Nurse Competence Symposium in Helsinki

Thursday 22nd – Friday 23rd May 2014

Biomedicum Helsinki 1, Haartmaninkatu 8, FI-00290 Helsinki

Abstracts
Symposium organizers:

Riitta Meretoja  
Development Manager, HUS  
PhD, RN, Docent  
University of Turku

Olivia Numminen  
Clinical researcher, HUS  
PhD, RN, Post-doc researcher  
University of Turku

Helena Leino-Kilpi  
PhD, RN, University of Turku  
Professor of Nursing Science  
University of Turku

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Symposium Programme

Abstracts

List of NCS Publications
The international Nurse Competence Symposium in Helsinki, Finland focuses on networking those interested in nurse competence research using Nurse Competence Scale (NCS) instrument. NCS research has its origin in the instrument, which Dr Riitta Meretoja and Professor Helena Leino-Kilpi have developed (2003). The instrument has been subsequently used in many international and national studies on nurse competence.

**Aim of the symposium:**
- to share and discuss the recent projects and approaches in nurse competence measurement
- to share experiences of using NCS instrument with colleagues
- to strengthen the networking in the field of nurse competence research
- to get new ideas for future needs

**Symposium organizers:**

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<td>University of Turku</td>
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riitta.meretoja@hus.fi  olivia.numminen@hus.fi  helena.leino-kilpi@utu.fi
Programme

Thursday 22nd May, 2014, Biomedicum Helsinki 1, Lecture room 3, P-floor

9.30 Registration and Coffee

10.00 Welcome and Opening Remarks
Lasse Viinikka, Professor, Hospital District of Helsinki and Uusimaa, HUS
Helena Leino-Kilpi, Professor, RN, University of Turku
Riitta Meretoja, PhD, Docent, RN, University of Turku; Development Manager, HUS

10.30 Music Ensemble
Nea-Maria Alanko, Jenni Kilpi, Roni Tuomivirta, Esa-Pekka Tupala, Students of Sibelius Academy

10.45 - 11.45 Key note speech: Competence in education strategies in EU
Paul de Raeve, Secretary General, European Federation of Nurses Associations (EFN), Belgium

11.45 - 12.15 Review of NCS competence research
Riitta Meretoja, PhD, Docent, RN; University of Turku; Development Manager, HUS

12.15 - 13.15 Lunch

13.15 – 14.00 How to assess newly graduated nurses’ competence and how competent they are?
Sally Lima MNSc, PhD student, RN, BN, Grad Dip Adv Nsg; University of Melbourne, Australia

14.00 – 14.30 Self-assessment as a method in graduating nursing students’ competence assessment
Satu Kajander-Unkuri, MNSc, PhD student, RN; University of Turku, Finland, Lecturer, Savonia University of Applied Sciences, Finland

14.30 - 14.45 Refreshment Break

14.45 - 15.15 Nurse competence and newly graduated nurses’ reality shock
Kirs Lindfors, MNSc, PhD student, RN, HUS; University of Tampere, Finland

15.15 - 15.45 Newly graduated nurses’ competence and personal empowerment
Liisa Kuokkanen, PhD, RN, Researcher, HUS; University of Turku, Finland
Friday 23rd of May, 2014 Place: Biomedicum Helsinki 1, Seminar room 1-2, P-floor

9.00 - 9.30 Nurse competence and ethical climate of work environment
Olivia Numminen, PhD, RN, Researcher, HUS; University of Turku

9.30 - 10.00 Association between nurse competence and work environment
Eija Ruoppa, MNSc, RN; University of Turku, Finland

10.00 - 10.30 Nurse competence in a psychiatric setting
Anja Hottinen, PhD, RN, Researcher, HUS; University of Turku, Finland

10.30 - 11.00 Refreshment Break

11.00 - 11.45 Associations between nurse competence, good nursing care, and empowerment in Lithuanian nurses
Natalia Istomina, PhD, RN, Klaipėda University, Lithuania; University of Turku, Finland

11.45 - 12.00 Nurse competence from the perspective of the practicing nurse
Jaana Kotila, MNS, RN, Clinical Nurse Specialist, HUS

12.00 - 13.00 Lunch

13.00 - 13.45 Newly graduated nurses’ critical thinking and professional competence
Sigrid Wangensteen, PhD, RN, Researcher; Gjøvik University College, Norway

13.45-14.15 Nurse competence – thoughts for future
Helena Leino-Kilpi, Professor, PhD, RN; University of Turku, Finland

14.15-14.45 Open discussion and closing of the symposium
Paul De Raeye  
Secretary General  
European Federation of Nurses Associations (EFN)  
Oiso du Parnasse 11A  
B-1050 Brussels  
Belgium  
Tel: +32 2 512 74 49  
Fax: +32 2 512 35 50  
Mobile: +32 477 87 07 28  
E-mail: efn@ntv.be

Graduated as registered nurse in 1984, he obtained a Master degree in Nursing Science at the Free University of Brussels in 1988, and a Master degree in Statistics from the Catholic University of Brussels in 1994. In 2014, Paul got his Doctoral Degree at the Kings College University of London.

Since 1984 he worked full time as a Registered Nurse in a centre for children with muscular disease. He was a Head nurse Neonatology in the Al Hada Hospital in Saudi Arabia from 1990 up to 1992. On his return from the Middle East, he was appointed as a staff manager at the Free University hospital of Brussels, and part-time delegated to the Belgium Ministry of Health and Environment, where he was responsible for developing a national comparable data warehouse for nursing introducing qualitative indicators within the hospital financing system and providing data for the political decision-making process.

In 2002, Paul De Raeye was appointed as General Secretary of the European Federation of Nurses Associations (EFN). EFN activities relate to the promotion and protection of nurses and the nursing profession with particular reference to the EU. Paul main lobby activities relate towards ensuring that nurses and nursing is central in the development, implementation and evaluation of the European Health Policy in the field of education, workforce, and quality and safety, including eHealth.

In 2014, Paul De Raeye became coordinator of ENS4Care, a European Thematic Network focusing on evidence based guidelines for e-services in healthcare. As such, the EFN Secretary General convinced the EFN members to establish and invest in the newly developed European Nursing Research Foundation (ENRF).
EFN Competency Framework to implement Article 31 of Directive 2013/55/EC

Paul De Raeve, Secretary General, European Federation of Nurses Associations (EFN)

The EFN was established in 1971 when the Directive on mutual recognition of professional qualifications was first conceived. This Directive has been recently modernised with the introduction of eight competencies as set out in article 31. Compliance with the Directive 2013/55/EC is key to have access to mutual recognition of professional qualifications and as such benefit of free movement within the EU. In times of education and healthcare cuts, unemployment of lower qualified workers and sectoral austerity measures, fitness to practice, with the delivery of safe and high quality care, becomes dependent on the delivery of a highly qualified, multi-skilled and polyvalent nurse!

The tools to measure competencies will therefore need to be Art 31 sensitive, including themes such as: “independently diagnose the nursing care required”, “plan, organise and implement nursing care”, “working effectively with other actors in the health sector”, “empower individuals, families and groups towards healthy lifestyles and self-care”, “life-preserving measures”, “act in crises and disaster situations”, “independently advice to, instruct and support persons”, “independently assure and analyse the care quality”, “independently evaluate nursing care”, “communicate professionally” and “improve professional practice”. Furthermore, any measurement tool should be linked to the annexe V competency framework. As more and more tools, mainly self-evaluation tools, are on the “market”, being psychometric tested for its reliability and validity, employers will need to be able to detect any differences in the required competence levels of potential employees, thus facilitating greater EU nurse workforce mobility”.

We have therefore an exciting research endeavour in front of us in which the several stakeholders play a central role. Politically, EFN drives the policy process with the European Commission, the European Parliament and the Council of Ministers. Academically, it is crucial some key researchers on “measuring competencies” meet, develop an EU research proposal and operate through the European Nursing Research Foundation to develop better evidence for EU policy-making.
REVIEW OF NURSE COMPETENCE SCALE RESEARCH

Riitta Meretoja, PhD, RN
Development Manager, Hospital District of Helsinki and Uusimaa
Docent, University of Turku, Department of Nursing Science

Targeting practising nurses’ competencies to optimal use is a strategic challenge of health care globally. To achieve this, a systematic assessment of nurse competence and its critical appraisal are mandatory. The key responsibility of nurse managers is to ensure that nurse competencies are put to the best possible use in patient care. However, managers are often unable to implement systematic evaluations because of the lack of clarity in professional clinical competence framework.

The Nurse Competence Scale (NCS) is a generic instrument to assess nurse competence identifying the attributes that are crucial to effective nursing care. The instrument has been scientifically developed to measure nurse competence in different phases of nursing career and in different nursing contexts (Meretoja et al. 2004). The instrument consists of seven action-oriented competence categories composed of 73 items measuring competence: Helping role, Teaching-coaching, Diagnostic functions, Managing situations, Therapeutic interventions, Ensuring quality, and Work role. Several expert panels and item-to-item correlations reduced the original 1308 items to the final 73. The instrument is based on Benner’s classical work “From novice to expert” (1984) in which the nurse’s career development is described as a sequence from the novice level through advanced beginner, competent and proficient levels to the expert level.

NCS has been tested in different cultures and health care environments. The psychometric properties of the NCS instrument have been scientifically tested and it has been proved to be valid, reliable and sensitive to measure nurse competence at the generic level in wide range of work experience and clinical care contexts. The NCS has been used in many studies both in Finland and internationally. The sensitivity of the instrument to discern nurse competence has been studied in a variety of nursing contexts in Finnish and in international studies. Participants in these studies have been enrolled from nurse students and recently graduated nurses to very experienced nurses.

Professional competence is a key contributor to safe and effective patient care. It also has high impact on well being, job satisfaction and retention of nurses. Nurse competence research benefit from current studies in which also other aspects related to professional development are taken into account, such as personal commitment, empowerment and environmental factors in nursing.

A Framework for Developing Competence

Sally Lima¹,²,³, Fiona Newall¹,²,³, Sharon Kinney¹,², Helen Jordan¹, Bridget Hamilton¹
¹The University of Melbourne, ²The Royal Children’s Hospital Melbourne, ³Murdoch Children's Research Institute, Melbourne, Australia

Background and purpose: Understanding the factors that enable nurses to develop competence is fundamental for healthcare organisations to ensure quality outcomes for patients. Despite the importance of a competent workforce, the most effective means through which competence develops and is assessed remains elusive. The aim of this study was to evaluate a framework promoting competence in nurses new to paediatric practice (Framework).

Method: Applying the principles of program theory evaluation, a two phase, mixed method design was applied. In Phase One 12 focus groups were conducted to gain understanding of the Framework’s theory. Phase Two was an explanatory sequential mixed method design. In the quantitative strand 47 graduate nurses were invited to complete the Nurse Competence Scale (NCS) three times over 6 months. This enabled a measure of the extent to which competence develops. In the qualitative strand 21 graduate nurses were interviewed to explain the variations in competence development in light of their NCS results.

Results: Focus group participants in Phase One articulated a range of processes, contextual factors and standards impacting the development of competence. Results from the NCS indicated nurses made statistically significant gains in competence over 6 months. The findings from the interviews, considered in combination with the findings from Phase One and the NCS, enabled discernment of the factors in the Framework that most contribute to development of competence. These include; the individual within the team, asking questions, provision of guides, engaging in endeavors, and identification and interpretation of standards, all taking place in a particular context.

Conclusion: Significant time and resources are directed at supporting the development and assessment of competence. This study has led to articulation of a theorised framework to underpin development of competence. The findings of this study will contribute to local, national and international knowledge related to competence development both in nursing and other health professions.
Self-assessment as a method in graduating nursing students’ competence assessment

Satu Kajander-Unkuri, MNSc, PhD student, RN; Department of Nursing Science, University of Turku, Finland, Senior Lecturer; Savonia University of Applied Sciences, Finland; Helena Leino-Kilpi, PhD, RN, Professor and Chair; Department of Nursing Science, University of Turku, Finland, Nurse Director; Turku University Hospital; Jouko Katajisto, MSocSci, Senior Lecturer, Department of Mathematics and Statistics, University of Turku, Finland; Riitta Meretoja, PhD, RN, Docent; Department of Nursing Science, University of Turku, Finland, Development Manager, Corporate Headquarters, Hospital District of Helsinki and Uusimaa, Finland; Mikko Saarikoski, PhD, RN, Docent, Department of Nursing Science, University of Turku, Finland; Leena Salminen, PhD, RN, Docent, Department of Nursing Science, University of Turku, Finland; Riitta Suhonen, PhD, RN, Professor, Department of Nursing Science, University of Turku, Finland

Background and purpose: Self-assessment is widely used to assess competence in clinical context, although recent studies indicate that there may be discrepancy between self-assessment and observed performance. Self-assessment has been found to stimulate students’ deep-level learning, critical thinking and problem-solving skills. During their education nursing students need to develop their self-assessment skills to identify their learning needs, and to ensure up-to-date outcomes and safe practice. Being responsible of their lifelong learning, nurses need to be self-directed learners; for this, they need self-assessment skills. The purpose of this study is to assess the validity of self-assessment of graduating nursing students by determining the association between their self-assessment and their mentors’ objective assessment concerning competence.

Research question: What is the association between students’ self-assessments and their mentors’ assessments of students’ competence?

Method: The study used a cross-sectional comparative survey design and Nurse Competence Scale in measuring graduating nursing students’ and their mentors’ assessments of competence. The data were collected in 2011 during the last week of final clinical placement of nurse education. Completed questionnaires were received from 60 students and 50 mentors of which 42 student-mentor pairs were matched comprising the sample of this study. Descriptive and inferential statistics were used in the data analysis.

Results: Comparisons between the assessments at group level showed that graduating nursing students assessed themselves to have higher competence than assessed by their mentors (VAS 64.5±12.2 vs. 56.7±19.0) (mean±SD). No corresponding assessments were found at the single student-mentor level.

Conclusions: Compared to mentors’ assessments, graduating nursing students overestimated their competence. However, the results may be due to different understanding of competence and more research is needed of the validity of students’ self-assessment. Nursing students should receive training in self-assessment during nurse education. Mentors would also benefit training in assessing students’ competence.
Nurse competence and newly graduated nurses’ reality shock

Kirsti Lindfors, MNSc, PhD student, RN, HUCH; University of Tampere, Finland, Eija Paavilainen, PhD, professor, University of Tampere, Finland, Etelä-Pohjanmaa Hospital District, Marja Kaunonen, PhD, professor, University of Tampere, Finland, Pirkanmaa Hospital District, Riitta Meretoja, Development manager, PhD, adjunct professor, HUCH

Nursing shortage will be a global problem in the near future. Baby boomers are retiring and the next generations are unable to fill the growing demand for nursing work force: fewer nurses will enter the nursing profession. Nursing shortage has negative outcomes including increased risk of infections, adverse events after surgery and increased mortality rates.

Simultaneously, when the healthcare sector is struggling with the nursing shortage, nurses are leaving the profession; especially newly graduated nurses. Nursing shortage is not always a matter of shortage of individuals with nursing qualifications, but individuals who do not want to work as nurses in healthcare organizations. Attracting and retaining new nurses in the working life and in the nursing profession is one of the main issues needing solution in healthcare organizations worldwide.

It takes almost a year of the nurse to achieve a sufficient level of professional confidence. The first twelve months encompass a wide range of emotional, intellectual, physical, socio-cultural, and developmental tasks, which in turn affect the nurse’s personal and professional growth and future. Especially newly graduated nurses may feel a sense of groundlessness and reality shock. According to numerous studies structural empowerment, better working conditions and authentic leadership are significantly related to job and career satisfaction and turnover intentions among new nurses.

Orientation programs add novice nurses’ ability to perform prescribed duties and increase their confidence, competence and job satisfaction. The main goal of an orientation program is to produce nurses who are as competent as possible.

Competence develops over time as the nurse progresses from a newly graduate to a proficient nurse. Along with orientation program, work environment, experiences and opportunities, as well as personal characteristics, motivation, and theoretical knowledge influence the competence development. A competent nurse is confident in his or her abilities to perform given duties and performs holistic and safe care with his or her patients.
Newly graduated nurses’ competence and personal empowerment

Liisa Kuokkanen, PhD, RN, Principal Lecturer, Helsinki Metropolia University of Applied Sciences; Riitta Meretoja, PhD, RN, Development Manager, HUS; Hannu Isoaho, Statistician, Statcon Ltd; Olivia Numminen, PhD, RN, Clinical Researcher, HUS; Helena Leino-Kilpi, Professor and Chair, Department of Nursing Science, University of Turku

Aim: The purpose of the study was firstly to examine the relationship between nurse empowerment and competence, and secondly, which variables explained empowerment most significantly.

Background: Nurse competence and its relationship with empowerment has been studied only to a limited degree.

Methods: Cross-sectional survey data were used and analyzed statistically. A total of 305 nurses returned the questionnaire. Nurse Empowerment was measured using the 19-item Qualities of an Empowered Nurse Scale (QEN-S) based on five categories representing moral principles, personal integrity, expertise, future-orientedness and sociability. Nurse Competence was measured using the 73-item the Nurse Competence Scale (NCS) organized into seven categories: helping role, teaching-coaching, diagnostic functions, managing situations, therapeutic interventions, ensuring quality, and work role.

Main results: Nurse competence had a clear correlation between all nurse empowerment (QEN) - categories. Empowerment and nurse competence were also associated with the quality of care in one’s own work unit.

Conclusions: Nurse competence and empowerment correlate with both quality of the nursing care and the nurses’ commitment to their personal work. According to the findings of the present study they reinforce another. Possibilities to use evidence-based knowledge of nursing care have increased significantly in recent years which in turn has contributed to the developing of the clinical work. It is of great importance to allocate resources for a nurse’s own professional development.
Nurse Competence and Ethical Climate of Work Environment

Olivia Numminen, RN, PhD, Clinical researcher, Post doc researcher, University of Turku, Department of Nursing, Helena Leino-Kilpi, RN, PhD, Professor of Nursing Science University of Turku, Department of Nursing, Hannu Isoaho, Statistician, Statcon Ltd, Riitta Meretoja, RN, PhD, Development manager, Adjunct professor, University of Turku, Department of Nursing

Abstract

Background: Nursing practice takes place in a social framework, in which interpersonal relations and environmental factors interact. The interest in the impact of environmental factors, particularly on novice nurses’ work has increased. Ethical climate of the work environment is an important environmental factor affecting nurses’ behaviour and practice. Consequently, the question arises, how the ethical climate is associated with novice nurses’ professional competence and some central work-related factors.

Purpose: This study examined novice nurses’ perceptions of the ethical climate of their work environment, and how these perceptions are associated with their self-assessed professional competence, their turnover intentions, and job satisfaction.

Method: A descriptive, cross-sectional, correlational design was used. Data were collected from 318 novice nurses and analysed using SPSS (19.0) software. Descriptive statistics’ frequency, mean, range and standard deviation were used in summarizing the data. Inferential statistics’ analysis of variance, Pearson’s correlation coefficient, and General Linear Model (GLM) multivariate analysis were used to estimate differences between nurse groups, and associations between ethical climate, professional competence, and work-related factors.

Results: Novice nurses’ perceptions of the ethical climate was positive. Most positive perceptions were related to peers and patients, and least positive to hospitals and managers. Nurses at a higher competence level, nurses who had intention to stay in their current job, nurses who were satisfied with their job orientation and quality of care, perceived the ethical climate significantly more positively than nurses at a lower competence level and who had negative attitudes towards work related factors.

Conclusions: Positive perception of one’s own professional competence, low turnover intentions, and all around job satisfaction are associated with a positive perception of ethical climate. Nursing management should acknowledge their role in creating positive ethical climates and to understand its association with competence and work-related environmental factors.

Keywords: Ethical climate, nurse competence, novice nurses, multivariate analysis
The purpose of the study was to describe the self-evaluated professional competence and work environment of newly graduated nurses and the association between them. The target group comprised nurses graduated in November 2011-October 2012 (N=1050). The sampling was taken from the member registers of Tehy (The Union of Health and Social Care Professionals) and of The Finnish Nurses Association.

The data were collected by an electronic questionnaire. Professional competence was evaluated by the Nurses Competence Scale© (NCS, Meretoja 2003). NCS consists of seven subcategories: helping role, teaching-coaching, diagnostic functions, managing situations, therapeutic interventions, ensuring quality and work role, and of 73 items. Professional work environment was evaluated by the Practice Environment Scale of the Nursing Work Index© (PES-NWI, Lake 2002). PES-NWI consists five subcategories: nurse participation in hospital affairs, nursing foundations for quality of care, nurse manager ability, leadership and support of nurses, staffing and resource adequacy, and collegial nurse-physician relations, and of 31 items. The response rate was 30% (n=318). SPSS was used in the data analysis.

The newly graduated nurses evaluated their professional competence overall and in all subcategories at a high level. They perceived that they were most competent in the categories of helping role, diagnostic functions and managing situations and least in the categories of ensuring quality and therapeutic interventions. Nurses perceived their work environment overall and in all categories positive except in staffing and resource adequacy. Professional work environment categories of nurse participation in hospital affairs, nursing foundations for quality of care, nurse manager ability, leadership and support of nurses and collegial nurse-physician relations correlated with the overall competence.

Nursing management can utilise the findings through supporting the development of newly graduated nurses’ professional competence in health care organizations so as to ensure the quality and safety of nursing care and to increase the attractiveness of work environments.
Nurse competence in a psychiatric setting

Anja Hottinen, RN, PhD; Taina Ala-Nikkola RN, MNSc, PhD-student; Raija Kontio, RN, PhD; Riitta Meretoja RN, PhD, Docent, Development Manager Hospital District of Helsinki and Uusimaa; University of Turku; University of Helsinki, Finland

Background and purpose: The psychiatric care system has faced changes in recent decades. Many countries – including Finland - have moved away from inpatient hospital care to outpatient services. On that account, there is a demand for studying the nurse competences according to that reform. Identification of competences is essential in high-quality, safe and cost-effective mental health nursing care. There is little research of the overall level of competences and analysis of competence profiles in psychiatric setting. This study aimed to explore nurses’ professional competences and the variations of them in different kind of psychiatric care. In this presentation, some preliminary findings of the project will be presented.

Method: The presentation is based on ongoing project where the data are being collected from psychiatric units of one Finnish University Central Hospital. Data were collected in 2013 from mental health nurses’ and their managers’ using an on-line survey. The instrument used was the Nurse Competence Scale (NCS).

Results: The data will be analyzed with descriptive statistics. The following questions will be answered:
1. What is the level of nurses’ professional competences in psychiatric care?
2. What are the differences of nurses’ professional competences in different kind of psychiatric units?
3. Do nurses’ quality and frequency of action correlate with each other?
4. Do nurses’ and their managers’ self-assessments correlate with each other?

Discussion/Conclusions: The results of this study are useful for allocation of mental health resources by developing the efficient use of nurses, targeted continual learning and educational interventions in psychiatric care. There are new demands for nurse competences according to the psychiatric care reform. Based on the preliminary findings, some suggestions for the future development needs will be presented.
Associations between nurse competence, good nursing care, and empowerment in Lithuanian nurses

Natalja Istomina, PhD, RN, Klaipėda University, Lithuania; University of Turku, Finland

**Background:** The associations between the nurse perceptions of the quality of nursing care and competence as well as the associations between the quality of nursing care and nurse empowerment have been explored and presented previously: the competence of nurse should be ensured and increased for achieving high quality nursing care and empowerment is important for increasing the quality of nursing care. However, the associations between the quality of nursing care, competence and empowerment of nurse were not evaluated.

**Purpose:** of study was to evaluate the associations between nurse perceptions of quality of nursing care, competence and empowerment of nurse.

**Methods:** The multi-central descriptive study design was conducted. Seven largest Lithuanian hospitals and 11 abdominal surgical units of those hospitals were involved in the study. The purposive sampling of surgical nurses (n=218) from abdominal surgical units during November 2007 - January 2008 was selected. Three instruments, originally developed in Finland, were used: Good Nursing Care Scale GNCS-N (Leino-Kilpi et al. 1994), Nurse Competence Scale NCS (Meretoja et al. 2004), Nurse Empowerment Scale NES (Kuokkanen et al. 2003). Statistical analyses were performed (SPSS, version 12.0). The study was conducted according to all ethical standards.

**Results:** The associations between nurse competence, good nursing care, and empowerment were identified, and all the correlations were positive. The nurses who were competent in their work role were also more empowered at their work and higher evaluated the quality in preconditions (r=0.367, p<0.01) and task-oriented activities (r=0.343, p<0.01), than the nurses who rated their competence lower. The more competent and empowered nurses evaluated the preconditions for nursing care (r=0.245-0.460, p<0.01) higher than the less competent and empowered nurses.

**Conclusion:** A competent and empowered surgical nurse tended to deliver a high level quality of abdominal surgical nursing care for patients.
Nurse competence from the perspective of the practising nurse

Jaana Kotila, RN, MNSc, Clinical Nurse Specialist, Helsinki University Hospital, Finland

**Background:** Since 2008 nurse’s professional competence evaluation has been one of the leading methods in developing nursing knowledge in the Neurosurgical ICU. Self-evaluation has been the basis for their professional development and it has offered nurse managers tools for development discussions. It has also been used to ensure quality of care in the ward. From 2012 we have conducted additional peer evaluations amongst the proficient nurses.

**Aim:** The current paper describes nurses’ competence assessed by means of self-evaluation as well as by peer evaluation from the perspective of the practising nurse.

**Methods:** The study is based on Nurse Competence Scale designed by Meretoja (2003). Self-evaluations were performed in 2009 and 2013, additional supervision evaluations in 2009 and peer assessments 2012. NCS evaluation is used as part of a continuing professional development. In addition to the NCS, proficient nurses have provided their opinions for self and peer evaluation as a method for continuing education.

**Results:** In general, the professional competence by a nurse’s peer was assessed higher than that of self-assessed. The results indicate that self-evaluation assists nurses in maintaining and improving their nursing practice skills. From the perspective of the practising nurses, the NCS evaluation is a helpful tool to identify one’s strengths and areas for further development. Nurses felt that competence recognition offers them a motivational way to produce quality care and ensure patient safety. Clinical peer evaluation has also increased collegial support among nurses. Practising nurses felt that self-evaluation constitutes a basis for peer evaluation and peer evaluation then allows nurses to give and receive professional and personal support to promotes professional development. Peer evaluation works like a mirror in nursing indicating a need for change and providing alternatives to perform quality care.

**Conclusions:** The results seem to provide evidence of the usefulness of self-evaluation and peer assessment for the knowledge development in nursing. Nowadays, the NCS evaluation is a permanent practice within the department of neurosurgery in the Helsinki University Hospital.
Newly graduated nurses’ critical thinking and professional competence

Sigrid Wangensteen, PhD, Study program manager, Gjøvik University College, Norway

**Background:** Newly graduated nurses have to meet expectations from health care authorities, health professionals, nurse leader, nurse colleagues and from themselves. The complex healthcare in homes and hospitals requires highly educated nurses. The ability to think critically is described as reducing the research-practice gap and fostering evidence based nursing.

**Purpose:** The purpose was to describe Critical Thinking by means of the California Critical Thinking Disposition Inventory among newly graduated nurses in Norway, and to study whether background data had any impact on critical thinking dispositions. Furthermore to describe newly graduated nurses’ perception of competence and to identify possible predictors influencing their perceptions.

**Method:** A cross-sectional design was chosen. Data were collected from October 2006 to April 2007 by means of The California Critical Thinking Disposition Inventory, Research Utilization Questionnaire and Nurse Competence Scale. Response rate 33% (n=620). Drop-out analysis was carried out. Non-parametric and parametric analyses were performed in SPSS. Multiple linear regression analyses were performed.

**Results:** Nearly 80% of the respondents reported a positive inclination towards critical thinking. The highest mean score was found for Inquisitiveness and lowest for Truth-seeking. The respondents assessed their overall competence level as “good”, and assessed themselves most competent in providing ethical and individualized nursing care. They assessed themselves least competent in evaluating outcomes and further development of nursing care. Critical thinking was the most prominent predictor for perception of competence in all competence categories and for the total score.

**Conclusion:** The findings indicate that there is a relationship between Critical Thinking, the use of research in clinical practice and perception of competence. Critical thinking – the most prominent predictor for perception of competence – indicate that it is important to develop students’ CT abilities during nursing education to strengthen the newly graduates’ perception of nurse competence.
Nurse Competence – thoughts for the future

Helena Leino-Kilpi, PhD, RN, FEANS
Professor and chair, University of Turku, Department of Nursing Science
Part-time Nurse Director, Turku University Hospital

In nurse competence, there are both stable and changing elements. For considering the nurse competence in future, following dimensions are relevant:

- What is competence – CONCEPT DEFINITION.
- How can the level of competence to be measured/defined – MEASUREMENT.
- How can the level of competence to be improved - IMPROVEMENT?
- What meaning/correspondence the level of competence has in connection with the background factors and other quality-related factors – FACTORS INFLUENCING/SUPPORTING?

Definition of the competence is depending on the changes in the structure of the population, possibilities for solving health problems, increasing role of patients/population and role of nursing/health care. Based on these, at least following competence areas - added with the existing ones - are important in future:

A) Respect-competence. This means the improvement and manifestation of ethics.

B) Uncertainty- competence. This means competence of living with different uncertainties.

C) Logic-competence. This means management of logical argumentation, evaluation and implementation.

D) Cognitive-competence. This means management of cognitive structuring, knowledge transfer, modifications and testing.

E) Outcomes-competence. This means argumentation based on outcomes, circumstances and consequences of the actions.

F) Joy-competence. This means, that for standing in variating situations, with different challenges, one needs to have possibilities for joy.

Competence has been emphasized in the evaluation of the quality of nursing care, in management and education. In nursing education, for example, there are normative elements for improving the competence (e.g. EU Directives) and also activities for improving the competence (e.g. Kajander-Unkuri et al 2013). Competence, however, is changing and responding also to the needs of the societies - and as such - it is always under the development. Future thoughts are as important as evaluation of the current level of competence.

## List of Participants

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NURSE COMPETENCE SCALE, PUBLICATIONS 2002 - 2014

PEER REVIEWED SCIENTIFIC PUBLICATIONS (n = 40)


Stobinski J. Competency and work environments among military and civilian perioperative registered nurses: a predictive model. Faculty of the College of Health Sciences of TUI University. Academic Dissertation 2011


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