



# A Network for Eating and Nutrition as a platform for cooperation over the organisational borders between healthcare sectors in Sweden

Zada Pajalic<sup>1, 2\*</sup>, Albert Westergren<sup>2</sup>

<sup>1</sup>Faculty of Health Sciences, Department of Health, Nutrition and Management, Programme for Midwifery, Oslo, Norway and Kristianstad University, Sweden, <sup>2</sup>The PRO-CARE Group, School of Health and Society, Kristianstad University, Kristianstad, Sweden, [albert.westergren@hkr.se](mailto:albert.westergren@hkr.se), Höskolan Kristianstad 291 88 Sweden

## ABSTRACT

**Introduction:** Requirements to implement scientific knowledge in practice within the Swedish health and social care sectors have increased during the last decades. One of these networks was the Network for Eating and Nutrition that began in 2003. The aim of this study was to retrospectively evaluate how the Network for Eating and Nutrition has functioned during a period of ten years and in what way it has affected work practice.

**Methods:** This is a descriptive qualitative study. Data sources for this study were meeting records collected over 10 years and two evaluation surveys (at five and 10 years). Participants were members of the Network for Eating and Nutrition (n=12 at five years and n=10 at 10 years). The manifest qualitative content analysis was used.

**Results:** The Network for Eating and Nutrition was seen as offering support for personal and organisational knowledge development. Further aspects of support from the workplaces of the members and the significance for the work places were described. Further the Network for Eating and Nutrition reached out to care receivers by using specifically tailored education programmes and material. The Network for Eating and Nutrition results and recommendations were described as important references for the development of nutrition routines.

**Conclusion:** Networks between organisations with different professional backgrounds can form a basis for knowledge exchange both for focus on the specific topic but also on how to work with quality improvement, i.e. evidence based practice.

**Keywords:** network; research and development

## INTRODUCTION

health and care systems in countries with welfare programmes and systems are going through system changes due to increased pressure for cost control, efficiency and analysis of the effects of implementing scientific knowledge to practice (1, 2). One reason

\*Corresponding Author: Dr. Zada Pajalic PhD Associated Professor Faculty of Health Sciences, Department of Health, Nutrition and Management, Programme for Midwifery, Oslo, Norway and Kristianstad University, Sweden. E-mail: [zada.pajalic@hioa.no](mailto:zada.pajalic@hioa.no)

Submitted: December 06 2014 / Accepted: December 15 2014



for this is ongoing demographical change, i.e., the increase of the aging population and age related needs for the health and care system's service (3). To deal with these complex needs, that now reach over organisational boundaries, networks have emerged as a solution to link across the boundaries (4).

Networks in the Swedish health and social care foster innovation and new ways of working by involving the whole health community in knowledge sharing and development of practice (5). These networks were initiated as a solution to deal with complex problems over organisational borders and to support practitioners in incorporating evidence based knowledge (6). Networks are interacting and non-linear systems that in practice create the sharing of knowledge and organisational culture minimise organisational barriers and support development in the practice. The knowledge development is a process formed through dialogue in both directions among practitioners and social and care consumers (1,7).

The networks in the public sector are complex, as common mechanisms for the delivery of public services and the advantage of these networks is that many of the members in the networks are employed by the organisations that build the networks. The effectiveness of these networks depends on their focus on community-level goals, not only their focus on client and public goals (8-10). Further, networks can be important contexts in which to set agendas that imply sustained, creative and systematic ways to work that are based on evidence based knowledge (11). As an important form of multi-organisational governance the networks enhance learning, efficient use of resources, increased capacity to plan for, and address complex problems, greater competitiveness and better service for clients and consumers (9).

Networks have been described as one way to go in the implementation of innovative methods for dealing with complex issues in the social care and service sector. Collaboration through a network structures and establishes an innovative response towards dealing with outcomes and processes based on new ways of working. The involvement of policy makers in these networks can maximize the benefits of unique mechanisms. Networks provide a way of dealing

with problems and provides solutions by bringing systemic change in traditional methods of knowledge development and intervention (6). The network is a construction of critical knowledge mass by the involvement of heterogenic knowledge that can enable improvement of health and care services (12).

This study provides new information about a network entitled, Network for Eating and Nutrition (NEN), for use as a platform for cooperation over the organisational borders in healthcare sectors in Sweden. The study will, hopefully, give a better understanding of the NEN's influence on work practice and contribute towards gaining new knowledge that can highlight the networks benefits on practice, nationally and internationally, by gaining insights into how the NEN has functioned during the ten years it has been in operation.

The aim of this study was to retrospectively evaluate how the Network for Eating and Nutrition (NEN) has functioned during a period of ten years and in what way it has affected work practices.

## METHODS

### Context

The NEN began in 2003 and includes members from six municipal primary care centres, two hospitals and one university in the north east of the Swedish province of Scania. In connection with the start-up of the network, members had the opportunity to design the network's work form, i.e. goals for the network and common ethical values and to primarily draw upon organisational differences and common problems. Common problems became the basis for further work guided by the approved ethical values. In 2004, joint guidelines were drawn up and developed regarding how to detect those at risk for malnutrition, which in 2005, contributed as input to the first large scale point prevalence study in Sweden on eating and nutrition (13). This study was followed up by two further studies in 2007 and 2009 that showed some improvement in nutritional care following an educational intervention (14-16). One indicator of success appeared to be due to the relatively fast feedback to each unit that had the ability to compare its performance with their own community or hospital (14).

## PARTICIPANTS

Today the NEN has about (n=24) members divided into two groups. At different times, a total of 22 members took part in a survey about their experiences of being a member of the NEN. The first survey was made after five years of NEN operation, where 12 members participated (average age was 50 years) and in the second survey that was made after 10 years where 10 members participated (average age was 42.5 years). Due to the fact that participation in these two surveys was anonymous, it is not possible to state to what extent it was the same persons who had participated in both surveys. The professions represented in the survey after five years were: six registered nurses, one head of unit, three dieticians, and two university lecturers, and their average length of membership in NEN was 3.5 years. In the survey taken after 10 years the following professions participated: one head of a diet unit, two university lecturers, four dieticians and three registered nurses and their average length of membership in NEN was 6.2 years.

## DATA COLLECTION METHODS

Data for the present study was taken from meeting records collected over 10 years (n=20, about 250 pages) and evaluations of the network after 5 and 10 years were performed as surveys with open questions. The surveys were sent to all NEN members.

Questions included in the 5 and 10 year surveys were focused on followed:

Age, profession and working place?

For how long have you been a member of NEN?

Describe your general experiences of being a member of NEN?

Do you experience support from your workplace regarding your membership in NEN and attendance to the NEN meetings?

What is your reflection of being a member in NEN from the perspective of your profession?

What significance has NEN for your work?

Do you have suggestions for new working forms and if yes specify?

Does NEN have any significance for how you work - if yes specify how? - if no specify why?

Do your colleagues know about your activity and membership in NEN, its existence, and working forms (if yes specify - if no describe why not)

Do you consider that NEN work reaches out to care receivers? (If yes specify- if no describe why not)

Is there something more in relation to NEN that we didn't ask about that you want to highlight?

The written text from the meeting records and surveys was analysed by using manifest qualitative analysis (17). The analyse process began with reading all the answers to get an overall impression of content, in the next step the text was structured into groups and then the groups in categories.

## ETHICAL CONSIDERATIONS

The present study was performed in accordance with the Helsinki Declaration and The Swedish Research Council directives (18, 19). All participants in the study received detailed information about the study and confirmation of their right to cancel their participation at any time without any consequences for them. Formal approval was not needed for this type of study, in accordance with Swedish law (20). All participants gave their informed consent following oral and written information regarding the aim and procedures of the study. No personal information that would allow any data to be linked to individual participants was recorded.

## RESULTS

### The NEN as support for personal knowledge development

The majority of participants described their membership in NEN as positive. They described NEN as a good platform for increasing and supporting individual knowledge development. As an example, they described that it was enriching to gain insight into how other colleagues work with nutrition at hospitals, municipalities and in primary care settings. Further they highlighted that it was valuable to get news of developments in nutrition and to be updated in all types of research and development as all members were willing to share their experiences with each other. The NEN was described as a network with various perspectives and possibilities to

create guidelines, target documents or other solutions that were positive for patients, care units and food production kitchens. Many of the participants described their membership as giving them a feeling of being involved in something important and that membership could give them influence at various levels from organisational to individual. One of the participants expressed it as: *“I learn new things the whole time through this network, together with good colleagues who are passionate about nutrition”*.

### **The NEN as a support for organisational knowledge development**

From a professional perspective many experienced that it was especially positive to meet other professionals and to unite in a common quest for the patients or care receivers best. The nurse was described as having a central role in this work but needed help from others including support from another professional's competence. Involvement in the NEN was described as offering a broader understanding of the possibilities of other professionals and the complexities to be found within various working places. The exchange of experience was described as invaluable and it was noted that if all professions had attended NEN network meetings they could become excellent spreaders of knowledge within their own working places. One participant described it as: *“My membership in the NEN gives me support and offers suggestions for proposals for procedures that I can present to the patient responsible doctor as we do not have a dietician in our municipality”*. Further the participants described membership as an important forum offering the possibility to highlight nutrition from the patient's perspective as well as overall nutrition routines. The importance of wide representation by many professions was highlighted and as well as the co-operation with professionals from the university. One of the participants described the NEN meetings as follows: *“I think that it is positive that we have a short round where everyone talks briefly about what is going on regarding nutrition and eating at their own workplace and gives information about actual news. In addition, I think that it is positive that the network uses information letters that are distributed with meal boxes”*. It was also described as important that all organisations are represented, i.e. municipalities, hospitals, primary health care

and the university. The members emphasised that there are some professionals missing in the membership of the NEN: for example, public home care officers, medically responsible nurses, and unit managers and that their perspective is missing. Further many of the participants agreed that the NEN has come a long way and managed to achieve a wider composition and is seen as an inspiration source for the whole country to form similar networks. One of participants expressed it as: *“I believe that the NEN should be a player who actively participates in the design of nutrition work and be an obvious referral body for nutritional issues”*.

### **Workplace support to NEN members and its significance for the working place**

Several participants expressed that they have the support of their managers. However one of them expressed that her manager considered that her membership was not consistent with a district nurse's area of responsibility. Support from the managers for NEN members was described as a confirmation that nutrition was important, as also when the NEN is used as a reference for the development of nutrition routines. Some of the participants expressed that they have support from their management but that it is not always easy because they have an enormous work load. One of them expressed it as: *“In contrast, my participation is questioned by colleagues since a whole afternoon disappears each time there is a meeting”*. One of the participants described that the education material produced by NEN was useful: *“The NEN's documents are on our webpage”*. Some participants described that they often use the part of NEN's handbook related to eating and nutrition to find various alternatives or suggestions for how to help their care receivers towards better nutrition. Further, membership in the NEN offers knowledge that can be used in education and in research. To gain insight into how others work with nutrition through membership of the NEN is inspiring for both the members and other organisations. One of the participants expressed it as: *“It is good to be able to coordinate different professions who all think that nutrition is important and simultaneously obtain both municipal and county points of view on issues”*. Further, participants described how they followed the NEN's recommendations and used the

information materials they produced. One of the participants described how they had implemented all the education material developed by the NEN at her workplace.

### **The NEN reaches out to care receivers**

The representativeness of all the professions involved in nutrition was highlighted and their involvement was described as important for dissemination of knowledge into the workplace. Further, knowledge was disseminated through education programmes, information material and decision-making. One participant highlighted the importance of the large surveys of nutrition and nutritional care that have been conducted in cooperation with the university. The university was described as an important partner for the network, and the surveys as being important for the work on quality improvements. The workplaces with good nutrition routines should be highlighted as being good models and public home care officers, as well as unit managers, should be an asset for the NEN. Furthermore, one of the participants suggested that all members of the NEN should attend nutrition conferences and also work more in project form with focus on reconnecting the results of projects and surveys. The NEN can be used as a platform for discussions regarding how the various workplaces can implement national guidelines and regulations from the Swedish National Board of Health and Welfare (Socialstyrelsen) and the National Food Agency (Livsmedelsverket) with other advice about nutrition.

## **DISCUSSION**

The present study showed that the NEN was seen as: support for individual and organisational knowledge development, that the public health care and social organisation supports the NEN and that it is an important reference for the development of nutrition routines. Further the NEN reaches out to care receivers through specifically tailored education programmes and material. This is in line with results from Tsai's (2001) in which the author argues that networks produce more innovations and enjoy better performance that provides access to new knowledge. However this also depends on motivation, absorptive capacity and the ability to successfully

use new knowledge, and the networks position. A network's position can represent various opportunities to have access to new external information and this information is necessary to generate new ideas for organisational development. Interaction between absorptive capacity and the position of a network can have significantly positive effects on practice, as indicated in this study. This position can promote social learning that links an organisation and its members and enables them to work collectively (21). Correspondingly the networks were further described by Wasko & Faraj (2005) as social constructions based on common interests that make it possible to focus on problems of practice and exchanges of ideas with others. Further they found that NEN network members are ready to add their knowledge when they recognize that it improves their professional status when they have experience to share and when they are organisationally rooted in the network (22).

A network is the key for the transmission of evidence into practice and was described as important for its own and its organisational knowledge development. Clinicians as members in a network combine different types of information taken from research to develop their practice. They interact with colleagues and patients and other sources of tacit knowledge. They use networking as a part of their professional development by using and deriving knowledge collectively (23). Heaney and Israel (2002) highlighted the point that networks have a powerful influence on the health and care sector in various ways including facilitation and exchange and support to all involved (24). For knowledge development it is important to highlight links between the culture in an organisation and its own knowledge.

Questions arise, for instance, is knowledge worth managing? What is the relation between an individual's and an organisations' knowledge? How effective can an organisation be at creating, sharing and applying knowledge and how should new knowledge be created, legitimised and distributed? (25). For example, multilevel organisations for regional innovation need, in an interactive way, to position specific local "sticky" knowledge resources as well as external world-class "ubiquitous" knowledge related to strength effectiveness and successful high quality practice development (26). Networks

encourage the sharing of knowledge by face-to-face interaction for transferring tacit knowledge. Further there is need to share knowledge across organisational boundaries and communities (27). Nicolini et al (2008) highlighted that knowledge development in clinical practice needs to understand the patients' role and assumptions in health care as well as using both researchers and practitioners knowledge as linear transfer. To achieve this, tailored policies of a characteristic professional and local nature of knowledge in the health and care sectors are required (28).

The cooperation with the University and the involvement of researchers in the network was described as a strength. Cooke (2005) highlighted the importance of building research capacity, achieved and shaped by the following principles: development of skills and confidence, support for linkages and partnerships, ensuring research close to practice, developing appropriate distribution, investing in infrastructure and building elements of sustainability and continuity. Each principle should operate at an individual, team and organisational level. This may contribute to establishing knowledge that is research capacity building effective in the health and care sector (29). Networks between organisations, and with different professional backgrounds, can form a basis for knowledge exchange and knowledge development both with focus on the specific topic but also on how to work with quality improvement, i.e. evidence based practice. The members inspire others in the NEN network by giving examples from their own practice. Furthermore, the network has the acceptance and power to influence the organisation at large through guidelines and recommendations.

## CONCLUSION

The NEN is important for knowledge development at individual and organisational levels in the Swedish health and care sector. The present study and results from other studies highlight the importance of support from the side of the involved organisations managements, i.e. new knowledge from the NEN should be an important reference for the development of nutrition routines through tailored education programmes and materials and the making of policies.

## COMPETING INTERESTS

The authors declare that they have no competing interests or financial interests.

## ACKNOWLEDGEMENT

The publications fee and language review for the study was supported by the Faculty of Health Sciences, Department of Health, Nutrition and Management, Programme for Midwifery, Oslo, Norway. Further study was supported by the Swedish Research Council, The Kamprad Family Foundation for Entrepreneurship and Charity, and the Vårdal Foundation. The authors wish to thank all of the participating respondents in the NEN for their cooperation.

## REFERENCES

1. Granerud A, Severinsson E. Knowledge about social networks and integration: a co operative research project. *Journal of Advanced Nursing*. 2007;58(4):348-57.
2. Viens C, Lavoie-Tremblay M, Leclerc MM, Brabant LH. New approaches of organizing care and work: giving way to participation, mobilization, and innovation. *Health Care Manag (Frederick)*. 2005 Apr-Jun;24(2):150-8.
3. Russell J, Greenhalgh T, Boynton P, Rigby M. Soft networks for bridging the gap between research and practice: illuminative evaluation of CHAIN. *BMJ*. 2004;328(7449):1174.
4. Johansson R, Borell K. Central Steering And Local Networks: Old-Age Care In Sweden. *Public Administration*. 1999;77(3):585-98.
5. Johansson Y. Knowledge networks and evidence-based practice: An action reserach approach: Lunds University, Sweden; 2013.
6. Keast R, Mandell MP, Brown K, Woolcock G. Network structures: Working differently and changing expectations. *Public administration review*. 2004;64(3):363-71.
7. Addicott R, McGivern G, Ferlie E. The distortion of a managerial technique? The case of clinical networks in UK health care. *British Journal of Management*. 2007;18(1):93-105.
8. Provan KG, Kenis P. Modes of network governance: Structure, management, and effectiveness. *Journal of public administration research and theory*. 2008;18(2):229-52.
9. Provan KG, Fish A, Sydow J. Interorganizational networks at the network level: A review of the empirical literature on whole networks. *Journal of management*. 2007;33(3):479-516.
10. Provan KG, Milward HB. Do networks really work? A framework for evaluating public-sector organizational networks. *Public administration review*. 2001;61(4):414-23.
11. O'Toole Jr LJ. Treating networks seriously: Practical and research-based agendas in public administration. *Public administration review*. 1997:45-52.
12. Pajalic Z, Skovdahl K, Westergren A, Persson L. How the professionals can identify needs for improvement and improve Food Distribution service for the home-living elderly people in Sweden-an action research project. *Journal of Nursing Education and Practice*. 2013;3(8):p29-40.
13. Westergren A, Lindholm C, Axelsson C, Ulander K. Prevalence of eating difficulties and malnutrition among persons within hospital care and special accommodations. *J Nutr Health Aging*. 2008 Jan;12(1):39-43.
14. Westergren A. Action-oriented study circles facilitate efforts in nursing

- homes to "go from feeding to serving": conceptual perspectives on knowledge translation and workplace learning. *Journal of aging research*. 2012;2012:627371.
15. Westergren A, Axelsson C, Lijla-Andersson P, Lindholm C, Petersson K, Ulander K. Study circles improve the precision in nutritional care in special accommodations. *Food Nutr Res*. 2009;53.
  16. Westergren A, Hedin G. Do study circles and a nutritional care policy improve nutritional care in a short- and long-term perspective in special accommodations? *Food Nutr Res*. 2010;24(54).
  17. Krippendorff K. *Content analysis: an introduction to its methodology*. Thousand Oaks, Calif.: Sage; 2004.
  18. Medical Association of Declaration of Helsinki. Medical Association Declaration of Helsinki: ethical principles for medical research involving human subject [<http://www.wma.net/en/30publications/10policies/b3/>] Ethical [cited 2014].
  19. Vetenskapsrådet. - The Swedish Research Council: en samlade kraft för svensk grundforskning i världsklass. Stockholm: Rådet; 2003.
  20. The act concerning the ethical review of research involving humans. Lag om etikprövning av forskning som avser människor SFS 2003:460 (The act concerning the ethical review of research involving humans) [[http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Lag-2003460-om-etikprovning\\_sfs-2003-460/](http://www.riksdagen.se/sv/Dokument-Lagar/Lagar/Svenskforfattningssamling/Lag-2003460-om-etikprovning_sfs-2003-460/)].
  21. Tsai W. Knowledge transfer in intraorganizational networks: Effects of network position and absorptive capacity on business unit innovation and performance. *Academy of management journal*. 2001;44(5):996-1004.
  22. Wasko MM, Faraj S. Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS quarterly*. 2005;35-57.
  23. Gabbay J, May AI. Evidence based guidelines or collectively constructed "mindlines?" Ethnographic study of knowledge management in primary care. *BMJ*. 2004;329(7473):1013.
  24. Heaney CA, Israel BA. Social networks and social support. *Health behavior and health education: Theory, research, and practice*. 2002;3:185-209.
  25. David W, Fahey L. Diagnosing cultural barriers to knowledge management. *The Academy of management executive*. 2000;14(4):113-27.
  26. Asheim BT, Isaksen A. Regional innovation systems: the integration of local 'sticky' and global 'ubiquitous' knowledge. *The Journal of Technology Transfer*. 2002;27(1):77-86.
  27. Swan J, Newell S, Scarbrough H, Hislop D. Knowledge management and innovation: networks and networking. *Journal of Knowledge management*. 1999;3(4):262-75.
  28. Nicolini D, Powell J, Conville P, Martinez-Solano L. Managing knowledge in the healthcare sector. A review. *International Journal of Management Reviews*. 2008;10(3):245-63.
  29. Cooke J. A framework to evaluate research capacity building in health care. *BMC Family practice*. 2005;6(1):44.