Original Article

Challenges and Barriers in Developing the Division of Labour between Nurses in a Finnish Acute Hospital

Paivi Lavander, RN, MHSc, Doctoral Student

Research Unit of Nursing Science and Health Management, Faculty of Medicine, University of Oulu. Senior Nursing Officer, Oulu University Hospital, the Northern Ostrobothnia District, Finland

Leena Turkki, RN, PhD, Docent

Professor, Head of Health Management, Research Unit of Nursing Science and Health Management, Faculty of Medicine, University of Oulu, Finland

Marjo Suhonen, RN, PhD, Docent

University lecturer, Research Unit of Nursing Science and Health Management, Faculty of Medicine, University of Oulu. Medical Research Group Oulu, Finland

Merja Merilainen, RN, PhD

Senior Nursing Officer, Oulu University Hospital, the Northern Ostrobothnia District, Finland. Medical Research Group Oulu, Finland

Correspondence: Paivi Lavander, Oulu University Hospital, BOX 20, 90029 OYS, Finland.

E-mail: paivi.lavander@ppshp.fi

Abstract

Background: Ageing populations with high demands for healthcare require changes in nursing work. The right division of labour is one of the solutions contributing to efficiency, productivity and quality in healthcare.

Objective: To determine challenges and barriers related to the development of division of labour between practical nurses and registered nurses.

Methodology: This qualitative study reports as a part of a larger study of nurses (n=260), perceptions of challenges and barriers in developing the division of labour in one hospital district in Finland. The data was derived from an open-ended question and analysed by inductive content analysis.

Results: The results showed that challenges and barriers in developing the division of labour were related to the individuals` experiences and know-how and organisational factors. The most common factors in all groups were attitudes and prejudices, concern about competence and the limits and ambiguity of division of labour.

Conclusions: The results were surprisingly similar in all groups (registered nurses, practical nurses, nurse managers). To improve productivity and quality in healthcare, we need uniform guidelines for wards, clear job descriptions, a culture of mutual respect, understanding of each group's role, information about practical nurses' education and continuous communication. Most of these issues are linked to management and its challenges.

Key words: division of labour, practical nurse, registered nurse, nurse manager

Background

There are numerous articles on the shortage of nurses written at different times and from different perspectives. The reasons for the shortage can be seen in the demographic change in most high-income countries as well as ageing nurses and nurses' intentions to leave the profession (Aiken et al., 2012; Buchan, Duffield

& Jordan, 2015). At the same time, our environment is changing and ageing populations with degenerative diseases with increasing levels of acuity are generating more demand for healthcare (Buchan & Campbell, 2013). However, healthcare funding is restricted or reduced in many countries (Buchan, 2013). All this requires change also in nursing work. The right division of labour is one of the solutions

contributing to efficiency, productivity and quality in healthcare.

The concept of division of labour is complex and difficult to define exactly. In this study, division of labour will be defined as the development of the whole working unit so that the activities and tasks will be arranged appropriately from the perspective of competence of different occupational groups (Hukkanen & Vallimies-Patomäki, 2005). The right division of labour also requires knowledge of the tasks of different occupational groups and teamwork. It is also important to clarify the barriers and challenges as regards the suitable division of labour. There are countries where this means the division of labour between qualified and unqualified staff, and countries where it concerns different groups of qualified staff.

This study focuses on Finnish healthcare and it is a part of a larger study conducted in Oulu University hospital district. The Finnish workforce in healthcare consists mainly of different levels of registered nurses and practical nurses. At the end of 2013, the healthcare sector employed 57,000 qualified nurses, midwives and public health nurses and 33,000 practical nurses (National Institute for Health and Welfare, 2017). Registered nurses' and radiographers' studies comprise 210 ECTS (European Credit Transfer and Accumulation System) and last about 3.5 years. Midwifery studies consist of 270 ECTS and last approximately 4.5 years; midwives are also qualified nurses. These groups' education takes place in Universities of Applied Sciences.

The title received on completing the studies is Bachelor of Health Care (Laurea University of Applied Sciences, 2015). Practical nursing studies are a 180 credit unit training programme and take three years to complete (The Finnish Union of Practical Nurses, 2016). However, we have as employees persons with old education completed before 1993; they are also practical nurses, and their education lasted 2.5 years, or 1.5 years if based on the matriculation examination (Finnish National Board of Education, 2016).

In the published literature, the division of labour is mainly described through roles, job descriptions, working time use, nursing activities, skill-mix or nursing duties. However, the challenges and barriers related to the division of labour often only appear between the lines in

these studies. An Australian interview and observational study aimed to explore the nature of enrolled nurses' (ENs) practice in an acute hospital setting (Milson Hawke & Higgins, 2004). The results revealed how ENs described their scope of practice, but also the expectations of registered nurses and lack of consistency in job descriptions in different wards. Thompson and Stanowski (2009) have drawn up some guiding principles for improved collaboration between nursing and support services.

To improve productivity, the following themes emerged: clear scope of practice, shared ownership, culture of mutual respect and recognition, continuous and open communication (Thompson & Stanowski, 2009). Even though the issue in their study is the cooperation between nurses and support workers, their principles might be useful when planning the division of labour between nurses. There is a lack of evidence identifying the challenges and barriers related to the development of division of labour between practical nurses (PNs) and registered nurses (RNs), and further research is needed. The current study focuses on the challenges and barriers in the development of division of labour.

Methodology

Design and sample

Research surveys were mailed to 1,989 practical nurses, registered nurses and nurse managers. Both wards and outpatient clinics were involved. The results presented in this paper focus on the open-ended question about the challenges and barriers to the division of labour.

Of the 672 participants who responded to this survey, 39% (n=260) answered the open-ended question. The sample consisted of the registered nurses' group, comprising RNs, midwives and radiographers (n=154), the practical nurses' group, comprising PNs, hospital and ambulance attendants and children's nurses from maternity wards (n=55) and the nurse managers group, comprising nurse managers and assistant nurse managers (n=51) (Figure 1).

These 260 respondents produced a total of 354 comments or descriptions for the question. Comment length varied from one word to 280 words and the medians were 29 in the practical nurses' group, 24 in the registered nurses' group and 21 in the nurse managers' group.

Data collection and ethical considerations

This study comprised a questionnaire for gathering information on the views of practical nurses, registered nurses and nurse managers on practical nurses' work activities in adult somatic wards, and included an open-ended question related to the development of division of labour. The question was: What kind of challenges and barriers do you see in developing the division of labour between registered nurses and practical nurses?

The study was conducted in two hospitals in the Northern Ostrobothnia Hospital District in Finland: Oulu University Hospital and Oulaskangas Hospital. This Hospital District has 944 beds and 3,200 nurses of different levels. The typical staff mix in medical-surgical wards is 75-100% RNs, with the remaining proportion

comprising PNs. Outpatient clinics have a higher RN population. Data were collected in November-December 2012, with a reminder sent once. An information letter was attached to each e-mail with a link to the questionnaire.

The study protocol was approved by the nursing director of the hospital, and as the study focused on healthcare workers, not on patients, approval by the ethics committee was not required according to the Medical Research Act (488/1999 and amendments 295/2004). The information letter attached to e-mail had a sentence indicating that participation was voluntary and the study was carried out according to the principles of the World Medical Association Declaration of Helsinki (World Medical Association Declaration of Helsinki 2000).

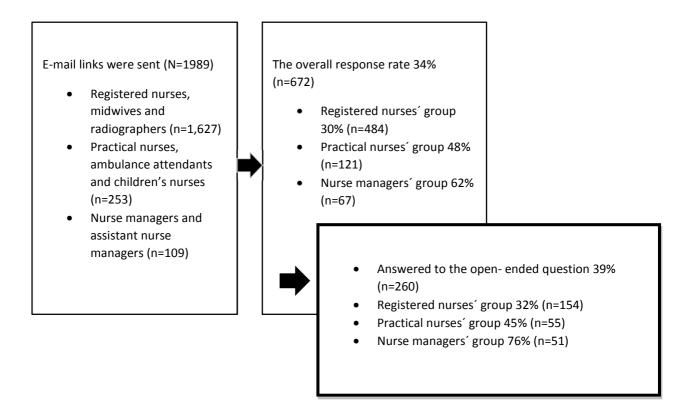


Figure 1: Participants who answered the open-ended question are part of a larger study.

Data analysis

Demographic data were analysed using SPSS version 22 (IBM Corp., Armonk, NY) and these findings were described using frequencies. Inductive content analysis designed by Elo and Kyngäs (2008) was used for qualitative data, which consisted of an open-ended question. First, all answers were read to get an overall picture of the views of different groups and to get familiar with the data. At the same time, the data was open coded. These codes were arranged in sheets and grouped into sub-categories and then further with similar content into generic categories. The generic categories were grouped together with the same principle into main categories and they were named using contentcharacteristic words: individuals' experiences, know-how and organisational individuals` factors. Finally, these main categories formed a common theme: challenges and barriers in developing the division of labour between nurses.

Results

Participant characteristics

The majority of respondents were female (PNs 85.5%, RNs 92.2%, nurse managers 91.7%). In the PN group, 25% of the respondents were 30 to 39 years and 49% were over 50 years old. They were also highly experienced, as 54% of them had over 21 years' work experience. In the RNs group the majority (31%) were aged 30 to 39 years. The majority (53%) had 5 to 20 years of work experience. Nurse managers were the oldest group, as 63% of them were over 50 years and 29% of them had 5 to 10 years' work experience as a nurse manager. In every group, most respondents worked in a ward (PNs 65.5%, RNs 39.6%, nurse managers 39%) (Table 1).

Challenges and barriers in developing the division of labour

Individuals' experiences

Individual experiences were described through attitudes and prejudices, lack of appreciation and lack of motivation and through fears. All participants expressed that there were a lot of old practices and habits and resistance to change. Practical nurses felt that there was a lot of prejudice against their competence and

experience and they also suspected that nurse managers do not want the expansion of their job description. According to nurse managers, there is resistance to change on both sides (registered nurses and practical nurses).

"This attitude is the biggest challenge. Registered nurses and managers don't want to see the extension of practical nurses' job description as a positive thing that would facilitate the work of others and ease the time pressure." (PNs' group)

"Practical nurses have resistance to new tasks." (RNs` group)

"Long traditions are barriers to the division of labour." (NMs' group)

"They (nurse managers) have done everything possible to make sure that our job descriptions are as limited as possible." (PNs' group)

From the practical nurses' perspective, the valuation of their education was weak. They felt that they were lower class persons and their skills and education were held to be suspect:

"We are considered "lower class" persons and they suspect we are not able to do things even though we have the education."(PNs' group)

Participants described fears related to an increase in workload (PNs). Basic care was also a concern (RNs, NMs), if more work was assigned to practical nurses or if basic care was transferred to registered nurses or midwives. Nurse managers also think that it would be difficult for registered nurses to give up certain tasks. This is related to the fears they reported. One nurse manager expressed concerns that registered nurses have a fear of losing tasks.

Some registered nurses thought that practical nurses were not willing to expand their job description or take care of certain tasks (interviewing the patient). They also doubted practical nurses' motivation to take on new tasks.

"They don't do things that "don't belong to them" even they can or are allowed to do them." (RNs' group)

Table 1. Sample characteristics

PNs (n=55)		RNs (n=154)		Managers (n=51)		-
Variable	n	%	n	%	n	%
Gender						
Female	47	85.5	142	92.2	44	91.7
Male	8	14.5	12	7.8	4	8.3
Age						
20-29	4	7.3	27	17.6	2	4.1
30-39	14	25.5	48	31.4	2	4.1
40-49	10	18.2	34	22.2	14	28.6
50-59	21	38.2	40	26.1	27	55.1
>60	6	10.9	4	2.6	4	8.2
Length of work experience						
<5	11	20.4	31	20.3	11	24.4
5-10	11	20.4	42	27.5	13	28.9
11-20	3	5.6	44	28.8	9	20.0
21-30	18	33.3	27	17.6	10	22.2
>30	11	20.4	9	5.9	2	4.4
Work place						
Outpatient clinic	9	16.4	22	14.3	9	22.0
Intensive care / emergency department	8	14.5	27	17.5	5	12.2
Op. theatre/delivery room/						
research unit	0	0.0	37	24.0	4	9.8
Ward	36	65.5	61	39.6	16	39.0
More than one unit	2	3.6	7	4.5	7	17.1

Number of missing responses vary per item

Table 2: Inductive content analysis of each professional group (PN = practical nurses` group, RN = registered

The old way of thinking (PN) Not as in the old days (RN) Old traditions (NM) The skills are underestimated (PN) The basic care will be forgotten (RN) The fear of increasing workload (NM) No willingness The new graduates have different capabilities (PN) Lack of education (RN) Ensuring competence (NM) The need of continuing education (PN) Need more information about the training (NM) The definition of responsibilities (RN, NM) Lack of time (PN) Limited resources (RN) The need of uniformity (RN) The roles and division of labour should be accurately recorded (NM) The roles and division of labour should be accurately recorded (NM) The payment (RN) Should be reflected in pay (NM) The skills are not utilised (PN) Attitudes or prejudices Individuals' experiences Individuals' "Know-How" Lack of motivation Responsibility Responsibility The limits and ambiguity of division of labour should be accurately recorded (NM) The roles and division of labour Should be reflected in pay (NM) The skills are not utilised (PN) Misuse	Sub-category	Generic category	Main category	Theme	
Old traditions (NM) The skills are underestimated (PN) The work comes more hectic (PN) The basic care will be forgotten (RN) The fear of increasing workload (NM) No willingness Lack of motivation The new graduates have different capabilities (PN) Lack of education (RN) Ensuring competence (NM) The need of continuing education (PN) Need more information about the training (NM) The definition of responsibilities (RN, NM) Lack of time (PN) Limited resources (RN) The need of uniformity (RN) The roles and division of labour should be accurately recorded (NM) To pay more (PN) Payment (RN) Should be reflected in pay (NM) Take work comes more hectic (PN) Lack of mapperiation Fears Individuals' "Know-How" Individuals' "Know-How" The individuals' "Know-How" Abarriers in developing the division of labour should be accurately recorded (NM) To pay more (PN) Payment (RN) Should be reflected in pay (NM)	The old way of thinking (PN)				
The skills are underestimated (PN) The work comes more hectic (PN) The basic care will be forgotten (RN) The fear of increasing workload (NM) No willingness The new graduates have different capabilities (PN) Lack of education (RN) Ensuring competence (NM) The need of continuing education (PN) Need more information about the training (NM) Lack of time (PN) Lack of time (PN) Limited resources (RN) The adequacy of staff (NM) To ostrict limits (PN) The need of uniformity (RN) The need of uniformity (RN) The need of uniformity (RN) The need of continuing education (PN) The need of continuing education (PN) Limited resources (RN) The adequacy of staff (NM) To strict limits (PN) The roles and division of labour should be accurately recorded (NM) To pay more (PN) Payment (RN) Should be reflected in pay (NM)	Not as in the old days (RN)	Attitudes or prejudices			
The work comes more hectic (PN) The basic care will be forgotten (RN) The fear of increasing workload (NM) No willingness The new graduates have different capabilities (PN) Lack of education (RN) The need of continuing education (PN) Need more information about the training (NM) The definition of responsibilities (RN, NM) Lack of time (PN) Limited resources (RN) The adequacy of staff (NM) Too strict limits (PN) The need of uniformity (RN) The pay more (PN) Payment (RN) Should be reflected in pay (NM) Individuals' experiences Individuals' experiences Individuals' experiences Individuals' experiences Challenges and barriers in developing the division of labour "Know-How" Organizational factors Organizational factors	Old traditions (NM)				
The work comes more hectic (PN) The basic care will be forgotten (RN) The fear of increasing workload (NM) No willingness The new graduates have different capabilities (PN) Lack of education (RN) Ensuring competence (NM) The need of continuing education (PN) Need more information about the training (NM) The definition of responsibilities (RN, NM) Lack of time (PN) Limited resources (RN) The adequacy of staff (NM) Too strict limits (PN) The need of uniformity (RN) The roles and division of labour should be accurately recorded (NM) To pay more (PN) Payment (RN) Should be reflected in pay (NM)	The skills are underestimated (PN)	Lack of appreciation	To Alesi des ale?		
The basic care will be forgotten (RN) The fear of increasing workload (NM) No willingness Lack of motivation The new graduates have different capabilities (PN) Lack of education (RN) The need of continuing education (PN) Need more information about the training (NM) The definition of responsibilities (RN, NM) Lack of time (PN) Limited resources (RN) The adequacy of staff (NM) Too strict limits (PN) The need of uniformity (RN) The need of uniformity (RN) The need of uniformity (RN) Too strict limits (PN) The need of uniformity (RN) The roles and division of labour should be accurately recorded (NM) To pay more (PN) Payment (RN) Should be reflected in pay (NM)	The work comes more hectic (PN)				
(NM) No willingness Lack of motivation The new graduates have different capabilities (PN) Lack of education (RN) Ensuring competence (NM) The need of continuing education (PN) Need more information about the training (NM) The definition of responsibilities (RN, NM) Lack of time (PN) Limited resources (RN) The adequacy of staff (NM) Too strict limits (PN) The need of uniformity (RN) The roles and division of labour should be accurately recorded (NM) To pay more (PN) Payment (RN) Should be reflected in pay (NM) Competence Competence Lack of motivation Individuals' "Know-How" developing the division of labour should be accurately recorded (NM) To pay more (PN) Wages Challenges and barriers in developing the division of labour should be accurately recorded (NM) Wages		Fears			
The new graduates have different capabilities (PN) Lack of education (RN) Ensuring competence (NM) The need of continuing education (PN) Need more information about the training (NM) The definition of responsibilities (RN, NM) Lack of time (PN) Limited resources (RN) The adequacy of staff (NM) Too strict limits (PN) The need of uniformity (RN) The roles and division of labour should be accurately recorded (NM) To pay more (PN) Payment (RN) Should be reflected in pay (NM)					
capabilities (PN)CompetenceLack of education (RN)Ensuring competence (NM)The need of continuing education (PN)Lack of knowledgeNeed more information about the training (NM)Lack of knowledgeThe definition of responsibilities (RN, NM)ResponsibilityLack of time (PN)ResourcesLimited resources (RN)ResourcesThe adequacy of staff (NM)The limits and ambiguity of division of labour should be accurately recorded (NM)To pay more (PN)WagesShould be reflected in pay (NM)Wages		Lack of motivation			
Ensuring competence (NM) The need of continuing education (PN) Need more information about the training (NM) The definition of responsibilities (RN, NM) Lack of time (PN) Limited resources (RN) The adequacy of staff (NM) Too strict limits (PN) The need of uniformity (RN) The roles and division of labour should be accurately recorded (NM) To pay more (PN) Payment (RN) Should be reflected in pay (NM) The need of uniformity (NM) Wages Individuals' "Know-How" Abarriers in developing the division of labour Organizational factors Wages				barriers in developing the	
The need of continuing education (PN) Need more information about the training (NM) The definition of responsibilities (RN, NM) Lack of time (PN) Limited resources (RN) The adequacy of staff (NM) Too strict limits (PN) The need of uniformity (RN) The roles and division of labour should be accurately recorded (NM) To pay more (PN) Payment (RN) Should be reflected in pay (NM) The need of continuing education (Know-How" (Know-How" developing the division of labour (Know-How") The Responsibility Responsibility Organizational factors Organizational factors	Lack of education (RN)	Competence			
Companies to the first of the					
The definition of responsibilities (RN, NM) Lack of time (PN) Limited resources (RN) The adequacy of staff (NM) Too strict limits (PN) The need of uniformity (RN) The roles and division of labour should be accurately recorded (NM) To pay more (PN) Payment (RN) Should be reflected in pay (NM)	_	Look of knowledge			
(RN, NM) Lack of time (PN) Limited resources (RN) The adequacy of staff (NM) Too strict limits (PN) The need of uniformity (RN) The roles and division of labour should be accurately recorded (NM) To pay more (PN) Payment (RN) Should be reflected in pay (NM) Resources Organizational factors Wages		Lack of knowledge			
Limited resources (RN) The adequacy of staff (NM) Too strict limits (PN) The need of uniformity (RN) The roles and division of labour should be accurately recorded (NM) To pay more (PN) Payment (RN) Should be reflected in pay (NM) Resources Organizational factors Wages		Responsibility			
The adequacy of staff (NM) Too strict limits (PN) The need of uniformity (RN) The roles and division of labour should be accurately recorded (NM) To pay more (PN) Payment (RN) Should be reflected in pay (NM) Wages Organizational factors Wages	Lack of time (PN)				
Too strict limits (PN) The need of uniformity (RN) The roles and division of labour should be accurately recorded (NM) To pay more (PN) Payment (RN) Should be reflected in pay (NM) Wages Organizational factors Wages	Limited resources (RN)	Resources			
The need of uniformity (RN) The roles and division of labour should be accurately recorded (NM) To pay more (PN) Payment (RN) Should be reflected in pay (NM) Wages Organizational factors Wages	The adequacy of staff (NM)				
The need of uniformity (RN) The roles and division of labour should be accurately recorded (NM) To pay more (PN) Payment (RN) Should be reflected in pay (NM) The fimits and ambiguity of division of labour Wages	Too strict limits (PN)				
The roles and division of labour should be accurately recorded (NM) To pay more (PN) Payment (RN) Should be reflected in pay (NM) Wages	The need of uniformity (RN)				
Payment (RN) Wages Should be reflected in pay (NM)	should be accurately recorded				
Should be reflected in pay (NM)	To pay more (PN)				
	Payment (RN)	Wages			
The skills are not utilised (PN) Misuse	Should be reflected in pay (NM)				
	The skills are not utilised (PN)	Misuse			

Individuals` know-how

Individuals' know-how comprised competence, lack of knowledge and responsibility. All participants were concerned about the competence and different capabilities of practical nurses. There are practical nurses with older, shorter education and practical nurses with current longer education. As a result, continuing education was requested. Nurse managers emphasised the importance continuing education due to the different

educational background of practical nurses. RNs brought up the lack of education, the difference between their educations and the definitions of the competence areas. They admitted that they did not know enough about the current education of practical nurses.

"The new graduates have different capabilities." (PNs'group)

"There are challenges related to the competence and how to measure the level of competence." (RNs`group)

"At the moment, the units have practical nurses educated at different stages and it is difficult to assess their competence. Recent education and long experience are not directly comparable." (NMs group)

Registered nurses and nurse managers expressed concern about the limits and definition of responsibility.

"Who will be responsible if there's a mistake?" (RNs` group)

"The responsibilities must be defined." (NMs` group)

Organisational factors

In registered nurses and nurse managers groups, the most commonly addressed factor was the limits and ambiguity of division of labour. The limits are inflexible and the units have no common guidelines. The absence of rules and instructions and an unclear division of labour came out from the data, as did the large workload and the lack of skilled nurses. Nurse managers described the current situation where the boundaries are fluid and job descriptions unclear. Common guidelines for the wards seem to be missing and nurse managers wished for identical instructions for all wards. They also expressed

that as the processes changed, the work needed to be changed as well.

"The education would enable a more comprehensive role, but they are too rigid when it comes to these limits." (PNs group)

"We need clear rules and clear roles." (RNs'group)

"The practical nurses have a lot of know-how that could be utilised, but this is prevented by the present restrictions linked to the job description." (NMs`group)

Participants were concerned about resources. They indicated that there were insufficient staff, too few practical nurses and too little time for planning and developing the content of work and some argued that no more tasks could be added. They also stated that if the job description is expanded, this should also be reflected in wages.

Practical nurses spoke about their education, which they experienced as useless as they were not able to do the things they were trained for. They thought that expanding the job descriptions could increase the meaningfulness of work and that work should be done according to competence.

"Today, it is very frustrating as I can't even remove venous cannulation." (PNs`group)

Discussion

This study aimed to determine the challenges and barriers related to the development of division of labour between practical nurses and registered nurses. Besides PNs and RNs, the question was also put to nurse managers, because they are responsible for the nursing work in the units.

The statements were surprisingly similar in all the groups. Differences emerged in the practical nurses' group, as they raised the issue of lack of appreciation. Practical nurses felt that their education was not appreciated and they were not able to do things they were trained for. Finland, among practical nurses there are still those with a shorter education and in some units job descriptions might have been formed according to the shorter training. This lack of a consistent policy on the part of the employer may thus have been a reason for the feeling of unworthiness among practical nurses. In the Canadian study (Havaei, MacPhee & Dahinten, 2016), RNs and licensed practical nurses (LPNs) indicated that lack of respect was one of the reasons underlying their intention to leave. In the study by Jones and Cheek (2003), study nurses also felt undervalued as their input and experience was not appreciated by those working alongside them, the wider community and by the organisations employing nurses.

One major challenge was the limits and ambiguity of division of labour with unclear job descriptions, different rules in wards and strict organisational limits. There seems to be role confusion in other countries as well, as these present results are consistent with previous studies, which (Conway & Kearin, 2007; Lankshear et al., 2016) revealed a lack of clarity and role tension among nursing staff and unregulated workers, yet role clarity is essential to support the optimal use of nursing knowledge for safe patient care.

Role conflict and role ambiguity were also associated with nurses' high turnover rates in a large pan-Canadian study (O`Brien-Pallas et al., 2010). Also, a Canadian study (Kearney & Grainger, 2016) about nurses' non-nursing duties suggests the clear definition of roles to avoid overlap.

Nurse managers, who all have a background as nurses, are responsible for the division of labour in the units. It is therefore surprising that none of them took these things up or thought what they could do about them. Also, when evaluating these results from the perspective of the adequacy of nurses, this misuse of practical nurses was a confusing result. If we invest in nurses' education, their skills must be well utilised (Buchan & Calman, 2004).

Concerns about responsibility were seen in registered nurses' and nurse managers' statements. They were worried about the increasing responsibilities of practical nurses and they wanted to define the limits of responsibility. This is a natural and justified concern because responsibility must be defined with educational needs and job descriptions.

In summary, the first steps have been taken in the development of division of labour, as all groups have a mutual understanding of the challenges and barriers. Managers and policy-makers now need to consider how to respond to these challenges and barriers to develop an optimal division of labour. To improve productivity and quality in healthcare, we need uniform guidelines to the wards, clear job descriptions, a culture of

mutual respect, understanding of each group's role, information about practical nurses' education and continuous communication. Nurse managers need to assume more responsibility and work for the development of division of labour and for co-operation between different professional groups. This is urgent because we will face a workforce shortage in the future. Also, it is not economically viable to misuse resources, and misuse can also lead to frustration on the part of individuals.

Conclusion

The main results of this study challenge nurses, nurse managers as well as managers from the organisational level. Practical nurses must bring up their skills and expertise. Registered nurses and nurse managers need to get familiar with practical nurses' education. Nurse managers have a big role because they are responsible for the division of labour in their units. Their role needs be to be strengthened to give them uniform instructions for the division of labour. Their attitude towards different professional groups is important because they give an example to others.

Nurse managers should also aim at maximising nursing group's strengths. responsibilities and limits should be resolved at the entire hospital district level. Job descriptions need to be renewed and upgraded and the principles for doing so must be the same in every Further research is needed from the unit. patients' perspective, because our goal is the patient's best, and research in this area can help us to understand how we should organise work and the division of labour between different healthcare workers. Many challenges in developing the division of labour were related to management and for that reason it needs further research.

Trustworthiness

The trustworthiness of this study is evaluated through the whole process: preparation, organisation, reporting and analysis. (Elo et al., 2014). According to Lincoln and Guba (1985), trustworthiness can be assessed through credibility, dependability, confirmability and transferability.

Credibility refers to the truth of data and the interpretations based on it. In the preparation phase, the selection of participants and data

collection methodology is an essential basis for credibility (Elo et al., 2014). In this study, participants were selected by purposive sampling. We had all the nurses from adult somatic hospital units. This helped to get the informants who had the best knowledge of this topic and were representatives of the desired population to be generalised (Lincoln & Guba, 1985). The selection of meaning unit in the preparation phase also refers to credibility (Graneheim & Lundman, 2004). Too broad a meaning unit is difficult to manage and it may have various meanings and a narrow meaning unit may cause fragmentation (Graneheim & Lundman, 2004; Elo et al., 2014). A sentence was selected as a meaning unit in this study because a sentence usually contained one meaning. Credibility can also be assessed by the amount of data and how well categories and themes cover the data (Graneheim & Lundman, 2004). As the open-ended question was a part of a larger questionnaire, we received quite many answers (n=260) and the participants produced 354 comments. Some of the comments consisted of one word only, but there were also long comments with several answers to the research question. Table 2 and quotations allow the readers to evaluate the data or look for alternative interpretations (Graneheim & Lundman, 2004).

Dependability refers to the stability of the data (Lincoln & Guba, 1985). It means the degree to which the data change over time. In our case, the research question will be timely and relevant, but of course the results might change, especially if interventions are made.

Confirmability refers to the objectivity. To achieve objectivity, the results must reflect participants' voice, not the researcher's (Polit & Beck, 2012). The researcher works in the study hospital and that might cause bias in the analysis process. To avoid this, there were two coresearchers outside the hospital with whom the researcher had a dialogue during the categorising process to ensure conformability.

Transferability refers to the extent to which the findings can be transferred to another setting and groups. As the sample was only from one hospital district, we did not reach for the results to be generalised, but the results might be utilised in a same type of nursing environment. However, it requires case-specific consideration. (Polit & Beck, 2012.) To facilitate this consideration, the sampling method and the main characteristics of

the participants were described previously in this article.

The work was carried out in Oulu University Hospital, BOX 20, 90029 OYS, Finland.

Acknowledgements: The authors thank all the nurses and managers who participated in this study.

References

Aiken, L., Sermeus, W., Van den Heede, K., Sloane, D., Busse, R., McKee, M., Bruyneel, L., Rafferty, A-M., Griffiths, P., Moreno-Casbas, M.T., Tishelman, C., Scott, A., Brzostek, T., Kinnunen, J., Schwendimann, R., Heinen, M., Zikos, D., Sjetne, I., Smith, H.L. & Kutney-Lee, A. (2012) Patient safety, satisfaction, and quality of hospital care: cross sectional surveys of nurses and patients in 12 countries in Europe and the United States. BMJ 344, no. e1717.

Buchan, J. (2013) Nurses' turnover: Reviewing the evidence, heeding the results? Journal of Advanced Nursing 69, 1917-1918.

Buchan, J. & Calman, L. (2004) The global shortage of registered nurses: an overview of issues and actions. International Council of Nurses. Geneva.

Buchan, J. & Campbell, J. (2013) Challenges posed by the global crisis in the health workforce. BMJ (Clinical Research Ed.) 347, f6201.

Buchan, J., Duffield, C. & Jordan, A. (2015) Solving nursing shortages: do we need a New Agenda? Journal of Nursing Management 23, 543-545.

Conway, J. & Kearin, M. (2007) The contribution of the Patient Support Assistant to direct patient care: An exploration of nursing and PSA role perceptions. Contemporary Nurse 24, 175-188.

Elo, S & Kyngäs ,H. (2008) The qualitative content analysis process. Journal of Advanced Nursing 62, 107-115.

Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K. & Kyngäs, H. (2014) Qualitative Content Analysis: A Focus on Trustworthiness. SAGE Open 4, 1-10. DOI: https://doi.org/10.1177/2158244014522633.

Finnish National Board of Education (2016). Available at: Http://www.Oph.fi/sosiaali-ja_terveysala (accessed 14 May 2016).

Graneheim, U.H. & Lundman, B (2004) Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. Nurse Education Today 24, 105-112.

Havaei, F., MacPhee, M. & Dahinten, S. (2016) RNs and LPNs: emotional exhaustion and intention to leave. Journal of Nursing Management 24, 393-399.

- Hukkanen, E. & Vallimies-Patomäki M. (2005) Cooperation and division of labour in securing access to care. A survey of the pilot projects on labour division carried out within the National Health Care Project. Helsinki. Available at: http://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/72423/Selv200521.pdf?sequence=1 (accessed at 4 April 2016).
- Jones, J. & Cheek, J. (2003) The scope of nursing in Australia: A snapshot of the challenges and skills needed. Journal of Nursing Management 11, 121-129.
- Kearney, A. & Grainger, P. (2016) Survey of Managers Regarding Nurses` Performance of Nonnursing Duties. Journal of Nursing Administration 46, 379-384.
- Lankshear, S., Rush, J., Weeres, A. & Martin, D. (2016) Enhancing role clarity for the practical nurse: A leadership imperative. Journal of Nursing Administration 46, 300-307.
- Laurea University of Applied Sciences (2015) Available at: Https://www.Laurea.fi/en/studying-and-applying/bachelors-Programmes-in-english/nursing, (accessed 14 May 2016).
- Lincoln, Y. & Guba, E. (1985) Naturalistic Inquiry. Sage Publications. Newbury Park. United States.
- Milson Hawke, S. & Higgins, I. (2004) The scope of enrolled nurse practice: A grounded theory study. Contemporary Nurse 17, 44-62.

- National Institute for Health and Welfare. (2017) Health care and social welfare personnel 2013. Available at: https://www.julkari.fi/bitstream/handle/10024/129 581/Tr26_15.pdf? sequence=4. (accessed 3 March 2017).
- O'Brien-Pallas, L., Murphy, G.T., Shamian, J., Xiaoqian, L. & Hayes, L.J. (2010) Impact and determinants of nurse turnover: a pan-Canadian study. Journal of Nursing Management 18, 1073-1086.
- Polit, D.F. & Beck, C.T. (2012) Nursing Research. Generating and Assessing Evidence for Nursing Practice. Wolters Kluwer. Lippincott Williams & Wilkins. Philadelphia. United States.
- The Finnish Union of practical nurses (2016). Available at: https://www.superliitto.fi/inenglish/practical-nurse-training/ (accessed 4 April 2016).
- Thompson, P. & Stanowski, A. (2009) Maximizing nursing productivity. The benefits of improved collaboration between nursing and support services. Healthcare financial management 63, 76-85.
- World Medical Association Declaration of Helsinki. Ethical principles for medical research involving human subjects. (2000) JAMA 284, 3043-3045.