating partners. The mentorship pilot programmes – consisting of the Mentorship training course for clinical staff nurses and their subsequent undertaking of the mentor role with students – will take place in Brno (CZ), Budapest (HU), Kaunas (LT) and Iasi (RO). There will be a collaborative team of a delegate from an HEI and a hospital who will lead each of the four Mentorship pilot programmes.

## RESULTS

The anticipated project outcomes are: (1) improved supervision skills of qualified nurses, (2) a homogeneous range of Mentorship models which are adapted to specific nursing education needs in a participating country and (3) enhanced integration of education and practice organisations and promotion of congruity of European nurse education.

## IMPACT

An impact evaluation of the EmpNURS project will be undertaken using both quantitative and qualitative methods, as well as an ongoing critical evaluation and support in the development of the mentorship programme. In particular, the evaluation will assess the increased cooperation between health care services and education, and the impact upon the professional empowerment of nurses especially in the joining Higher Education Institutions and hospital organisations.

## SCENARIO FOR THE FUTURE

EmpNURS seeks to create permanent interchange of shared beliefs and development in nursing education support system. The project is based on an optimal idea that the mentorship model developed and tested during the project will be formed into permanent practice in the teaching hospitals of the project. The local teams will also promote the mentorship training courses and models in national networks.

## PUBLICATIONS

Antohe, I., Holland, K., Pokorna, A., Rieklikiene, O., Bòdi, M. & Saarikoski M. 2011. Nurse education in clinical practice – An exploration in four new EU countries (submitted).

Saarikoski, M., Pokorna, A., Surá, Z., Bódi, M., Riklikiene, O., Masiliuniene, G., Antohe, I. & Bogdanici, C. 2011. Empowering the Professionalization of Nurses through Mentorship (EmpNURS) project (2010–2013). Poster presentation. NET2011 Conference, 5–7 September 2011, Cambridge, United Kingdom.

EmpNURS team. 2012. Transnational projects: The Challenges of Language, Culture and Dialogue. Symposium in NETNEP 2012 Conference, Baltimore, USA (submitted).

## REFERENCES

Saarikoski, M., Isoaho, H., Warne, T. & Leino-Kilpi, H. 2008. The Nurse Teacher in clinical practice: developing the new sub-dimension to Clinical Learning Environment and Supervision (CLES) scale. *International Journal of Nursing Studies* 45, 1233–1237.

Warne, T., Johansson, U.B., Papastavrou, E., Tichelaar, E., Tomietto, M., Van den Bossche, K., Moreno, M. & Saarikoski, M. 2010. An exploration of the clinical learning experience of nursing students in nine European countries. *Nurse Education Today* 30; 809–815.

# THE EFFECTIVENESS OF REHABILITATION WITH CANCER PATIENTS AND THEIR SIGNIFICANT OTHERS 2010–2015

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## **Partners**

The project “The effectiveness of rehabilitation with cancer patients and their significant others” has started in collaboration with the Southwestern Finland Cancer Society and Turku University of Applied Sciences (TUAS). The project is scheduled to take place 2010–2015 and is divided into three parts:

4. The evaluation of rehabilitation of cancer patients (2010–2012)
  - Cancer patients’ and significant others’ perception of “Cancer and sexuality”
5. Improvement of the quality of life of cancer patients during their care in Southwestern Finland (2011–2014)
6. Development of palliative care in Southwestern Finland (2012–2015).

### **Funding**

Southwestern Finland Cancer Society

TUAS

### **AIMS**

The purpose of the subproject *The evaluation of rehabilitation of cancer patients (2010–2012)* is to determine the effectiveness of cancer patients’ rehabilitation and to find out whether rehabilitation courses promote functional capacity and the ability to work, as evaluated by patients and their significant others. Development objectives are to improve the compatibility of assessment methods and model their use, to support the team operating the multiprofessional rehabilitation work and to strengthen the role of rehabilitation as a part of the cancer patient’s treatment path in cooperation with units treating cancer patients. The reports are based on the objectives set by the Social Insurance Institution of Finland as well as the course objectives and reported results. The review provides information about how the course activities benefit cancer patients, their relatives, society, and various organisations.

### **IMPLEMENTATION**

The data comprise several parts and the sample consisted of cancer patients with significant others taking part in rehabilitation courses during 2009–2011. Quantitative data (n = 1164) were collected using five measurement tools FACT-G (Functional Assessment of Cancer Therapy), RAND-36 (health and welfare), RBDI (mental) and GAS (Goal Attainment Scale, a goal description tool) and a structured questionnaire related to sexuality. The data

were analysed using statistical methods and content analysis. The qualitative research method was an interview, and 150 (= n) cancer patients and significant others took part in the qualitative part of the study. The professionals of the rehabilitation group also took part in one qualitative study. The qualitative data were analysed using content analysis.

## CONCLUSIONS

Based on quantitative data, rehabilitation has a significant role in the cancer patients' recovery process. Most rehabilitees were satisfied with their quality of life (even if some of them suffered from a lack of energy and had some pain). The rehabilitation that took place over six months had a positive effect on all areas of well-being. The psychological health state of the rehabilitees was better than their physical health. The mood of the rehabilitees was generally rather bright with some exceptions; they had a positive attitude towards the future and were very pleased with their lives. However, some of the participants were not satisfied with their quality of life, felt their future was hopeless and they could have suicidal thoughts. The most common goals set by cancer rehabilitees were getting peer support and information and improving their physical well-being. These goals were reached extremely well.

Based on qualitative data, the contents and methods of adaptation training and rehabilitation courses aimed at cancer patients and their significant others contribute to the patients' adaptation to cancer and their recovery from it, support their physical and mental functional capacity and improve the way patients experience their quality of life and coping. Positive experiences in the different stages of a cancer patient's treatment path (suspicion of cancer, diagnosis, treatment and rehabilitation) strengthen the patient's faith in the future and help him or her progress through the stages of the treatment path. It is especially important that cancer patients receive reliable and up-to-date information about cancer, cancer treatment and the prognosis. Cancer patients in rehabilitation also need expert information regarding their current situation and the opportunity to discuss their concerns with medical experts. Support in the form of information that patients gain during adaptation training and rehabilitation courses alleviates fears related to cancer and its recurrence and anxiety faced during the different stages of the treatment path.

Mental support in various forms, such as expert lectures and individual and group discussions, empower (strength to face cancer as a disease) patients in rehabilitation and their significant others. Expert knowledge on relationships, sexuality and emotional life, informative support regarding nutrition and diverse operational support in physical exercise contributed to the patients' physical and mental functional capacity. Peer support enabled the patients to experience intimacy and humanity, gave them courage to speak more openly about their disease and helped them to understand their disease and situation better.

The level of empowerment and improvement of functional capacity varied from one individual to another, depending on how serious their situation with cancer was and how they were able to utilise their existing health and strength. Patients in rehabilitation and their significant others found it important to recognise whether their outlook on life was determined by the existing health or the cancer.

Cancer rehabilitation courses organised by the Southwestern Finland Cancer Association received mainly positive feedback; however, some development proposals were also brought up. Based on the results, cancer rehabilitation should be developed so that it would improve the rehabilitees' emotional life and well-being resulting from the activities. In the future, special attention should be given to supporting cancer rehabilitees' sexuality better, to encouraging them to overcome the fear of their deteriorating health and to alleviating the feeling of a lack of energy. Development proposals also concerned the duration of the courses, group sizes, physical training, femininity, nurturing relationships (significant others) and advanced courses. More information should be provided about sexuality, the change of self-image and medication. Special attention should also be given and resources allocated to providing multi-professional help to deeply depressed patients. In the future, the quantitative data and background variables should be analysed using statistical methods and saved for annual comparisons.



## PUBLICATIONS

Based on the results, the quality of rehabilitation of cancer patients and significant others will be improved using multi-professional cooperation. The project will publish scientific articles, 17 theses, one doctoral dissertation and a few professional publications.

### Website in Finnish

[www.lssy-hanke.turkuamk.fi](http://www.lssy-hanke.turkuamk.fi)

# WELL-BEING AT WORK IN THE UNIVERSITY OF APPLIED SCIENCES 2011–2013

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## **Partners**

Finnish Institute of Occupational Health

Turku University of Applied Sciences (TUAS)

## **Funding**

The Finnish Work Environment Fund

TUAS

## **AIMS AND OBJECTIVES**

A collaboration project between Turku University of Applied Sciences (TUAS) and the Finnish Institute of Occupational Health aims at holistic *well-being at work* promotion in the University of Applied Sciences (UAS) environment. *Well-being at work* development activities arise from existing needs and they are based on the commitment of management and staff, shared co-operation and participation. All faculties of TUAS are part of the project. Furthermore, especially two R&D Programmes of TUAS – *Expertise in Health Care and Medication and Future Work and Higher Education Institution Development* – join hands closely for mutual interest.

## IMPLEMENTATION

Firstly, the exploration of the current state of well-being at work is made with existing materials and data, interviews, questionnaires, seminars and in situ visits. Secondly, the development proposals are conducted. The development activities will take place in versatile and multi-professional form, taking advantage of the strengths and opportunities at TUAS.

The Finnish Institute of Occupational Health supports and guides the operation in the desired direction, conveys information and shows options and solutions for effective action. It uses the latest research knowledge, monitors the promotion of overall well-being at work and maintains the takeover. Furthermore it consolidates the selected strategy. The actual development work is however carried out by TUAS itself in order to ensure real change and commitment.

## RESULTS

The expected result will be an overall management model for well-being at work in a UAS environment. The project will also produce initial feedback on the effectiveness of this model. Development actions concentrate on activities that promote the staff's health and work ability, support skills, competence and motivation, and improve working conditions. Well-being at work is going to be taken into account at all levels of the organisation – in managerial work, leadership and decision-making.

## CONCLUSION

At the end of the project the well-being at work activities 1) are organised as a functional entity, 2) cover the entire organisation, and 3) will form a crucial part of the strategic decision making in TUAS. The model can also be used more extensively for example in the Finnish UAS network.