Autonomy of nursing staff and the attractiveness of working in home care

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Autonomy of nursing staff and the attractiveness of working in home care

Autonomie van zorgverleners en de
aantrekkelijkheid van werken in de thuiszorg

(met een samenvatting in het Nederlands)

Proefschrift

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General introduction

1.1 Introducing this study

This thesis focuses on the attractiveness of working in home care. In many Western European countries, the need for home care is rising due to demographic developments and policies to substitute institutional care with home care. Consequently, the demand for home-care nursing staff is increasing. A number of countries are facing current and expected future shortages of nursing staff. Insight into the attractiveness of working in home care is pivotal to retaining current nursing staff in home care and to recruiting new staff. Therefore, working conditions that have an impact on the attractiveness of working in home care need to be studied.

The central idea studied in this thesis is that autonomy is important for the attractiveness of working in home care. The general research question addressed in this thesis is:

How is autonomy related to the attractiveness of working in home care?

Reasoning from some important contributions to the sociology of professions (such as Freidson, 2001; Abbott, 1988), this thesis postulates that home care nursing staff value autonomy as it increases their professionalism. This thesis also discusses whether this applies to nursing staff regardless of their level of education. Furthermore, the possibility is examined of a relationship between working in a self-directed team and home-care nursing staff's autonomy over patient care. This thesis also covers the attractiveness of delivering and organising people-centred and integrated care, which may enhance home-care nursing staff's autonomy. The downside of autonomy may be a higher risk of professional misconduct going unnoticed. This thesis explores whether home-care nursing staff know how to deal with suspicions of misconduct by colleagues.

1.2 Background

This section describes current developments in home care internationally. It also provides the definition of home care that is used in this thesis, explains the type and range of services included in home care and highlights the differences in home-care contexts across countries. Furthermore, it discusses

home care in the Netherlands and explains the Dutch home-care nursing staff categories of registered nurses with a bachelor's degree, registered nurses with an associate degree and certified nursing assistants. Finally, this section identifies key trends and challenges in Dutch home care, as well as detailing recent policy responses and the introduction of self-directed teams.

Growing need for home care and international workforce shortages

Many Western European countries are being confronted with existing or expected future shortages of home-care nursing staff (Genet et al., 2012). This is the result of a number of trends and developments.

Demographic developments are increasing the demand for long-term care. Population ageing and the increasing prevalence of chronic diseases are accompanied by a rising share of the population receiving long-term care. Although long-term care services are sometimes delivered to younger persons, the majority of long-term care recipients are older people (OECD, 2015).

In response to most people's preference for receiving long-term care services at home, many countries have expanded the availability of home-care services. Often, governments promote the independence of people who need long-term care. In addition, in many countries current policies aim to substitute residential long-term care and hospital care with home care in order to curb the growth in healthcare expenditure. As a consequence, the share of long-term care recipients aged 65 and over receiving long-term care at home has increased over the past ten years (OECD, 2015; Carrera et al., 2013; Genet et al., 2012)[1].

The strengthening of home care at the expense of inpatient care entails a growing demand for home-care nursing staff. Ensuring an adequate supply of trained nursing staff is a challenge for many countries. The working conditions of home-care nursing staff are a significant area for attention, with the aim of deterring nursing staff from leaving the sector and attracting new staff (Genet et al., 2012).

[1]For the sake of readability and to prevent repetition, the references used have been listed at the end of the paragraph for a number of paragraphs in the General Introduction.

Defining home care

In this thesis, home care is defined as formal nursing services and personal care provided by nursing staff in patient's own homes. Nursing services can be of a technical, supportive, rehabilitative or preventive nature. Personal care services relate to assistance with activities that are part of daily living, such as dressing, feeding and washing. Different types of care can be delivered to various types of patients, such as the chronically ill, disabled people, elderly people and people at the end of life. Home care encompasses both long-term care at home and short-term care at home, for instance after discharge from the hospital (Van Eenoo et al., 2016; Genet et al., 2012).

Domestic care, which relates to instrumental activities that are part of daily living, e.g. housekeeping or food preparation, is not discussed in this thesis. Delivery of these services requires specific training only in a minority of EU countries (Genet et al., 2012). Furthermore, domestic care is considered part of social care rather than health care in the Netherlands (Mot, 2010) and many other EU countries (Genet et al., 2012). Workforce issues concerning the delivery of domestic-care services are therefore likely to differ from those concerning the provision of nursing and personal care.

Although all European countries provide publicly funded home-care services to some extent, substantial differences between countries exist in regulation, funding and delivery of formal home care and the availability and role of informal care (Van Eenoo et al., 2016; Verbeek-Oudijk et al., 2015). However, common challenges can be found. As mentioned before, most countries foresee a growth in formal home care, and an adequate supply of trained home-care staff is a pressing issue in home-care sectors across Europe. Another shared concern is the lack of integration between home health care and social care. Different types of care for home-dwelling patients are often provided by different organisations, and coordination is frequently not organised formally (Genet et al., 2012).

Home care in the Netherlands

The Netherlands is one of the European countries with a high share of the population served by home care. Dutch formal home care (excluding domestic care) covers technical nursing care, psychosocial care and personal care. Home care in the Netherlands is partly directed at communities or

neighbourhood populations (for instance health promotion and prevention) and partly at individual patients who have formally assessed care needs.

Home-care services are delivered mainly by registered nurses and certified nursing assistants. Nursing specialists and care assistants also form part of the Dutch home-care workforce. However, their numbers are limited and the share of care assistants in the home-care workforce is declining (Van der Windt & Bloemendaal, 2015). Therefore, nursing specialists and care assistants are not discussed in this thesis.

Registered nurses in Dutch home care receive professional training for a minimum of four years and either have an associate degree, i.e. a nursing qualification after completing senior secondary vocational education (European Qualifications Framework educational level 4), or a bachelor's degree from a university of applied sciences (European Qualifications Framework educational level 6). The education of certified nursing assistants consists of one and a half to three years of vocational training after secondary school (European Qualifications Framework educational level 3). This is different from other countries, where vocational training for nursing assistants is often less than one year.

Clear dividing lines between the tasks of the different nursing staff categories are lacking. However, more complex tasks, such as technical nursing care, are generally performed by registered nurses. Since 2015, registered nurses with a bachelor's degree perform the formal assessment of care needs. Certified nursing assistants primarily deliver personal care and psychosocial care. They assist with personal activities that are part of daily living. Certified nursing assistants also draw up and evaluate care plans. The care provision by certified nursing assistants is focused on maintaining and encouraging patients' self-reliance (Francke et al., 2017; Poortvliet & Lameris, 2016; Stuurgroep, 2015; Genet et al., 2013, 2012).

Trends in Dutch home care

Until the 1990s, home nursing care in the Netherlands was provided by nurses in small-scale, local home-care organisations. In these organisations, home-care nurses had a wide range of tasks and an independent role and responsibility towards patients. They also determined what kind of care and how much care a patient received, doing so in consultation with the patient. However, in the 1990s the local home-care organisations merged to form large

organisations. This scaling-up of home care was accompanied by a strengthening of the position of managers, who increasingly steered and controlled the work of nurses. Home-care nursing tasks and responsibilities were laid down in protocols, and nurses increasingly had to account for their activities. Furthermore, the work domain of home-care nurses was divided up between different hierarchical levels of nursing staff, each with their own tasks and responsibilities.

These transformations were in line with the rise of New Public Management, an international trend in public administration in the past decades in which public governance was increasingly based on business-style managerialism. Managerialism means organising and pre-structuring services in a top-down way and imposing rules, regulations and administrative procedures. It was assumed that New Public Management would increase cost-efficiency and improve the quality of care (Oomkens et al., 2015; Bjornsdottir, 2009; Van der Boom, 2008; Hood, 1991).

In 1997, the tasks of the assessment of care needs and the assignment of care to patients, which were previously performed by home-care nurses, were transferred to regional assessment organisations in order to promote objectivity in decisions on eligibility for care. The reallocation of the needs assessment reflects the managerialism trend, as it entails regulation and standardisation. This measure was also taken in response to criticism by the Dutch patients' movement that home-care organisations tended to underestimate patients' care needs in order to serve as many patients as possible with the available budget and staff (De Putter et al., 2014; Van der Boom, 2008; Algera et al., 2003).

These transformations led to a reduction in home-care nurses' leeway for action and independent decision-making based on expertise, skills and experience (Van der Boom, 2008). However, current governmental policy is likely to expand home-care nurses' work domain and responsibilities, as part of a reform of long-term care in the Netherlands (VWS, 2013). In addition, it is plausible that the new policy has broadened home-care nurses' freedom of action and of decision-making.

Home-care nurses with a bachelor's degree have been assigned a central position in the community in current Dutch governmental home-care policy, and in the philosophy of the professional association of nursing staff (V&VN). They are responsible for organising and coordinating home care and

serve as a link between the domains of home care and social care. They are required to involve patients and their social network in the decision-making and provision of care. Within home care, home-care nurses with a bachelor's degree cooperate closely with nurses with an associate degree and certified nursing assistants. In the care for individual patients, home-care nurses are expected to support self-management by patients and their relatives. Furthermore, they have to take an active role in healthcare-related prevention (Stuurgroep, 2015; VWS, 2015, 2014a, 2014b; De Bont et al., 2012).

A related change in Dutch home care is that in 2015 home care nurses with a bachelor's degree regained the responsibility for performing the formal assessment of care needs and organising the required care. They determine, once again, what nursing-care and personal-care services are required, taking into account the patient's care needs, opportunities for self-reliance, home environment and social network (V&VN, 2014; VWS, 2015).

This home-care delivery approach is in line with the people-centred and integrated health services delivery that is advocated by the World Health Organization (WHO). According to the WHO (WHO, 2015), people-centred and integrated health services entails, among other things:

- Prioritising community care services;
- Providing integrated care around people's needs that is effectively coordinated across different providers and settings;
- Co-production of care by professionals, the patient, the family, informal carers and the community;
- Helping people to manage and take responsibility for their own health;
- Investing in health promotion and prevention strategies.

The WHO is calling for this fundamental shift in health services delivery in order to meet the challenges of ageing populations, increasing prevalence of chronic diseases, the spread of unhealthy lifestyles and the fragmented nature of health systems (WHO, 2015).

The rise of self-directed work teams is another trend in current Dutch home care, one that is spreading to other countries. In home care, a self-directed team of nursing staff organises the care for a group of patients independently, although the team is often facilitated by supporting services, for instance ICT and HRM, and receives external coaching on demand. The team itself determines the objectives, methods and tasks of the individual

team members with the purpose of tailoring the care to fit the needs of patients. The team as a whole is responsible for the outcomes (InVoorZorg, 2013). Self-directed teams were successfully launched in Dutch home care by the Buurtzorg (in English: 'Neighbourhood Care') organisation in 2007. The number of self-directed Buurtzorg teams grew quickly, and other home-care organisations also initiated self-directed teams or incorporated elements of the Buurtzorg model of self-directed teams. Furthermore, this model has captured the interest of foreign countries, including Germany, Norway, Japan and China, and is already being introduced in Sweden, Japan, the United States and the UK (Sheldon, 2017; Gray et al., 2015; Kreitzer et al., 2015; Monsen & De Blok, 2013).

Like other European countries, the Netherlands suffers from a shortage of home-care nursing staff, in particular home-care nurses with a bachelor's degree. An increasing shortage of these nurses is expected for the coming years (Bloemendaal et al., 2015). Therefore, the question rises what the current developments in the Dutch home-care sector mean for the attractiveness of working in home care.

1.3 Problem definition and aim of this thesis

In this section, the problem definition of this thesis is presented as well as the main research objective and the general research question. It stresses the importance of gaining further insight into the attractiveness of working in home care and explains why it is highly relevant to focus on the role of nursing staff's autonomy. Furthermore, the use is explained of the concept of 'attractiveness' in this thesis.

Problem definition

As already stated, attracting and retaining home-care nursing staff is of profound importance to many Western European countries, including the Netherlands. Therefore, providing satisfying working conditions to home-care nursing staff should by high on the agenda of home-care employers and policymakers. However, current knowledge of job characteristics that impact on the attractiveness of working in home care is limited. For instance, research on turnover in nursing has tended to focus on hospital nurses (Hayes

et al., 2012). Little research has been done on working conditions that impact on intentions to leave home care (Ellenbecker et al., 2008).

A striking feature distinguishing home-care nursing staff from other nursing staff is their work setting. While hospital nurses provide care in an organisational setting located at the centre of the healthcare system, primarily aimed at diseases or medical disorders, home-care nursing staff perform their tasks in the community, with greater focus on the day-to-day functioning of people with health problems. Although they are usually part of a team, home-care nurses and certified nursing assistants generally work alone in the homes of their patients. This home setting, the limited daily interactions with colleagues and the restricted direct supervision by managers and other health professionals enhance home-care nursing staff 's autonomy over their work. This also applies to the often necessary tailoring of care to the individual living situations of home-care patients (Oomkens, 2015; Van der Boom, 2008).

However, as described above, the autonomy of home-care nursing can be reduced by a number of factors, such as protocols, the need to account for care activities, task divisions and the assessment of care needs by assessment organisations. Therefore, autonomy seems to be a highly relevant working condition to examine in the context of the attractiveness of working in home care.

The aim of this thesis is to gain insight into the importance of autonomy for home-care nursing staff. The main research question is: *How is autonomy related to the attractiveness of working in home care?* The concept of autonomy is further explained in the next section.

Attractiveness as an overarching concept

In this thesis, the attractiveness of working in home care is used as an overarching concept that is linked to nursing staff's wish to start or remain working in the home-care sector. The central concept of attractiveness of working in home care covers multiple more specific concepts that are discussed in this thesis, including job satisfaction, not considering leaving the healthcare sector and the attractiveness of specific aspects of home care.

1.4 Theoretical considerations and general hypotheses

This section covers the general hypotheses of this thesis. It also explains how the hypotheses are derived from theoretical perspectives in the sociology of professions and findings from previous studies.

Professions and professionalisation

According to Hall (1968), professionalisation is the process in which an occupation acquires the attributes of a profession. Yet literature does not provide a clear set of features that define a profession. Different combinations of characteristics are considered essential for professionalism (see for instance: Pavalko, 1971; Hall, 1968). According to Abbott (1988), professions are not fixed entities, but subject to change due to the interdependence between professions and the influence of both internal forces (for instance, the development of new knowledge or skills) and external forces (for instance, change in organisations). Therefore, Abbott (1988) argues that professions cannot be firmly defined.

However, a recurrent theme in the literature on professions is the notion that members of a professional occupation control their own work and exercise discretion over areas of expertise, based upon a body of abstract, theoretical knowledge (see for instance Freidson, 2001; Abbott, 1988). According to Freidson (1999), professions are distinguished from other occupations where the employer, manager or consumer controls the work, i.e. decides what tasks are to be performed, by whom, under which conditions and how. Professions can be characterised by occupational (or worker) control of work. Furthermore, the work of professions is highly specialised and differentiated. To work successfully, professionals have to exercise sound judgment to adapt their knowledge to specific circumstances. This partly entails specialised and formal knowledge, gained through special training (Freidson, 2001, 1999). This is in line with Abbott's definition of professions: *"somewhat exclusive occupational groups applying somewhat abstract knowledge to particular cases"* (Abbott, 1988, p. 318). According to Abbott (1988), jurisdiction is essential to professions. Jurisdictional claims may include monopoly of practice, rights of self-discipline and the control of professional training (Abbott, 1988).

According to Evetts (2003), it is an attractive prospect for occupational workers to be identified as professionals. The appealing aspects include occupational control of work and the exclusive ownership of an area of expertise and knowledge (Evetts, 2003).

Autonomy, professionalisation and attractiveness of working in home care

Closely linked to the aforementioned notions of occupational control of work, discretion and jurisdiction, which are frequently addressed in the literature on professions, is the concept of autonomy. In the nursing context, autonomy can be defined as independence and freedom of initiative in a job (Ellenbecker, 2004). Weston (2008) describes different dimensions of autonomy in nursing practice. Autonomy over patient care relates to individual authority and freedom to make decisions concerning the content of patient care. Work autonomy denotes freedom and discretion in work scheduling, job processes and work methods. Finally, organisational autonomy refers to decision-making that guides the work of the unit, i.e. control over the context of practice (Weston, 2008).

Autonomy is frequently reported in the literature as an essential prerequisite for increased professionalism in nursing (Alidina, 2012; Varjus et al., 2011; Wade, 1999). As professionalism is believed to be attractive (Evetts, 2003), it can be assumed that autonomy is related to nursing staff's job satisfaction. This is confirmed by previous studies among nurses. Multiple literature reviews and meta-analyses showed that autonomy is positively related to nursing staff's job satisfaction (Hayes et al., 2010; Zangaro & Soeken, 2007; Irvine & Evans, 1995; Blegen, 1993). Considering the association between autonomy and job satisfaction, it is likely that autonomy is also associated with nursing staff's self-perceived ability to remain working until retirement. However, little research has been done on job characteristics related to the self-perceived ability to continue working in the current line of work until retirement (Geuskens et al., 2012). In view of the need to address current and expected future nursing staff shortages, it is important to gain insight into the relationship between autonomy and nursing staff's ability to remain working until they retire. It can be expected that autonomy is positively related to the ability to remain working.

Hypothesis 1: Autonomy is positively related to nursing staff's self-perceived ability to remain working until retirement.

Hypothesis 1 focuses on nursing staff in general, who are employed in different healthcare sectors. As was pointed out previously, it is likely that autonomy is a particularly relevant working condition in the context of home care. Although considerable research has been devoted to attractive job characteristics for nursing staff, previous studies have largely been restricted to hospital nurses. For instance, in their systematic review of literature on nurse turnover, Hayes et al. (2012) conclude that there is a predominance of nurse turnover research that deals with acute care settings. Nevertheless, the little research literature that *is* available on the attractiveness of working in home care indicates that autonomy is a key factor (e.g. Tourangeau et al., 2014; Ellenbecker et al., 2006). In their large-scale survey on the impact of job characteristics on intent to leave the organisation among nurses in different long-term care settings, Tummers et al. (2013) showed that autonomy is most important to nurses in home care. However, in-depth knowledge about autonomy as an attractive aspect of working in home care is lacking. Hence, it is important to understand the attractiveness of the different dimensions of autonomy in nursing practice: autonomy over patient care; work autonomy; and organisational autonomy. Considering the importance of occupational control of work, discretion and jurisdiction to professionalism and the appeal of professionalism, it is likely that nursing staff value all three dimensions of autonomy.

Hypothesis 2: Home-care nursing staff value autonomy and its three dimensions: autonomy over patient care; work autonomy; and organisational autonomy.

Previous studies have reported a positive correlation between nurses' educational level and autonomy (Alidina, 2012; Wynd, 2003; Yin & Yang, 2002). As mentioned above, autonomy is an important condition for greater professionalism in nursing. Hence, nursing staff with higher educational qualifications are likely to demonstrate increased professionalism (Alidina, 2012). Since professionalism is considered attractive, in part because of the occupational control of work (Evetts, 2003) , it can be assumed that these

more highly educated nurses want to maintain or further enhance their autonomy. Therefore, it is plausible that nursing staff with a higher level of education particularly value autonomy.

Hypothesis 3: Home-care nursing staff with a higher level of education attach more value to autonomy than nursing staff with a lower level of education.

Professionalisation of home-care nursing staff

As described in the Background section, self-directed teams of home-care nursing staff organise nursing care independently. In more traditional, manager-led work teams, regulatory functions are performed by managers while team members are exclusively engaged in the operational tasks (such as care delivery). Self-directed teams can take decisions independently with respect to the work process. Team members are also involved in tasks that in a traditional work setting are performed by managers, for instance planning the work process, coordination and allocation of work (Tjepkema, 2003). In this sense, self-directed teams enjoy a significant degree of organisational autonomy. Van Mierlo et al. (2006) showed that team autonomy is positively related to the individual autonomy of team members in healthcare organisations. Therefore, it can be expected that individual nursing staff members in self-directed teams experience more autonomy over patient care than nursing staff members in teams that are self-directing to a lesser extent. This may mean that working in a self-directed team enhances nursing staff's professionalism.

Hypothesis 4: Home-care nursing staff in self-directed work teams experience more autonomy over patient care than nursing staff in more traditionally organised teams

Recent Dutch policy changes in home-care nurses' position and responsibilities (see the Background section), which are in line with the WHO's plea for people-centred, integrated health services delivery, are likely to enhance nurses' autonomy and thereby contribute to professionalism. It can be assumed that home-care nurses' organisational and coordination tasks will increase their independence and freedom of initiative. Although past literature has suggested a contrast between on the one hand organisational

and managerial tasks and on the other hand the work of professionals (Noordegraaf, 2011), more recently, Noordegraaf (2015) has claimed that organising has become a common part of professional work. In line with this reasoning, Postma et al. (2015) have shown that in the work of Dutch home-care nurses with a bachelor's degree, organisational tasks such as coordinating and planning can be an integral part of professional work. In addition, the regained responsibility for independent assessment of patients' care needs and for the organisation of the required care will most likely increase the autonomy of home-care nurses with a bachelor's degree. This reflects the three acts of professional practice, as described by Abbott (1988): to diagnose, to infer and to treat. As people-centred and integrated home care is likely to enhance home-care nurses' autonomy, it can be assumed that home-care nurses value people-centred and integrated home care.

Hypothesis 5: Home-care nurses value people-centred and integrated home care.

Autonomy and reporting professional misconduct

As mentioned in the Problem Definition section, home-care nursing staff generally work on their own in patients' homes, with limited daily interactions with colleagues and restricted direct supervision by managers and other health professionals (Van der Boom, 2008). This work setting gives them control over practical decisions (Oomkens, 2015), i.e. work autonomy. However, home-care nursing staff's independent working practices can hinder the identification of possible professional misconduct among nursing staff. In addition, the self-reliant character of the work may increase the risk of professional misconduct. As professional misconduct can jeopardise the health and well-being of patients and the quality of nursing staff's teamwork, it is very important that home-care nursing staff raise the matter of suspicions of professional misconduct by colleagues. By this means, professional misconduct can be tackled and further harm can be avoided.

The responsibility to take appropriate action when a patient's health is endangered by a colleague is part of the code of ethics of the International Council of Nurses (ICN, 2012) and the national code of ethics of nurses and nursing assistants in the Netherlands (CGMV/CNV/FNV/HCF/NU'91 /RMU/V&VN, 2015). According to Pavalko (1971), codes of ethics support and strengthen professional communities' claim to both collective and individual

autonomy as these codes are likely to contribute to effective self-regulation, which avoids the need for external control. This is in line with the idea that there is a sense of community among members of a professional group, as well as shared values and norms that function to control the work behaviour of members (Pavalko, 1971). Yet the existence of ethical codes that stipulate self-regulation does not necessarily mean that home-care nursing staff know how to deal with suspicions of misconduct by colleagues. Therefore, it is important to examine whether nursing staff in home care know how to deal with suspicions of misconduct by colleagues. Self-regulation by a professional group is important in maintaining the public's confidence and acceptance of their jurisdiction.

As indicated before, the educational level of nursing staff is presumed to be positively associated with their degree of professionalism. In addition to greater autonomy (Wynd, 2003; Yin & Yang, 2002), higher educated nursing staff have acquired more abstract, theoretical knowledge, which is an important aspect of professionalism, as described above. As a more professionalised group, nursing staff with a higher educational level may be more accustomed to exerting social control over the behaviour of colleagues. In addition, they may have had more training in critically reflecting upon practice (Malmedal et al., 2009). Therefore, it can be expected that they experience less difficulty in raising the matter of suspicions of professional misconduct by colleagues than nursing staff with a lower level of educational attainment.

Hypothesis 6: Home-care nursing staff with a higher level of education experience less difficulty in reporting suspicions of professional misconduct by colleagues than nursing staff with a lower level of education.

1.5 General methodology

This section presents the methods that were used. Most studies described in this thesis employed a quantitative design. Data for these studies were gathered through questionnaire surveys among participants in the Nivel Nursing Staff Panel. In addition, qualitative research was performed using online focus groups to gain more in-depth knowledge concerning the attractiveness of working in home care.

Questionnaire surveys among participants in the Nursing Staff Panel (Chapters 2, 3, 5, 6 and 7)

The Nivel Nursing Staff Panel consists of a nationwide group of nursing staff in various healthcare settings who deliver direct patient care and have expressed their willingness to complete questionnaires about topical issues in health care. During the period in which the research described in this thesis was conducted, the Nivel Nursing Staff Panel comprised 1350 to 1920 nursing staff members working in hospitals, the mental health sector, the care of disabled people, home care, nursing homes, homes for the elderly and general practices. Recruitment of Nivel Nursing Staff Panel participants was based on a random sample of Dutch healthcare employees provided by the Dutch Employee Insurance Agency. Employees in the random sample were invited to take part in healthcare research. Nursing staff who agreed to this request and who deliver direct patient care in any of the healthcare sectors mentioned above were asked to join the Nivel Nursing Staff Panel. This procedure promotes a diverse composition of the Panel in terms of age, sex, region and employer. In 2014, there was an extra recruitment round in which participants working in home care were asked to invite up to four colleagues to join the Nivel Nursing Staff Panel.

Participants in the Nivel Nursing Staff Panel are invited to fill in a questionnaire up to four times a year. Participation in the Nivel Nursing Staff Panel and completion of the questionnaires is voluntary. The questionnaires are self-administered and filled in on paper or online. Questionnaire data are kept separately from response information and personal details, and the researchers do not have access to these background data. Hence confidentiality and anonymity are assured.

The studies that used questionnaire surveys among participants in the Nivel Nursing Staff Panel had a cross-sectional design. Relationships between variables were analysed with t-tests, analysis of variance, chi-square tests, regression analyses and mediation analyses.

Online focus groups (Chapter 4)
In the explorative study described in Chapter 4, online focus groups were conducted. These focus groups involved registered nurses in home care. Participants were recruited through convenience sampling and among participants in the Nivel Nursing Staff Panel. Discussions in the online focus groups were organised using a closed web-based discussion site. The online focus group discussions were conducted asynchronously, which means that participants were able to log in during a set period, read questions posted by the researchers and contributions by other participants, and give their written online responses at any time that was convenient for them (Tates et al., 2009). The researchers acted as moderators by frequently examining the comments and posting new questions. Anonymity of the participants and confidentiality of their comments was ensured by giving participants a unique login name and password with which they could access the discussion site and anonymously contribute to the group discussion.

The transcripts of the online focus groups were analysed following the steps of thematic analysis: becoming familiar with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and writing an analytic narrative (Braun & Clarke, 2006).

1.6 Outline of this thesis

This final section of the General Introduction provides an outline of the subsequent chapters of this thesis.

Chapter 2 focusses on the associations between different job and organisational characteristics, job satisfaction, occupational commitment and nursing staff's self-perceived ability to continue working in the current line of work until the official retirement age. **Chapter 3** describes how home-care nursing staff's self-perceived autonomy relates to whether they have considered leaving the healthcare sector and addresses the possible mediating effect of work engagement. **Chapter 4** covers aspects that home-care nurses find attractive about their work and explores whether these aspects vary for home-care nurses with different levels of education. **Chapter 5** provides insight into the relationship between working in a self-directed team and home-care nursing staff's job satisfaction, the mediating effect of self-

perceived autonomy over patient care and the moderating effect of educational level on the association between autonomy over patient care and job satisfaction. **Chapter 6** explores whether people-centred, integrated home care appeals to nurses with different levels of education in home care and hospitals. Finally, **Chapter 7** addresses home-care nursing staff's experiences with professional misconduct, the difficulty they experience in reporting suspicions of professional misconduct within the organisation and the aspects of professional practice that home-care nursing staff consider important in preventing professional misconduct.

Chapters 2 to 7 contain stand-alone research articles with separate research questions and hypotheses that can be read independently of one another. The knowledge gained in these studies also provides insight into the general hypotheses of this thesis. Table 1.1 presents the chapters schematically and illustrates how the research articles relate to the general hypotheses. An overall discussion is provided in **Chapter 8**, which addresses the general hypotheses of this thesis and offers an answer to the central research question.

Table 1.1

	Chapter
General hypothesis	
1. Autonomy is positively related to nursing staff's self-perceived ability to remain working until retirement.	2
2. Home-care nursing staff value autonomy and its three dimensions: autonomy over patient care; work autonomy; and organisational autonomy.	3, 4, 5
3. Home-care nursing staff with a higher level of education attach more value to autonomy than nursing staff with a lower level of education.	3, 4, 5
4. Home-care nursing staff in self-directed work teams experience more autonomy over patient care than nursing staff in more traditionally organised teams.	5
5. Home-care nurses value people-centred and integrated home care.	6
6. Home-care nursing staff with a higher level of education experience less difficulty in reporting suspicions of professional misconduct by colleagues than nursing staff with a lower level of education.	7

References

Abbott, A. (1988). *The System of Professions*. Chicago: The University of Chicago.

Algera, M., Francke, A. L., Kerkstra, A., & Van Der Zee, J. (2003). An evaluation of the new home-care needs assessment policy in the Netherlands. *Health & Social Care in the Community,* 11(3), 232-241.

Alidina, K. (2012). Professionalism in post-licensure nurses in developed countries. *Journal of Nursing Education and Practice,* 3(5), 128. doi: 10.5430/jnep.v3n5p128.

Bjornsdottir, K. (2009). The ethics and politics of home care. *International Journal of Nursing Studies,* 46(5), 732-739.

Blegen, M. A. (1993). Nurses' job satisfaction: a meta-analysis of related variables. *Nursing research,* 42(1), 36-41.

Bloemendaal, I., Van Essen, G., Kramer, S., & Van der Windt, W. (2015). *Vraag en aanbod van wijkverpleegkundigen 2015-2019 [Demand and supply of community nurses 2015-2019].* Utrecht/Den Haag: KIWA/CAOP.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology,* 3(2), 77-101. doi: 10.1191/1478088706qp0630a.

Carrera, F., Pavolini, E., Ranci, C., & Sabbatini, A. (2013). Long-Term Care Systems in Comparative Perspective: Care Needs, Informal and Formal Coverage, and Social Impacts in European Countries. In C. Ranci & E. Pavolini (Eds.), *Reforms in Long-Term Care Policies in Europe.* (pp. 23-52). New York: Springer.

CGMV/CNV/FNV/HCF/NU'91/RMU/V&VN. (2015). *Beroepscode van Verpleegkundi-gen en Verzorgenden [National Code of Ethics of Nurses and Nursing Assistants]*.

De Bont, M., Van Haaren, E., Rosendal, H., & Wigboldus, M. (2012). *Expertisegebied Wijkverpleegkundige [Area of expertise home-care nurse with a bachelor's degree in nursing].* Utrecht: V&VN.

De Putter, I. D., Francke, A. L., De Veer, A. J. E., & Rademakers, J. J. D. J. M. (2014). *Kennissynthese. De wijkverpleegkundige van vandaag en morgen. Rollen, samenwerking en deskundigheid van wijkverpleegkundigen [Knowledge synthesis. The community nurse of today and tomorrow. Roles, cooperation and expertise of community nurses].* Utrecht: NIVEL.

Ellenbecker, C. H. (2004). A theoretical model of job retention for home health care nurses. *Journal of Advanced Nursing,* 47(3), 303-310.

Ellenbecker, C. H., Boylan, L. N., & Samia, L. (2006). What home healthcare nurses are saying about their jobs. *Home healthcare nurse,* 24(5), 315-324.

Ellenbecker, C. H., Porell, F. W., Samia, L., Byleckie, J. J., & Milburn, M. (2008). Predictors of home healthcare nurse retention. *Journal of Nursing Scholarship,* 40(2), 151-160.

Evetts, J. (2003). The sociological analysis of professionalism occupational change in the modern world. *International sociology,* 18(2), 395-415.

Francke, A. L., Rijken, P. M., De Groot, K., De Veer, A. J. E., Verkleij, K. A. M., & Boeije, H. R. (2017). *Evaluatie van de wijkverpleging. Ervaringen van cliënten, mantelzorgers en zorgprofessionals [Evaluation of community nursing. Experiences of clients, informal caregivers, and healthcare professionals].* Utrecht: NIVEL.

Freidson, E. (1999). Theory of professionalism: Method and substance. *International review of sociology,* 9(1), 117-129. doi: 10.1080/03906701.1999.9971301.

Freidson, E. (2001). *Professionalism. The Third Logic.* Cambridge: Polity Press.

Genet, N., Boerma, W., Kroneman, M., Hutchinson, A., & Saltman, R. B. (2012). *Home care across europe. Current structure and future challenges.* Copenhagen: World Health Organization (on behalf of the European Observatory on Health Systems and Policies).

Genet, N., Boerma, W., Kroneman, M., Hutchinson, A., & Saltman, R. B. (2013). *Home Care across Europe. Case studies.* Copenhagen: World Health Organization (on behalf of the European Observatory on Health Systems and Policies).

Geuskens, G. A., Hengel, K. M. O., Koppes, L. L. J., & Ybema, J. F. (2012). Predictors of the Willingness and the Ability to Continue Working Until the Age of 65 Years. *Journal of Occupational and Environmental Medicine,* 54(5), 572-578.

Gray, B. H., Sarnak, D. O., & Burgers, J. S. (2015). Home Care by Self-Governing Nursing Teams: The Netherlands' Buurtzorg Model. Retrieved from The Commonwealth Fund website: http://www.commonwealthfund.org/~/media/files/publications/casestudy/2015/may/1818_gray_home_care_nursing_teams_buurtzorg_model_case_study.pdf

Hall, R. H. (1968). Professionalization and bureaucratization. *American sociological review,* 33 92-104.

Hayes, B., Bonner, A., & Pryor, J. (2010). Factors contributing to nurse job satisfaction in the acute hospital setting: a review of recent literature. *Journal of nursing management,* 18(7), 804-814.

Hayes, L. J., O'Brien-Pallas, L., Duffield, C., Shamian, J., Buchan, J., Hughes, F., . . . North, N. (2012). Nurse turnover: a literature review - An update. *International Journal of Nursing Studies,* 49(7), 887-905.

Hood, C. (1991). A public management for all seasons. *Public administration,* 69(1), 3-19.

ICN. (2012). *The ICN Code of Ethics for Nurses*. Geneva: International Council of Nurses.

InVoorZorg. (2013). *Zelfsturende teams in de thuiszorg. Handleiding voor managers, projectleiders en bestuurders [Self-directed teams in home care. Manual for managers, project leaders and administrators].* Utrecht: In voor zorg.

Irvine, D. M., & Evans, M. G. (1995). Job satisfaction and turnover among nurses: integrating research findings across studies. *Nursing research,* 44(4), 246-253.

Kreitzer, M. J., Monsen, K. A., Nandram, S., & De Blok, J. (2015). Buurtzorg Nederland: A global model of social innovation, change, and whole-systems healing. *Global Advances in Health and Medicine,* 4(1), 40-44. doi: 10.7453/gahmj.2014.030.

Malmedal, W., Hammervold, R., & Saveman, B.-I. (2009). To report or not report? Attitudes held by Norwegian nursing home staff on reporting inadequate care carried out by colleagues. *Scandinavian journal of public health,* 37(7), 744-750.

Monsen, K., & De Blok, J. (2013). Buurtzorg: Nurse-Led Community Care. *Creative Nursing,* 19(3), 122-127.

Mot, E. (2010). *The Dutch system of long-term care*. Den Haag: CPB.

Noordegraaf, M. (2011). Risky business: how professionals and professional fields (must) deal with organizational issues. *Organization Studies,* 32(10), 1349-1371. doi: 10.1177/0170840611416748.

Noordegraaf, M. (2015). Hybrid professionalism and beyond: (New) Forms of public professionalism in changing organizational and societal contexts. *Journal of Professions and Organization,* 2 187-206. doi: 10.1093/jpo/jov002.

OECD. (2015). *Health at a Glance 2015: OECD Indicators.* Paris: OECD Publishing.

Oomkens, R. (2015). *Professionalism & Performance-based Contracting. Transparency, accountability or interference? Doctoral thesis.* Utrecht: Universiteit Utrecht.

Oomkens, R., Hoogenboom, M., & Knijn, T. (2015). Continuity and change: comparative case study of hospital and home care governance in the Netherlands. *Administration & Society,* 47(7), 851-880. doi: 10.1177/0095399713503462.

Pavalko, R. M. (1971). *Sociology of Occupations and Professions*. Itasca: F.E. Peacock Publishers.

Poortvliet, P., & Lameris, P. (2016). *Verzorgenden in wijkteams. Een verkenning naar aantallen, deskundigheid en rol [Certified nursing assistants in community teams. An exploration of numbers, expertise and role].* Rijswijk: Bosman & Vos.

Postma, J., Oldenhof, L., & Putters, K. (2015). Organized professionalism in healthcare: articulation work by neighbourhood nurses. *Journal of Professions and Organization,* 2, 61-77. doi: 10.1093/jpo/jou008.

Sheldon, T. (2017). Buurtzorg: the district nurses who want to be superfluous. *BMJ: British Medical Journal,* 358 j3140. doi: 10.1136/bmj.j3140.

Stuurgroep. (2015). *Toekomstbestendige beroepen in de verpleging en verzorging. Rapport stuurgroep over de beroepsprofielen en de overgangsregeling [Future-proof professions in nursing and care. Steering committee report on the job profiles and the transitional regulation].* Retrieved from https://www.nfu.nl/img/pdf/Rapport_toekomstbestendige-beroepen-in-de-verpleging-en-verzorging.pdf

Tates, K., Zwaanswijk, M., Otten, R., van Dulmen, S., Hoogerbrugge, P. M., Kamps, W. A., & Bensing, J. M. (2009). Online focus groups as a tool to collect data in hard-to-include populations: examples from paediatric oncology. *BMC Medical Research Methodology,* 9(15). doi: 10.1186/1471-2288-9-15.

Tjepkema, S. (2003). *The learning infrastructure of self-managing work teams. PhD Thesis.* Enschede: University of Twente.

Tourangeau, A., Patterson, E., Rowe, A., Saari, M., Thomson, H., MacDonald, G., . . . Squires, M. (2014). Factors influencing home care nurse intention to remain employed. *Journal of nursing management,* 22(8), 1015-1026.
Tummers, L. G., Groeneveld, S. M., & Lankhaar, M. (2013). Why do nurses intend to leave their organization? A large-scale analysis in long-term care. *Journal of Advanced Nursing,* 69(12), 2826-2838. doi: 10.1111/jan.12249.

Van der Boom, H. (2008). *Home Nursing in Europe. Patterns of Professionalisation and Institutionalisation of Home Care and Family Care to Elderly People in Denmark, France, the Netherlands and Germany. Doctoral thesis.* Maastricht: Maastricht University.

Van der Windt, W., & Bloemendaal, I. (2015). *Toekomstverkenning voor de Thuiszorg. Vraag en aanbod van verplegend en verzorgend personeel 2015-2019 [Future study for Home Care. Demand and supply of nursing and caring staff 2015-2019].* Utrecht/Den Haag: Kiwa/CAOP.

Van Eenoo, L., Declercq, A., Onder, G., Finne-Soveri, H., Garms-Homolová, V., Jónsson, P. V., . . . van der Roest, H. G. (2016). Substantial between-country differences in organising community care for older people in Europe—a review. *European journal of public health,* 26(2), 213-219. doi: 10.1093/eurpub/ckv152.

Van Mierlo, H., Rutte, C. v., Vermunt, J., Kompier, M., & Doorewaard, J. (2006). Individual autonomy in work teams: The role of team autonomy, self-efficacy, and social support. *European Journal of Work and Organizational Psychology,* 15(3), 281-299. doi: 10.1080/13594320500412249.

Varjus, S. L., Leino-Kilpi, H., & Suominen, T. (2011). Professional autonomy of nurses in hospital settings–a review of the literature. *Scandinavian journal of caring sciences,* 25(1), 201-207. doi: 10.1111/j.1471-6712.2010.00819.x.

Verbeek-Oudijk, D., Woittiez, I., Eggink, E., & Putman, L. (2015). Who cares in Europe? *Geron,* 17(1), 62-65.

VWS. (2013). *Notitie Hervormingen van de langdurige ondersteuning en zorg. Bijlage bij Kamerbrief hervormingen langdurige zorg: naar een waardevolle toekomst [Note Reform of long-term support and care. Annex to parliamentary letter Reform long-term care: towards a valuable future].* Den Haag: Ministerie van Volksgezondheid Welzijn en Sport.

VWS. (2014a). *Brief aan de voorzitter van de Tweede Kamer der Staten-Generaal. Commissiebrief inzake VSO Beroep en opleiding verpleegkundige. 15 oktober 2014 [Letter to the chairman of the House of Representatives. Commission letter regarding VSO Nursing profession and education. 15 October 2014].* Den Haag: Ministerie van Volksgezondheid, Welzijn en Sport.

VWS. (2014b). *Brief aan de voorzitter van de Tweede Kamer der Staten-Generaal. Samenhang in zorg en ondersteuning. 4 maart 2014 [Letter to the chairman of the House of Representatives. Coherence in care and support. 4 March 2014].* Den Haag: Ministerie van Volksgezondheid, Welzijn en Sport.

VWS. (2015). *Brief aan de Voorzitter van de Tweede Kamer der Staten-Generaal. Kamerbrief over de rol van wijkverpleegkundige. 14 april 2015 [Letter to the chairman of the House of Representatives. Letter regarding the role of home-care nurses with a bachelor´s degree. 14 April 2015].* Den Haag: Ministerie van Volksgezondheid, Welzijn en Sport.

Wade, G. H. (1999). Professional nurse autonomy: concept analysis and application to nursing education. *Journal of Advanced Nursing,* 30(2), 310-318.

Weston, M. J. (2008). Defining control over nursing practice and autonomy. *Journal of Nursing Administration,* 38(9), 404-408.

WHO. (2015). *WHO global strategy on people-centred and integrated health services: interim report*. Geneva: World Health Organization.

Wynd, C. A. (2003). Current factors contributing to professionalism in nursing. *Journal of Professional Nursing,* 19(5), 251-261.

Yin, J.-C. T., & Yang, K.-P. A. (2002). Nursing turnover in Taiwan: a meta-analysis of related factors. *International Journal of Nursing Studies,* 39(6), 573-581.

Zangaro, G. A., & Soeken, K. L. (2007). A meta-analysis of studies of nurses' job satisfaction. *Research in nursing & Health,* 30(4), 445-458.

2

Factors associated with the self-perceived ability of nursing staff to remain working until retirement: a questionnaire survey

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Abstract

Background

It is important to learn how employers in European countries can prevent nursing staff from changing occupation or taking early retirement in order to counteract expected nursing shortages. However, to date research on nursing staff's ability to remain working until retirement age has been limited. The purpose of this study was to gain insight into the associations between different job and organisational characteristics, job satisfaction, occupational commitment and the self-perceived ability to continue working in the current line of work until the official retirement age.

Methods

The questionnaire-based, cross-sectional study included 730 nursing staff members employed in Dutch hospitals, nursing homes, organisations for psychiatric care, homes for the elderly, care organisations for disabled people and home care organisations (mean age: 48; 89 % female). Linear and logistic regression analyses and mediation analyses were applied to test hypothesised associations.

Results

Reducing work pressure and increasing appreciation by senior management in particular have positive consequences for nursing staff's self-perceived ability to continue working until the official retirement age. The job and organisational characteristics of autonomy, work pressure, supportive leadership, educational opportunities, communication within the organisation and appreciation of nursing staff by senior management together have substantial impact on nursing staff's job satisfaction. Job satisfaction in turn is related to the self-perceived ability to continue working until the retirement age. However, job satisfaction mainly summarises the joint effect of job and organisational characteristics and has no supplementary effect on the self-perceived ability to continue working.

Conclusion

Employers should primarily focus on work pressure and the appreciation of nursing staff by senior management in order to retain nursing staff even as they get older.

2.1. Background

A nursing shortage is expected in the coming years in most countries in the WHO European Region due to increasing care needs. The need for direct patient care has been rising as a result of multiple forces in European societies, such as aging populations, the increasing prevalence of chronic diseases and higher survival rates for seriously ill people. Furthermore, there is a threat of a shortage of nurses due to nursing staff retiring or leaving the profession [1, 2] Reducing the flow of nursing staff leaving their profession might help to counteract the expected shortages of nursing staff in European countries. This is even more important because we have indications that nursing staff often do not expect to remain working in the nursing profession until retirement age. In the Netherlands, for instance, the age up to which healthcare workers expect to be capable of working in their profession is lower than for other occupational groups. Only craftspeople, industrial workers and farmers expect to have to stop working at a lower age than healthcare workers do [3].

It would thus be of interest to learn how employers can prevent nursing staff members from leaving the profession and retain them for patient care, even as they get older. In addition, it is important for healthcare organisations to gain insight into the job and organizational factors that are related to the self-perceived ability of nursing staff to remain working in their current line of work until the official retirement age. Much of the re-search on turnover among nurses so far focuses predominantly on predictors of nurses' intention to leave their current job or organisation or, to a lesser extent, their current profession [4-8] Little attention has been paid to factors related to their self-perceived ability to continue working in the current line of work until retirement age [9]. As far as we know, to date no model has been developed to explain these factors.

Karsh et al. [10] created a general model of nursing staff turnover that integrates elements from different models examined by Price and Mueller [11] Hinshaw et al. [12] and Parasuraman (as cited in [10]) and a meta-analysis conducted by Irvine and Evans [13]. According to this model, job satisfaction and organisational commitment are the key factors determining turnover intention. Several studies have identified positive associations between job satisfaction and organisational commitment on the one hand and turnover

intention on the other hand (e.g. [14-16]. Furthermore, the model of Karsh, et al. [10] showed that various job, organisational, economic and demographic factors in turn affect both job satisfaction and organisational commitment. None of these different types of factors have a direct effect on turnover intention.

Multiple literature reviews and meta-analyses have identified the following job and organisational factors as affecting job satisfaction and/or organisational commitment: autonomy, workload and stress, leadership style and educational opportunities [13, 17-22]. Autonomy and educational opportunities had positive associations, while the associations with workload and stress were negative. In their systematic review of leadership styles and outcome patterns for the nursing workforce, Cummings et al. [23] found that leadership styles focused on people and relationships were positively related to nurse job satisfaction, while leadership styles focused on tasks were negatively related to nurse job satisfaction. Furthermore, earlier research suggests that greater communication within the organisation and perceived appreciation by senior management are also positively related to job satisfaction and/or organisational commitment. There are multiple studies in which nursing staff indicate that in-creased appreciation in the organisation for their work would make the profession more appealing [24, 25]. In addition, Liou [26] argued that communication between administrators and nursing staff is vital to generate the level of organisational commitment that is needed for a durable, effective work environment.

The aim of our study was to identify job and organisational factors related to the self-perceived ability of nursing staff to continue in their current line of work until the official retirement age, using the model of Karsh, et al. [10] as a starting point. This general model of nursing staff turnover might also be applicable to the self-perceived ability of nursing staff to remain working until retirement. In our study, we focused on job factors and organisational factors, as these factors can be influenced by employers. Since our study examined the self-perceived ability to continue working in the current line of work rather than the current job, occupational commitment was included instead of organisational commitment. Occupational commitment has been found to have a stronger link to occupational turnover intention than organisational commitment [27].

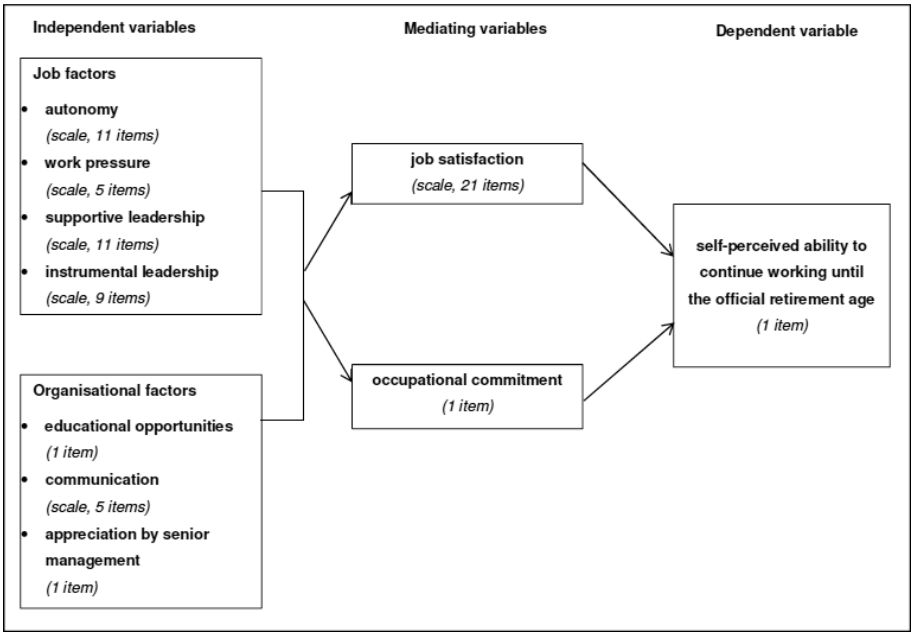
2.2. Methods

Hypothesised associations

Figure 2.1 shows the hypothesised associations examined in our study.
We tested the following hypotheses:

1. Job factors (i.e. more autonomy, less work pressure, more supportive leadership and less instrumental leadership) and organisational factors (i.e. more educational opportunities, better communication and more appreciation of nursing staff by senior management) are positively related to job satisfaction.
2. These job factors and organisational factors are also positively related to occupational commitment.
3. Nursing staff members who are less satisfied with their work or less committed to their occupation are more likely to think that they will be unable to continue working in the current line of work until the official retirement age.
4. The relationships between job factors and organisational factors on the one hand and the self-perceived ability of nursing staff to continue in their current line of work until the official retirement age on the other hand are mediated by job satisfaction and occupational commitment.

Figure 2.1 Associations examined in this study



Design and setting

Our hypotheses were evaluated using a cross-sectional correlational study, based on a secondary analysis of two datasets:

(1) a questionnaire survey containing questions about the self-perceived ability to continue working, with data collection in January 2011 (75 % response rate)
(2) a questionnaire survey containing questions about job satisfaction, occupational commitment, job factors and organisational factors, with data collection in May 2011 (68 % response rate)

The analysis is termed 'secondary analysis' as the data on job satisfaction, occupational commitment, job factors and organisational factors were not originally gathered for the purpose of explaining the self-perceived ability to continue working. Both questionnaires were self-administered. Respondents could complete the first questionnaire online or on paper. The second questionnaire was sent by post and completed on paper. The data from the two questionnaires were linked using the unique respondent ID.

Our research was conducted in the Netherlands. Hence, we used the Dutch official retirement age, which was 65 for both men and women at the time.

Sample

A total of 730 Dutch nursing staff members completed both questionnaires. All respondents were members of a pre-existent research sample, the Nursing Staff Panel, consisting of a nationally representative group of registered nurses, certified nursing assistants and social workers in Dutch hospitals, nursing homes, organisations for psychiatric care, homes for the elderly, care organisations for disabled people and home-care organisations. They deliver direct patient care and are willing to fill in questionnaires about current topics in health care. Candidates for the panel are recruited from a random sample of employees in healthcare organisations.

The vast majority of respondents (89 %) were female (Table 2.1) The respondents' mean age of 47 (standard deviation, or *S.D.* = 9.3) was several years older than the mean age of the Dutch population of nursing staff. Most respondents (88 %) only delivered direct patient care, while 12 % also had managerial tasks. The respondents were employed for 26 hours a week on average (*S.D.* = 7.5). A large proportion of the respondents (74 %) had irregular shifts. Their average score for self-perceived health was 4.1 (*S.D.* = 0.6) on a five-point scale ranging from 1 = 'very poor' to 5 = 'very good'.

Measures

Self-perceived ability to continue working until the age of 65
The self-perceived ability to continue working until the official retirement age was assessed using the question 'Do you think you are able to continue working in your current line of work until the age of 65?', which was used in a large-scale national study of work circumstances [28] The responses were originally on a three-point scale ('yes', 'no' and 'don't know') and subsequently dichotomised. Respondents answering 'yes' or 'don't know' (score = 1) were classified as (probably) being able to continue in their current line of work or being unsure whether they could continue, whereas respondents answering 'no' were classified as not being able to continue in their current line of work (score = 0). This classification was applied since this study focused on those nursing staff members who believe they are not able to continue working until retirement and factors that could change this conviction.

Job satisfaction
Job satisfaction was measured using the shortened version of the MAS-GZ (Maastricht Work Satisfaction Scale for Healthcare) by Landeweerd et al. [29]. This instrument comprises 21 items covering seven dimensions of job satisfaction: 'supervisor', 'quality of care', 'contacts with colleagues', 'contacts with patients', 'possibilities for promotion', 'opportunities for self-actualisation/growth' and 'clarity of tasks and rules'. Each item was rated on a five-point Likert scale ranging from 1 = 'very dissatisfied' to 5 = 'very satisfied'. Overall job satisfaction was calculated as the mean score of all 21 items (Cronbach's alpha = 0.91).

Occupational commitment
Occupational commitment was operationalised using the statement 'I'm proud to be in the nursing profession'. Respondents could indicate whether they agreed with this statement on a five-point Likert scale ranging from 1 = 'strongly disagree' to 5 = 'strongly agree'.

Autonomy
Self-perceived professional autonomy was measured using the 'autonomy' subscale (Cronbach's alpha = 0.91) from the 'Experience and Assessment of

Work' (VBBA) questionnaire by Van Veldhoven and Meijman [30]. Some examples of the 11 items are 'Do you have freedom in carrying out your daily activities? ' and 'Do you solve problems yourself?'. The responses were on a four-point Likert scale ranging from 1 = 'never' to 4 = 'always'.

Work pressure

The work pressure experienced was measured using a five-item scale (Cronbach's alpha = 0.84), giving an assessment of the time available for direct patient care [31] The items were rated on a five-point Likert scale ranging from 1 = 'I fully agree' to 5 = 'I fully disagree'. One example of these items is 'I have enough time to give good care to patients'.

Leadership style

Leadership style was assessed with the Leader Behaviour Description Questionnaire (Stogdill [32], revised and translated by Boumans [33]. This instrument consists of two subscales, measuring different dimensions of leadership: supportive leadership and instrumental leadership. Supportive leadership behaviour focuses on the personal needs of employees, whereas instrumental leadership behaviour is goal oriented and focuses on completing tasks. The two subscales (Cronbach's alpha = 0.91 and 0.82) consisted of eleven and nine items. Respondents could indicate how often their manager showed such behaviour using a five-point Likert scale from 1 = 'never' to 5 = 'always'.

Educational opportunities

Educational opportunities were measured by asking whether the respondent approves of the amount of personnel training (0 = 'no', 1 = 'yes').

Communication
Communication within the organisation was assessed using an adapted version of the 'communication' subscale from the 'Experience and Assessment of Work' (VBBA) questionnaire by Van Veldhoven and Meijman [30]. Some examples of the items are 'Are you kept adequately up to date about important issues within the organisation? ' and 'Is it clear to you whom you should address within the organisation for specific problems?' One self-developed item was added: 'Are you able to give your opinion on important policy decisions to the senior management?' The scale contained five items and responses were on a four-point Likert scale ranging from 1= 'never' to 4 = 'always'. Cronbach's alpha is 0.87.

Appreciation by senior management
Nursing staff's perceived appreciation by senior management was operationalised with the following question: 'Do you feel appreciated by the senior management within the organisation? '. Respondents could indicate their answer on a four-point Likert scale ranging from 1 = 'not at all' to 4 = 'to a large extent'.

Ethical considerations
This study was questionnaire based and had no patient involvement. According to Dutch law (www.ccmo.nl), no ethical approval was needed because the research subjects were not subjected to any interventions or actions. Study participation was voluntary and anonymous.

Data analysis
Since the hypothesised associations can be influenced by the individual characteristics of the nursing staff, we controlled for age, gender, self-perceived health, number of working hours per week, working irregular shifts, performing managerial tasks and educational level.

Linear regression analysis was used to test hypotheses 1 and 2. In the first step simple linear regression analyses were used to select the independent variables for use in a multiple regression model. Separate linear regression analyses were conducted with one independent variable (a job factor, organisational factor or respondent characteristic) and one dependent variable (job satisfaction or occupational commitment). Because of the large

number of tests, multiplicity adjustment was necessary; this was accomplished by using 99 % confidence intervals. Next, the job factors, organisational factors and respondent characteristics with $P < 0.01$ in the univariate regression analysis were selected as independent variables for inclusion in the multiple linear regression analysis. Two multiple regression analyses were performed; one with job satisfaction as the dependent variable and one with occupational commitment as the dependent variable.

Logistic regression analysis was used to test hypotheses 3 and 4. In the first step simple logistic regression analyses were used to select the independent variables for use in a multiple logistic regression model. Separate logistic regression analyses were performed with one independent variable (job satisfaction, occupational commitment, one of the job factors, one of the organisational factors or one of the respondent characteristics). The ability to continue working was the dependent variable. Because of multiple testing, a 99 % confidence interval was applied to adjust for multiplicity. Second, multiple logistic regression analysis was used to predict the ability to continue working based on both job satisfaction and occupational commitment, while controlling for the influence of the respondent characteristics (hypothesis 3). In this analysis, job satisfaction, occupational commitment and respondent characteristic(s) with $P < 0.01$ in the univariate logistic regression analysis were included as independent variables and the ability to continue working was included as the dependent variable. A check was also made for possible direct relationships between job factors and organisational factors on the one hand and the ability to continue working on the other hand using a second multiple logistic regression analysis, with the ability to continue working as the dependent variable. The independent variables in this analysis were job satisfaction and occupational commitment, plus the job factors, organisational factors and respondent characteristics with $P < 0.01$ in the univariate logistic regression analyses. To assess the mediated effect of job satisfaction and occupational commitment (hypothesis 4), mediation analysis was conducted using logistic regression analysis with standardised coefficients [34, 35]. Separate mediation analyses were performed with the self-perceived ability to continue working as the dependent variable, job satisfaction or occupational commitment as the mediator and one of the job factors or organisational factors that were significant in the multiple linear regression analyses as the independent variable. Standard errors for the direct and

indirect effects along with 95 % confidence intervals were obtained by bootstrapping (500 replications).

The data management and analysis were performed using STATA 12.1 (2011). Respondents with missing values for one or more variables were excluded from the analyses containing those variables. Table 2.1 shows the proportion of missing data for each variable. The assumptions on which multiple linear and logistic regression analyses are based were checked (i.e. the absence of multicollinearity, homoscedasticity, the linearity of the dependent variable, linear relationships between predictor variables and the outcome (or its log), normally distributed residual terms and absence of dispersion). Job satisfaction and occupational commitment showed a deviation from linearity. Therefore robust multiple linear regression was also conducted. The results did not diverge substantially from the initial multiple regression analyses. No further violations of assumptions were found.

2.3 Results

Self-perceived ability to continue working

As can be seen from the data in Table 2.1, 43 % of the respondents did not think they would be able to continue working in their current line of work until the age of 65. The proportion of respondents who thought they would be able to continue working, or were not sure about this, was 57 %.

Job factors and organisational factors related to job satisfaction

Bivariate analyses showed that all job and organisational factors measured were indeed related to job satisfaction (Table 2.2). However, instrumental leadership showed no association with job satisfaction when other job and organisational factors were included in the analysis (Table 2.3). So this largely confirms our first hypothesis, that job satisfaction is related to the selected job and organisational factors. Interestingly, the job and organisational factors explained a large proportion of the variance in job satisfaction (62 %). Hence, these factors are important in explaining nursing staff's satisfaction with their job.

Job factors and organisational factors related to occupational commitment

Bivariate relationships were found between occupational commitment and five job/organisational factors: autonomy, work pressure, supportive leadership, communication and appreciation by senior management (Table 2.2). However, when all these factors were included in the analysis (Table 2.3) occupational commitment was only related to work pressure and appreciation (and the control variable self-perceived health). Those staff members who experienced less work pressure and more appreciation by senior management felt more occupational commitment. Hence, the hypothesis that occupational commitment is related to the selected job and organisational factors is only partially confirmed.

Job satisfaction, occupational commitment and the self-perceived ability to continue working

Bivariate analyses indicated that job satisfaction and occupational commitment were associated with the self-perceived ability to continue working (Table 2.2). Yet, occupational commitment turned out not to be related to the ability to continue working when job satisfaction was included in the analysis (Table 2.3). Therefore, hypothesis 3 is only true for job satisfaction. Also, the control variables of age and self-perceived health appeared to be positively associated with the ability to continue working.

Job satisfaction as mediator

The separate mediation models showed that job satisfaction indeed mediates the relationship between autonomy, work pressure, supportive leadership, educational opportunities, communication and appreciation by senior management on the one hand and the ability to continue working on the other hand (Table 2.4). Concerning educational opportunities, the mediation analysis showed somewhat surprising results at first sight. The total effect of educational opportunities was not significant, while the indirect effect was significant. In this mediation analysis, the direct effect was opposite in sign to the indirect effect, and so the job satisfaction mediator could have acted as a suppressor variable. In such a case there is still mediation [35]. Contrary to expectations, work pressure and appreciation by senior management also showed a direct relationship with the ability to continue working in addition

to the indirect relationship through job satisfaction (Table 2.3 and Table 2.4). Multiple regression analysis comparing nested models showed no cumulative effect of the other job factors and organisational factors on the ability to continue working. Due to the correlations with these factors, job satisfaction no longer predicted the ability to continue working when job factors and organisational factors were included in the multiple logistic regression analysis (Table 2.3). Job satisfaction does not contribute separately to the prediction of the ability to continue working when account is taken of the joint contributions of the job factors and organisational factors. Job satisfaction seems to encapsulate the individual effects of the different job factors and organisational factors, without having a supplementary effect on the self-perceived ability to continue working. Thus, job satisfaction mediates the separate relationships between job factors and organisational factors (except instrumental leadership) on the one hand and the self-perceived ability to continue working on the other hand, but has no mediating role when linking these factors simultaneously to the self-perceived ability to continue working until retirement. No mediation analyses were performed for occupational commitment since it was not related to the self-perceived ability to continue working when account was taken of job satisfaction. In conclusion, hypothesis 4 is rejected.

Table 2.1 Descriptive statistics for variables in analyses: means, missing data, scale reliabilities (*n*=730)

	% or mean (S.D.)	Missing data (%)	Cronbach's α [a]
Dependent variable			
Self-perceived ability to continue working		0.3%	N/A
No	43.4%		
Yes or don't know	56.6%		
Mediator variables			
Job satisfaction (range 1-5)	3.59 (0.48)	1.6%	0.91
Occupational commitment (range 1-5)	4.05 (0.86)	1.2%	N/A
Independent variables			
Job factors			
Autonomy (range 1-4)	2.70 (0.54)	0.4%	0.91
Work pressure (range 1-5)	2.90 (0.80)	0.8%	0.84
Supportive leadership (range 1-5)	3.53 (0.73)	3.4%	0.91
Instrumental leadership (range 1-5)	2.82 (0.59)	3.8%	0.82
Organisational factors			
Sufficient educational opportunities		1.5%	N/A
No	31.6%		
Yes	68.4%		
Communication (range 1-4)	2.52 (0.61)	1.2%	0.87
Appreciation by senior management (range 1-4)	2.47 (0.72)	1.4%	N/A
Respondent characteristics (control variables)			
Age (years)	46.79 (9.3)	0%	N/A
Gender		0%	N/A
Male	10.8%		
Female	89.2%		
Perceived health (range 1-5)	4.11 (0.61)	3.3%	N/A
Working hours per week	25.58 (7.48)	2.7%	N/A
Irregular shifts		2.9%	N/A
No	26.2%		
Yes	73.8%		
Managerial tasks		0.3%	N/A
No	88.0%		
Yes	12.0%		

a N/A= not applicable

Table 2.2 Simple regression predicting 'job satisfaction', 'occupational commitment' and 'self-perceived ability to continue working'

	Job satisfaction	**Occupational commitment**	**Self-perceived ability to continue working**
	Coefficient	Coefficient	Coefficient
	Simple linear regression (99% C.I.) *n*=695-718	Simple linear regression (99% C.I.) *n*=696-721	Simple logistic regression (99% C.I.) *n*=700-728
Mediators			
Job satisfaction (range 1-5)	-	-	0.77 (0.35 – 1.21)**
Occupational commitment (range 1-5)	-	-	0.25 (0.02 – 0.48)**
Job factors			
Autonomy (range 1-4)	0.40 (0.32 – 0.48)**	0.34 (0.19 – 0.49)**	0.48 (0.11 – 0.85)**
Work pressure (range 1-5) #	-0.32 (-0.37 – -0.27)**	-0.27 (-0.37 – -0.17)**	-0.46 (-0.71 – -0.21)**
Supportive leadership (range 1-5)	0.43 (0.39 – 0.48)**	0.25 (0.14 – 0.37)**	0.26 (-0.01 – 0.53)
Instrumental leadership (range 1-5)#	-0.12 (-0.20 – -0.05)**	-0.14 (-0.28 – 0.00)	-0.19 (-0.52 – 0.14)
Organisational factors			
Educational opportunities (no=ref.)	0.35 (0.25 – 0.44)**	0.10 (-0.08 – 0.28)	0.17 (-0.24 – 0.59)
Communication (range 1-4)	0.39 (0.33 – 0.46)**	0.33 (0.20 – 0.46)**	0.39 (0.06 – 0.71)**
Appreciation by senior management (range 1-4)	0.32 (0.26 – 0.37)**	0.31 (0.20 – 0.42)**	0.49 (0.21 – 0.77)**

- *Table 2.2 continues* -

- Table 2.2 continued -

	Job satisfaction	Occupational commitment	Self-perceived ability to continue working
	Coefficient	Coefficient	Coefficient
	Simple linear regression (99% C.I.) *n*=695-718	Simple linear regression (99% C.I.) *n*=696-721	Simple logistic regression (99% C.I.) *n*=700-728
Respondent characteristics			
Age	-0.00 (-0.01 – 0.00)	-0.00 (-0.01 – 0.01)	0.03 (0.01 – 0.05)**
Gender (woman=ref.)	-0.10 (-0.24 – 0.05)	-0.16 (-0.42 – 0.11)	0.48 (-0.17 – 1.13)
Perceived health (range 1-5)	0.09 (0.01 – 0.17)**	0.15 (0.01 – 0.28)**	0.47 (0.14 – 0.80)**
Working hours per week	-0.01 (-0.01 – 0.00)	-0.00 (-0.01 – 0.01)	0.02 (-0.01 – 0.04)
Irregular shifts (no=ref.)	-0.05 (-0.16 – 0.05)	-0.08 (-0.27 – 0.11)	-0.24 (-0.68 – 0.21)
Managerial tasks (no=ref.)	0.09 (-0.05 – 0.24)	0.15 (-0.10 – 0.41)	-0.01 (-0.61 – 0.58)

- Variable is not included in the analysis
Scale is in opposite direction; negative relationships are expected
** Statistically significant with $p < 0.01$

Table 2.3 Multiple regression predicting 'job satisfaction', 'occupational commitment' and 'self-perceived ability to continue working'

	Job satisfaction	**Occupational commitment**	**Self-perceived ability to continue working**	
	Coefficient	Coefficient	Coefficient	
	Multiple linear regression (95% C.I.) *N*=660	Multiple linear regression (95% C.I.) *N*=667	1) Multiple logistic regression (95% C.I.) *N*=688	2) Multiple logistic regression (95% C.I.) *N*=673
Mediators				
Job satisfaction (range 1-5)	-	-	0.72 (0.36 – 1.08)**	0.26 (-0.21 – 0.74)
Occupational commitment (range 1-5)	-	-	0.09 (-0.11 – 0.29)	0.07 (-0.13 – 0.27)
Job factors				
Autonomy (range 1-4)	0.13 (0.08 – 0.18)**	0.12 (-0.01 – 0.25)	-	0.09 (-0.25 – 0.43)
Work pressure (range 1-5) #	-0.15 (-0.18 – -0.12)**	-0.16 (-0.24 – -0.07)**	-	-0.30 (-0.54 – -0.06)*
Supportive leadership (range 1-5)	0.28 (0.25 – 0.32)**	0.06 (-0.03 – 0.16)	-	
Instrumental leadership (range 1-5) #	-0.00 (-0.04 – 0.04)	-	-	

- Table 2.3 continues –

- Table 2.3 continued –

	Job satisfaction	Occupational commitment	Self-perceived ability to continue working	
	Coefficient	Coefficient	Coefficient	
	Multiple linear regression (95% C.I.) N=660	Multiple linear regression (95% C.I.) N=667	1) Multiple logistic regression (95% C.I.) N=688	2) Multiple logistic regression (95% C.I.) N=673
Organisational factors				
Educational opportunities (no=ref.)	0.12 (0.07 – 0.17)**	-	-	-
Communication (range 1-4)	0.06 (0.01 – 0.11)*	0.06 (-0.08 – 0.19)	-	-0.13 (-0.47 – 0.21)
Appreciation by senior management (range 1-4)	0.07 (0.03 – 0.11)**	0.17 (0.07 – 0.28)**	-	0.34 (0.05 – 0.62)*
Respondent characteristics				
Age	-	-	0.04 (0.02 – 0.05)*	0.04 (0.02 – 0.05)*
Gender (woman=ref.)	-	-	-	-
Perceived health (range 1-5)	0.04 (-0.00 – 0.07)	0.11 (0.01 – 0.22)*	0.47 (0.20 – 0.74)*	0.44 (0.17 – 0.71)*
Working hours per week	-	-	-	-

- Table 2.3 continues –

- Table 2.3 continued –

	Job satisfaction	**Occupational commitment**	**Self-perceived ability to continue working**	
	Coefficient	Coefficient	Coefficient	
	Multiple linear regression (95% C.I.) N=660	Multiple linear regression (95% C.I.) N=667	1) Multiple logistic regression (95% C.I.) N=688	2) Multiple logistic regression (95% C.I.) N=673
Irregular shifts (no=ref.)	-	-	-	-
Managerial tasks (no=ref.)	-	-	-	-
Test of model	R^2= 0.62, F (8,651)= 137.01**	R^2= 0.12, F (6,660)= 14.94**	R^2= 0.10 (Nagelkerke), Model X^2(4)= 51.10**	(R^2= 0.12 (Nagelkerke), Model X^2(8)= 62.49**

- Variable is not included in the analysis
Scale is in opposite direction; negative relationships are expected
* Statistically significant with $p < 0.05$
** Statistically significant with $p < 0.01$

Table 2.4 Separate mediation analyses with 'job satisfaction' as the mediating variable and 'self-perceived ability to continue working' as the dependent variable [a b]

Independent variables	*N*	Total effect (c) Coefficient (95% C.I.)	Total indirect effect (ab) Coefficient (95% C.I.)	Direct effect (c') Coefficient (95% C.I.)
Job factors				
Autonomy (range 1-4)	715	0.140 (0.056 – 0.233)*	0.077 (0.037 – 0.125)*	0.063 (-0.034 – 0.160)
Work pressure (range 1-5) #	712	-0.197 (-0.272 – -0.117)*	-0.070 (-0.127 – -0.016)*	-0.127 (-0.219 – -0.031)*
Supportive leadership (range 1-5)	702	0.106 (0.026 – 0.188)*	0.162 (0.091 – 0.244)*	-0.056 (-0.175 – 0.060)
Organisational factors				
Educational opportunities (no=ref.)	705	0.043 (-0.050 – 0.124)	0.070 (0.040 – 0.108)*	-0.026 (-0.119 – 0.063)
Communication (range 1-4)	710	0.134 (0.052 – 0.227)*	0.087 (0.035 – 0.139)*	0.047 (-0.043 – 0.149)
Appreciation by senior management (range 1-4)	709	0.198 (0.114 - 0.286)*	0.070 (0.027 – 0.119)*	0.128 (0.032 – 0.224)*

a Mediation effects estimated by bootstrapping (500 replications)
b Percentile confidence intervals (no bias correction)
Scale is in opposite direction; negative relationships are expected
* Statistically significant with $p < 0.05$

2.4 Discussion

Main findings

The present study was designed to gain insight into the associations between different job and organisational characteristics, job satisfaction, occupational commitment and the self-perceived ability of nursing staff to continue working in the current line of work until the official retirement age. Our results showed that work pressure and appreciation by senior management in particular are important in explaining the self-perceived ability to continue working in the current line of work. The job characteristics of autonomy, work pressure and supportive leadership and the organisational characteristics of educational opportunities, communication and appreciation by senior management together have substantial impact on job satisfaction. Furthermore, only work pressure and appreciation are significantly related to occupational commitment when accounting for the effect of the other job and organisational characteristics. Job satisfaction is related to the self-perceived ability to continue working, whereas occupational commitment has no contribution over and above job satisfaction in explaining this self-perceived ability. However, job satisfaction mainly summarises the joint effect of job and organisational factors and has no separate, supplementary effect on the self-perceived ability to continue working.

The results of this study confirm previous findings (e.g.[13] [18] [21]) and provide additional evidence of the associations between job satisfaction and the job and organisational factors of autonomy, work pressure, leadership style and educational opportunities. Nursing staff members who are allowed to have a certain degree of self-determination, freedom and discretion over their job, who have sufficient time to deliver high-quality care to patients, whose supervisor focuses on their personal needs and who have opportunities for professional development are more satisfied with their job.

Also, the current study showed that perceived appreciation in the organisation for nursing staff's work not only makes the profession more appealing [24], it seems also to be positively related to job satisfaction. The finding that communication within the organisation is associated with job satisfaction elaborates upon the ideas of Liou [26], who argued that communication between administrators and nursing staff is important in achieving a durable, effective work environment.

Our study showed an association between job satisfaction and the self-perceived ability to continue in the current line of work until the official retirement age. Thus, nursing staff members who are highly satisfied with their job are not only less likely to resign from their job or leave the profession, as earlier studies described (e.g. [6, 14, 16]) they are also less likely to believe they are unable to remain working in the current line of work until they reach retirement age.

According to this study, occupational commitment is not related to the self-perceived ability to continue working once account has been taken of the influence of job satisfaction. Previous studies have reported an association between occupational or professional commitment and nurses' intention to leave the profession [6]. However, job satisfaction seems to outweigh occupational commitment when it comes to staying in the profession until retirement age.

Our study also indicates that the only job and organisational factors with a direct effect on the self-perceived ability to continue working are work pressure and appreciation of nursing staff by senior management. This emphasises the negative consequences of high work pressure and a lack of appreciation. Limiting nursing staff's work pressure and showing appreciation for their work seem to be vital if employers are to retain them.

In line with the literature [9. 36], our study indicates that age and self-perceived health are important in explaining the self-perceived ability to continue working until retirement age, in addition to the aforementioned job and organisational factors. Also, other individual factors (e.g. family needs) may play a role. However, although good health and other personal factors are important in prolonging working life, these factors are part of nursing staff members' personal context and predominantly beyond the reach of employers. However, employers could boost the personal health of their employees, for example by initiating a vitality programme and promoting healthy working conditions.

Strengths and limitations

The current findings make several contributions to the literature. First, while a large body of literature has been devoted to the issue of nursing staff leaving the current job, organisation or profession, little research has been conducted on continuing working in the current line of work until retirement [9].

Furthermore, in contrast to the substantial amount of research on the working conditions of nursing staff within a particular healthcare sector [4, 8], the participants in this study encompassed nursing staff in different healthcare sectors. Finally, our study adds to previous studies on the relationship between job and organisational characteristics and job satisfaction (e.g. [13, 17]), by showing that communication within the organisation and perceived appreciation by senior management are also associated with job satisfaction.

Our study has some limitations. First, we assume that the self-perceived ability to remain working in the current line of work predicts whether nursing staff will in fact continue working until retirement age. Yet, this cannot be verified with our data because we did not measure how long nurses actually continued working. However, if nursing staff members think they are unable to continue in the current line of work until the age of 65, it seems plausible that they will retire early or make a career change. Ybema et al.[37] found the self-perceived ability to continue working until the age of 65 to be predictive of early retirement in the general working population aged 45 to 64. Another limitation is that the cross-sectional design of our study means that no cause-and-effect conclusions can be drawn. However, it is unlikely that the self-perceived ability to continue working in the current line of work precedes job and organisational factors such as autonomy and supportive leadership. Furthermore, selection bias could have affected the study results. However, the high response rate for both questionnaires suggests that this was probably not the case. Finally, we used a single item measure for occupational commitment rather than a scale. Using a scale could have enhanced the reliability of this measure.

Suggestions for future work

Additional empirical research could further validate the associations found. Longitudinal studies are recommended to ascertain the cause-and-effect relationships between job and organisational factors on the one hand and the self-perceived ability to continue working on the other hand. Preferably, these longitudinal studies should include a measurement of whether nursing staff members actually continue working until the official retirement age. This would enable the prognostic value of the self-perceived ability to continue working to be estimated.

2.5 Conclusions

To maintain a balanced nursing labour market, it is crucial to understand the job characteristics and organisational characteristics that are important in retaining nurses in patient care. With this knowledge, employers can focus on the most essential working conditions. This study has shown that employers should primarily address work pressure and appreciation of nursing staff by senior management as this would have a positive effect on nursing staff's ability to remain working until retirement. Furthermore, this study has revealed that employers can keep nursing staff members satisfied with their job by encouraging autonomy in nursing practice, regulating the work load, motivating team leaders to listen to nursing staff members and support them when they need help, fostering educational opportunities, advocating communication between administrators and nursing staff, and encouraging people in senior management positions to show their appreciation of nursing staff. Aiken et al. [38] reported 11 % (Netherlands) to 56 % (Greece) of nurses in general acute care hospitals in twelve European countries to be dissatisfied with their job, with an average of 30 %. Therefore, it seems crucial for healthcare organisations to tackle the sources of job dissatisfaction among nursing staff.

Authors' contributions
Study conception and design: EM, AdV, AF. Analysis and interpretation of data: EM, LvhH. Drafting of manuscript: EM, AdV, AF, LvdH. All authors read and approved the final manuscript.

References

1. Büscher A, SiVertsen B, White J. Nurses and midwives: a force for health. Copenhagen: World Health Organization (WHO); 2010.
2. OECD. Health at a Glance: Europe 2012. OECD Publishing; 2012. [http://dx.doi.org/10.1787/9789264183896-en]
3. Tno/Cbs. Oudere werknemers denken langer te kunnen doorwerken [Older workers expect to prolong working life]. [http://www.cbs.nl/NR/rdonlyres/F5281B4F-8C9A-4AE7-8AE8-80CEFE0133F9/0/2012pbnea16.pdf].
4. Chan ZC, Tam WS, Lung MK, Wong WY, Chau CW. A systematic literature review of nurse shortage and the intention to leave. J Nurs Manag. 2013;21(4):605–13.
5. Cowden TL, Cummings GG. Nursing theory and concept development: a theoretical model of clinical nurses' intentions to stay in their current positions. J Adv Nurs. 2012;68(7):1646–57.
6. Flinkman M, Leino-Kilpi H, Salanter S. Nurses' intention to leave the profession: integrative review. J Adv Nurs. 2010;66(7):1422–34.
7. Gilmartin MJ. Thirty Years of Nursing Turnover Research Looking Back to Move Forward. Med Care Res Rev. 2012;70(1):3–28.
8. Hayes LJ, O'Brien-Pallas L, Duffield C, Shamian J, Buchan J, Hughes F, et al. Nurse turnover: a literature review - An update. Int J Nurs Stud. 2012;49(7):887–905.
9. Geuskens GA, Hengel KMO, Koppes LLJ, Ybema JF. Predictors of the Willingness and the Ability to Continue Working Until the Age of 65 Years. J Occup Environ Med. 2012;54(5):572–8.
10. Karsh B, Booske BC, Sainfort F. Job and organizational determinants of nursing home employee commitment, job satisfaction and intent to turnover. Ergonomics. 2005;48(10):1260–81.
11. Price JL, Mueller CW. A causal model of turnover for nurses. Acad Manage J. 1981;24(3):543–65.
12. Hinshaw AS, Smeltzer CH, Atwood JR. Innovative retention strategies for nursing staff. J Nurs Adm. 1987;17(6):8–16.

13. Irvine DM, Evans MG. Job satisfaction and turnover among nurses: integrating research findings across studies. Nurs Res. 1995;44(4):246–53.

14. Sd G, Hofmans J, Pepermans R. Revisiting the impact of job satisfaction and organizational commitment on nurse turnover intention: An individual differences analysis. Int J Nurs Stud. 2011;48(12):1562–9.

15. Lynn MR, Redman RW. Faces of the nursing shortage: influences on staff nurses' intentions to leave their positions or nursing. J Nurs Adm. 2005;35(5):264–70.

16. Castle NG, Engberg J, Anderson R, Men A. Job satisfaction of nurse aides in nursing homes: Intent to leave and turnover. Gerontologist. 2007;47(2):193–204.

17. Blegen MA. Nurses' job satisfaction: a meta-analysis of related variables. Nurs Res. 1993;42(1):36–41.

18. Hayes B, Bonner A, Pryor J. Factors contributing to nurse job satisfaction in the acute hospital setting: a review of recent literature. J Nurs Manag. 2010;18(7):804–14.

19. Lu H, Barriball KL, Zhang X, While AE. Job satisfaction among hospital nurses revisited: a systematic review. Int J Nurs Stud. 2011;49(8):1017–38.

20. Mathieu JE, Zajac DM. A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. Psychol Bull. 1990;108(2):171.

21. Utriainen K, Kyng SH. Hospital nurses' job satisfaction: a literature review. J Nurs Manag. 2009;17(8):1002–10.

22. Zangaro GA, Soeken KL. A meta-analysis of studies of nurses' job satisfaction. Res Nurs Health. 2007;30(4):445–58.

23. Cummings GG, MacGregor T, Davey M, Lee H, Wong CA, Lo E, et al. Leadership styles and outcome patterns for the nursing workforce and work environment: a systematic review. Int J Nurs Stud. 2010;47(3):363–85.

24. Maurits EEM, De Veer AJE, Spreeuwenberg P, Francke AL. De aantrekkelijkheid van werken in de zorg 2013. Cijfers en trends. Utrecht: NIVEL; 2014.

25. De Veer AJE, Bloemendal E, Spreeuwenberg P, Francke AL. De aantrekkelijkheid van de verpleegkundige en verzorgende beroepen 2011: cijfers en trends over de afgelopen 10 jaar. Utrecht: NIVEL; 2012.

26. Liou S. An analysis of the concept of organizational commitment. Nurs Forum. 2008;43(3):116–25.

27. Lee K, Carswell JJ, Allen NJ. A meta-analytic review of occupational commitment: relations with person-and work-related variables. J Appl Psychol. 2000;85(5):799.

28. Koppes LLJ, De Vroome EMM, Mol MEM, Janssen BJM, Van den Bossche SNJ. Nationale Enquête Arbeidsomstandigheden 2010: Methodologie en globale resultaten [The Netherlands working conditions survey 2010: Methodology and overall results]. Hoofddorp: TNO; 2011.

29. Landeweerd JA, Boumans NPG, Nissen JMF. Arbeidsvoldoening bij verplegenden en verzorgenden. De Maastrichtse arbeidssatisfactieschaal voor de gezondheidszorg. [Job satisfaction of nurses and CNAs. The Maastricht Work Satisfaction Scale for Healthcare]. In: Handboek Verpleegkundige Innovatie. Houten: Bohn Stafleu; 1996.

30. Van Veldhoven MJPM, Meijman TF. Het meten van psychosociale arbeidsbelasting met een vragenlijst: de vragenlijst beleving en beoordeling van de arbeid (VBBA) [The measurement of psychosocial job demands with a questionnaire: the questionnaire on the experience and evaluation of work (QEEW)]. Amsterdam: Nederlands Instituut voor Arbeidsomstandigheden NIA; 1994.

31. Ruijters RFM, Stevens FCJ. Organisatiestructuur, rolduidelijkheid, arbeidssatisfactie en het oordeel van verpleegkundigen over de samenwerking met artsen. Verpleegkunde. 1992;2:106–14.

32. Stogdill RM. Manual for the leader behavior description questionnaire-Form XII. Columbus: Ohio State University, Bureau of Business Research; 1963.

33. Boumans NPG. Het werk van verpleegkundigen in algemene ziekenhuizen: een onderzoek naar werkaspecten en hun invloed op verpleegkundigen. Maastricht: Rijksuniversiteit Limburg; 1990.

34. Preacher KJ, Hayes AF. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. Behav Res Methods. 2008;40(3):879–91.

35. Mediation. [http://davidakenny.net/cm/mediate.htm].

36. Nilsson K, Hydbom AR, Rylander L. Factors influencing the decision to extend working life or retire. Scand J Work Environ Health. 2011;37(6):473–80.

37. Ybema JF, Geuskens G, Hengel KO. Oudere werknemers en langer doorwerken: Secundaire analyses van de NEA, het NEA-cohortonderzoek en de WEA. Hoofddorp: TNO Kwaliteit van Leven, Arbeid; 2009.

38. Aiken LH, Sermeus W, Van den Heede K, Sloane DM, Busse R, McKee M, et al. 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. 2012;344.

3

Autonomous home-care nursing staff are more engaged in their work and less likely to consider leaving the healthcare sector: a questionnaire survey

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Abstract

Background
The need for home care is rising in many Western European countries, due to the ageing population and governmental policies to substitute institutional care with home care. At the same time, a general shortage of qualified home-care staff exists or is expected in many countries. It is important to retain existing nursing staff in the healthcare sector to ensure a stable home-care workforce for the future. However, to date there has been little research about the job factors in home care that affect whether staff are considering leaving the healthcare sector.

Objective
The main purpose of the study was to examine how home-care nursing staff's self-perceived autonomy relates to whether they have considered leaving the healthcare sector and to assess the possible mediating effect of work engagement.

Design, setting and participants
The questionnaire-based, cross-sectional study involved 262 registered nurses and certified nursing assistants employed in Dutch home-care organisations (mean age of 51; 97% female). The respondents were members of the Dutch Nursing Staff Panel, a nationwide group of nursing staff members in various healthcare settings (67% response rate).

Methods
The questionnaire included validated scales concerning self-perceived autonomy and work engagement and a measure for considering pursuing an occupation outside the healthcare sector. Logistic regression and mediation analyses were conducted to test associations between self-perceived autonomy, work engagement and considering leaving the healthcare sector.

Results
Nursing staff members in home care who perceive more autonomy are more engaged in their work and less likely to have considered leaving the healthcare

sector. The negative association between self-perceived autonomy and considering leaving, found among nursing staff members regardless of their level of education, is mediated by work engagement.

Conclusion

In developing strategies for retaining nursing staff in home care, employers and policy makers should target their efforts at enhancing nursing staff's autonomy, thereby improving their work engagement.

3.1 Introduction

Ensuring a sustainable workforce in home care is a challenge for many Western European countries. A general shortage of home-care nursing staff exists in several countries, while other countries expect a scarcity of qualified home-care staff in the future (Genet et al., 2013).

The need for home care is rising due to the growing number of elderly people, both in absolute terms and as a proportion of the population, and because informal care is becoming scarcer (Colombo et al., 2011; European Commission, 2013; Genet et al., 2013; OECD, 2013). In addition, many OECD countries have developed policies to substitute institutional care with home care in response to people's preference for receiving care at home, as a measure for curbing the rapid growth in healthcare expenditure and helped by technological developments that further enable home-based care (Ellenbecker et al., 2008; Genet et al., 2013; OECD, 2013).

Various measures can be taken to ensure a workforce that is sufficient to meet the rising demand for home care. Besides recruiting new home-care personnel and increasing productivity, it is important to retain current nursing staff and prevent them from leaving the healthcare sector. It would thus be useful to have a better understanding of the job factors in home care that affect home-care nursing staff's views on leaving the healthcare sector. This knowledge can help home-care employers and policymakers take action to ensure a stable home-care workforce for the future.

Nurse turnover intention has frequently been the topic of research. Chan et al. (2013) conducted a systematic review on the intention to leave the current employment or the profession among registered nurses in hospitals. Hayes et al. (2012) reviewed recent literature on the intention to leave and actually leaving the organisation, unit/ward or the profession among registered nurses, practical/enrolled nurses and assistant nurses working in hospitals, long-term care or community care. However, current knowledge of job factors that impact on intentions to leave home care is limited (Ellenbecker et al., 2008). Research on turnover in nursing has tended to focus on leaving the organisation rather than the sector (Chan et al., 2013) and on hospital nurses (Hayes et al., 2012). For example, the recent systematic literature review by Chan et al. (2013) showed that lack of autonomy is associated with hospital nurses' intention to leave. However, these results

cannot automatically be extrapolated to nursing staff in the home-care sector (Neal-Boylan, 2006). For instance, home-care nursing staff may take more autonomous decisions in caring for their clients than nursing staff in hospital do.

This paper therefore focuses on the role of home-care nursing staff's self-perceived autonomy in considering leaving the healthcare sector. There is still no commonly accepted definition of autonomy in the nursing context (Varjus et al., 2011). Ellenbecker (2004), who has described a theoretical model of job retention for home-care nurses, has defined autonomy as independence and freedom of initiative in a job. We use this definition of autonomy in this paper.

A large-scale survey of the impact of job characteristics on intent to leave the organisation among nurses in nursing homes, care homes and home care established that autonomy is particularly important for nurses in home care (Tummers et al., 2013). When autonomy was reduced, home-care nurses were more likely to leave the organisation. However, it remains unclear whether low self-perceived autonomy is also an important reason for home-care nursing staff to consider leaving the healthcare sector. A more thorough understanding of this would help in particular in developing policies to guarantee a nursing workforce that can meet the demand for home care in the longer term. Therefore, the first objective of this paper is to provide insight into the association between the self-perceived autonomy of nursing staff in home care and whether they are considering leaving the healthcare sector.

In this regard, the paper also addresses whether there is a possible moderating effect of educational level on the association between self-perceived autonomy and considering leaving. A meta-analytic study of factors related to hospital nurses' intention to stay at or leave their jobs, performed by Yin and Yang (2002), showed a positive relationship between hospital nurses' educational level and autonomy. Alexander et al. (1982) suggest that nurses with a bachelor's degree are socialised to expect autonomy in their work environment. It can therefore be assumed that nursing staff with a higher level of education would be more dissatisfied than other nursing staff if they perceive a lack of autonomy, and would therefore be more likely to leave the healthcare sector.

Furthermore, this paper examines whether work engagement has a mediating effect on the relationship between self-perceived autonomy and

considering leaving the healthcare sector. A frequently cited definition of work engagement is "a positive, fulfilling, and work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli et al., 2002a, p. 465; Schaufeli et al., 2002b, p. 74). Work engagement is distinct from concepts such as organisational commitment, embeddedness and job satisfaction as it entails a complex and comprehensive view of an employee's relationship with their work (Leiter and Maslach, 2003). While organisational commitment concerns allegiance to the organisation and embeddedness refers to the attachment to a specific job and work setting, work engagement is directly linked to the work itself, which could be done in multiple settings (Bargagliotti, 2012; Leiter and Maslach, 2003). Besides, job satisfaction refers to the extent to which work is a source of need fulfilment and contentment and does not include an employee's relationship with the work itself (Leiter and Maslach, 2003).

Previous studies among healthcare personnel (Mauno et al., 2007) and telecom managers (Schaufeli et al., 2009) have shown that autonomy is positively related to (aspects of) work engagement. According to Bakker and Demerouti (2007), autonomy can be labelled as a job resource: a feature of the job that is functional in achieving work goals, reducing job demands and the associated physical and psychological costs, and supporting personal growth, learning and development. In their survey study among employees in a home-care organisation, Schaufeli and Bakker (2004) found support for their hypothesis that work engagement mediates the relationship between job resources and turnover. However, the authors did not include autonomy in the job resources they examined. They also highlighted the need for replication using different types of indicators for job resources (Schaufeli and Bakker, 2004).

Hence, the second objective of this paper is to examine whether the hypothesised relationship between home-care nursing staff's self-perceived autonomy and considering leaving health care is mediated by work engagement.

This study sought to test the following three hypotheses:

1) The self-perceived autonomy of nursing staff in home care is negatively related to considering leaving the healthcare sector.
2) The association between self-perceived autonomy and considering leaving

health care is stronger for nursing staff with a higher level of education.

3) The association between self-perceived autonomy and considering leaving health care is mediated by work engagement.

3.2 Methods

Design and setting

The hypotheses were tested in a cross-sectional design, using data from a questionnaire survey among nursing staff working in home care. Data collection took place in the Netherlands in May and June 2013.

Dutch formal home care covers care that supports daily living activities (i.e. personal care), technical nursing care and psychosocial care – all of which are delivered mainly by registered nurses and certified nursing assistants.

Formal home care can be episodic after a hospital stay but is more often longer lasting (De Veer et al., 2009). The education of Dutch certified nursing assistants consists of 3 years of vocational training after secondary education. This is different from the situation in most other countries where nursing assistants often have vocational training of less than 1 year. Dutch registered nurses are educated to two different levels. Nurses educated to associate degree level have had 3–3.5 years of professional training (equivalent to a UK foundation qualification) and nurses educated to bachelor's degree level have had at least 4 years of professional training (De Veer and Francke, 2010; De Veer et al., 2009).

Sample

A total of 116 Dutch registered nurses and 146 certified nursing assistants working in home care completed the questionnaire (a response rate of 69% among registered nurses and 65% among nursing assistants). Respondents were members of a pre-existent survey panel, the Nursing Staff Panel, consisting of a nationwide group of nursing staff members in various healthcare settings. Members of the Nursing Staff Panel are recruited via a random sample of the population of Dutch healthcare employees provided by the Dutch Employee Insurance Agency. This agency is responsible for social security payments and registers all employees in the Dutch healthcare sector. Healthcare employees in this random sample were asked to participate in

healthcare research for various purposes. Nursing staff delivering direct patient care in the largest healthcare sectors in the Netherlands (i.e. hospitals, mental health care, care for disabled people, home care, nursing homes and homes for the elderly) who agreed to this request were then invited to become members of the Nursing Staff Panel. This procedure promotes a diverse composition of the Panel in terms of age, gender, region and employer. Participation in the Nursing Staff Panel is voluntary and anonymous.

Data collection

The questionnaire was self-administered. The questionnaire was sent by post to panel members working in home care. The questionnaire was accompanied by a covering letter and a prepaid reply envelope. To increase the response rate, up to two postal reminders were sent at fortnightly intervals to panel members who had not yet responded.

Instruments

Considering leaving the healthcare sector

Considering leaving the healthcare sector was measured using one item: 'During the past year, did you consider pursuing an occupation outside the healthcare sector?' Responses were coded as 'no' = 0 and 'yes' = 1.

Autonomy

Self-perceived autonomy was measured using the 'autonomy' subscale from the Dutch 'Questionnaire on the Experience and Evaluation of Work' (QEEW) by Van Veldhoven and Meijman (1994). The QEEW, which is modelled on internationally renowned instruments such as the Job Content Questionnaire (Karasek et al., 1998), is widely used in the Netherlands to measure psychosocial job characteristics among employees in various sectors, including health care (Van Veldhoven et al., 2002). The 'autonomy' subscale has shown to be valid and reliable (Van Veldhoven et al., 2002). Some examples of the 11 items are 'Do you have freedom in carrying out your daily activities?', 'Are you able to influence the scheduling of your work activities?' and 'Can you decide on the content of your work activities yourself?' The responses were on a four-point Likert scale ranging from 1 = 'never' to 4 = 'always'.

Work engagement

Work engagement was assessed using the Dutch nine-item version of the Utrecht Work Engagement Scale (UWES-9), developed by Schaufeli and Bakker (2003). The UWES-9 covers three dimensions of work engagement, which are measured by three items each: vigour (e.g., 'In my job, I feel strong and vigorous'), dedication (e.g., 'I am proud of the work that I do') and absorption (e.g., 'I feel happy when I am working intensely'). Items were scored on a six-point Likert scale ranging from 0 'never' to 6 'always'. Overall work engagement was calculated as the mean score of all nine items. Previous research in 10 different countries has demonstrated that the UWES-9 is a valid and reliable questionnaire (Schaufeli and Bakker, 2003; Schaufeli et al., 2006). The UWES is the instrument most commonly used to measure engagement (Bakker et al., 2008).

Respondent characteristics

The respondent characteristics addressed in the survey questionnaire are age, gender, educational level, performing managerial tasks, work experience in health care and number of working hours per week. Educational level was specified as the highest level of nursing education completed (certified nursing assistant, registered nurse associate level degree or registered nurse bachelor's degree). Work experience in health care was defined as the number of years practicing as a registered nurse or certified nursing assistant.

Ethical considerations

This study was questionnaire-based and had no patient involvement. No ethical approval was needed according to the Dutch law on medical research (the 'WMO') because the research subjects were not subjected to any interventions or actions (www.ccmo.nl). Study participation was voluntary and anonymous. Members of the Nursing Staff Panel were free to decide whether they filled in the questionnaire. Questionnaire data were stored separately from personal information on the panel members and researchers did not have access to personal information. Therefore responses were non-traceable to individual panel members and confidentiality and anonymity were guaranteed.

Data analysis

Univariate logistic regression analyses were conducted to assess the associations between autonomy, work engagement and the respondent characteristics on the one hand (the independent variables) and considering leaving the healthcare sector on the other hand (the dependent variable). To test Hypothesis 1, a multiple logistic regression analysis was performed with autonomy and the respondent characteristics as the independent variables and considering leaving as the dependent variable. Interaction terms of educational level with autonomy were included to investigate the potential moderating effect of educational level (Hypothesis 2). The mediated effect of work engagement (Hypothesis 3) was examined using multiple logistic regression and mediation analysis. First, a multiple logistic regression analysis was performed with autonomy, work engagement and the respondent characteristics as the independent variables and considering leaving as the dependent variable. Then tests for mediation were conducted with autonomy as the independent variable, work engagement as the mediator and considering leaving as the dependent variable. The three regression equations described by Baron and Kenny (1986) were used for the tests: (1) regressing the mediator on the independent variable; (2) regressing the dependent variable on the independent variable; (3) regressing the dependent variable on both the independent variable and the mediator. The binomial nature of the dependent variable was accommodated by performing logistic regression analyses with standardised coefficients (Kenny, 2012; Preacher and Hayes, 2008). Standard errors for the direct and indirect effect along with 95% confidence intervals were obtained by bootstrapping (500 replications).

Data were analysed using STATA 13.1 (2013). The level of statistical significance was fixed at 0.05. Respondents with missing values for one or more variables were excluded from the analyses that included those variables. Table 3.1 shows the proportion of missing data for each variable. Model assumptions for logistic regression were verified (i.e. absence of multicollinearity, overdispersion and non-linear relationships between predictor variables and the log of the outcome). No violations of assumptions were found.

3.3 Results

Descriptive statistics

The demographic characteristics of the respondents are shown in Table 3.1. Almost all respondents were female (97%). The respondents' mean age of 51 (standard deviation, or *S.D.* = 9.1) was higher than the mean age of employees working in the home-term care sector in the Netherlands, which was 43 in 2011 (AZW, 2014). The majority of the respondents (56%) were certified nursing assistants, while 24% had an associate level degree in nursing and 20% a bachelor's degree. Most respondents (87%) delivered only direct patient care, while 13% also had managerial tasks. The average weekly working time was 22 h (S.D. = 7.9). Respondents had 22 years of experience in nursing on average (*S.D.* = 10.3).

As can be seen from Table 3.1, 21% of the respondents said that they had considered pursuing an occupation outside the healthcare sector during the past year. The mean score for self-perceived autonomy was 2.70 (*S.D.* = 0.59; range 1–4) and the mean score for work engagement was 4.72 (*S.D.* = 1.02, range 0–6). The internal consistency of the two scales was good because Cronbach's a met the criterion of 0.80 (Table 3.1). The mean score for autonomy was higher among registered nurses with a bachelor's degree (3.04) than among registered nurses with an associate degree (2.69, $p < 0.01$) and certified nursing assistants (2.58, $p < 0.01$). No statistically significant differences were found between the three nursing staff groups in self-perceived work engagement and whether they had considered leaving the healthcare sector.

Hypothesis 1. Association between autonomy and considering leaving the healthcare sector.

Hypothesis 1 is supported. As shown in Table 3.2 (column 1), the univariate logistic regression indicated that autonomy is negatively related to considering leaving (odds ratio (OR) = 0.47, 95% confidence interval (CI) = [0.27, 0.82], $p < 0.01$). As can be seen from Table 3.2 (column 2), this relationship remained significant after adding the respondent characteristics as independent variables in a multiple logistic regression analysis (OR = 0.52, 95% CI = [0.29, 0.95], $p < 0.05$). Nursing staff who perceived more autonomy were less likely to have considered leaving. None of the respondent characteristics (age, gender, educational level, performing managerial tasks, work experience and working hours per week) were associated with considering leaving the sector.

Hypothesis 2. Moderating effect of educational level

Hypothesis 2 stated that the effect of autonomy on considering leaving would be stronger for nursing staff members with a higher level of education. Since no interaction effect was found between autonomy and educational level (not in table), this hypothesis is rejected.

Table 3.1 Descriptive statistics for variables in analyses: means and missing data (*n*=262)

	% or mean (*S.D.*)	**missing data (%)**	**Cronbach's α** [a]
Dependent variable			
Considered leaving the healthcare sector		1.9%	N/A
No	79.0%		
Yes	21.0%		
Work characteristics			
Autonomy (range 1-4)	2.70 (0.59)	0.4%	0.93
Work engagement (range 0-6)	4.72 (1.02)	3.4%	0.94
Respondent characteristics			
Age (years)	51.03 (9.09)	0.0%	N/A
Gender		0.0%	N/A
Male	3.4%		
Female	96.6%		
Educational level		0.4%	N/A
certified nurse assistant	55.9%		
registered nurse, associate level degree	24.1%		
registered nurse, bachelor's degree	19.9%		
Managerial tasks		0.8%	N/A
No	87.3%		
Yes	12.7%		
Work experience (years)	22.12 (10.31)	1.9%	N/A
Working hours per week	22.44 (7.92)	2.7%	N/A

[a] N/A: not applicable

Table 3.2 Univariate and multiple logistic regression analyses

	Considering leaving the healthcare sector		
	Odds ratio (95% CI)		
	Univariate logistic regression *N*=248-257	**Multiple logistic regression** *N*=248	**Multiple logistic regression** *N*=247
Work characteristics			
Autonomy (range 1-4)	0.47 (0.27 – 0.82)**	0.52 (0.29 – 0.95)*	0.74 (0.39 – 1.42)
Work engagement (range 0-6)	0.57 (0.43 – 0.77)**	-	0.60 (0.43 – 0.83)**
Respondent characteristics			
Age (years)	0.97 (0.94 – 1.00)	0.98 (0.94 – 1.01)	0.97 (0.94 – 1.01)
Educational level			
certified nursing assistant (ref.)			
registered nurse, associate level degree	0.58 (0.27 – 1.25)	0.62 (0.27 - 1.38)	0.51 (0.22 – 1.17)
registered nurse, bachelor's degree	0.66 (0.29 – 1.48)	0.82 (0.32 - 2.06)	0.60 (0.23 – 1.57)
Managerial tasks			
No (ref.)			
Yes	0.84 (0.33 – 2.16)	1.22 (0.43 – 3.47)	1.25 (0.43 – 3.63)

Table 3.2 continues –

- Table 3.2 continued -

	Considering leaving the healthcare sector Odds ratio (95% CI)		
	Univariate logistic regression *N*=248-257	**Multiple logistic regression *N*=248**	**Multiple logistic regression *N*=247**
Work experience (years)	1.00 (0.97 – 1.03)	-[a]	-[a]
Working hours per week	0.98 (0.94 – 1.02)	0.99 (0.95 – 1.03)	1.00 (0.95 – 1.05)
Test of model		R^2=0.07 (Nagelkerke), Model $\chi 2$ (6)=10.75	R^2=0.12 (Nagelkerke), Model $\chi 2$ (7)=20.25**

- Variable is not included in the analysis

a Variable is not included in the analysis since this variable is highly correlated with age (r=0.46)

* Statistically significant with $p < 0.05$

** Statistically significant with $p < 0.01$

Table 3.3 Mediation analyses with 'autonomy' as the independent variable, 'work engagement' as the mediating variable and 'considering leaving health care' as the dependent variable[a,b] (*N*=247)

Total effect Coefficient (95% CI)	Total indirect effect Coefficient (95% CI)	Direct effect Coefficient (95% CI)
-0.218 (-0.402 to – -0.049)*	-0.083 (-0.154 – -0.026)*	-0.135 (-0.328 – 0.049)

a Mediation effects estimated by bootstrapping (500 replications)

b Percentile confidence intervals (no bias correction)

* Statistically significant with $p < 0.05$

Hypothesis 3. Mediation by work engagement.
As shown in Table 3.2 (column 1), univariate logistic regression analysis revealed that work engagement was negatively associated with considering leaving the healthcare sector (OR = 0.57, CI = [0.43, 0.77], $p < 0.01$). Those nursing staff members who showed greater engagement with their work were less likely to consider leaving. Autonomy turned out not to be related to considering leaving when both autonomy and work engagement (in addition to respondent characteristics) were included in the multiple regression analysis with considering leaving as the dependent variable (Table 3.2, column 3). Mediation analysis confirmed that work engagement mediates the relationship between autonomy and considering leaving (Table 3.3). The direct effect of autonomy was not significant, while the indirect effect was significant (β = -0.083, $p < 0.05$). Thus, Hypothesis 3 is supported: self-perceived autonomy is related to considering leaving the healthcare sector due to its association with work engagement.

3.4 Discussion

Main findings

There was a significant negative relationship between nursing staff's self-perceived autonomy and whether they had considered leaving health care during the past year. No moderating effect of educational level was found. Yet work engagement had a mediating effect on the association between self-perceived autonomy and considering leaving health care. Thus, nursing staff's self-perceived autonomy affects considering leaving health care as a

consequence of its relationship with work engagement. Enhancing nursing staff's autonomy will increase their work engagement and thereby make them less likely to consider a profession outside the healthcare sector.

Previous research in the field of turnover among nursing staff has predominantly concentrated on leaving, or intent to leave, the current employment (Chan et al., 2013) and on hospital nurses (Hayes et al., 2012). Although autonomy has been found to be an important factor in the retention of hospital nurses (Chan et al., 2013), it is likely that lack of autonomy has even more detrimental effects on nursing staff in home care. According to Tummers et al. (2013), nurses in home care often choose to work in this extramural setting because they expect to be able to work relatively independently, since home-care nurses regularly work alone when providing their services. A survey study among home-care nurses revealed that practice flexibility and independence are driving forces in attracting nurses to home care (Anthony and Milone-Nuzzo, 2005). Ellenbecker et al. (2006) also stress the importance of autonomy to home-care nurses. Qualitative data from their survey among nurses from home-care agencies in the USA showed that autonomy is the most frequently reported positive aspect of home-care nurses' job. The current study confirms the importance of autonomy to home-care nursing staff.

Previous studies depicted autonomy as an antecedent of nurses' work engagement (Bargagliotti, 2012; Freeney and Tiernan, 2009). Bargagliotti (2012) described work engagement as the dedicated, absorbing, vigorous nursing practice that arises from settings of autonomy and trust. Our findings support the role of autonomy in creating favourable conditions for work engagement in home care. Home-care nursing staff members who perceive more autonomy are more engaged in their work.

In addition, this paper provides further insight into the implications of work engagement among home-care nursing staff. To date, research on the consequences of nursing staff's work engagement has been scarce and has tended to focus on patient outcomes (e.g. patient mortality and complication rates in hospitals), organisational outcomes (profitability) and employees' health outcomes (nurses' physical and mental health) rather than job outcomes such as considering leaving the healthcare sector (Bargagliotti, 2012; Laschinger and Finegan, 2005; Simpson, 2009). Nevertheless, in their small-scale survey study including teams of nurses and non-registered caregivers in

two psychiatric hospitals, Van Bogaert et al. (2013) found that team work engagement is positively associated with intention to stay in the profession. Furthermore, Schaufeli and Bakker (2004) found a negative association between employees' work engagement and turnover intention among employees in a home-care organisation. In their literature review about engagement at work, Simpson (2009) recommends further research on the antecedents and consequences of nurses' work engagement, including different work settings and types of nursing staff. Our analyses showed that the work engagement of home-care nursing staff is related to whether they have considered leaving the healthcare sector. Nursing staff members in home care who are less engaged in their work are more likely to consider leaving the healthcare sector.

With regard to the job resource 'autonomy', the present paper provides additional evidence on the mediating role of work engagement in the job resources-turnover intention relationship. Schaufeli and Bakker (2004) demonstrated that a model with only an indirect path between job resources and turnover intention, via work engagement, is superior to a model that also assumes direct paths from job resources to turnover intention. Likewise, we found that work engagement emerged as a mediator of the relationship between autonomy and considering leaving the healthcare sector. No direct path between autonomy and considering leaving was found in addition to this indirect path through work engagement.

This paper also indicates that age, educational level, performing managerial tasks, work experience in health care and working hours per week are not associated with considering leaving the healthcare sector. However, in our multiple regression analyses the variance in the dependent variable (considering leaving) explained by the included independent variables was somewhat low. Therefore, other individual or work-related factors could play a role as well, as could economic factors.

Practical implications

Interventions that enhance home-care nursing staff's autonomy may improve their work engagement and thus make them less likely to consider leaving the healthcare sector. In the Netherlands, home-care nurses' autonomy is increasing due to policy changes and organisational transformations. While the task of assessing patients' home-care needs used to be delegated to an

independent assessment agency, the Dutch government recently decided to reassign this task to home-care nurses with a bachelor's degree in nursing. Furthermore, the number of Dutch homecare organisations that have introduced self-managing district teams of nurses is growing. These independent teams organise nursing tasks themselves without close supervision. These developments are expected to be important in enhancing home-care nurses' autonomy and work engagement, and may also lead to a reduction in the number of home-care nursing staff members who are considering leaving the healthcare sector.

Limitations and strengths

The current study is limited by the failure to address causality in the relationships found between self-perceived autonomy, work engagement and considering leaving health care. Since the data were cross-sectional, causal inferences cannot be made. Furthermore, the mean age of nursing staff members in this study (51) was somewhat higher than the national average age of those working in long-term care (43) in the Netherlands (AZW, 2014). For this reason, the generalisability of our research could be questioned. Nevertheless, age effects are not expected since our results showed no difference between older and younger nursing staff in the likelihood of considering leaving health care. Another relevant issue is that the term 'home care' is understood differently across countries (Genet et al., 2013). Therefore, the generalisability of the study results is limited to countries like the Netherlands where home care denotes formal nursing services and personal care provided by nursing staff within clients' own homes. Furthermore, by using a dichotomous question to measure whether staff have considered leaving the healthcare sector, we could not differentiate between nursing staff for whom this is a strong possibility and those who have only occasionally considered the option. Finally, this study did not examine the possibility of nursing staff considering switching to a different healthcare subsector such as hospital care. These home-care nursing staff may be retained for the healthcare sector as a whole but are lost to home care.

Notwithstanding these limitations, the findings from this study make several noteworthy additions to previous research. First, while many published studies on the turnover of nurses are limited to the intention to leave the current job or organisation (Flinkman et al., 2010), this paper

focused on considering leaving the healthcare sector in its entirety. It can be assumed that unlike changing jobs or organisations within the healthcare sector, nursing staff who leave the healthcare sector could pose a threat to the ability to ensure a sustainable workforce in this sector. Second, since the number of studies on nurse retention in home care is limited (Ellenbecker et al., 2008), this research enhances our understanding of important work characteristics that help keep nursing staff in their profession. Finally, the current findings provide further insight into the consequences of nursing staff's work engagement and thereby support the idea that work engagement is an important concept in nursing.

Suggestions for future studies

Future longitudinal research could be helpful in establishing cause-and-effect relationships between self-perceived autonomy, work engagement and considering leaving the healthcare sector. Also, a cross-country study could assess possible differences between different countries in the associations found. Furthermore, objective data on nursing staff actually leaving the healthcare sector would improve the validity of the findings presented in this paper.

Conclusions

It is important to prevent nursing staff from leaving the healthcare sector in order to tackle current and future shortages of home-care nursing staff. This paper shows that in home care, nursing staff members who perceive more autonomy are more engaged in their work and less likely to consider leaving the healthcare sector. In developing strategies for retaining nursing staff, employers and policy-makers should therefore target their efforts at enhancing nursing staff's autonomy, thereby improving their work engagement.

Authors' contributions

Study conception and design: EM, AdV, AF. Analysis and interpretation of data: EM, LvdH. Drafting of manuscript: EM, AdV, AF, LvdH. All authors read and approved the final manuscript.

References

Alexander, C.S., Weisman, C.S., Chase, G.A., 1982. Determinants of staff nurses' perceptions of autonomy within different clinical contexts. Nursing Research 31 (1), 48-52.

Anthony, A., Milone-Nuzzo, P., 2005. Factors attracting and keeping nurses in home care. Home healthcare nurse 23 (6), 372-377.

AZW, 2014. Arbeid in Zorg en Welzijn. Integrerend jaarrapport [Labour in health and welfare. Integrated annual report]. Panteia, Zoetermeer.

Bakker, A.B., Demerouti, E., 2007. The job demands-resources model: State of the art. Journal of managerial psychology 22 (3), 309-328.

Bakker, A.B., Schaufeli, W.B., Leiter, M.P., Taris, T.W., 2008. Work engagement: An emerging concept in occupational health psychology. Work & Stress 22 (3), 187-200.

Bargagliotti, A.L., 2012. Work engagement in nursing: a concept analysis. Journal of advanced nursing 68 (6), 1414-1428.

Baron, R.M., Kenny, D.A., 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. Journal of Personality and Social Psychology 51 (6), 1173-1182.

Chan, Z.C., Tam, W.S., Lung, M.K., Wong, W.Y., Chau, C.W., 2013. A systematic literature review of nurse shortage and the intention to leave. Journal of nursing management 21, 605-613.

Colombo, F., Llena-Nozal, A., Mercier, J., Tjadens, F., 2011. Help Wanted? Providing and Paying for Long-Term Care. OECD Publishing.

De Veer, A., Francke, A.L., 2010. Attitudes of nursing staff towards electronic patient records: A questionnaire survey. International Journal of Nursing Studies 47, 846-854.

De Veer, A.J.E., Francke, A.L., Buijse, R., Friele, R.D., 2009. The Use of Physical Restraints in Home Care in the Netherlands. Journal of the American Geriatrics Society 57 (10), 1881-1886.

Ellenbecker, C.H., 2004. A theoretical model of job retention for home health care nurses. Journal of advanced nursing 47 (3), 303-310.

Ellenbecker, C.H., Boylan, L.N., Samia, L., 2006. What home healthcare nurses are saying about their jobs. Home healthcare nurse 24 (5), 315-324.

Ellenbecker, C.H., Porell, F.W., Samia, L., Byleckie, J.J., Milburn, M., 2008. Predictors of home healthcare nurse retention. Journal of Nursing Scholarship 40 (2), 151-160.

European Commission, 2013. Long-term Care in Ageing Societies – Challenges and Policy Options¸ Commission StaffWorking Document, SWD 41. European Commission, Brussels.

Flinkman, M., Leino-Kilpi, H., Salanter, S., 2010. Nurses' intention to leave the profession: integrative review. Journal of Advanced Nursing 66 (7), 1422-1434.

Freeney, Y.M., Tiernan, J., 2009. Exploration of the facilitators of and barriers to work engagement in nursing. International Journal of Nursing Studies 46 (12), 1557-1565.

Genet, N., Boerma, W., Kroneman, M., Hutchinson, A., Saltman, R.B., 2013. Home care across europe. WHO, Regional Office for Europe (on behalf of the European Observatory on Health Systems and Policies), Copenhagen.

Hayes, L.J., O'Brien-Pallas, L., Duffield, C., Shamian, J., Buchan, J., Hughes, F., Laschinger, H.K.S., North, N., 2012. Nurse turnover: a literature review - An update. International Journal of Nursing Studies 49 (7), 887-905.

Karasek, R., Brisson, C., Kawakami, N., Houtman, I., Bongers, P., Amick, B., 1998. The Job Content Questionnaire (JCQ): an instrument for internationally comparative assessments of psychosocial job characteristics. Journal of occupational health psychology 3 (4), 322.

Kenny, D.A., 2012. Mediation. [http://davidakenny.net/cm/mediate.htm], accessed 12-12-2012.

Laschinger, H.K.S., Finegan, J., 2005. Empowering nurses for work engagement and health in hospital settings. Journal of Nursing Administration 35 (10), 439-449.

Leiter, M.P., Maslach, C., 2003. Areas of worklife: A structured approach to organizational predictors of job burnout. Research in occupational stress and well-being 3, 91-134.

Mauno, S., Kinnunen, U., Ruokolainen, M., 2007. Job demands and resources as antecedents of work engagement: A longitudinal study. Journal of Vocational Behavior 70 (1), 149-171.

Neal-Boylan, L., 2006. An analysis of the differences between hospital and home healthcare nurse job satisfaction. Home healthcare nurse 24 (8), 505-512.

OECD, 2013. Health at a Glance: OECD Indicators. OECD Publishing.

Preacher, K.J., Hayes, A.F., 2008. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. Behavior research methods 40 (3), 879-891.

Schaufeli, W.B., Bakker, A., 2003. UWES-Utrecht Work Engagement Scale: Preliminary Manual (Version 1). Utrecht University: Occupational Health Psychology Unit, Utrecht.

Schaufeli, W.B., Bakker, A.B., 2004. Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. Journal of organizational Behavior 25 (3), 293-315.

Schaufeli, W.B., Bakker, A.B., Salanova, M., 2006. The measurement of work engagement with a short questionnaire a cross-national study. Educational and psychological measurement 66 (4), 701-716.

Schaufeli, W.B., Bakker, A.B., Van Rhenen, W., 2009. How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. Journal of Organizational Behavior 30 (7), 893-917.

Schaufeli, W.B., Martínez, I.M., Pinto, A.M., Salanova, M., Bakker, A.B., 2002. Burnout and engagement in university students a cross-national study. Journal of cross-cultural psychology 33 (5), 464-481.

Schaufeli, W.B., Salanova, M., González-Romá, V., Bakker, A.B., 2002. The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. Journal of Happiness studies 3 (1), 71-92.

Simpson, M.R., 2009. Engagement at work: A review of the literature. International Journal of Nursing Studies 46 (7), 1012-1024.

Tummers, L.G., Groeneveld, S.M., Lankhaar, M., 2013. Why do nurses intend to leave their organization? A large-scale analysis in long-term care. Journal of advanced nursing 69 (12), 2826-2838.

Van Bogaert, P., Wouters, K., Willems, R., Mondelaers, M., Clarke, S., 2013. Work engagement supports nurse workforce stability and quality of care: nursing team-level analysis in psychiatric hospitals. Journal of psychiatric and mental health nursing 20 (8), 679-686.

Van Veldhoven, M.J.P.M., Meijman, T.F., 1994. Het meten van psychosociale arbeidsbelasting met een vragenlijst: de vragenlijst beleving en beoordeling van de arbeid (VBBA) [The measurement of psychosocial job demands with a questionnaire: the questionnaire on the experience and evaluation of work (QEEW)]. Nederlands Instituut voor Arbeidsomstandigheden NIA, Amsterdam.

Van Veldhoven, M.J.P.M., Meijman, T.F., Broersen, J.P.J., Fortuin, R.J., 2002. Handleiding VBBA [VBBA Manual]. SKB Vragenlijst Services, Amsterdam.

Varjus, S.L., Leino-Kilpi, H., Suominen, T., 2011. Professional autonomy of nurses in hospital settings–a review of the literature. Scandinavian journal of caring sciences 25 (1), 201-207.

Yin, J.-C.T., Yang, K.-P.A., 2002. Nursing turnover in Taiwan: a meta-analysis of related factors. International Journal of Nursing Studies 39 (6), 573-581.

4

Attractiveness of working in home care: an online focus group study among nurses

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Abstract

Many western countries are experiencing a substantial shortage of home-care nurses due to the increasing numbers of care-dependent people living at home. In-depth knowledge is needed about what home-care nurses find attractive about their work in order to make recommendations for the recruitment and retention of home-care nursing staff. The aims of this explorative, qualitative study were to gain in-depth knowledge about which aspects home-care nurses find attractive about their work and to explore whether these aspects vary for home-care nurses with different levels of education. Discussions were conducted with six online focus groups in 2016 with a total of 38 Dutch home-care nurses. The transcripts were analysed using the principles of thematic analysis. The findings showed that home-care nurses find it attractive that they are a "linchpin", in the sense of being the leading professional and with the patient as the centre of care. Home-care nurses also find having autonomy attractive: autonomy over decision-making about care, freedom in work scheduling and working in a self-directed team. Variety in patient situations and activities also makes their work attractive. Home-care nurses with a bachelor's degree did not differ much in what they found attractive aspects from those with an associate degree (a nursing qualification after completing senior secondary vocational education). It is concluded that autonomy, variety and being a "linchpin" are the attractive aspects of working in home care. To help recruit and retain home-care nursing staff, these attractive aspects should be emphasised in nursing education and practice, in recruitment programmes and in publicity material.

4.1 Introduction

Western populations are ageing rapidly, a development that is accompanied by an increasing prevalence of chronic diseases (European Commission, 2013; United Nations, 2013). Most chronically ill and elderly people prefer to receive care at home (Genet et al., 2011). In addition, European countries' governments generally promote home care rather than institutional care, which is leading to a growing demand for home care (Genet, Boerma, Kroneman, Hutchinson, & Saltman, 2012).

While the demand for home care is increasing, many Western European countries are experiencing a substantial shortage of home-care nurses (EUROFOUND, 2013; Genet et al., 2012). Home-care nurses deliver nursing care to patients at home. Nursing care ranges from personal care in daily activities to technical nursing care, preventive care and psychosocial care, for short or long periods. For a sufficiently large workforce, it is important to recruit new home-care nurses and to prevent current staff from leaving the home-care sector. Healthcare professionals, managers, lecturers, recruiters and policy makers therefore need to have information on the specific attractive aspects of working in home care.

However, little research has been done on the aspects that attract nurses to working in home care. Autonomy is the aspect most frequently mentioned in the scarce research literature on the attractiveness of working in home care (Anthony & Milone-Nuzzo, 2005; Ellenbecker, 2004; Ellenbecker, Boylan, & Samia, 2006; Maurits, De Veer, Van der Hoek, & Francke, 2015; Tummers, Groeneveld, & Lankhaar, 2013). Autonomy can be defined as "independence and freedom of initiative in a job" (Ellenbecker, 2004), and can be divided into: (i) autonomy over patient care, which refers to individual authority and freedom to make decisions concerning the content of patient care; (ii) work autonomy, which includes freedom and discretion in work scheduling and work methods; and (iii) organisational autonomy, which includes decision-making about the practice setting and contextual matters (Weston, 2008). Two surveys and a literature review from the US showed that autonomy is the most frequently reported positive aspect of working as a home-care nurse (Anthony & Milone-Nuzzo, 2005; Ellenbecker, 2004; Ellenbecker et al., 2006). Two Dutch surveys also revealed autonomy to be an attractive aspect (Maurits et al., 2015; Tummers et al., 2013), and showed that

it is related to the intention to remain working in the healthcare sector.

With regard specifically to organisational autonomy, the rise of self-directed teams in western countries is an interesting trend (Gray, Sarnak, & Burgers, 2015; Maurits, De Veer, Groenewegen, & Francke, 2017; Tjepkema, 2003). A "self-directed team" can be described as a team of home-care nurses that organises nursing care independently, in an optimum way for their patients and without directions from a manager. Self-directed teams differ from traditional teams in which managers have more influence on the nursing care and practice setting (Gray et al., 2015; Tjepkema, 2003). Furthermore, working in these self-directed teams is associated with enhanced autonomy over patient care (Maurits et al., 2017).

Previous research also points to some other aspects that attract nurses to work in home care, such as good employment conditions, use of their skills and abilities, having sufficient time to provide high quality nursing care, supportive supervisors and flexibility (Amstrong-Stassen & Cameron, 2005; Anthony & Milone-Nuzzo, 2005; Tourangeau, Patterson, Saari, Thomson, & Cranley, 2017). However, previous studies on the attractive aspects of working in home care were mainly quantitative in nature, and in-depth knowledge of what attracts home-care nurses is lacking, for instance with regard to the kind of autonomy that home-care nurses find attractive. This knowledge is needed in order to be able to give recommendations for recruiting and retaining home-care nursing staff.

Therefore, the qualitative study described in this paper aims to provide in-depth knowledge on the attractive aspects of working in home care. The study was performed in the Netherlands, a country with an urgent need for more home-care nurses. In the Netherlands, nurses either have an associate degree (a nursing qualification after completing senior secondary vocational education) or a bachelor's degree (from a university of applied sciences). We were interested to see whether there are differences between home-care nurses depending on their level of education in what they find attractive about working in home care. This is relevant as home-care nurses with a bachelor's degree are assigned a central position in the community in governmental and professional policy documents in the Netherlands (De Bont, Van Haaren, Rosendal, & Wigboldus, 2012; Ministry of Health, Welfare and Sports, 2015), while this is less so for their colleagues with an associate degree. In particular, home-care nurses with a bachelor's degree, but not

those with an associate degree, have the legal authority to perform a formal care needs assessment to decide what type of care and how much home care has to be delivered to a patient. The aspects that home-care nurses find attractive in their work might therefore also depend on their level of education.

This led to the following aims of this study:

- To gain in-depth knowledge about which aspects home-care nurses find attractive about their work.
- To explore whether these aspects vary for home-care nurses with different levels of education.

4.2 Methods

Design

An explorative, qualitative design was used with online focus groups (OFGs). OFGs were chosen rather than traditional face-to-face focus groups, because OFGs give the participants the ability to participate at a time most convenient to them. Additionally, OFGs enable participants to be recruited from a broad geographical area, because they can participate from home (Reid & Reid, 2005; Tates et al., 2009; Zwaanswijk & Van Dulmen, 2014).

Participants and recruitment

Participants were eligible for inclusion if they met the following criteria:

1. Being a registered nurse with a bachelor's degree or an associate degree in nursing,
2. Currently providing home care and
3. Having access to and being able to use a device with an Internet connection.

Participants were recruited through convenience sampling, by using professional associations' social media, the network of an alumni association and the professional network of the principal researcher (K.G.), as well as through "snowball sampling." Additionally, home-care nurses of a pre-existent Dutch research panel of nursing staff (see https://www.nivel.nl/en/panel-nurses-carers-vv) were asked whether they were prepared to participate in this

specific study. This recruitment resulted in an initial sample of 85 home-care nurses who stated that they were potentially interested in participating. These 85 nurses received information about the study and an informed consent form by e-mail. In total, 38 nurses (44.7%) signed and returned the informed consent form.

Data collection

The participants were divided into two homogeneous OFGs of home-care nurses with a bachelor's degree, two homogeneous OFGs of home-care nurses with an associate degree and two heterogeneous OFGs of nurses with both types of degree. We chose to have some heterogeneous OFGs as we expected that these would provide participants with an opportunity to discuss with nurses with a different level of education whether they differed in what they found attractive in their work. On the other hand we expected that the homogenous OFGs would provide opportunities for nurses with the same level of education to supplement one other regarding aspects which they found attractive.

Previous research showed that two OFGs with about eight participants were sufficient to gain worthwhile insights about aspects of working in home care (De Putter, Francke, De Veer, & Rademakers, 2014). Therefore, it was expected that six focus groups, each with six to eight participants, would be more than enough to reach data saturation, the point where new data collection does not provide any new insights relevant to the research questions (Guest, Bunce, & Johnson, 2006).

Discussions with the six OFGs were organised between February and May 2016, using a closed web-based discussion site developed by NIVEL—the Netherlands Institute for Health Services Research (Tates et al., 2009). Participants received an e-mail with the starting date of the OFG discussion, the website link and their individual login names and passwords. The OFG discussions were conducted in an asynchronous form, meaning in this case that participants could log in, read each other's anonymous comments and give their written online responses at any time within a set period of two weeks. Each of the six OFG discussions started with the open question "What do you find attractive about your work as a home-care nurse?" Thereafter, the research team asked more specific questions, steered by the answers to the first question and based on the interview guide shown in Table 4.1.

Questions from the interview guide were placed on the discussion board every 2 days, except in the weekend. The research team acted as moderators by regularly checking the comments and posting new questions. The research team consisted of three members: the principal researcher, a nursing scientist who also works on a part-time base as a home-care nurse (K.G.), a researcher on the working conditions of nursing staff (E.M.), and a nursing professor and research coordinator (A.F.).

Data analysis

The OFG transcripts were analysed following the steps of thematic analysis: becoming familiar with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes and producing a report (Braun & Clarke, 2006). Thematic analysis was used because this is a flexible and systematic method for identifying themes within qualitative data (Braun & Clarke, 2006, 2014). The transcripts of all six OFG discussions were analysed by the principal researcher (K.G.), while the first four OFG discussions were also independently analysed by one of the other two researchers (A.F. or E.M.). The initial codes derived from the independent analyses were discussed until consensus was reached. After searching for and reviewing themes, a thematic "mind map" was drawn. This map was discussed with the research team until consensus was reached about the defining of themes. This resulted in Figure 4.1 and the themes discussed in the Results section.

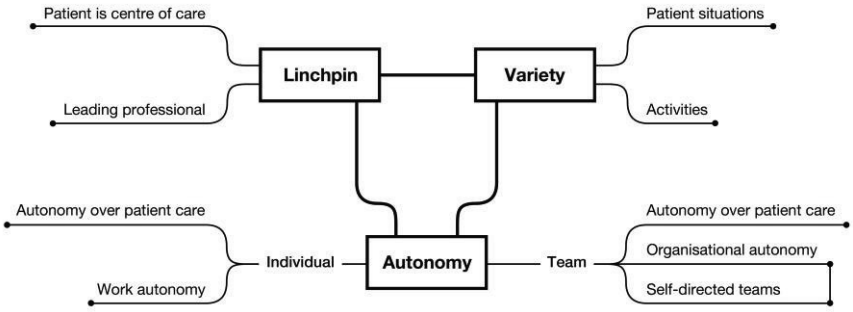
Ethical considerations

The study was conducted in compliance with the principles of the Dutch Personal Data Protection Act (see http://www.privacy.nl/uploads/guide_for_controller_ministry_justice.pdf). The anonymity of the participants was strictly safeguarded throughout the entire study. Further ethics approval of this study was not required under the applicable national Dutch legislation as all participants were competent individuals, they were not subjected to procedures and they were not required to follow rules of behaviour (for the Dutch legislation, see: http://www.ccmo.nl/en/).

Table 4.1 Interview guide for online focus groups

Given the iterative process of qualitative research, the interview guide could be adjusted based on new insights from data analysis.
First open question
What do you find attractive about your work as a home-care nurse?
Possible follow-up questions
Autonomy over patient care:
Can you say something about whether working independently in the patient's home is important for the attractiveness of your work?
Do you find it important to be able to make independent decisions concerning the patient care? Do you find this important for the attractiveness of your work? Can you elaborate on your answer?
What does the authority to perform a formal care needs assessments mean for the attractiveness of your work? Can you elaborate on your answer?
Work autonomy:
Do you find it important to experience freedom and discretion in making decisions about work methods? Do you find this important for the attractiveness of your work? Can you elaborate on your answer?
Do you find it important to experience freedom and discretion in making decisions about work scheduling? Do you find this important for the attractiveness of your work? Can you elaborate on your answer?
Organisational autonomy:
Do you find it important to be involved in decision making about the practice setting and contextual matters? Do you find this important for the attractiveness of your work? Can you elaborate on your answer?
Self-directed teams:
Do you find it important for the attractiveness of your work to be working in a self-directed team? Can you elaborate on your answer?
Follow-up question for all previous questions:
Do you think there are differences between home-care nurses with different levels of education in the aspects that they find attractive in their work?

Figure 4.1 Thematic map



4.3 Findings

The background characteristics of the 38 participants of the OFG discussions are shown in Table 4.2. The three main themes and the related subthemes in Figure 4.1 will be discussed in the next sections.

Table 4.2 Characteristics of the participants in the online focus groups (n=38)

	number or mean (range)
Age (years)	42.5 (22-64)
Work experience (years)	14.4 (1-40)
Working hours per week	27.9 (12-38)
Gender	
Female	38
Education level	
Bachelor's degree	18
Associate degree	20[a]
Kind of team	
Self-directed	27
Non-self-directed	11

a Four nurses with an associate degree were following a bachelor's programme in nursing during this study

Linchpin

Home-care nurses considered themselves as a "linchpin" in the community in the sense that they had a central position in the community, communicating and collaborating with general practitioners, other professionals (e.g. from welfare and municipal organisations) and family caregivers. From this position they saw *the patient as the centre of care* and themselves as the *leading professional* in the care for their patients as well as within the community. Participants considered themselves as "leading" as they formed the link between the patient and other professionals (e.g. general practitioners, nursing assistants and home helps) and were responsible for the co-ordination of care and for the well-being of their patients and family caregivers. Their role as linchpin was also attractive for them as it let them make a positive difference to the situation of their patients:

> *I like to be the one who makes the connections around the patient, the one who assesses the care needs and the one who takes actions to connect the patient to professionals and to family caregivers. If this eventually leads to a good collaboration, it can give me a lot of satisfaction.*
>
> *(OFG 3, homogeneous OFG, bachelor's degree)*

Their perception of the patient as the centre of care and their role as linchpin also meant that participants took the needs of patients and their relatives as the starting point of care rather than the rules of their organisation. This was why patients appreciated them:

> *I see that the patient (almost) always looks forward to our visits. They like us because the things that nurses do complement the things a patient cannot get done inde- pendently. The care is a (small) part of his/her life.*
>
> *(OFG 2, heterogeneous OFG)*

Home-care nurses in all the OFGs—the homogeneous as well as the heterogeneous OFGs—emphasised that the "linchpin role" (irrespective of whether or not they used this specific term) was attractive for them. However, some specific subroles were associated with the educational level. Home-care nurses with a bachelor's degree referred to their role coaching team members

as an attractive aspect, but this was not mentioned by their colleagues with an associate degree.

Autonomy

In all OFGs, home-care nurses mentioned autonomy as an attractive aspect of their work. First of all, autonomy was about the autonomy over patient care. Participants said that they had a relatively autonomous role in decision-making about the care needed. At the same time, participants in all OFGs said that shared decision-making with the patient and the family caregivers was "a must." In addition, decision-making was also related to the "linchpin role" and as such influenced by consultations with colleagues and other relevant professionals, such as general practitioners:

> *What I really like is that I can consult a lot with colleagues and other disciplines, but when decisions have to be made I have an important role too.*
>
> *(OFG 1, homogenous OFG, bachelor's degree)*

With regard to autonomy over patient care, home-care nurses with a bachelor's degree mentioned their authority to perform formal care needs assessments; the home-care nurses with an associate degree do not have this authority, but they did recognise this as an aspect for their colleagues with a bachelor's degree.

Second, home-care nurses with a bachelor's degree and those with an associate degree mentioned that work autonomy was attractive. For example, they stated that being able to schedule their activities and set priorities was important for them. Their relative independence in scheduling most of their activities made their work challenging in the positive sense of the word:

> *Independent scheduling of your own tasks and setting priorities is a nice part of our work. It means that you constantly have to check your own schedule and have to make compromises on a regular basis. That means that you never know beforehand how your day is going to be.*
>
> *(OFG 2, heterogeneous OFG)*

Third, aspects of organisational autonomy were mentioned, particularly in relation to working in self-directed teams. Several home-care nurses with either a bachelor's degree or an associate degree who worked in self-directed teams called their team their "own business" or their "own shop." They found that working in a self-directed team made it possible to be responsible for their own work together with their team members and not to be dependent on a manager. This independence made their work more attractive, and some said that they never wanted to return to a traditional, non-self-directed team:

> *I have worked in a self-directed team since 2013 and it has opened up a whole new world for me. I was used to man- agers who did not reply to questions or only did so after a long time. I often felt I was not being taken seriously. Now, in this self-directed team, I help to come up with solutions and feel responsible for everything we encounter in our work, together with my colleagues.*
>
> *(OFG 2, heterogeneous OFG)*

Home-care nurses found that self-direction resulted in more equality and involvement among the team members. They said that self-direction allowed them to make use of each other's qualities, to develop these qualities and to "flourish":

> *Everyone is important in a self-directed team. Nobody can be missed, which makes everyone so valuable with their own individual qualities and experiences.*
>
> *(OFG 4, heterogeneous OFG)*

However, a few participants made remarks about the necessary preconditions for a self-directed team: it was important to have the trust of the authorities higher up in the organisation and the right facilities, and if these preconditions were not satisfied, this reduced the attractiveness of self-direction. Additionally, not all participants liked the idea of working in a self-directed team. For instance, one nurse working in a traditional, non-self-directed team mentioned that she liked the possibility of falling back on someone else and the safety of support from the authorities.

Variety

Participants of both educational levels said that every working day was unique because of the variety in their work. First, there was variety in the patient situations. In all OFGs—the heterogeneous as well as the homogenous OFGs—the variety in patient situations was mentioned as an attractive aspect of working in home care. The participants stated that each situation was unique and required different solutions or actions. Several participants mentioned that the varied patient situations required constant alertness during nursing care and stopped their work from becoming a boring routine. In addition, given that home care is delivered in the patients' home, they also found having to take account of the rituals and wishes of each individual patient an attractive aspect:

> *I like the fact that each patient situation is different. I have to deal with people of different ages. They might be wealthy or they might be just getting by. They might be intelligent or illiterate. They might be mature and help come up with ideas or they might leave the initiative to others. You have to deal with the family around a patient, but also with patients with almost no family. Seriously ill, terminally ill, but fortunately sometimes you also get to end the care because the patient is cured.*
>
> *(OFG 2, heterogeneous OFG)*

Second, the variety in activities was considered an attractive aspect. This aspect was mentioned in all OFGs. In particular, the combination of nursing care for their patients and the more organisational activities was frequently mentioned as an attractive aspect:

> *Caring for the patients, directing the nursing care by taking a helicopter view, coaching and managing the team and contributing to improvements in the quality of care within the team and the organisation. It is incredibly diverse. Every day I switch continuously between these different roles, it's wonderful!*
>
> *(OFG 1, homogenous OFG, bachelor's degree)*

Home-care nurses saw these varied activities as inherent to their role as a "linchpin." Home-care nurses found that the variety in patient situations and

nursing activities led to a certain alertness, improvisation, flexibility and creativity in their work. Home-care nurses said that standard solutions did not work in home care, which meant they had to improvise regularly and without advance warning. They also worked with limited resources, which created certain challenges in their work. Participants found it very satisfying when they were able to deal with these challenges successfully:

> *You have to be very creative and inventive in coming up with solutions. If I think back to my time in the hospital, then I feel that what I'm doing now is real nursing. You have to work with the limited resources that are available. All the challenges that get dealt with successfully are moments of happiness in my work from which I derive new energy for new challenges. This is what makes our work so attractive.*
>
> *(OFG 3, homogenous OFG, bachelor's degree)*

4.4 Discussion

Being a "linchpin," in the sense of being the leading professional who collaborates intensively with other professionals and who takes the individual patient as the centre of care, is a very attractive role for home-care nurses. This result supports the World Health Organisation's (2015) call for people-centred and integrated health services delivery. In addition, home-care nurses indicate that the autonomy over patient care and their work autonomy are attractive aspects of their work. Previous research also showed that autonomy is important in home care (Anthony & Milone-Nuzzo, 2005; Ellenbecker et al., 2006; Maurits et al., 2015; Tummers et al., 2013). For instance, Maurits et al. (2015) found that home-care nursing staff who have autonomy are more engaged in their work and less likely to consider leaving the healthcare sector. The OFGs indicated that individual autonomy is accompanied by shared decision-making with the patients and family caregivers, and with consultations with their immediate colleagues and other relevant professionals. This finding is in line with the research of Van Mierlo, Rutte, Vermunt, Kompier, and Doorewaard (2006), who found that nurses reported more individual autonomy when they felt supported by their immediate colleagues. Hence, autonomy over patient care is both an individual factor and a team-related trait.

Furthermore, the OFG discussions showed that home-care nurses often find working in a self-directed team attractive, a finding that is backed up by other research (Gray et al., 2015; Maurits et al., 2017; Tjepkema, 2003). Home-care nurses in self-directed teams experience shared responsibility and the freedom to make decisions about the organisation of care, which is associated with the concept of organisational autonomy. Van Mierlo et al. (2006) have shown that team autonomy is positively related to individual autonomy, which may also explain the attractiveness of self-directed teams.

Furthermore, home-care nurses find the variety in patient situations and nursing activities attractive; it prevents their day-to-day work from turning into boring routines. This finding is in line with re- search by Tourangeau et al. (2017), who show that having variety in patient situations is positively related with home-care nurses' intent to remain employed in home care.

Interestingly, the above-mentioned attractive aspects of working in home care were mentioned by home-care nurses of both levels of educational, although some specific job tasks (e.g. coaching team members and the formal care needs assessment) were particularly relevant for those with a bachelor's degree. Nevertheless, in general, home-care nurses of both educational levels liked being "a linchpin," having autonomy and experiencing variety in patient situations and activities. We therefore recommend that professionals, managers and policy makers involved in recruiting new staff emphasise these positive aspects of working in home care. It is also important that these positive aspects are emphasised in magazines and on Internet sites that are read by nurses. Given the growing need for care in the home, it is also important to ensure that current home-care nurses do not leave the home-care sector. This implies that governments and care organisations, now and in the future, have to ensure the right financial and organisational conditions for home-care nurses to retain their linchpin role, and that it is also important to have autonomy and variation at work.

Study strengths and limitations

In 2014, the average age of nursing staff in home care was about 44 years and about 8% were male (AZW, 2014). Hence, the average age of our sample is representative for the home-care sector. Unfortunately, no male nurses were recruited for this study, which is a limitation for the generalisability. However,

we reached data saturation for the female home-care nurses, which is a strength of this study. Saturation was confirmed as the last two OFGs produced no new aspects relevant for answering the research questions. Another strength is that we worked with a research team of three closely collaborating researchers, which allowed triangulation of data analyses and peer discussions.

Another feature of this study is that we only focused on the attractive aspects of working in home care. This choice was made as those aspects are important when recruiting staff. However, when it comes to retaining current personnel, it is also important to know what is not attractive about working in home care. Future research should therefore focus on gaining more in-depth knowledge about the negative aspects of working as a home-care nurse and strategies to mitigate these. With this knowledge, managers and policy makers can take action to prevent nurses from leaving the home-care sector.

4.5 Conclusion

Home-care nurses—both those with a bachelor's degree and those with an associate degree—find being a "linchpin," autonomy and variety in patient situations and nursing activities the main attractive aspects of their work. We recommend that these attractive aspects are emphasised in publicity materials and also by managers, lecturers, recruiters and policy makers who are involved in recruiting and retaining home-care nursing staff.

Authors' contributions

Study conception and design: KdG, EM, AF. Analysis and interpretation of data: KdG, EM, AF. Drafting of manuscript: KdG, EM, AF. All authors read and approved the final manuscript.

References

Amstrong-Stassen, M. L. H. R., & Cameron, S. J. (2005). Concerns, satisfaction, and retention of Canadian community health nurses. *Journal of Community Health Nursing*, *22*, 181–194.

Anthony, A., & Milone-Nuzzo, P. (2005). Factors attracting and keeping nurses in home care. *Home Healthcare Nurse*, *23*, 372–377.

AZW (2014). Personeelskenmerken 2014 - Branches [Staff characteristics 2014 - Branches]. Retrieved from www.azwinfo.nl.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*, 77–101.

Braun, V., & Clarke, V. (2014). What can "thematic analysis" offer health and wellbeing researchers? *International Journal of Qualitative Studies on Health and Well-Being*, https://doi.org/10.3402/qhw.v9.26152.

De Bont, M., Van Haaren, E., Rosendal, H., & Wigboldus, M. (2012). *Expertisegebied wijkverpleegkundige [Area of expertise community nurse]*. Utrecht: V&VN. Retrieved from http://mgz.venvn.nl/Portals/30/Eerstelijn/Publicaties/wijkverpleegkundigen/20121106%20 Expertisegebied%20wijkverpl.pdf.

De Putter, I. D., Francke, A. L., De Veer, A. J. E., & Rademakers, J. J. D. J. M. (2014). *Kennissynthese: De wijkverpleegkundige van vandaag en morgen. [Knowledge synthesis: The community nurse of today and tomorrow]*. Utrecht: NIVEL.

Ellenbecker, C. H. (2004). A theoretical model of job retention for home health care nurses. *Journal of Advanced Nursing*, *47*, 303–310.

Ellenbecker, C. H., Boylan, L. N., & Samia, L. (2006). What home healthcare nurses are saying about their jobs. *Home Healthcare Nurse*, *24*, 315–324.

EUROFOUND. (2013). *More and better jobs in home-care services. Luxembourg: Publications Office of the European Union. Retrieved from* https://www.eurofound.europa.eu/publications/report/2013/labour-market-social-policies/more-and-better-jobs-in-home-care-services.

European Commission. (2013). *Commission staff working document: Long-term care in ageing societies – Challenges and policy options*. Brussels: EU Commission. Retrieved from http://aei.pitt.edu/id/eprint/45916

Genet, N., Boerma, W. G., Kringos, D. S., Bouman, A., Francke, A. L., Fagerstrom, C., … Devillé, W. (2011). Home care in Europe: A systematic literature review. *BMC Health Service Research*, *11*,207.

Genet, N., Boerma, W. G., Kroneman, M., Hutchinson, A., & Saltman, R. B. (2012). Home care across Europe: Current structure and future challenges. Retrieved from http://www.euro.who.int/data/assets/pdf_file/0008/181799/e96757.pdf

Gray, B. H., Sarnak, D. O., & Burgers, J. S. (2015). Home care by self-governing nursing teams: The Netherlands' Buurtzorg Model. Retrieved from https://www.commonwealthfund.org/publications/case-study/2015/may/home-care-self-governing-nursing-teams-netherlands-buurtzorg-model.

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, *18*, 59–82.

Maurits, E. E. M., De Veer, A. J. E., Groenewegen, P. P., & Francke, A. L. (2017). Home-care nursing staff in self-directed teams are more satisfied with their job and feel they have more autonomy over patient care: A nationwide survey. *Journal of Advanced Nursing*, https://doi. org/10.1111/jan.13298.

Maurits, E. E. M., De Veer, A. J. E., Van der Hoek, L. S., & Francke, A. L. (2015). Autonomous home-care nursing staff are more engaged in their work and less likely to consider leaving the healthcare sector: A questionnaire survey. *International Journal of Nursing Studies*, *52*, 1816–1823.

Ministry of Health, Welfare and Sports. (2015). Kamerbrief over bekostiging wijkverpleging [Letter to House of Representatives about funding home care]. Retrieved from https://zoek.officielebekendmakingen.nl/kst-29689-611.pdf.

Reid, D. J., & Reid, F. J. M. (2005). Online focus groups: An in-depth comparison of computer-mediated and conventional focus group discussions. *International Journal of Market Research*, *47*, 131–162.

Tates, K., Zwaanswijk, M., Otten, R., Van Dulmen, S., Hoogerbrugge, P. M., Kamps, W. A., & Bensing, J. M. (2009). Online focus groups as a tool to collect data in hard-to-include populations: Examples from paediatric oncology. *BMC Medical Research Methodology*, *9*, 15.

Tjepkema, S. (2003). *The learning infrastructure of self-managing work teams*. PhD Thesis. University of Twente, Enschede.

Tourangeau, A. E., Patterson, E., Saari, M., Thomson, H., & Cranley, L. (2017). Work-related factors influencing home care nurses intent to remain employed. *Health Care Management Review*, *42*, 87–97.

Tummers, L. G., Groeneveld, S. M., & Lankhaar, M. (2013). Why do nurses intend to leave their organization? A large-scale analysis in long-term care. *Journal of Advanced Nursing*, *69*, 2826–2838.

United Nations. (2013). *World Population Ageing 2013*. New York: United Nations. Retrieved from Van Mierlo, H., Rutte, C. G., Vermunt, J. K., Kompier, M., & Doorewaard, J. (2006). Individual autonomy over work teams: The role of team autonomy, self-efficacy, and social support. *European Journal of Work and Organizational Psychology*, *15*, 281–299.

Weston, M. J. (2008). Defining control over nursing practice and autonomy. *The Journal of Nursing Administration*, *38*, 404–408.

World Health Organisation (2015). *WHO global strategy on people-centered and integrated health services: Interim report*. Geneva: WHO.

Zwaanswijk, M., & Van Dulmen, S. (2014). Advantages of asynchronous on-line focus groups and face-to-face focus groups as perceived by child, adolescent and adult participants: A survey study. *BMC Research Notes*, *7*, 756.

5

Home-care nursing staff in self-directed teams are more satisfied with their job and feel they have more autonomy over patient care: a nationwide survey

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Abstract

Aims

The aims of this study were: (1) To examine whether working in a self-directed team is related to home-care nursing staff's job satisfaction; (2) To assess the mediating effect of self-perceived autonomy over patient care; (3) To investigate the moderating effect of educational level on the association between autonomy over patient care and job satisfaction.

Background

Self-directed teams are being introduced in home care in several countries. It is unknown whether working in a self-directed team is related to nursing staff's job satisfaction. It is important to gain insight into this association since self-directed teams may help in retaining nursing staff.

Design

A cross-sectional study based on two questionnaire surveys in 2014 and 2015.

Methods

The study involved 191 certified nursing assistants and registered nurses employed in Dutch home-care organizations (mean age of 50). These were members of the Dutch Nursing Staff Panel, a nationwide panel of nursing staff working in various healthcare settings.

Results

Self-direction is positively related to nursing staff's job satisfaction. This relationship is partly mediated by autonomy over patient care. For certified nursing assistants and registered nurses with a bachelor's degree, a greater sense of autonomy over patient care in self-directed teams is positively related to job satisfaction. No significant association was found between autonomy over patient care and job satisfaction for registered nurses with an associate degree.

Conclusions

This study suggests that home-care organizations should consider the use of self-directed teams as this increases nursing staff's job satisfaction and may therefore help to retain nursing staff in home care.

5.1 Introduction

In home care, there is a shift towards self-directed teams. At the same time, a process of professionalization is occurring in nursing (Wynd 2003). This paper explores the interrelationship between these developments. It addresses the question of whether working in a self-directed team contributes to nursing staff's job satisfaction because of greater individual autonomy, an essential element of professionalism (Hall 1968, Pavalko 1971).

Background

In 2007, self-directed work teams were introduced in Dutch home care by the Buurtzorg organization (Monsen & De Blok 2013). Since then, the number of self-directed teams has risen sharply in the Netherlands and many home-care organizations have incorporated elements of the Buurtzorg model of self-directed teams. Moreover, this model is being introduced in several other countries, including Japan, Norway, Sweden, UK and USA (Gray *et al.* 2015).

A self-directed team is: 'A permanent group of employees who work together on a daily basis, who, as a team, share the responsibility for all interdependent activities necessary to deliver a well-defined product or service to an internal or external customer. The team is, to a certain degree, responsible for managing itself and the tasks it performs, on the basis of a clear common purpose. To do so, the team has access to relevant information, possesses relevant competences and other resources and has the authority to independently make decisions with regard to the work process (e.g. solving problems).' (Tjepkema 2003, p. 6–7). Other labels are also used for the concept of self-directed teams, including 'self-managing teams', 'empowered teams', 'self-governing teams' and 'autonomous work groups' (Tjepkema 2003, Yeatts & Cready 2007, Gray *et al.* 2015), but the most commonly used terms are 'self-directed work teams' and 'self-managing work teams' (Tjepkema 2003). In home care, a self-directed team can be described as a team of nursing staff that organizes the care for a group of clients independently, although the team is often facilitated in a demand-driven way and receives external, demand-driven coaching. The team itself determines the objectives, methods and contributions of the individual team members with the aim of tailoring the care to fit the needs of clients. The team as a whole is responsible for the results.

Remarkably little is known about the job satisfaction of nursing staff in self-directed teams as literature on self-directed teams in health care is scarce. Self-directed work teams were first used in manufacturing (Yeatts & Seward 2000) and previous research in this field has tended to focus on this industry (Yeatts *et al.* 2004).

It is of interest to examine whether working in a self-directed home-care team is related to nursing staff's job satisfaction since many Western European countries face current or future shortages of home-care nursing staff (Genet et al. 2012). Besides attracting new nursing staff, it is therefore important to retain current nursing staff in home care. Self-directed teams may help achieve this as a literature review of self-directed teams and psychological well-being in other sectors showed that working in a self-directed team is positively related to job satisfaction (Van Mierlo *et al.* 2005). However, it remains unclear whether this association also applies to nursing staff in home care. Therefore, the first objective of this paper is to clarify this.

In initiating self-directed teams, Buurtzorg wanted to foster autonomous nursing by nursing teams that provide and organize comprehensive, holistic care with limited external regulation and few management restrictions (Monsen & De Blok 2013, Gray *et al.* 2015). It would be of interest to know whether this team autonomy is accompanied by enhanced nursing staff autonomy over patient care, that is, greater individual authority and freedom to make decisions concerning the content of patient care (Weston 2008). In that case, the introduction of self-directed teams will strengthen the professionalization of nursing staff in home care, as autonomy is viewed as a core characteristic of professionalism (Hall 1968, Pavalko 1971). Professions differ from occupations where the employer, manager or consumer controls the work, that is, determines which tasks are to be performed, by whom, under which conditions and how (Freidson 1999). Van Mierlo *et al.* (2006) found a positive relationship between team autonomy and the individual autonomy of team members in healthcare organizations. Therefore, it can be expected that working in a self- directed team enhances nursing staff's autonomy over patient care.

Since the autonomy of nurses in Dutch home care has been severely reduced over the past decades, the introduction of self-directed teams may contribute to a process of re-professionalization. Until the 1990s, Dutch home-care nurses in the many small-scale, local care organizations had a wide

range of tasks and an independent role and responsibility with regard to patients (Van der Boom 2008). Yet in the years that followed, nurses were incorporated into large, bureaucratic organizations where managers primarily determined the content and allocation of nursing tasks and responsibilities and nursing staff were increasingly required to account for their activities. Home-care nursing tasks, responsibilities and work areas were increasingly standardized and divided up between different categories of nursing staff (Van der Boom 2008). The assessment of care needs was transferred from home-care nurses to regional assessment organizations, which further increased the external regulation of home-care nursing tasks (Algera *et al.* 2003). According to Van der Boom (2008), the reduced autonomy led to a great deal of discontent among home-care nurses in the Netherlands.

The introduction of self-directed teams, which are expected to give nursing staff more autonomy over patient care, may help to alleviate this discontent. Several literature reviews and meta-analyses have shown that autonomy is associated with nurses' job satisfaction (Blegen 1993, Irvine & Evans 1995, Zangaro & Soeken 2007, Hayes *et al.* 2010). Moreover, several studies suggest that autonomy is especially important to nurses in home care (Anthony & Milone-Nuzzo 2005, Ellenbecker *et al.* 2006, Tummers *et al.* 2013). Therefore, the second objective of this paper is to ascertain whether increased autonomy over patient care can explain the hypothesized greater job satisfaction of nursing staff in self-directed teams.

Furthermore, the expected greater autonomy over patient care of nursing staff in self-directed teams may improve the job satisfaction of registered nurses with a bachelor's degree in particular. In general, these nurses experience more autonomy in their work than home-care nursing staff with a lower level of education (Maurits *et al.* 2015). Hence, registered nurses with a bachelor´s degree can be characterized by a greater degree of professionalism than nursing staff with a lower level of educational attainment. Therefore, it is likely that they will attach more value to having control over the content of their work. The third objective of this paper is to provide insight into the possible moderating effect of nursing staff's educational level on the association between autonomy over patient care and job satisfaction.

5.2 The study

Aims

The aim of the study was to test the following hypotheses:

- Home-care nursing staff in teams with a greater degree of self-direction are more satisfied with their job.
- The positive relationship between self-direction and work satisfaction is mediated by the self-perceived autonomy over patient care.
- The positive relationship between self-perceived autonomy over patient care and job satisfaction is stronger for registered nurses with a bachelor's degree than for nursing staff with a lower level of education.

Design and setting

The hypotheses were tested in a cross-sectional design, using a secondary analysis of two datasets:

- a questionnaire survey containing questions about self-direction and autonomy over patient care, with data collection in November and December 2014 (response rate of 68%);
- a questionnaire survey containing questions about job satisfaction, with data collection in April and May 2015 (response rate of 66%).

Data were collected among home-care registered nurses and certified nursing assistants in the Netherlands. The services provided by Dutch home-care organizations include support with daily living activities (i.e. personal care), nursing care and psychosocial care. All of these services are delivered mainly by registered nurses and certified nursing assistants. Home care can be just for a short period, for example, after a discharge from hospital, but it often lasts much longer. Dutch certified nursing assistants receive 3 years of vocational training after leaving secondary school. This is different from the situation in most other countries, where vocational training for nursing assistants is often less than 1 year. Dutch registered nurses have had at least 4 years of professional training and are educated to two different levels: associate degree level (equivalent to a UK foundation qualification) and bachelor's degree level.

Participants

A total of 191 nursing staff working in home care (48%) completed both questionnaires. Respondents belonged to an existing survey panel, the Nursing Staff Panel. This comprises a nationwide group of nursing staff in various healthcare settings who deliver direct patient care and have expressed their willingness to complete questionnaires about topical issues in health care (Maurits et al. 2015).

Recruitment for the Nursing Staff Panel is based on a random sample of Dutch healthcare employees provided by the Dutch Employee Insurance Agency. This agency, which is responsible for social security payments, keeps a register of all employees in the Dutch healthcare sector. Employees in the random sample were invited to take part in health-care research for various purposes. Nursing staff who agreed to this request and who deliver direct patient care in any of the main healthcare sectors (i.e. hospitals, the mental health sector, the care for disabled people, home care, nursing homes and homes for the elderly) were asked to join the Nursing Staff Panel. This procedure helps create a panel that is representative in terms of age, sex, region and employer. Participation in the Nursing Staff Panel is voluntary and on an anonymous basis (Maurits *et al.* 2015).

Data collection

Respondents could complete the first questionnaire online or on paper. The second questionnaire could only be filled in on paper. The data from the two questionnaires were linked using the unique respondent ID. Reminders were sent at fortnightly intervals to panel members who had not yet responded (with a maximum of two reminders). This procedure helped to increase the response rate. The questionnaires used an existing scale for measuring job satisfaction and also contained self-developed questions.

Measures

Job satisfaction

Job satisfaction was measured using the MAS-GZ scale (Maastricht Work Satisfaction Scale for Healthcare) developed by Landeweerd *et al.* (1996). This instrument comprises 21 items covering seven dimensions of job satisfaction: 'supervisor', 'quality of care'; 'contacts with colleagues'; 'contacts with

patients'; 'possibilities for pro-motion'; 'opportunities for self-actualization/growth'; and 'clarity of tasks and rules'. Each item was rated on a five-point Likert scale ranging from 1 = 'very dissatisfied' to 5 = 'very satisfied'. Overall job satisfaction was calculated as the mean score of all 21 items.

Self-direction

The questionnaire asked nursing staff to what extent their team is self-directed. The responses were on a five-point Likert scale ranging from 1 = 'not at all' -5 = 'fully'. To ensure respondents would interpret the concept of self-directed work teams appropriately, they were first shown the following definition of a self-directed team in health care:

A self-directed team in home care is a permanent team of care-givers. This team organizes the care for a group of clients professionally and independently. The team optimally tailors the care to the needs of the client, without the assistance of, or appealing to, a central manager. Yet, there is often someone who coaches and facilitates the team. Self-directed teams have a great degree of control and arrange contacts themselves with internal and external stakeholders. Support services facilitate the teams in a demand-driven manner. The team itself determines the objectives, methods and contributions of all the individual team members. The team as a whole is responsible for the results and reports to higher management. (InVoorZorg 2013, English translation by the first author).

Autonomy over patient care.

Self-perceived autonomy over patient care was assessed using the following two questions: (1) 'Do you experience freedom to make decisions about the type of care you provide to patients?'; and (2) 'Do you experience freedom to make decisions about the amount of care you provide to patients?' Both items were scored on a five-point Likert scale ranging from 1 = 'not at all' -5 = 'to a very large extent'. Over-all, self-perceived autonomy over patient care was calculated as the mean score of the two items.

Respondent characteristics.
The respondent characteristics that were recorded were age, educational level, work experience in health care and number of working hours per week. The 'educational level' was defined as the highest completed nursing qualification: certified nursing assistant, registered nurse with an associate degree, registered nurse with a bachelor's degree or registered nurse with a master's degree. As the group of respondents who had completed a master's degree after their bachelor's degree was too small to analyse separately, they were included in the category of 'registered nurses with a bachelor's degree'. A respondent's 'work experience' was defined as the number of years they had spent working as a registered nurse or certified nursing assistant.

Ethical considerations
This study was based on questionnaires completed by nursing staff; no patients were involved. As all the research participants were competent individuals and no participants were subjected to any interventions or actions, no ethical approval was needed under Dutch law on medical research (Medical Research Involving Human Subjects Act, http:// www.ccmo.nl). Study participation was voluntary. The questionnaire data were stored and analysed anonymously, in accordance with the Dutch Personal Data Protection Act (http://www.privacy.nl/uploads/guide_for_controller_ministry_justice.pdf). Privacy regulations are available for the Nursing Staff Panel.

Data analysis
Since the hypothesised associations can be affected by the individual characteristics of the nursing staff, we controlled for educational level, work experience and number of working hours per week. As age was highly correlated with work experience, this individual characteristic was not included in the analyses. To test Hypothesis 1, a multiple regression analysis was conducted with self-direction and the respondent characteristics as the explanatory variables and job satisfaction as the outcome variable. The mediating effect of autonomy over patient care (Hypothesis 2) was assessed using multiple regression analysis and mediation analysis. First, a multiple regression analysis was performed with self-direction and the respondent characteristics as the explanatory variables and autonomy over patient care as the outcome variable. Then, a multiple regression analysis was done with self-

direction, autonomy over patient care and the respondent characteristics as the explanatory variables and job satisfaction as the outcome variable. Finally, a mediation analysis was performed with self-direction as the explanatory variable, autonomy over patient care as the mediator and job satisfaction as the outcome variable. The three regression models described by Baron and Kenny (1986) were used: (1) regressing the mediator on the explanatory variable; (2) regressing the outcome variable on the explanatory variable; and (3) regressing the outcome variable on both the explanatory variable and the mediator. The size and significance of the direct and indirect effects were estimated by bootstrapping (Preacher & Hayes 2008). To assess the moderating effect of educational level on the association between autonomy over patient care and job satisfaction (Hypothesis 3), interaction terms for the interaction between educational level and autonomy over patient care were added to the multiple regression model.

Data were analysed using STATA 14.0 (StataCorp 2015). The level of statistical significance was fixed at $\alpha = 0.05$. Respondents with missing values for one or more variables were excluded from the analyses that included those variables. Table 5.1 shows the proportion of missing data for each variable. Model assumptions for multiple regressions were verified (i.e. linearity, absence of multicollinearity, homoscedasticity and normally distributed errors). No violations of assumptions were found.

Validity and reliability

The MAS-GZ scale has been shown to be valid and reliable (Landeweerd *et al.* 1996). The self-developed questions were assessed by a nurse and a policy maker in the field of the healthcare labour market. They considered the relevance, completeness and comprehensibility of the questions. Suggestions for amendments were implemented.

5.3 Results

Descriptive statistics

The respondents' characteristics are shown in Table 5.1. The mean age of 50 (standard deviation or *SD* 9.6) was higher than the average age of employees working in the long-term care sector in the Netherlands, which was 44 in 2014 (AZW 2016). A total of 45.0% of the respondents were certified nursing

assistants, while 27.5% had an associate-level degree in nursing and 27.5% had a bachelor's degree. As the corresponding proportions in the Dutch home-care sector were 69%, 17% and 14% in 2014 (Van Windt & Bloemendaal 2015), certified nursing assistants were under-represented and registered nurses were over-represented in the study population. Respondents had 23 years of experience in nursing on average (*SD* 11.0) and an average working week of 23 hours (*SD* 7.0).

The mean score for job satisfaction was 3.67 (*SD* 0.47; range 1–5), the mean score for self-direction was 3.44 (*SD* 1.11; range 1–5) and the mean score for autonomy over patient care was 3.17 (*SD* 1.02; range 1–5). The internal consistency (Cronbach's alpha) of the job satisfaction scale (α = 0.91) and autonomy over patient care scale (α = 0.88) was good as Cronbach's alpha met the criterion of at least 0.80 (Table 5.1).

Table 5.1 Descriptive statistics (n=191)

	% or mean (*S.D.*)	**Missing data (%)**	**Cronbach's α[a]**
Job satisfaction (range 1-5)	3.67 (0.47)	1.1%	0.91
Self-direction (range 1-5)	3.44 (1.11)	0.5%	N/A
Autonomy over patient care (range 1-5)	3.17 (1.02)	1.1%	0.88
Respondent characteristics			
Educational level		1.1%	N/A
Certified nursing assistant	45.0%		
Registered nurse, associate-level degree	27.5%		
Registered nurse, bachelor´s degree	27.5%		
Age (years)	50.22 (9.62)	0.0%	N/A
Work experience (years)	22.59 (10.96)	0.5%	N/A
Working hours per week	23.27 (6.97)	0.0%	N/A

a N/A: not applicable

Hypothesis 1 Association between self-direction and job satisfaction

Hypothesis 1 is supported. Multiple regression analysis (Table 5.2, column 2) showed that self-direction is significantly related to job satisfaction. None of the individual respondent characteristics were associated with job satisfaction.

Table 5.2 Multiple regression analyses

	Autonomy over patient care		**Job satisfaction**					
	n=185		*n*=186		*n*=184		*n*=184 [a]	
	b	*β*	*b*	*β*	*b*	*β*	*b*	*β*
Self-direction (1-5)	0.309	0.330**	0.193	0.447**	0.136	0.312**	0.128	0.294**
Autonomy over patient care (1-5)	-		-		0.197	0.423**	0.278	0.596**
Educational level								
Certified nursing assistant	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Registered nurse, associate-level degree	0.373	0.164*	0.046	0.044	-0.024	-0.022	0.001	0.001
Registered nurse, bachelor´s degree	0.760	0.334**	-0.028	-0.026	-0.175	-0.166*	-0.225	-0.213**
Autonomy over patient care x educational level	-		-		-			
Certified nursing assistant							ref.	ref.
Registered nurse, associate-level degree							-0.261	-0.270**
Registered nurse, bachelor´s degree							-0.028	-0.036
Work experience (years)	-0.002	-0.024	-0.004	-0.101	-0.004	-0.086	-0.005	-0.110
Working hours per week	0.023	0.150*	0.002	0.031	-0.002	-0.032	-0.003	-0.038
Test of model	R^2=0.260, Model $F(5,179)$=12.56**		R^2=0.199, Model $F(5,180)$=8.97**		R^2=0.332, Model $F(6,177)$=14.67**		R^2=0.379, Model $F(8,175)$=13.34**	

- Variable is not included in the analysis, * Statistically significant with $p < 0.05$, ** Statistically significant with $p < 0.01$

a In this analysis with interaction terms, the values of autonomy over patient care were centred around the median, to ensure that the interpretation of the effect of educational level will occur at a meaningful value of autonomy over patient care (the median).

Table 5.3 Mediation analysis with 'self-direction' as the explanatory variable, 'autonomy over patient care' as the mediating variable and 'job satisfaction' as the outcome variable (n=186) [a b]

Total effect	**Total indirect effect**	**Direct effect**
Coefficient (95% C.I.)	Coefficient (95% C.I.)	Coefficient (95% C.I.)
0.189 (0.132-0.246)*	0.054 (0.024-0.091)*	0.135 (0.075-0.197)*

a Mediation effects estimated by bootstrapping (1000 replications)
b Indirect effect and direct effect: percentile confidence intervals (no bias correction)
* Statistically significant with p<0.05.

Hypothesis 2 Mediation by autonomy over patient care

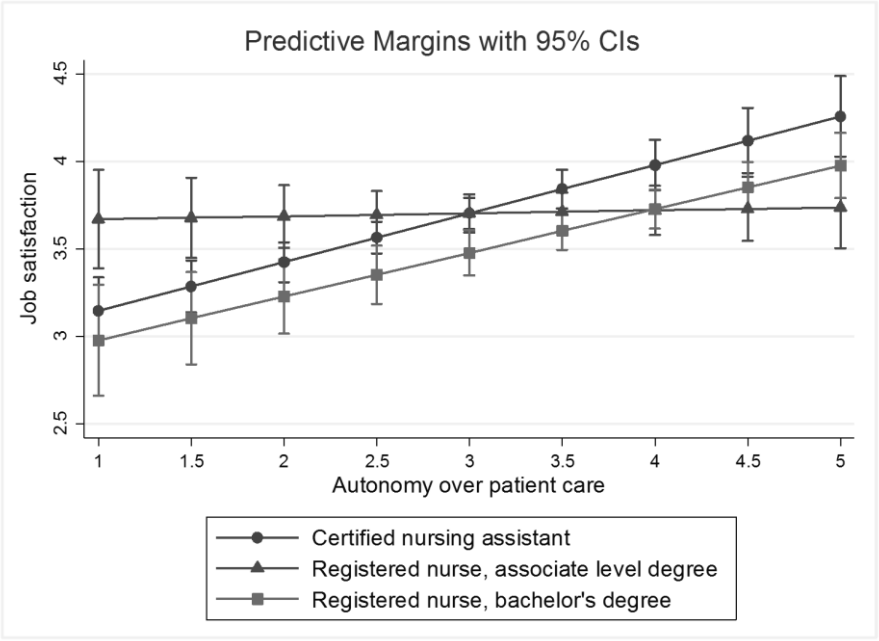
As can be seen in Table 5.2 (column 1), multiple regression analysis showed that self-direction is positively related to autonomy over patient care. When autonomy over patient care was added as an explanatory variable to the multiple regression model with self-direction and the individual characteristics as explanatory variables and job satisfaction as the outcome variable (Table 5.2, column 3), both self-direction and autonomy over patient care were significantly related to job satisfaction. This indicates that mediation was not complete, but the separate effect of self-direction was reduced. In other words, autonomy over patient care does not account for all of the effect of self-direction on job satisfaction. Mediation analysis also showed only partial mediation. Both the direct effect and the indirect effect were significant (Table 5.3). The proportion of the total effect that was mediated was 29%. Therefore, Hypothesis 2 is only partially confirmed.

Hypothesis 3 Moderating effect of educational level

Hypothesis 3 stated that the effect of autonomy over patient care on job satisfaction would be stronger for registered nurses with a bachelor's degree than for nursing staff with a lower level of education. As can be seen from Table 5.2 (column 4), a significant interaction effect was found between autonomy over patient care and educational level. In Figure 5.1, the relationship between autonomy over patient care and job satisfaction is

plotted for certified nursing assistants, registered nurses with an associate degree and registered nurses with a bachelor's degree. For certified nursing assistants and registered nurses with a bachelor's degree, the relationship between autonomy over patient care and job satisfaction is positive. For registered nurses with an associate degree, no significant relationship was found between autonomy over patient care and job satisfaction. Since the effect of autonomy over patient care on job satisfaction is stronger for both certified nursing assistants (who have a lower level of education than registered nurses with an associate degree) and registered nurses with a bachelor's degree (who have a higher level of education), Hypothesis 3 is rejected.

Figure 5.1 Visualization of the moderating effect of educational level on the association between self-perceived autonomy over patient care and job satisfaction



5.4 Discussion

Main findings

This study found a significant positive association between self-direction and job satisfaction among certified nursing assistants and registered nurses in home care. This implies that nursing staff in teams that have a greater degree of self-direction are more satisfied with their job than nursing staff in teams that are self-directing to a lesser extent. This association can be partly explained by the higher degree of autonomy over patient care perceived by nursing staff in self-directed teams. However, no significant association between autonomy over patient care and job satisfaction was found for registered nurses with an associate degree. This indicates that the higher degree of self-perceived autonomy over patient care increases job satisfaction in particular for certified nursing assistants and registered nurses with a bachelor's degree in teams that have a greater degree of self-direction.

The results of this study show that the positive relationship between self-directed teamwork and job satisfaction that was found in other sectors (Van Mierlo *et al.* 2005) also applies to nursing staff in home care. Therefore, it is likely that the use of self-directed teams will help to retain nursing staff in home care and thereby tackle staff short-ages.

This study found partial mediation by autonomy over patient care of the relationship between self-direction and job satisfaction. The association between self-direction and self-perceived autonomy over patient care found in this study implies that working in a self-directed team enhances home-care nursing staff's professionalism since autonomy is considered to be an essential element of professionalism (Hall 1968, Pavalko 1971). This suggests that the large rise in self-directed teams in Dutch home care is being accompanied by a process of re-professionalization of nurses. This process is bolstered by the fact that registered nurses with a bachelor's degree have recently regained responsibility for the assessment of care needs.

Since the analyses showed only incomplete mediation by autonomy over patient care, other types of autonomy may also be of relevance. As self-directed teams in home care generally organize the care for their clients independently and set their own objectives and methods, nursing staff in such teams may also experience more control over the context of practice, i.e. organizational autonomy (Weston 2008). Furthermore, as nursing staff in self-

directed teams do not have to give an account to managers, they may also experience more freedom and discretion in work scheduling, that is, work autonomy (Weston 2008).

In addition to autonomy, other characteristics of self- directed teams in home care may also help explain the greater job satisfaction of nursing staff in these teams. A qualitative study by Yeatts and Seward (2000) of self-directed work teams in nursing homes suggests that team cohesion and cooperation may play a role.

Surprisingly, this study found a positive association between autonomy over patient care and job satisfaction for both certified nursing assistants and registered nurses with a bachelor's degree but not for registered nurses with an associate degree. A possible explanation is that nurses with an associate degree are used to working under the supervision of a nurse with a bachelor's degree and therefore attach less value to autonomy. Both nursing assistants and nurses with a bachelor's degree work rather independently. However, the type of autonomy over patient care that certified nursing assistants experience differs from that experienced by registered nurses with a bachelor's degree since the home-care services delivered by certified nursing assistants are restricted to personal care. Nursing assistants are not allowed to provide technical nursing care. Yet, the freedom to make decisions concerning the content of individual patient care still seems to be of relevance for their job satisfaction, as it is for nurses with a bachelor's degree.

Implications

The findings of this study support the use of self-directed work teams in home care, since self-direction enhances nursing staff's job satisfaction and may thereby help in retaining nursing staff in home care. Self-direction may particularly suit nursing staff in home care since they usually work rather independently, without direct supervision (Narayan *et al.* 1996). As mentioned in the introduction, some home-care organizations are choosing to incorporate elements of self-direction. To increase the job satisfaction of certified nursing assistants and registered nurses with a bachelor's degree, organizations are advised to focus on autonomy over patient care decisions. However, organizations should also focus on other elements of self-direction to increase the job satisfaction of registered nurses with an associate degree.

Individual autonomy in self-directed teams may also have negative outcomes. A study among self-directed teams of MBA students suggests that when a self-directed team is characterized by both a high level of individual autonomy and a high level of trust, team members may be reluctant to monitor each other, which can lead to performance loss (Langfred 2004). Furthermore, self-direction may not suit every nurse or nursing assistant. Narayan *et al.* (1996) have described the important characteristics for successful self-directed teams in home-care, including shared leadership among the team members, a climate of trust and mutual respect, effective communication, commitment and a cooperative spirit. Not all nursing staff may have the necessary skills. Even so, time, training and encouragement may help them to master these skills.

Limitations and suggestions for future research

Some limitations to this study need to be acknowledged. First, the degree to which the teams were self-directing was estimated by nursing staff themselves rather than being measured objectively. However, their assessment of self-direction was guided by including a definition of self-direction in the questionnaire. Second, causal inferences regarding the relationships tested cannot be made as the data were cross-sectional. Another relevant issue is that there are differences between countries in how home care is organized and provided (Genet *et al.* 2012). The study results can be considered applicable to those other countries that are similar to the Netherlands, where home care takes the form of formal nursing services and personal care provided by nursing staff in clients' own homes.

Future longitudinal studies could be helpful in unravelling the causes and effects in relationships. It is recommended that future studies also include other characteristics of self-directed teams that could be related to job satisfaction. As home-care organizations may only adopt certain elements of self-direction rather than using fully self-directed teams, it is important to gain further insight into the elements that are vital to nursing staff job satisfaction. Furthermore, future research could examine individual characteristics, for example, work experience and communication skills that may be associated with the job satisfaction of nursing staff in self-directed home-care teams. In addition, future research could focus on possible unintended consequences of self-direction. Last, using objective data on a

home-care team's degree of self-direction, future studies can improve the validity of the findings presented in this paper.

5.5 Conclusions

This study shows that nursing staff in teams with a high degree of self-direction are more satisfied with their job. This can partly be explained by the higher degree of self-perceived autonomy over patient care. However, other characteristics of self-directed teams also appear to play a role. This study suggests that home-care organizations should consider the use of self-directed teams as this increases nursing staff's job satisfaction and may therefore help in retaining nursing staff in home care.

Authors' contributions
Study conception and design: EM, PG, AdV, AF. Analysis and interpretation of data: EM, PG, AdV, AF. Drafting of manuscript: EM, PG, AdV, AF. All authors read and approved the final manuscript.

References

Algera M., Francke A.L., Kerkstra A. & Van Der Zee J. (2003) An evaluation of the new home-care needs assessment policy in the Netherlands. *Health & Social Care in the Community* 11(3), 232–241.

Anthony A. & Milone-Nuzzo P. (2005) Factors attracting and keeping nurses in home care. *Home Healthcare Nurse* 23(6), 372–377.

AZW (2016). Onderzoeksprogramma Arbeidsmarkt Zorg en Welzijn [Research programme Labour Market in Healthcare and Welfare]. Retrieved from http://www.azwinfo.nl on 15 October 2016.

Baron R.M. & Kenny D.A. (1986) The moderator-mediator variable distinction in social psychological research: conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology* 51(6), 1173–1182.

Blegen M.A. (1993) Nurses' job satisfaction: a meta-analysis of related variables. *Nursing Research* 42(1), 36–41.

Ellenbecker C.H., Boylan L.N. & Samia L. (2006) What home healthcare nurses are saying about their jobs. *Home Healthcare Nurse* 24(5), 315–324.

Freidson E. (1999) Theory of professionalism: method and substance. *International Review of Sociology* 9(1), 117–129.

Genet N,. Boerma W., Kroneman M., Hutchinson A. & Saltman R.B. (2012) Home Care Across Europe. Current Structure and Future Challenges. World Health Organization (on behalf of the European Observatory on Health Systems and Policies), Copenhagen.

Gray B.H., Sarnak D.O. & Burgers J.S. (2015) Home Care by Self-Governing Nursing Teams: The Netherlands' Buurtzorg Model. Retrieved from http://www.commonwealthfund.org/~/media/files/publications/casestudy/2015/may/1818_gray_home_care_nursing_teams_buurtzorg_model_case_study.pdf on 18 August 2015.

Hall R.H. (1968) Professionalization and bureaucratization. *American Sociological Review* 33, 92–104.

Hayes B., Bonner A. & Pryor J. (2010) Factors contributing to nurse job satisfaction in the acute hospital setting: a review of recent literature. *Journal of Nursing Management* 18(7), 804–814.

InVoorZorg (2013) *Zelfsturende teams in de thuiszorg. Handleiding voor managers, projectleiders en bestuurders [Self- directed teams in home care. Manual for managers, project leaders and administrators]*. In voor zorg, Utrecht.

Irvine D.M. & Evans M.G. (1995) Job satisfaction and turnover among nurses: integrating research findings across studies. *Nursing Research* 44(4), 246–253.

Landeweerd J.A., Boumans N.P.G. & Nissen J.M.F. (1996) Arbeidsvoldoening bij verplegenden en verzorgenden. De Maastrichtse arbeidssatisfactieschaal voor de gezondheidszorg. [Job satisfaction of nurses and CNAs. The Maastricht Work Satisfaction Scale for Healthcare]. In *Handboek Verpleegkundige Innovatie* (Van Beek C.C., Van Dorsten T.C. & Stam G.J., ed.), Bohn Stafleu, Houten, pp. D250-1-26.

Langfred C.W. (2004) Too much of a good thing? Negative effects of high trust and individual autonomy in self-managing teams. *The Academy of Management Journal* 47(3), 385–399.

Maurits E.E.M., De Veer A.J.E. & Francke A.L. (2015) Autonomous home-care nursing staff are more engaged in their work and less likely to consider leaving healthcare. *International Journal of Nursing Studies* 52(12), 1816–1823.

Monsen K. & De Blok J. (2013) Buurtzorg: nurse-Led Community Care. *Creative Nursing* 19(3), 122–127.

Narayan M.C., Larose P. & Marchessault L. (1996) Achieving succes in home care through the self-directed work group approach. *Home Healthcare Nurse* 14(11), 865–872.

Pavalko R.M. (1971) *Sociology of Occupations and Professions*. Peacock Publishers, Itasca, F.E.

Preacher K.J. & Hayes A.F. (2008) Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods* 40(3), 879–891.

StataCorp (2015) *Stata Statistical Software: Release 14*. StataCorp LP, College Station, TX.

Tjepkema S. (2003) The Learning Infrastructure of Self-Managing Work Teams. PhD Thesis. University of Twente, Enschede.

Tummers L.G., Groeneveld S.M. & Lankhaar M. (2013) Why do nurses intend to leave their organization? A large-scale analysis in long-term care. *Journal of Advanced Nursing* 69(12), 2826–2838.

Van der Boom H. (2008) Home Nursing in Europe. Patterns of Professionalisation and Institutionalisation of Home Care and Family Care to Elderly People in Denmark, France, the Netherlands and Germany. Doctoral thesis. Maastricht University, Maastricht.

Van Mierlo H., Rutte C.G., Kompier M.A. & Doorewaard H.A. (2005) Self-Managing Teamwork and Psychological Well-Being. Review of a Multilevel Research Domain. *Group &Organization Management* 30(2), 211–235.

Van Mierlo H., Rutte C.V., Vermunt J., Kompier M. & Doorewaard J. (2006) Individual autonomy in work teams: the role of team autonomy, self-efficacy and social support. *European Journal of Work and Organizational Psychology* 15 (3), 281–299.

Van der Windt W. & Bloemendaal I. (2015) *Toekomstverkenning voor de Thuiszorg. Vraag en aanbod van verplegend en verzorgend personeel 2015-2019 [Future study for Home Care. Demand and supply of nursing and caring staff 2015-2019]*. Kiwa/CAOP, Utrecht/Den Haag.

Weston M.J. (2008) Defining control over nursing practice and autonomy. *Journal of Nursing Administration* 38(9), 404–408.

Wynd C.A. (2003) Current factors contributing to professionalism in nursing. *Journal of Professional Nursing* 19(5), 251–261.

Yeatts D.E. & Cready C.M. (2007) Consequences of empowered CNA teams in nursing home settings: a longitudinal assessment. *The Gerontologist* 47(3), 323–339.

Yeatts D.E. & Seward R.R. (2000) Reducing Turnover and Improving Health Care in Nursing Homes The Potential Effects of Self-Managed Work Teams. *The Gerontologist* 40(3), 358– 363.

Yeatts D.E., Cready C., Ray B., DeWitt A. & Queen C. (2004) Self-managed work teams in nursing homes: implementing and empowering nurse aide teams. *The Gerontologist* 44(2), 256– 261.

Zangaro G.A. & Soeken K.L. (2007) A meta-analysis of studies of nurses' job satisfaction. *Research in Nursing & Health* 30(4), 445–458.

6

Attractiveness of people-centred and integrated Dutch Home Care: a nationwide survey among nurses

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Abstract

The World Health Organization is calling for a fundamental change in healthcare services delivery, towards people-centred and integrated health services. This includes providing integrated care around people's needs that is effectively co-ordinated across providers and co-produced by professionals, the patient, the family and the community. At the same time, healthcare policies aim to scale back hospital and residential care in favour of home care. This is one reason for the home care nursing staff shortages in Europe. Therefore, this study aimed to examine whether people-centred, integrated home care appeals to nurses with different levels of education in home care and hospitals. A questionnaire survey was held among registered nurses in Dutch home-care organisations and hospitals in 2015. The questionnaire addressed the perceived attractiveness of different aspects of people-centred, integrated home care. In total 328 nurses filled in the questionnaire (54% response rate). The findings showed that most home-care nurses (70% to 97%) and 36% to 76% of the hospital nurses regard the different aspects of people-centred, integrated home care as attractive. Specific aspects that home-care nurses find attractive are promoting the patient's self-reliance and having a network in the community. Hospital nurses are mainly attracted to health-related prevention and taking control in complex situations. No clear differences between the educational levels were found. It is concluded that most home-care nurses and a minority of hospital nurses feel attracted to people-centred, integrated home care, irrespective of their educational level. The findings are relevant to policy makers and home-care organisations who aim to expand the home-care nursing workforce.

6.1 Introduction

The World Health Organization (WHO) is calling for a fundamental shift in the way health services are delivered, towards people-centred and integrated health services (WHO, 2015). This plea for a change in health services delivery is driven by the need to meet the challenges of ageing populations, increasing prevalence of chronic diseases, the spread of unhealthy lifestyles and the fragmented nature of health systems. Some principles of people-centred and integrated health services as envisaged by the WHO (2015) are:

- Prioritising community care services;
- Providing integrated care around people's needs that is effectively co-ordinated across different providers and settings;
- Co-production of care by professionals, the patient, the family, informal carers and the community;
- Helping people to manage and take responsibility for their own health;
- Investing in health promotion and prevention strategies.

The WHO strategy on people-centred and integrated health services reflects current developments in home care. The proportion of older long-term care recipients receiving care at home has increased in many developed countries and the length of hospital stays has been reduced (OECD, 2015). High-quality care in communities is of great importance to the elderly people and to chronically ill patients. In order to improve home care, several European countries have set up initiatives focused on the integration and co-ordination of care services for home-dwelling patients (Genet, Boerma, Kroneman, Hutchinson, & Saltman, 2012). It is argued that integrated care needs to be people-centred, i.e. dealing with the whole person in their particular familial and community contexts, and that the informal domain and local community should be included as a resource and co-producer of care (De Maeseneer et al., 2012; Nies, 2014; WHO, 2008).

In the Netherlands, the work of home-care nurses reflects people-centred, integrated health services delivery as described by the WHO (WHO, 2015). Home-care nurses with a bachelor's degree in nursing (from a university of applied sciences) are appointed as central care professionals within

communities. They are expected to co-ordinate and deliver people-centred, integrated home care in co-operation with nurses educated to associate degree level (who have completed senior secondary vocational education) and certified nursing assistants (see Box 6.1).

The WHO refers to a potential increase in the job satisfaction of health professionals resulting from the shift to people-centred and integrated health services (WHO, 2015). This is highly relevant to the home-care sector, given the current and expected future shortages of home-care nursing staff in many European countries (Eurofound, 2013; Genet et al., 2012), and thus the need to retain and recruit home-care nursing staff. Therefore, it is important to know whether people-centred, integrated home care actually appeals to home-care nurses. Furthermore, since the recommended shift in health services delivery entails a strengthening of community care at the expense of inpatient care, it is also of interest to know whether people-centred, integrated home care appeals to hospital nurses. This may indicate the extent to which staff shortages in home care can be addressed by a shift of hospital nurses to home care.

However, to date the research on factors that attract nurses to home care has tended to focus on general work characteristics. For instance, previous studies have shown that autonomy is important (Ellenbecker, Boylan, & Samia, 2006; Maurits, De Veer, & Francke, 2015; Tummers, Groeneveld, & Lankhaar, 2013). Little is known about the attractiveness of people-centred and integrated home care. Yet a literature review showed that elements of the management of care and the care process are associated with the job satisfaction of care professionals in the elderly home-care setting (Van Eenoo, van der Roest, van Hout, & Declercq, 2016).

People-centred, integrated home care can be expected to appeal to nurses as it is likely to enhance their professionalism. A recurrent notion in the large body of literature on professions is that members of an occupation control their own work and exercise discretion over areas of expertise, based upon a body of abstract, theoretical knowledge (see for instance Abbott, 1988; Freidson, 2001). According to Freidson (1999), professions are distinguished from occupations where the employer, manager or consumer controls the work, e.g. decides what tasks are to be performed, by whom, under which conditions and how. Being identified as a professional is an attractive prospect, in part because of the control over your work and the exclusive

ownership of an area of expertise and knowledge (Evetts, 2003).

Although past literature has suggested a contrast between on the one hand organisational and managerial tasks and on the other hand the work of professionals (Noordegraaf, 2011), more recent work has argued that organising has become a normal part of professional work (Noordegraaf, 2015). This has been further substantiated by Postma, Oldenhof, and Putters (2015), who have shown that in the work of Dutch home-care nurses with a bachelor's degree, organisational tasks like co-ordinating and planning can be an inherent element of professional work. It is plausible that the organising and co-ordination tasks enhance home-care nurses' autonomy, a core characteristic of professionalism (Hall, 1968; Pavalko, 1971). Autonomy is frequently reported in the literature as an essential prerequisite for increased professionalism in nursing (Alidina, 2012; Varjus, Leino-Kilpi, & Suominen, 2011; Wade, 1999).

Independently assessing patients' home-care needs will most likely increase home-care nurses' professionalism by bringing this core aspect of professional work back into their jurisdiction (Abbott, 1988). Supporting self-management by patients and focussing on prevention gives nurses the opportunity to use a wider range of nursing knowledge and skills and increases the complexity of nurses' work. It also requires the application of abstract, theoretical knowledge to specific cases, which is associated with professionalism (Abbott, 1988).

It can be assumed that the attractiveness of people-centred, integrated home care differs between nursing staff depending on their level of education. In general, home-care nurses with a bachelor's degree experience more autonomy in their work than nurses with an associate degree (Maurits et al., 2015). Hence, these more highly educated nurses can be characterised by a greater degree of professionalism. Therefore, it is likely that they will attach more value to having greater control over the content of their work by delivering people-centred, integrated home care than nurses with an associate degree. Furthermore, as can be seen in Box 6.1, home-care nurses with a bachelor's degree (rather than nursing staff educated to associate degree level) have been given a central role in the community. This might also affect whether nurses with different levels of education perceive care integration and people-centredness as attractive. Moreover, competencies related to people-centred, integrated home care may also partially depend on the

educational level, e.g. competencies regarding co-operation with other professionals within the community or the ability to take into account a patient's own opportunities for self-reliance or support from the social network.

Box 6.1 Policy regarding home care in the Netherlands

As part of a recent reform of long-term care, the Dutch government aims to give home-care nurses with a bachelor's degree a central position in the community, in which they are responsible for organising and co-ordinating home care and serve as a link between the domains of healthcare, social care and housing.

Since 1 January 2015, home-care nurses with a bachelor's degree have the legal authority to perform the formal needs assessment, where they determine what nursing-care and personal-care services are needed, taking into account the patient's care needs, opportunities for self-reliance, home environment and social network. Within home care, they collaborate closely with nurses with an associate degree and certified nursing assistants. In the care for individual patients, home-care nurses are required to promote self-management by the patient and co-operate with informal carers. In addition, they are responsible for healthcare-related prevention (Postma et al., 2015; VWS, 2014a,b, 2015).

Objective

The purpose of this article was to examine whether people-centred, integrated home care appeals to home-care nurses and hospital nurses educated to either bachelor's or associate degree level. This knowledge can help policy makers and home-care organisations in different countries in the retention and recruitment of nurses in home care, which is of crucial importance given the current and expected future shortages of home-care nursing staff in Europe. Hospital nurses are included in the study because a shift in which hospital nurses move to home care may be necessary given the desire to have more care delivered in the community rather than through in-patient facilities.
The main questions addressed in this study are:

- To what extent do different aspects of people-centred, integrated home care appeal to nurses currently working in home care or in a hospital?
- Is the perceived attractiveness of these different aspects associated with the educational level?

6.2 Methods

Design and setting

The study employed a quantitative, explorative design. Data were gathered using a questionnaire survey among 609 registered nurses working in home care and hospitals. Data collection was carried out in the Netherlands in October 2015. In the Netherlands, home-care services traditionally include nursing care, support with daily living activities (i.e. personal care) and psychosocial care, and are mainly delivered by registered nurses and certified nursing assistants. Dutch registered nurses are educated to two different levels: associate degree level (equivalent to a UK foundation qualification) and bachelor's degree level (Maurits et al., 2015).

Participants

The sample was from a pre-existent nationwide research panel, the Nursing Staff Panel. This panel consists of a nationwide group of nursing staff members in various healthcare settings who deliver direct patient care and have expressed their willingness to complete questionnaires about topical issues in health-care. Nursing Staff Panel participants are recruited via a random sample of Dutch healthcare employees provided by the Dutch Employee Insurance Agency. This procedure helps generate a representative group with respect to age, sex, region and employer (Maurits et al., 2015). In 2014, there was a supplementary recruitment drive in which participants working in home care were asked to invite up to four colleagues to join the Nursing Staff Panel.

For the survey presented in this paper, Nursing Staff Panel participants who worked as a nurse in home care or in a hospital were selected. A total of 328 nurses completed the questionnaire, providing a response rate of 53.9%.

Instrument

A self-developed online questionnaire in Dutch was used. The core part of the questionnaire addressed the perceived attractiveness of different aspects of working as a nurse in home care. These aspects were derived from the professional profile of home-care nurses developed by the Dutch professional

association of nurses (De Bont, Van Haaren, Rosendal, & Wigboldus, 2012). As mentioned in the Section 6.1, the work of Dutch home-care nurses is in line with the people-centred and integrated delivery of health services as described by the WHO (WHO, 2015). The aspects addressed in the questionnaire that relate to people-centred, integrated home care were selected for the current study. Table 6.1 lists the aspects along with the corresponding WHO principles for people-centred and integrated health services.

For each aspect, respondents were asked to indicate whether they considered this aspect attractive. The responses were originally on a three-point scale ("attractive", "neither attractive nor unattractive" and "unattractive"). They were subsequently dichotomised: the responses "neither attractive nor unattractive" and "unattractive" were pooled since the response frequencies for "unattractive" were too low for the analysis of possible associations with healthcare sector and educational level.

The following respondent characteristics were measured in the questionnaire: healthcare sector, age, sex, educational level, work experience and number of working hours per week. Educational level was defined as the highest level of nursing education completed (either an associate degree or a bachelor's degree in nursing, possibly followed by a master's degree).

The content validity of the draft questionnaire was approved by the research project's advisory committee, which consisted of representatives of the Dutch professional association of nurses, associations of care organisations, organisations involved in nursing education and the Netherlands Organisation for Health Research and Development. Content validity and comprehensibility were tested further in a group of six nurses who completed a draft of the questionnaire. After this test, minor amendments were made, to take account of comments by the nurses and the advisory committee.

Table 6.1 Aspects of working in Dutch home care that relate to people-centred and integrated health services

Aspects of the new position, tasks and responsibilities of Dutch home-care nurses	**Corresponding principle of people-centred and integrated health services (WHO, 2015)**
Having contact with family caregivers who are both users and partners in the delivery of care	Co-production of care by professionals, the patient, the family, carers and the community
Having contact with everyone in the patient´s network (patient, informal caregivers, family, neighbours)	Co-production of care by professionals, the patient, the family, carers and the community
Working in the community, knowing the community	• Prioritising community care services • Co-production of care by professionals, the patient, the family, carers and the community
Having a network in the community and maintaining contacts with local residents, organisations, professionals and municipal officials	• Providing integrated care around people's needs that is effectively coordinated across different providers and settings • Co-production of care by professionals, the patient, the family, carers and the community
Paying attention to health promotion and the timely identification of problems (prevention)	Investing in health promotion and ill-health prevention strategies
Serving as a link between the domains of housing, social care and health care	Providing integrated care around people's needs that is effectively coordinated across different providers and settings
Focusing on what a patient can still do and promoting self-reliance in a patient	Helping people to manage and take responsibility for their own health
Taking control in complex situations	Providing integrated care around people's needs that is effectively coordinated across different providers and settings

Data collection

Respondents were sent an e-mail with information about the survey and a link to the online questionnaire. To increase the response rate, up to two e-mail reminders were sent, after 7 and 18 days, to participants who had not responded thus far. When filling in the online questionnaire, respondents were not allowed to skip questions. As a result, there were no missing data for individual questions. Twenty- seven respondents quitted the questionnaire at an early stage. As these respondents did not answer the questions regarding the attractiveness of different aspects of working as a nurse in home care, they were excluded from the study. Since some of them quitted before answering the background questions, it was not possible to verify whether these respondents belonged to the research population and therefore no useful further analysis could be performed on these missing data.

Data analysis

Descriptive statistics were calculated for the perceived attractiveness of the different aspects of people-centred, integrated home care. Bivariate relationships between the perceived attractiveness of the different aspects and the respondent's healthcare sector or educational level were examined using Pearson's chi-square tests. The data were analysed using STATA 14.0 (StataCorp, 2015). A difference was deemed to be statistically significant if $p < .05$.

Ethics approval and consent to participate

This study was based on questionnaires completed by nursing staff; no patients were involved. As all the research participants were competent individuals and no participants were subjected to any interventions or actions, no ethics approval was needed under Dutch law on medical research (Medical Research Involving Human Subjects Act, http://www.ccmo.nl). Study participation was voluntary. Participant consent was assumed upon return of a completed questionnaire. The data were stored and analysed in accordance with the Dutch Personal Data Protection Act (http://www.privacy.nl/uploads/guide_for_controller_ministry_justice.pdf). Questionnaire data were kept separately from response information and personal details and the researchers did not have access to these background data. Hence, confidentiality and anonymity were assured. Privacy regulations have been drawn up and are in

force for the Nursing Staff Panel.

6.3 Results

Respondents' characteristics

Table 6.2 provides the individual characteristics of the respondents. Most were female (91%). The mean age of 46 (standard deviation or *SD* = 11.8) was slightly higher than the average age of employees working in the Dutch healthcare sector, which was 43 in 2015 (AZW, 2016). More than half of the respondents (55%) had an associate-level degree in nursing and 45% had a bachelor's degree. When compared with the population proportions in the Dutch home-care sector and in Dutch hospitals (Van der Windt & Bloemendaal, 2015a,b,c), it turns out that nurses with a bachelor's degree were overrepresented in this study, especially among hospital nurses. We have addressed this by performing subgroup analyses. The respondents had 19 years of experience in nursing on average (*SD* = 11.9) and an average working week of 27 hr (*SD* = 6.0). In this study, hospital nurses were more likely to be male and have a slightly higher average number of weekly working hours than home-care nurses (see footnotes to Table 6.2).

Attractiveness of people-centred and integrated home care

As shown in Table 6.3, most home-care nurses regarded the different aspects of people-centred, integrated home care as attractive. Serving as a link between the domains of housing, social care and health care was least likely to be considered as attractive (70%). The other aspects were considered as attractive by 81% to 97% of the home-care nurses.

Hospital nurses were less likely to view the different aspects of people-centred, integrated home care as attractive than home-care nurses (Table 6.3). However, all the different aspects were considered to be attractive by at least one-third of the hospital nurses. Taking control in complex situations was seen as attractive by three quarters of the hospital nurses. Furthermore, almost two-thirds of the hospital nurses considered the aspects "paying attention to health promotion and the timely identification of problems (prevention)" and "focusing on what a patient can still do and promoting self-reliance in a patient" to be attractive. The other aspects were

regarded as attractive by 36% to 45% of the hospital nurses.

The biggest differences between home-care nurses' and hospital nurses' views concerned the aspects "having contact with family caregivers who are both users and partners in the delivery of care," "having contact with everyone in the patient's network" and "working in the community." These aspects were seen as attractive by 87%, 93% and 91% of the home-care nurses respectively, while 36%, 42% and 45% respectively of the hospital nurses regarded these aspects as attractive (Table 6.3).

Differences between educational levels

Home-care nurses with a bachelor's degree seem more likely to consider the different aspects of people-centred, integrated home care as attractive than home-care nurses educated to associate degree level (Table 6.4). However, a statistically significant difference between the two educational levels was found only for the aspect "having a network in the community and maintaining contacts with local residents, organisations, professionals and municipal officials." Almost 9 of 10 nurses (88%) with a bachelor's degree regarded this aspect as attractive, whereas around three quarters (76%) of the nurses educated to associate degree level consider this aspect as attractive.

No clear pattern of differences was found between the two educational levels among hospital nurses (Table 6.4), except for "taking control in complex situations." Hospital nurses educated to bachelor's degree level are more likely (85%) to consider this aspect as attractive than nurses with an associate degree (69%).

Table 6.2 Descriptive statistics

	Total (*n*=328)	**Nurses in home care** (*n*=177)	**Nurses in hospitals** (*n*=151)
	% or mean (*S.D.*)	% or mean (*S.D.*)	% or mean (*S.D.*)
Educational level			
Registered nurse, associate-level degree	54.9%	53.1%	57.0%
Registered nurse, bachelor´s degree	45.1%	46.9%	43.0%
Age (years)	46.02 (11.78)	47.10 (11.68)	44.76 (11.80)
Sex*			
Male	8.8%	5.7%	12.6%
Female	91.2%	94.3%	87.4%
Work experience (years)	18.85 (11.90)	17.93 (11.94)	19.93 (11.80)
Working hours per week**	27.42 (6.01)	26.32 (5.76)	28.72 (6.06)

* Statistically significant difference between nurses in home care and nurses in hospitals, $p<0.05$

** Statistically significant difference between nurses in home care and nurses in hospitals, $p<0.01$

Table 6.3 Percentage of nurses in home care and hospitals who consider different aspects of people-centred and integrated home care as attractive (versus unattractive or neither attractive nor unattractive) (*n*=328)

	Nurses in home care (*n*=177)	**Nurses in hospitals (*n*=151)**	χ^2	*p*
Having contact with family caregivers who are both users and partners in the delivery of care	87.0%	36.4%	90.18	0.000
Having contact with everyone in the patient´s network (patient, informal caregivers, family, neighbours)	92.7%	42.4%	97.17	0.000
Working in the community, knowing the community	91.0%	45.0%	81.56	0.000
Having a network in the community and maintaining contacts with local residents, organisations, professionals and municipal officials	81.4%	44.4%	48.57	0.000
Paying attention to health promotion and the timely identification of problems (prevention)	96.6%	65.6%	53.96	0.000
Serving as a link between the domains of housing, social care and health care.	70.1%	40.4%	29.15	0.000
Focusing on what a patient can still do and promoting self-reliance in a patient	96.1%	61.6%	60.88	0.000
Taking control in complex situations	90.4%	75.5%	13.15	0.000

Table 6.4 Percentage of nurses in home care and hospitals that consider different aspects of people-centred and integrated home care as attractive (versus unattractive or neither attractive nor unattractive); differences depending on educational level (n=328)

	Nurses in home care				Nurses in hospitals			
	RN-a[a] n=94	RN-b[b] n=83	χ^2	p	RN-a[a] n=86	RN-b[b] n=65	χ^2	p
Having contact with family caregivers who are both users and partners in the delivery of care	84.0%	90.4%	1.56	0.212	36.1%	36.9%	0.01	0.912
Having contact with everyone in the patient's network (patient, informal caregivers, family, neighbours)	91.5%	94.0%	0.40	0.527	38.4%	47.7%	1.32	0.251
Working in the community, knowing the community	89.4%	92.8%	0.62	0.430	46.5%	43.1%	0.18	0.674
Having a network in the community and maintaining contacts with local residents, organisations, professionals and municipal officials.	75.5%	88.0%	4.48	0.034	40.7%	49.2%	1.09	0.296
Paying attention to health promotion and the timely identification of problems (prevention)	97.9%	95.2%	0.98	0.323	66.3%	64.6%	0.05	0.831
Serving as a link between the domains of housing, social care and health care.	66.0%	74.7%	1.61	0.205	41.9%	38.5%	0.18	0.673
Focusing on what a patient can still do and promoting self-reliance in a patient	95.7%	96.4%	0.05	0.827	61.6%	61.5%	0.00	0.991
Taking control in complex situations	87.2%	94.0%	2.31	0.129	68.6%	84.6%	5.13	0.024

a Registered nurse educated to associate degree level
b Registered nurse educated to bachelor's degree level

6.4 Discussion

Main findings

This study examined the attractiveness of different aspects of working in Dutch home care that correspond to people-centred and integrated home care. The results show that most home-care nurses regard these aspects as attractive. A focus group study by De Groot, Maurits, and Francke (2018) also showed that home-care nurses feel attracted to the fact that they can be a link between the patient and other professionals, and be responsible for the co-ordination of care. Reasoning from the study findings, being able to deliver and organise people-centred, integrated home care may increase home-care nurses' job satisfaction and contribute to the retention of nurses in home care. These results are in line with the WHO's appeal for a shift towards people-centred and integrated health services in order to address current challenges in health care (WHO, 2015). In addition, the study findings support the initiatives of several European countries to integrate and co-ordinate care services for home-dwelling patients (Genet et al., 2012).

Furthermore, at least one-third of the hospital nurses consider aspects of people-centred, integrated home care as attractive. This indicates a potential for a shift of hospital nurses to home care. The study findings also suggest that hospital nurses are more attracted to fostering a patient's self-reliance and health promotion than to people-centred care in the community. A possible explanation is that hospital nurses are more oriented towards the individual patient and have fewer contacts with the patient's family, community and professionals in the domains of housing and welfare.

That home-care nurses are more likely to consider aspects of integrated, people-centred home care as attractive than hospital nurses is likely to be related to their decision to work in this setting and their current work experiences in this regard. Choosing to work in home care indicates a preference for supporting patients in their personal living environment. This better reflects people-centred care than nursing care in hospitals, which is more focused on supporting physicians. If hospital nurses gain further experience with supporting patients in their home, they may feel more attracted to people-centred care. Furthermore, as suggested in the Section 6.1, enhanced professionalism may explain why delivering and organising people-centred, integrated home care appeals to home-care nurses. This mainly

concerns the use of a wider range of knowledge and skills, more opportunities to apply abstract knowledge to specific cases, and greater autonomy. However, hospital nurses may prefer to specialise within their specific field of expertise, which is also a characteristic of professionalism (Freidson, 1999). Delivering and organising people-centred and integrated health services in home care may be at the expense of deepening specialist knowledge of the treatment of specific disease conditions.

Contrary to expectations, the study showed no clear differences between educational levels. A possible explanation may be that, despite the differences in professional profiles and educational background, there are only a few differences between nurses with a bachelor's degree and nurses with an associate degree in nursing practice in the Netherlands (Van der Velden, Francke, & Batenburg, 2011). This may mean that experiences with the provision of people-centred and integrated care and the need for additional training are also largely the same.

Implications

The findings of this study indicate that strengthening people-centred, integrated home care is important for the attractiveness of working in home care and may help to retain current home-care nurses. In order to create a competent workforce for people-centred and integrated home-care delivery, nurses may have to develop new competencies. The WHO has described 42 competencies that are needed to deliver people-centred and integrated health services; these competencies are divided into the clusters of patient advocacy, effective communication, team work, people-centred care and continuous learning (Langins & Borgermans, 2015).

Furthermore, the study results seem to suggest some potential for the recruitment of home-care nurses among hospital nurses, although in general hospital nurses appear to be less attracted to people-centred and integrated home care than nurses who currently work in home care. Giving hospital nurses the opportunity to gain experience with delivering and organising people-centred, integrated home care may help to encourage nurses to switch from inpatient care to home care. Such a shift appears necessary as signs of an imminent general shortage of nurses have diminished in recent years (OECD, 2016), while the demand for home-care nurses is likely to rise due to ageing populations and government plans for growth in home care, often seen as a

replacement for residential and hospital care (Genet et al., 2012; OECD, 2015).

Suitable strategies for fostering people-centred, integrated home care are likely to vary between countries given the substantial differences in home-care contexts across countries, even within Europe (Carrera, Pavolini, Ranci, & Sabbatini, 2013; European Commission, 2013; Van Eenoo, Declercq, et al., 2016). It is plausible that providing people-centred and integrated home care by nurses is more difficult in countries where nurses mainly assist physicians, compared to countries where nurses operate more independently in supporting home-dwelling patients. The WHO has developed a framework for action on integrated health services delivery, which can assist countries in enhancing people-centred, integrated home care (WHO, 2016).

Strengths, limitations and suggestions for future research

Previous research on factors that attract nurses to home care has mainly been restricted to general working conditions, such as autonomy, rather than the way the home-care services delivered by nursing staff are organised, co-ordinated and provided. Therefore, this study provides valuable new insights. As the WHO is calling for people-centred and integrated health services while at the same time the home-care sector is struggling with nursing staff shortages, it is very important to know whether home-care nursing staff consider people-centred, integrated home care to be attractive. The findings of this study can be used for this purpose.

However, a few caveats need to be noted regarding the present study. Since there is variation in the provision and organisation of home-care services and in the overarching long-term care systems across countries (Carrera et al., 2013; Van Eenoo, Declercq, et al., 2016), the generalisability of the study findings may be limited to countries where the role of home-care nurses is well-developed and where a relatively high percentage of the population have access to nursing services and personal care at home provided by nursing staff. Furthermore, although this study indicated that hospital nurses feel some attraction to people-centred, integrated home care, it remains unclear whether they would actually consider switching to home care. In the view of calls to prioritise community care at the expense of inpatient care, hospital nurses' willingness to change to home care is an intriguing subject for future research.

6.5 Conclusions

People-centred, integrated home care appeals to most home-care nurses, irrespective of their educational level. The study findings also suggest that a minority of hospital nurses feel attracted to this characteristic of home care. These findings are relevant to policy makers and home-care organisations who aim to retain and expand the home-care nursing workforce.

Authors' contributions
Study conception and design: EM, PG, AF, AdV. Analysis and interpretation of data: EM, PG, AdV, AF. Drafting of manuscript: EM, PG, AF, AdV. All authors read and approved the final manuscript.

References

Abbott, A. (1988). *The system of professions*. Chicago, IL: The University of Chicago.

Alidina, K. (2012). Professionalism in post-licensure nurses in developed countries. *Journal of Nursing Education and Practice*, 3, 128-137. https://doi.org/10.5430/jnep.v3n5p128

AZW. (2016). Retrieved from http://www.azwinfo.nl

Carrera, F., Pavolini, E., Ranci, C., & Sabbatini, A. (2013). Long-term care systems in comparative perspective: Care needs, informal and formal coverage, and social impacts in european countries. In C. Ranci, & E. Pavolini (Eds.), *Reforms in long-term care policies in Europe* (pp. 23–52). New York, NY: Springer.

De Bont, M., Van Haaren, E., Rosendal, H., & Wigboldus, M. (2012). *Expertisegebied Wijkverpleegkundige [Area of expertise home-care nurse with a bachelor's degree in nursing]*. Utrecht: V&VN.

De Groot, K., Maurits, E. E. M., & Francke, A. L. (2018). Attractiveness of working in home care: An online focus group study among nurses. *Health & Social Care in the Community*, 26, e94–e101. https://doi.org/10.1111/hsc.12481

De Maeseneer, J., Van Weel, C., Daeren, L., Leyns, C., Decat, P., Boeckxstaens, P., Willems, S. (2012). From "patient" to "person" to "people": The need for integrated, people-centered healthcare. *International Journal of Person Centered Medicine*, 2, 601–614.

Ellenbecker, C. H., Boylan, L. N., & Samia, L. (2006). What home health-care nurses are saying about their jobs. *Home Healthcare Nurse*, 24, 315–324.

Eurofound. (2013). *More and Better Jobs in Home-Care Services*. Luxembourg: Publications Office of the European Union. https://doi.org/10.2806/4586

European Commission. (2013). *Long-term care in ageing societies – Challenges and policy options*¸ *Commission StaffWorking Document, SWD 41*. Brussels: European Commission.

Evetts, J. (2003). The sociological analysis of professionalism occupational change in the modern world. *International Sociology*, 18, 395–415.

Freidson, E. (1999). Theory of professionalism: Method and substance. *International Review of Sociology*, 9, 117–129. https://doi.org/10.1080/03906701.1999.9971301

Freidson, E. (2001). *Professionalism. The third logic*. Cambridge: Polity Press.

Genet, N., Boerma, W., Kroneman, M., Hutchinson, A., & Saltman, R. B. (2012). *Home care across Europe. Current structure and future challenges*. Copenhagen: World Health Organization (on behalf of the European Observatory on Health Systems and Policies).

Hall, R. H. (1968). Professionalization and bureaucratization. *American Sociological Review*, 33, 92–104.

Langins, M., & Borgermans, L. (2015). *Strengthening a competent health workforce for the provision of coordinated/integrated health services. Working document*. Copenhagen: WHO Regional Office for Europe.

Maurits, E. E. M., De Veer, A. J. E., & Francke, A. L. (2015). Autonomous home-care nursing staff are more engaged in their work and less likely to consider leaving healthcare. *International Journal of Nursing Studies*, 52, 1816–1823. https://doi.org/10.1016/j.ijnurstu.2015.07.006

Nies, H. (2014). Communities as co-producers in integrated care. *International Journal of Integrated Care*, 14, e022. https://doi.org/10.5334/ijic.1589

Noordegraaf, M. (2011). Risky business: How professionals and professional fields (must) deal with organizational issues. *Organization Studies*, 32, 1349–1371. https://doi.org/10.1177/0170840611416748

Noordegraaf, M. (2015). Hybrid professionalism and beyond: (New) Forms of public professionalism in changing organizational and societal contexts. *Journal of Professions and Organization*, 2, 187–206. https://doi.org/10.1093/jpo/jov002

OECD. (2015). *Health at a Glance 2015: OECD Indicators*. Paris: OECD Publishing.

OECD. (2016). *Health workforce policies in OECD countries: Right jobs, right skills, right places*. Paris: OECD Publishing.

Pavalko, R. M. (1971). *Sociology of occupations and professions*. Itasca: F.E. Peacock Publishers.

Postma, J., Oldenhof, L., & Putters, K. (2015). Organized professionalism in healthcare: Articulation work by neighbourhood nurses. *Journal of Professions and Organization*, 2, 61–77. https://doi.org/10.1093/jpo/jou008

StataCorp. (2015). *Stata statistical software: Release 14*. College Station, TX: StataCorp LP.

Tummers, L. G., Groeneveld, S. M., & Lankhaar, M. (2013). Why do nurses intend to leave their organization? A large-scale analysis in long-term care. *Journal of Advanced Nursing*, 69, 2826–2838. https://doi.org/10.1111/jan.12249

Van der Velden, L. F. J., Francke, A. L., & Batenburg, R. S. (2011). *Vraag- en aanbodontwikkelingen in de verpleging en verzorging in Nederland. Een kennissynthese van bestaande literatuur en gegevens- bronnen [Developments in demand and supply in nursing and care in the Netherlands. A knowledge synthesis of existing literature and data sources]*. Utrecht: NIVEL.

Van der Windt, W., & Bloemendaal, I. (2015a). *Toekomstverkenning voor de branche Algemene en categorale ziekenhuizen. Vraag en aanbod van verplegend en verzorgend personeel 2015-2019 [Future study for the general and categorial hospital sector. Demand and supply of nursing and caring staff 2015-2019]*. Utrecht/Den Haag: KIWA/CAOP.

Van der Windt, W., & Bloemendaal, I. (2015b). *Toekomstverkenning voor de branche Universitair Medische Centra. Vraag en aanbod van verplegend en verzorgend personeel 2015-2019 [Future study for the University Medical Centre sector. Demand and supply of nursing and caring staff 2015-2019]*. Utrecht/Den Haag: KIWA/CAOP.

Van der Windt, W., & Bloemendaal, I. (2015c). *Toekomstverkenning voor de Thuiszorg. Vraag en aanbod van verplegend en verzorgend personeel 2015-2019 [Future study for Home Care. Demand and supply of nursing and caring staff 2015-2019]*. Utrecht/Den Haag: Kiwa/CAOP.

Van Eenoo, L., Declercq, A., Onder, G., Finne-Soveri, H., Garms-Homolová, V., Jónsson, P. V., ...van der Roest, H. G. (2016). Substantial between-country differences in organising community care for older people in Europe—A review. *European Journal of Public Health*, 26, 213–219. https://doi.org/10.1093/eurpub/ckv152

Van Eenoo, L., van der Roest, H., van Hout, H., & Declercq, A. (2016). Quality of care and job satisfaction in the European home care setting: Research protocol. *International Journal of Integrated Care*, 16, 14. https://doi.org/10.5334/ijic.2519

Varjus, S. L., Leino-Kilpi, H., & Suominen, T. (2011). Professional autonomy of nurses in hospital settings – A review of the literature. *Scandinavian Journal of Caring Sciences*, 25, 201–207. https://doi.org/10.1111/j.1471-6712.2010.00819.x

VWS. (2014a). *Brief aan de voorzitter van de Tweede Kamer der Staten-Generaal. Commissiebrief inzake VSO Beroep en opleiding verpleegkundige. 15 oktober 2014 [Letter to the chairman of the House of Representatives. Commission letter regarding VSO Nursing profession and education. 15 October 2014]*. Den Haag: Ministerie van Volksgezondheid, Welzijn en Sport.

VWS. (2014b). *Brief aan de voorzitter van de Tweede Kamer der Staten-Generaal. Samenhang in zorg en ondersteuning. 4 maart 2014 [Letter to the chairman of the House of Representatives. Coherence in care and support. 4 March 2014]*. Den Haag: Ministerie van Volksgezondheid, Welzijn en Sport.

VWS. (2015). *Brief aan de Voorzitter van de Tweede Kamer der Staten- Generaal. Kamerbrief over de rol van wijkverpleegkundige. 14 April 2015 [Letter to the chairman of the House of Representatives. Letter regarding the role of home-care nurses with a bachelor's degree. 14 April 2015]*. Den Haag: Ministerie van Volksgezondheid, Welzijn en Sport.

Wade, G. H. (1999). Professional nurse autonomy: Concept analysis and application to nursing education. *Journal of Advanced Nursing*, 30, 310–318.

WHO. (2008). The World Health Report 2008. Primary Health Care: Now more than ever. Retrieved from http://www.who.int/whr/2008/en/

WHO. (2015). *WHO global strategy on people-centred and integrated health services: Interim report*. Geneva: World Health Organization.

WHO. (2016). *The European framework for action on integrated health services delivery*. Copenhagen: WHO Regional Office for Europe.

7

Dealing with professional misconduct by colleagues in home care: a nationwide survey among nursing staff

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Abstract

Background

Professional misconduct in healthcare, a (generally) lasting situation in which patients are at risk or actually harmed, can jeopardise the health and well-being of patients and the quality of teamwork. Two types of professional misconduct can be distinguished: misconduct associated with incompetence and that associated with impairment. This study aimed to (1) quantify home-care nursing staff's experiences with actual or possible professional misconduct; (2) provide insight into the difficulty home-care nursing staff experience in reporting suspicions of professional misconduct within the organisation and whether this is related to the individual characteristics of nursing staff; and (3) show which aspects of professional practice home-care nursing staff consider important in preventing professional misconduct.

Methods

A questionnaire survey was held among registered nurses and certified nursing assistants employed in Dutch home-care organisations in 2014. The 259 respondents (60 % response rate; mean age of 51; 95 % female) were members of the Dutch Nursing Staff Panel, a nationwide group of nursing staff members in various healthcare settings.

Results

Forty-two percent of the nursing staff in home care noticed or suspected professional misconduct by another healthcare worker during the previous year, predominantly a nursing colleague. Twenty to 52 % of the nursing staff experience difficulty in reporting suspicions of different forms of incompetence or impairment. This is related to educational level (in the case of incompetence), and managerial tasks (both in the case of incompetence and of impairment). Nursing staff consider a positive team climate (75 %), discussing incidents (67 %) and good communication between healthcare workers (57 %) most important in preventing professional misconduct among nursing staff.

Conclusions

Suspicions of professional misconduct by colleagues occur quite frequently among nursing staff. However, many nursing staff members experience difficulty in reporting suspicions of professional misconduct, especially in the case of suspected impairment. Home-care employers and professional associations should eliminate the barriers that nursing staff may encounter when they attempt to raise an issue. Furthermore, advocating a positive team climate within nursing teams, encouraging nursing staff to discuss incidents and facilitating this, and promoting good communication between healthcare workers may be appropriate strategies that help reduce professional misconduct by nursing staff.

7.1 Background

Professional misconduct among home-care nursing staff can jeopardise the health and well-being of patients and the quality of nursing staff's teamwork. Therefore, it is important to address and prevent professional misconduct in home care. Professional misconduct in health care is defined by the Dutch Health Care Inspectorate as a (generally) lasting situation in which patients are at risk or actually harmed because a healthcare worker lacks competencies or provides irresponsible care and seems unable or unwilling to change this situation [1]. Two types of professional misconduct can be distinguished, viz. misconduct associated with incompetence and misconduct associated with impairment [2, 3]. In the case of incompetence, a healthcare worker's functioning is harmed as a result of a deficiency in knowledge or skills, including communication and collaboration problems [3]. In the case of impairment, a healthcare worker's cognitive, interpersonal or psychomotor abilities are seriously impaired due to individual conditions that interact with the environment (e.g. substance abuse, aggressive behaviour, mental illness or physical disability) [4, 5]. Impairment is frequently accompanied by incompetence [3].

In home care, nursing staff play an important role in caring for the chronically ill and the elderly. Home-care patients in general depend heavily on the care they receive and may therefore be reluctant to report professional misconduct. Signs of incompetence or impairment that are perceived and acted upon by nursing colleagues may therefore play an important role in reducing professional misconduct. However, since staff in home-care nursing generally deliver care individually in the homes of their clients, it may be more difficult for nursing staff to identify possible professional misconduct by colleagues than in other healthcare sectors.

To our knowledge, there have been no studies that quantify home-care nursing staff's experiences with actual or possible professional misconduct as a (generally) lasting situation. Previous research has concentrated on *instances* of inadequate care or disruptive behaviour and predominantly focussed on in-patient care. These studies revealed that nurses quite frequently notice such *instances*. Moore and McAuliffe [6] showed that 88 % of the nurses in acute-care hospitals had observed an incident of poor care in the past 6 months. Rosenstein and O'Daniel [7] found that 72 % of the

hospital nurses had at some point witnessed disruptive behaviour from another nurse at their hospital. Lastly, Malmedal, et al. [8] showed that 91 % of the nursing staff in nursing homes had at some point observed an act of inadequate care committed by a colleague. The first objective of our study was to quantify home-care nursing staff's experiences with actual or possible professional misconduct.

It is important that home-care nursing staff report observations of professional misconduct by nursing colleagues, either formally or informally, in order to tackle professional misconduct and prevent any further harm to patients. According to the International Council of Nurses' code of ethics, nurses have to take appropriate action to safeguard patients when their health is endangered by a colleague [9]. Nonetheless, nurses do not always report acts of inadequate care committed by their colleagues [6, 10]. Seeing a colleague not functioning properly gives rise to high levels of moral distress among nursing staff [11]. Nursing staff 's reluctance to report incidents may also apply to suspicions of professional misconduct. Frequently named factors that deter nurses from reporting incidents of poor care or raising concerns about patient safety are the belief that their concerns will be ignored, not wanting to cause trouble, and fear of retribution or repercussions [6, 10, 12]. However, these factors may be most relevant for nurses in hospitals, where the division of power between physicians and nursing staff may affect nurses' reporting behaviour.

It is likely that home-care nursing staff experience more difficulty in reporting suspicions of impairment than in reporting supposed incompetence. Signs of impairment may be less clear and more of a taboo subject than indications of incompetence, since impairment concerns personal problems and incompetence involves professional functioning that has deteriorated due to a deficiency in knowledge or skills. In addition, it is plausible that communication about professional knowledge and skills is common within teams, while personal problems are discussed less often.

Furthermore, it can be expected that there are individual differences in the reluctance to report suspicions of incompetence or impairment and that these differences partly depend on professionalism, position within the organisation and prior experience with professional misconduct. First, it is plausible that registered nurses with a bachelor's degree experience less difficulty in reporting suspicions of professional misconduct by colleagues

than nursing staff with a lower level of educational attainment. Registered nurses with a bachelor's degree can be characterised as having a higher degree of professionalism, as they perceive more autonomy in their work than nursing staff in home care with a lower level of education [13]. Autonomy is viewed as a core characteristic of professionalism in the literature on professions (e.g. [14, 15]. Self-regulation by a professional group is important to prevent autonomy from resulting in professional misconduct. Professions can be viewed as moral communities whose norms, values and definitions of appropriate professional conduct guide the individual professionals in their work ([14], p.25, p.100). This moral dimension helps to sustain society's trust in the professions [16]. Although national codes of ethics may exist for nursing staff with both lower and higher levels of education, as is the case in the Netherlands, it stands to reason that registered nurses with a bachelor's degree are more accustomed to exerting social control over the behaviour of colleagues. Also, as suggested by Malmedal, et al. [17], more highly educated nursing staff may have had more training in critically reflecting upon practice and have acquired more knowledge about ethics and moral practice.

Secondly, it can be expected that more experienced nursing staff have less difficulty in reporting incompetence or impairment. These nursing staff may have a better sense of the limits of permissible behaviour in nursing. However, an opposite effect could also be postulated. Less experienced nursing staff may have more optimistic views on the likely outcome of reporting suspicions of professional misconduct by nursing colleagues. Nursing staff members with more work experience may have experienced or heard of disappointing results from reporting professional misconduct.

Thirdly, it can be assumed that home-care nursing staff with managerial tasks experience less difficulty in reporting suspicions of professional misconduct by colleagues since they are more accustomed to judging the performance of colleagues and are better connected to senior management.

Finally, it is likely that nursing staff who have actually experienced or suspected professional misconduct by a nursing colleague report more difficulty in voicing suspicions of impairment or incompetence than nursing staff lacking this experience. Nursing staff without actual experience with actual or suspected misconduct may underestimate the moral distress that is triggered by these situations.

Insight into these differences can help home-care employers and professional associations in tailoring their policies to tackle professional misconduct by nursing staff. Hence, the second objective of this study was to provide insight into the difficulty that home-care nursing staff experience in reporting suspicions of professional misconduct by nursing colleagues, and the individual characteristics that are related to this difficulty.

In addition to dealing appropriately with nursing staff members who demonstrate incompetence or impairment, it is important to prevent professional misconduct wherever possible. It would thus be of interest to know which aspects of professional practice home-care nursing staff consider important in preventing professional misconduct. With this knowledge, home-care employers and professional associations can strengthen their policies for curbing professional misconduct. However, no research has been found that surveyed nursing staff's views on practice factors that help to prevent professional misconduct. The third objective of the current study was to explore different aspects of professional practice that nursing staff consider important in preventing professional misconduct, and possible associations between this and the educational level of nursing staff or their prior experience with misconduct.

The main questions addressed in this study are:

1. To what extent do home-care nursing staff have experience with nursing colleagues who were or suspected to be incompetent or impaired?
2. To what extend do home-care nursing staff experience difficulty in reporting suspicions of professional misconduct by nursing colleagues? Do nursing staff experience less difficulty in reporting suspicions of incompetence than in reporting suspicions of impairment?
3. Is difficulty in reporting suspicions of professional misconduct related to educational level, work experience, managerial tasks and prior experience with professional misconduct?
4. Which aspects of professional practice do home-care nursing staff consider important in preventing professional misconduct by nursing colleagues?
5. Are educational level and prior experience with professional misconduct related to the aspects of professional practice that nursing staff consider important?

7.2 Methods

Design and setting

This study used a quantitative, exploratory design. Data were collected by a questionnaire survey among home-care registered nurses and certified nursing assistants in the Netherlands in May and June 2014. Dutch home-care services include support in daily living activities (i.e. personal care), technical nursing care and psychosocial care, all of which are delivered mainly by registered nurses and certified nursing assistants. This home care can be episodic, e.g. after a hospital stay, but it is more often longer lasting [18]. The education of Dutch certified nursing assistants consists of 3 years of vocational training after secondary education. This is different from the situation in most other countries, where nursing assistants often have vocational training of less than 1 year. Dutch registered nurses are educated to two different levels. Nurses educated to associate degree level have had 3 to 3.5 years of professional training (equivalent to a UK foundation qualification) and nurses educated to bachelor's degree level have had at least 4 years of professional training [18, 19].

In the Netherlands, a national code of ethics applies to both certified nursing assistants and registered nurses [20].This code requires nursing staff to point out acts of poor care or harmful behaviour to the healthcare worker concerned. If a conversation with the healthcare worker does not have the desired effect, nursing staff should inform the appropriate person or authority (e.g. the supervisor, manager, complaints committee, medical disciplinary law judge or Dutch Health Care Inspectorate) while taking due care.

Sample

A total of 259 Dutch nursing staff working in home care completed the questionnaire (response rate of 60 %). All respondents were members of a pre-existent research sample, the Nursing Staff Panel, consisting of a nation-wide group of nursing staff members in various healthcare settings who deliver direct patient care and are willing to fill in questionnaires about current topics in health care.

Members of the Nursing Staff Panel are recruited via a random sample of the population of Dutch healthcare employees provided by the Dutch

Employee Insurance Agency. This agency is responsible for social security payments and registers all employees in the Dutch healthcare sector. Healthcare employees in this random sample were asked to participate in healthcare research for various purposes. Nursing staff delivering direct patient care in the largest healthcare sectors in the Netherlands (i.e. hospitals, mental health care, care for disabled people, home care, nursing homes and homes for the elderly) who agreed to this request were invited to become members of the Nursing Staff Panel. This procedure promotes a diverse composition of the panel with respect to age, gender, region and employer. Participation in the Nursing Staff Panel is voluntary and takes place on an anonymous basis.

Data collection

The questionnaire was administered in Dutch. Respondents could complete the questionnaire online or on paper. To increase the response rate, up to two reminders were sent at fortnightly intervals to panel members who had not yet responded.

The questionnaire contained both self-developed questions and questions from an existing questionnaire on dealing with colleagues demonstrating impairment or incompetence in health care by Weenink, et al. [3], adjusted to suit nursing staff. The questionnaire was assessed by five experts in nursing research and ethics in health care and amended to take account of their comments.

Experience with colleagues who demonstrated actual or possible incompetence or impairment

The questionnaire asked nursing staff whether they had noticed or suspected professional misconduct by another healthcare worker in the preceding 12 months. To ensure respondents would interpret the concept of professional misconduct appropriately, they were shown the Health Care Inspectorate's definition of professional misconduct as described above in the Background section [1]. A comment was added that professional misconduct can also involve substance abuse or transgressive behaviour. The question was derived from the questionnaire by Weenink, et al. [3]. Possible responses were 'yes' and 'no'. If the answer was 'yes', respondents were asked to specify the profession of this healthcare worker. Their responses were categorised into

1) nursing colleague, 2) physician, 3) other healthcare worker. If respondents had noticed or suspected professional misconduct more than once, they were asked to report the most recent case. Respondents who had noticed or suspected professional misconduct were also asked to specify the type of professional misconduct. They were shown four categories of incompetence and seven categories of impairment (see Table 7.3). The categories of incompetence and impairment were derived from the questionnaire by Weenink, et al. [3], although two additional categories were included – 'Dealing carelessly with patient's personal belongings' and 'Fraud' – on the advice of the aforementioned experts. Multiple responses were possible. Respondents could also mention another type of professional misconduct.

Difficulty in reporting suspicions of professional misconduct by colleagues
For each of the 11 categories of professional misconduct (see Table 7.3) respondents were requested to picture that they suspect a nursing colleague of this particular type of incompetence or impairment. A 'nursing colleague' was defined as a nurse or nursing assistant in the same home-care team. Respondents were subsequently asked to indicate whether they would find it easy or difficult to raise the matter of this suspicion within their organisation. The responses were on a five-point Likert scale and coded as 1 = 'very easy', 2 = 'easy', 3 = 'neither easy nor difficult', 4 = 'difficult' and 5 = 'very difficult'. A mean score was calculated for both the four incompetence categories and the seven impairment categories, resulting in two scale scores, with a possible range of 1–5.

Important aspects of professional practice in preventing professional misconduct
Respondents were shown 16 aspects of professional practice and asked to indicate which of these aspects they consider as most important in preventing professional misconduct by nursing colleagues (see Table 7.1). Respondents were requested to select up to five aspects. They could also add an additional aspect they considered important to the list of aspects.

Respondents' characteristics
The respondent characteristics addressed in the survey questionnaire are age, sex, educational level, managerial tasks, work experience in health care, and

working hours per week. Educational level was specified as the highest level of nursing education completed (certified nursing assistant, registered nurse with an associate-level degree or registered nurse with a bachelor's degree). Work experience was defined as the number of years practicing as a registered nurse or certified nursing assistant. Respondents were classified into four age groups (see Table 7.2). Both years of work experience and number of working hours per week were categorised into four groups.

Table 7.1 Aspects of professional practice that could be important in preventing professional misconduct, as addressed in the questionnaire

Aspects of professional practice
Support and guidance by nurse managers
Transparent communication patterns
Regular performance appraisal interviews
Individual work support or supervision
Supplementary training
Personal development plan
Peer review
Discussing incidents
Using professional profiles/competence profiles/professional codes of ethics
Good communication between healthcare workers
Positive team climate/culture of openness
Flexibility in working hours
Ability to work reduced hours over a period of time if necessary
Sufficient staff
Suitably qualified staff

Data analysis

The data were analysed using Stata 13.1. The level of statistical significance was set at $p < 0.05$. Descriptive statistics were calculated for experience with actual or suspected professional misconduct by colleagues, difficulty in reporting suspicions of professional misconduct by colleagues and aspects of professional practice that nursing staff consider important in preventing professional misconduct. Independent t-tests (for dichotomous independent variables) and analyses of variance (for independent variables with more than

two categories) were conducted to explore bivariate relationships between individual characteristics and difficulty in reporting suspicions of professional misconduct. Additional regression analysis was performed to check for possible interaction and interdependence between individual characteristics with $p < 0.05$ in the bivariate analyses. A dependent t-test was performed to compare the difficulty in reporting suspicions of incompetence and of suspicions of impairment. Bivariate relationships between educational level and experience with professional misconduct on the one hand and aspects of professional practice that nursing staff members consider important in preventing professional misconduct on the other hand, were examined using Pearson's chi-square tests.

7.3 Results

Respondents' characteristics

The individual characteristics of the respondents are shown in Table 7.2. Most were female (95 %). The respondents ranged in age from 23 to 66. Their average age of 51 (standard deviation or *S.D.* = 9.3) was higher than the average age of employees working in the home-care sector in the Netherlands, which was 44 in 2014 [21]. The majority of the respondents (51 %) were certified nursing assistants, 26 % had an associate-level degree in nursing and 23 % a bachelor's degree. As the respective proportions in the Dutch home-care sector as a whole were 69 %, 17 % and 14 % in 2014 [22],certified nursing assistants were under-represented and registered nurses were over-represented in the study population. We have addressed the slightly distorted distribution of the sample by performing subgroup analyses. Respondents had 23 years of experience in nursing on average (*S.D.* = 10.8) and an average weekly working time of 23 h (*S.D.* = 7.5). Most respondents (86 %) delivered only direct patient care, while 14 % also had managerial tasks.

Table 7.2 Summary of respondent characteristics (*n*=259)

	% or mean (S.D.)	**missing data (%)**
Age (years)	50.79 (9.30)	0 %
<40	13.1 %	
40-49	22.8 %	
50-59	48.7 %	
>59	15.4 %	
Sex		0 %
Male	4.3 %	
Female	95.8 %	
Educational level		0.8 %
Certified nursing assistant	51.0 %	
Registered nurse, associate-level degree	25.7 %	
Registered nurse, bachelor´s degree	23.4 %	
Managerial tasks [a]		1.2 %
No	86.3 %	
Yes	13.7 %	
Work experience (years)	23.00 (10.75)	6.6 %
<10	13.6 %	
10-19	21.1 %	
20-29	31.0 %	
>29	34.3 %	
Working hours per week	22.7 (7.50)	6.6 %
<16	14.9 %	
16-23	33.5 %	
24-31	36.4 %	
>31	15.3 %	

a Managerial tasks are performed mainly by registered nurses. Only 0.8% of the certified nursing assistants have managerial tasks, while 12% of the registered nurses with an associate degree and 40% of the nurses with a bachelor's degree have managerial tasks.

Experience with actual or suspected misconduct by another healthcare worker

As shown in Table 7.3, 42 % (95 % confidence interval of 36–48 %) of the respondents reported that they had noticed or suspected professional

misconduct by another healthcare worker in the past 12 months. No statistically significant differences in experience with misconduct were found between age groups and educational levels. In most cases of actual or suspected professional misconduct (85 %), the healthcare worker concerned was a nursing colleague. 11 % of the respondents who had experienced actual or suspected professional misconduct said that the healthcare worker concerned was a physician. Furthermore, most respondents (56 %) indicated that the professional misconduct entailed substandard care, followed by communication problems with colleagues (42 %) and collaboration problems with colleagues (38 %). The different types of impairment were mentioned far less often (10 % or less).

Difficulty in reporting suspicions of professional misconduct by colleagues

As presented in Table 7.4, 20 to 35 % of the nursing staff regarded reporting suspicions of different types of incompetence as difficult or very difficult. Reporting suspicions of different types of impairment was considered difficult or very difficult by 25 to 52 % of the nursing staff. Nursing staff experience most difficulty in reporting suspicions of substance abuse and fraud (both categories of impairment). The dependent t-test showed that nursing staff experience more difficulty in reporting suspicions of impairment (mean score of 3.18) than in reporting suspicions of incompetence (mean score of 2.95).

An analysis of variance and a t-test showed that difficulty in reporting suspicions of incompetence is related to educational level and managerial tasks (Table 7.5) Certified nursing assistants and registered nurses with an associate-level degree experience more difficulty than registered nurses with a bachelor's degree. Nursing staff without managerial tasks experience more difficulty in reporting suspicions of incompetence than nursing staff with managerial tasks. Additional regression analysis (not in table) revealed that when controlling for educational level, performing managerial tasks remains significantly related to difficulty in reporting suspicions of incompetence. Since managerial tasks occur rarely among certified nursing assistants (see footnote to Table 7.2), they were excluded from this analysis. Furthermore, when controlling for managerial tasks, we still found an association of -.22 between educational level (associate degree versus bachelor's degree) and difficulty in reporting suspicions of incompetence, although this relationship

was not statistically significant. The lack of statistical significance is likely due to reduced statistical power since there were relatively few nurses with managerial tasks (see Table 7.2) Supplementary regression analysis showed no interaction between educational level and managerial tasks. In summary, the additional regression analyses confirm that both educational level and managerial tasks are related to difficulty in reporting suspicions of incompetence. Furthermore, the effect of having managerial tasks is the same among nurses with an associate degree as among nurses with a bachelor's degree.

With regard to difficulty in reporting suspicions of impairment, only an association with managerial tasks was found (Table 7.5). Home-care nursing staff without managerial tasks experience more difficulty in reporting suspicions of impairment than nursing staff with managerial tasks.

Important aspects of professional practice in preventing professional misconduct

As shown in Table 7.6, nursing staff considered a positive team climate (reported by 75 %), discussing incidents (reported by 67 %), and good communication between healthcare workers (reported by 57 %) as the most important aspects of professional practice in preventing professional misconduct by nursing colleagues. Further-more, almost half of the nursing staff (49 %) believed support and guidance by nurse managers is important in order to prevent professional misconduct.

A chi-square test revealed that certified nursing assistants and registered nurses with an associate-level degree attach greater importance to transparent communication patterns than registered nurses with a bachelor's degree. No further associations with educational level were found. Additionally, none of the professional practice aspects showed an association with prior experience with professional misconduct. In other words, nursing staff members with prior experience with actual or possible professional misconduct and staff without such experience attach the same importance to the different aspects of professional practice in preventing professional misconduct.

Table 7.3 Experience with a healthcare worker demonstrating actual or possible incompetence or impairment during the past 12 months

	%	*n*
Experience with a healthcare worker demonstrating actual or possible incompetence or impairment		
Total	41.7 %	259
Educational level[a]		257
Certified nursing assistant	39.7 %	
Registered nurse, associate-level degree	40.9 %	
Registered nurse, bachelor´s degree	45.0 %	
Age (years)[b]		259
<40	47.1 %	
40-49	39.0 %	
50-59	42.9 %	
>59	37.5 %	
Category of healthcare worker demonstrating incompetence or impairment		98
Nursing colleague	84.7 %	
Physician	11.2 %	
Other	4.1 %	
Category of incompetence or impairment (multiple responses possible)		106
Incompetence		
Substandard care	55.7 %	
Collaboration problems with colleagues	37.7 %	
Communication problems with colleagues	41.5 %	
Communication problems with patients	34.0 %	

-Table 7.3 continues-

-Table 7.3 continued-

	%	*n*
Category of incompetence or impairment (multiple responses possible)		
Impairment		
Careless handling of patient's belongings	3.8 %	
Fraud	3.8 %	
Substance abuse (e.g. drugs or alcohol)	1.9 %	
Aggressive behaviour (verbally or physically)	2.8 %	
(Sexually) inappropriate behaviour or remarks	0.9 %	
Physical impairment	10.4 %	
Mental illness	8.5 %	
Other	9.4 %	

a No statistically significant differences in experience with misconduct were found between educational levels (χ^2 (2)=0.48, p=0.786)

b No statistically significant differences in experience with misconduct were found between age groups (χ^2 (3)=0.94, p=0.816)

Table 7.4 Difficulty in raising the matter of suspicions of professional misconduct by a colleague (*n*=236 to 238)

	Mean score (range 1-5)	**Very easy**	**Easy**	**Neither easy nor difficult**	**Difficult**	**Very difficult**
Incompetence	2.95[a]					
Substandard care	3.02	2.9 %	31.5 %	30.3 %	31.5 %	3.8 %
Collaboration problems with colleagues	3.01	1.3 %	29.8 %	38.7 %	27.3 %	2.9 %
Communication problems with colleagues	3.01	1.7 %	28.6 %	40.3 %	25.6 %	3.8 %
Communication problems with patients	2.77	3.4 %	38.4 %	38.0 %	18.6 %	1.7 %
Impairment	3.18[a]					
Careless handling of patient belongings	2.80	4.2 %	38.7 %	32.4 %	22.7 %	2.1 %
Fraud	3.36	3.0 %	22.5 %	24.6 %	36.0 %	14.0 %
Substance abuse (e.g. drugs or alcohol)	3.43	2.1 %	16.9 %	29.1 %	39.2 %	12.7 %
Aggressive behaviour (verbally or physically)	3.20	3.8 %	24.1 %	28.7 %	35.0 %	8.4 %
(Sexually) inappropriate behaviour or remarks	3.23	3.8 %	23.6 %	27.4 %	35.9 %	9.3 %
Physical impairment	2.95	2.1 %	34.2 %	35.0 %	24.1 %	4.6 %
Mental illness	3.30	1.3 %	21.5 %	32.1 %	36.7 %	8.4 %

a On average, nursing staff find reporting impairment more difficult than reporting incompetence, t (235) =-5.09, p=0.000

Table 7.5 Bivariate relationships between individual characteristics and difficulty in raising the matter of suspicions of professional misconduct (n=232 to 237)

	Incompetence (range 1-5)			**Impairment (range 1-5)**		
	mean	*t* or *F*	*p*	mean	*t* or *F*	*p*
Educational level		4.16	0.017*[a]		0.68	0.505
Certified nursing assistant (CNA)	3.00			3.20		
Registered nurse, associate-level degree (RN-a)	3.08			3.23		
Registered nurse, bachelor´s degree (RN-b)	2.71			3.07		
Work experience in years		2.53	0.058		1.96	0.120
<10	2.73			3.15		
10-19	2.84			3.11		
20-29	3.11			3.37		
>29	2.97			3.06		
Managerial tasks		3.82	0.000*		2.45	0.015*
No	3.03			3.24		
Yes	2.51			2.87		
Experience with professional misconduct		-1.08	0.283		-0.93	0.353
No	3.00			3.12		
Yes	2.89			3.22		
Age		0.98	0.404		2.11	0.100
<40	2.95			3.40		
40-49	3.06			3.30		
50-59	2.97			3.13		
>59	2.78			2.98		

-Table 7.5 continues-

-Table 7.5 continued-

	Incompetence (range 1-5)			Impairment (range 1-5)		
	mean	*t* or *F*	*p*	mean	*t* or *F*	*p*
Working hours per week		1.84	0.140		1.84	0.141
<16	3.11			3.32		
16-23	3.06			3.30		
24-31	2.84			3.11		
>31	2.85			2.97		

a A post-hoc Bonferroni test showed that CNA and RN-a staff experience more difficulty than RN-b staff ($p<0.05$)

* Statistically significant

Table 7.6 Aspects of professional practice reported as important in preventing professional misconduct by at least 25% of the nursing staff; differences depending on educational level and experience with professional misconduct (*n*=235 to 236)

	Total	**Educational level**					**Experience with professional misconduct**			
		CNA	RN-a	RN-b	χ^2	*p*	Yes	No	χ^2	*p*
Positive team climate/ culture of openness	75.4 %	77.5 %	74.1 %	71.9 %	0.70	0.704	72.9 %	77.1 %	0.55	0.459
Discussing incidents	67.4 %	68.3 %	69.0 %	64.9 %	0.27	0.875	66.7 %	67.9 %	0.04	0.848
Good communication between healthcare workers	57.2 %	58.3 %	60.3 %	50.9 %	1.22	0.542	54.2 %	59.3 %	0.61	0.435
Support and guidance by nurse managers	49.2 %	52.5 %	51.7 %	40.4 %	2.45	0.293	47.9 %	50.0 %	0.10	0.753
Transparent communication patterns	40.7 %	47.5 %	43.1 %	24.6 %	8.58	0.014*	42.7 %	39.3 %	0.28	0.599

-Table 7.6 continues-

-Table 7.6 continued-

	Total	**Educational level**					**Experience with professional misconduct**			
		CNA	RN-a	RN-b	χ^2	*p*	Yes	No	χ^2	*p*
Sufficiently qualified staff	40.7 %	35.8 %	43.1 %	49.1 %	2.99	0.225	45.8 %	37.1 %	1.78	0.182
Regular performance appraisal interviews	34.3 %	35.0 %	34.5 %	31.6 %	0.21	0.901	40.6 %	30.0 %	2.85	0.091
Individual work support or supervision	25.9 %	24.2 %	25.9 %	28.1 %	0.31	0.855	30.2 %	22.9 %	1.61	0.205

* Statistically significant

7.4 Discussion

Main findings

This study shows that, during the past year, 42 % of the nursing staff in home care noticed or suspected professional misconduct by another healthcare worker. In 85 % of these cases, the healthcare worker (suspected of) demonstrating incompetence or impairment was a nursing colleague. These findings do not imply that this proportion of nursing staff members actually had a nursing colleague who demonstrated impairment or incompetence as this partly refers to *suspicions* of professional misconduct. A survey study among ten health-care professions regulated by law showed that 31 % of the healthcare professionals had experience with a colleague demonstrating impairment or incompetence in the preceding 12 months [3]. Our findings suggest that nursing staff in home care are slightly more likely to encounter a colleague who demonstrates actual or possible incompetence or impairment.

Earlier research among nursing staff has shown that nurses in hospitals and nursing homes are rather likely to observe acts of inadequate care or disruptive behavior [6-8]. The current findings reveal that experience with actual or possible professional misconduct by colleagues, as a (generally) lasting situation, is quite common among nursing staff in the home-care sector. This is remarkable since home-care nursing staff deliver care rather independently and generally out of sight of colleagues. The autonomous and self-reliant character of the work and lack of direct interference and close supervision of managers [23] may increase the risk of professional misconduct. However, this could also increase the risk of unjustified suspicions of professional misconduct as colleagues may lack a good picture of the care provided by their fellow workers.

Since home-care staff apparently quite regularly suspect a nursing colleague of impairment or incompetence, it is even more important that they report their suspicions of professional misconduct. The current study indicates that 20 to 35 % of the nursing staff experience difficulty in reporting suspicions of different types of incompetence and 25 to 52 % experience difficulty in reporting suspicions of various forms of impairment. The hesitancy of some nursing staff members to report acts of inadequate care, as shown by Firth-Cozens, et al. [10] and Moore and McAuliffe [6], seems to apply to reporting suspicions of professional misconduct by nursing

colleagues as well.

Our findings show that nursing staff experience more difficulty in reporting suspicions of misconduct associated with impairment than suspicions of misconduct associated with incompetence. This is in accordance with Moore and McAuliffe [24], who found that 79 % of the hospital nurses who observed an incident of incompetence reported it, while only 61 % of the nurses who observed poor treatment/abuse reported this. Our study revealed that suspicions of misconduct associated with impairment are rather rare in comparison with suspicions of misconduct associated with incompetence. In addition to impairment as a taboo subject and a problem that is less obvious than incompetence, unfamiliarity with nursing colleagues being impaired could explain why nursing staff experience more difficulty in voicing suspicions of misconduct related to impairment than in reporting suspicions of misconduct associated with incompetence.

As expected, the results reveal that nursing staff with managerial tasks experience less difficulty in reporting suspicions of professional misconduct by nursing colleagues, both in cases of incompetence and of impairment. This finding is in line with the findings of Moore and McAuliffe [6], who found that nurse managers are more likely to report incidents of poor care than staff nurses in hospitals.

Our study indicates that nursing staff with a higher level of education (registered nurses with a bachelor's degree) experience less difficulty in reporting suspicions of incompetence than nursing staff with a lower level of education (registered nurses with an associate degree and certified nursing assistants). This is consistent with Malmedal, et al. [17] who revealed that nursing-home staff with a lower level of education feel less brave about reporting acts of inadequate care than more highly educated nursing staff. However, surprisingly, no relationship was found between educational level and difficulty in reporting suspicions of impairment. Possibly, as a professional group, registered nurses with a bachelor's degree may be more accustomed to exerting social control over the professional behaviour of colleagues than to exerting social control over personal problems.

Contrary to expectations, we found no associations between, on the one hand, work experience and prior experience with professional misconduct and on the other hand difficulty in reporting professional misconduct. Malmedal, et al. [17] showed that nursing-home staff with more than 30 years of

work experience are more afraid of the personal consequences of reporting *acts* of inadequate care committed by their colleagues than staff with less experience. This does not seem to apply to reporting suspected misconduct by nursing colleagues in home care.

It is of great importance that professional misconduct by nursing staff is avoided as far as possible. This study has found that three-quarters of the nursing staff consider a positive team climate important in preventing professional misconduct. Furthermore, two-thirds attach great value to discussing incidents and 57 % believe good communication between healthcare workers is critical. We found no association between on the one hand the importance nursing staff attach to these three aspects of professional practice and on the other hand educational level and prior experience with professional misconduct. Both nursing staff with higher education levels and those with lower education levels, and both nursing staff with actual experience with suspected misconduct and those without think that a positive team climate, discussing incidents and good communication between healthcare workers are important aspects of professional practice that help prevent professional misconduct.

Implications

Home-care employers and professional associations should encourage nursing staff to report suspicions of impairment or incompetence concerning their nursing colleagues in order to tackle professional misconduct by nursing staff. This can be achieved by eliminating the barriers nursing staff may encounter when they attempt to raise an issue. These barriers vary between different types of nursing staff. Employers and professional associations should therefore tailor their approach to the educational level and managerial tasks of the nursing staff concerned. In their study of nurses' and doctors' attitudes to reporting poor care, Firth-Cozens, et al. [10] conclude that in order to foster a reporting culture, there is a need to *"introduce clarity into the areas which must be reported and clear systems for doing so, ensure that mechanisms exist to bring about necessary change following reporting, and assure safety for those who have the courage to report"* (p.336). To respond to this need, home-care employers can draw up a protocol for dealing with nursing colleagues demonstrating incompetence or impairment. Professional associations can foster this by developing a model protocol. In the Netherlands, the

associations of general practitioners and medical specialists have drawn up such a model protocol [25]. However, to date, a model protocol for home-care nursing staff is lacking and it is unknown whether individual home-care organisations have a protocol for dealing with nursing colleagues demonstrating impairment or incompetence. An important part of the organisational arrangements for reporting suspicions of professional misconduct is blame-free reporting. Previous research indicates that fears about negative consequences are an important barrier to reporting healthcare incidents [6, 26]. In addition, it could be useful to enhance nursing staff's training in critically reflecting upon practice and in knowledge about ethics and moral practice. The results of our study indicate that this is particularly relevant for certified nursing assistants and registered nurses with an associate degree.

Advocating a positive team climate within nursing teams, encouraging nursing staff to discuss incidents and facilitating this, and promoting good communication between healthcare workers may be appropriate strategies for employers, team leaders and professional organisations to help reduce professional misconduct by nursing staff. Home-care nursing staff consider these aspects of professional practice most important in preventing professional misconduct. In order to justify this approach, home-care organisations and professional associations can examine whether organisations that focus on these aspects of nursing staff's professional practice do indeed experience less professional misconduct.

Limitations and suggestions for future research

Although the first part of our study considered *actual* observations or suspicions of healthcare workers demonstrating incompetence or impairment, nursing staff were asked about *hypothetical* scenarios of suspected professional misconduct in the second part of the study. Jones and Kelly [27] consider the focus on hypothetical scenarios and intentions to be a drawback of many studies in relation to whistle-blowing by nurses. It remains unknown to what extent home-care nursing staff's expectations of difficulty in reporting suspicions of professional misconduct correspond to the actual difficulty they experience in a situation of suspected impairment or incompetence. Another limitation of this study is that we did not explore nursing staff's reasons underpinning the difficulty they experience in reporting professional

misconduct. Furthermore, certified nursing assistants and younger nursing staff were underrepresented in our sample. However, we found no association between experience with actual or possible professional misconduct and educational level or age. Finally, we used a Dutch sample and home-care nursing staff's experience with professional misconduct may differ across countries. Nonetheless, it is likely that the associations found between the type of misconduct (either associated with impairment or with incompetence) and individual characteristics of nursing staff on the one hand and difficulty in reporting suspicions of professional misconduct on the other hand are also true for other countries.

Further research is needed to better understand the factors that might deter nursing staff from reporting suspicions of professional misconduct, for instance prior experiences with reporting. It is recommended that future research addresses actual suspicions of professional misconduct by nursing colleagues rather than hypothetical scenarios. Furthermore, including patients' experiences with professional misconduct in future research is important in order to obtain a better view of the prevalence of professional misconduct in home care.

7.5 Conclusions

This study showed that observations or suspicions of professional misconduct by colleagues occur quite frequently among nursing staff. However, a substantial proportion of the nursing staff experience difficulty in reporting suspicions of professional misconduct, especially in the case of suspected impairment. Nursing staff consider a positive team climate, discussing incidents and good communication between healthcare workers to be important aspects of professional practice in preventing professional misconduct among nursing staff.

Authors' contributions
Study conception and design: EM, AdV, AF, PG. Analysis and interpretation of data: EM. Drafting of manuscript: EM, AdV, AF, PG. All authors read and approved the final manuscript.

References

1. IGZ. Aanscherping definitie disfunctioneren [Refinement of the definition of professional misconduct]. Utrecht: Inspectie voor de Gezondheidszorg; 2013.
2. DesRoches CM, Rao SR, Fromson JA, Birnbaum RJ, Iezzoni L, Vogeli C, Campbell EG. Physicians' perceptions, preparedness for reporting, and experiences related to impaired and incompetent colleagues. JAMA. 2010; 304(2):187–93.
3. Weenink JW, Westert GP, Schoonhoven L, Wollersheim H, Kool RB. Am I my brother's keeper? A survey of 10 healthcare professions in the Netherlands about experiences with impaired and incompetent colleagues. BMJ Qual Saf. 2014;24:56–64.
4. Beckstead JW. Modeling attitudinal antecedents of nurses' decisions to report impaired colleagues. West J Nurs Res. 2002;24(5):537–51.
5. American Nurses Association. Addictions and psychological dysfunctions in nursing: The profession's response to the problem. Kansas City: ANA; 1984.
6. Moore L, McAuliffe E. To report or not to report? Why some nurses are reluctant to whistleblow. Clin GovInt J. 2012;17(4):332–42.
7. Rosenstein AH, O'Daniel M. Disruptive Behavior and Clinical Outcomes: Perceptions of Nurses and Physicians: Nurses, physicians, and administrators say that clinicians' disruptive behavior has negative effects on clinical outcomes. AJN. 2005;105(1):54–64.
8. Malmedal W, Ingebrigtsen O, Saveman BI. Inadequate care in Norwegian nursing homes–as reported by nursing staff. Scand J Caring Sci. 2009;23(2):231–42.
9. ICN. The ICN Code of Ethics for Nurses. Geneva: International Council of Nurses; 2012.
10. Firth-Cozens J, Firth RA, Booth S. Attitudes to and experiences of reporting poor care. Clin GovInt J. 2003;8(4):331–6.
11. De Veer AJ, Francke AL, Struijs A, Willems DL. Determinants of moral distress in daily nursing practice: A cross sectional correlational questionnaire survey. Int J Nurs Stud. 2013;50(1):100–8.

12. Waters A. Nurses fear their concerns about care will be ignored. Nurs Stand. 2008;22:12–3.

13. Maurits EEM, De Veer AJE, Francke AL. Autonomous home-care nursing staff are more engaged in their work and less likely to consider leaving healthcare. Int J Nurs Stud. 2015;52:1816–23.

14. Pavalko RM. Sociology of Occupations and Professions. Itasca: F.E. Peacock Publishers; 1971.

15. Hall RH. Professionalization and bureaucratization. Am Sociol Rev. 1968;33:92–104.

16. Frankel MS. Professional codes: why, how, and with what impact? J Bus Ethics. 1989;8(2–3):109–15.

17. Malmedal W, Hammervold R, Saveman B-I. To report or not report? Attitudes held by Norwegian nursing home staff on reporting inadequate care carried out by colleagues. Scand J Public Health. 2009;37(7):744–50.

18. De Veer AJE, Francke AL, Buijse R, Friele RD. The Use of Physical Restraints in Home Care in the Netherlands. JAGS. 2009;57(10):1881–6.

19. De Veer AJE, Francke AL. Attitudes of nursing staff towards electronic patient records: A questionnaire survey. Int J Nurs Stud. 2010;47:846–54.

20. CGMV/CNV/FNV/HCF/NU'91/RMU/V&VN.Beroepscode van Verpleegkundigen en Verzorgenden [National Code of Ethics of Nurses and Nursing Assistants]; 2015.

21. Onderzoeksprogramma Arbeidsmarkt Zorg en Welzijn [Research Programme Labour Market in Healthcare and Welfare] http://www.azwinfo.nl. Accessed 18 Nov 2016

22. Van der Windt W, Bloemendaal I. Toekomstverkenning voor de Thuiszorg. Vraag en aanbod van verplegend en verzorgend personeel 2015–2019 [Future study for Home Care. Demand and supply of nursing and caring staff 2015–2019]. Utrecht/Den Haag: Kiwa/CAOP; 2015.

23. Van der Boom H. Home Nursing in Europe. Patterns of Professionalisation and Institutionalisation of Home Care and Family Care to Elderly People in Denmark, France, the Netherlands and Germany. Doctoral thesis. Maastricht: Maastricht University; 2008.

24. Moore L, McAuliffe E. Is inadequate response to whistleblowing perpetuating a culture of silence in hospitals? Clin GovInt J. 2010;15(3):166–78.

25. Drewes H, Weenink J, Kool T: Disfunctioneren van zorgverleners in de Nederlandse gezondheidszorg. Definiëring, signalering, vaststellen en het treffen van maatregelen [Professional misconduct by health care providers in the Dutch healthcare system. Defining, signalling, identifying and taking action]. Nijmegen: IQ Healthcare UMC St. Radboud; 2012.

26. Kingston MJ, Evans SM, Smith BJ, Berry JG. Attitudes of doctors and nurses towards incident reporting: a qualitative analysis. Med J Aust. 2004;181(1):36–9.

27. Jones A, Kelly D. Whistle-blowing and workplace culture in older people's care: qualitative insights from the healthcare and social care workforce. Sociol Health Illn. 2014;36:986–1002.

8

General discussion

8.1 Introduction

A number of Western European countries face shortages of home-care nursing staff. To address these shortages, it is important to gain insight into factors that impact on the attractiveness of working in home care. This knowledge can help in retaining nursing staff and attracting new staff.

This thesis focused on the role of autonomy in the attractiveness of working in home care. The central research question was: *How is autonomy related to the attractiveness of working in home care?* Autonomy was defined as independence and freedom of initiative in a job (Ellenbecker, 2004). In addition to autonomy in general, different dimensions of autonomy in nursing practice were distinguished: autonomy over patient care; work autonomy; and organisational autonomy. Autonomy over patient care refers to individual authority and freedom to make decisions regarding the content of patient care. Work autonomy connotes freedom and discretion in work scheduling, job processes and work methods. Finally, organisational autonomy refers to decision-making that guides the work of the unit, i.e. control over the context of practice (Weston, 2008).

This chapter provides an answer to the central research question. This is done by discussing the hypotheses that were presented in the General Introduction. In addition, reflections on the main findings are provided as well as implications for practice and for policy and recommendations for further research. This chapter ends with a conclusion.

8.2 Main findings in relation to the general hypotheses

This section discusses whether the general hypotheses are supported by the research findings that are described in Chapters 2 to 7.

Hypothesis 1: Autonomy is positively related to nursing staff's self-perceived ability to remain working until retirement.

Hypothesis 1 focused on the association between autonomy and the self-perceived ability of nursing staff in general to continue their work until the official retirement age. Gaining insight into this relationship is relevant given the nursing staff shortages and the need to prevent early drop out. It was expected that for nursing staff in general, working in different healthcare

sectors, autonomy is positively associated with the self-perceived ability to remain working until retirement.

A positive relationship between autonomy and the self-perceived ability to continue working until retirement was found in the research described in this thesis (Chapter 2). Nursing staff who perceive more autonomy were less likely to believe they would be unable to continue their work until the official retirement age. Therefore, Hypothesis 1 is confirmed. However, when other job factors and organisational factors were also included in the analysis, work pressure and appreciation of nursing staff by senior management in particular appeared to be positively related to the self-perceived ability to continue working.

Hypothesis 2: Home-care nursing staff value autonomy and its three dimensions: autonomy over patient care; work autonomy; and organisational autonomy.

Where Hypothesis 1 concerned nursing staff in general, Hypothesis 2 focused on nursing staff in home care. In addition to autonomy in general, the hypothesis also included the three dimensions of autonomy that are described above: autonomy over patient care; work autonomy; and organisational autonomy.

This thesis showed that nurses in home care see these dimensions of autonomy as attractive aspects of their work (Chapter 4). Furthermore, it was found that home-care nursing staff who perceive more autonomy are less likely to consider pursuing an occupation outside the healthcare sector. This is related to their greater work engagement (Chapter 3). This finding also indicates that home-care nursing staff value autonomy. In addition, this thesis showed that home-care nursing staff who work in a self-directed team are more satisfied with their job (Chapter 5). The relationship between self-direction and job satisfaction is partially mediated by autonomy over patient care, which underpins the importance of autonomy over patient care for the attractiveness of working in home care. As mediation was not complete, the usually high degree of organisational autonomy of self-directed teams may additionally explain the positive association between working in a self-directed team and job satisfaction. In view of these research findings, Hypothesis 2 is confirmed.

Hypothesis 3: Home-care nursing staff with a higher level of education attach more value to autonomy than nursing staff with a lower level of education.

Hypothesis 3 compares home-care nursing staff with different levels of education. It was expected that nursing staff with a higher level of education particularly value autonomy.

The research in this thesis showed that for both registered nurses with an associate degree in home care and registered nurses with a bachelor's degree, autonomy is an attractive aspect of their work (Chapter 4). Furthermore, it was found that the negative relationship between autonomy and considering leaving the healthcare sector applies to registered nurses with a bachelor's degree, registered nurses with an associate degree and certified nursing assistants (Chapter 3). Both home-care nursing staff with a higher level of education and those with a lower level of education are less likely to consider leaving the healthcare sector if they perceive more autonomy. In addition, it turned out that both registered nurses with a bachelor's degree and certified nursing assistants are more satisfied with their work if they feel they have more autonomy over patient care (Chapter 5). These study results indicate that for both nursing staff with a higher level of education and staff with a lower educational level, autonomy is positively related to the attractiveness of working in home care. Hypothesis 3 is therefore not confirmed.

Hypothesis 4: Home-care nursing staff in self-directed work teams experience more autonomy over patient care than nursing staff in more traditionally organised teams.

According to Hypothesis 4, self-direction of home-care teams is accompanied by more individual autonomy for team members. It was expected that nursing staff in self-directed teams experience more autonomy over patient care than nursing staff in teams that are self-directing to a lesser extent.

This thesis showed that self-direction of a nursing staff team is positively associated with team members' autonomy over patient care (Chapter 5). Home-care nursing staff in teams with a greater degree of self-direction feel they have more autonomy over patient care than nursing staff in more traditionally organised teams. Hence, Hypothesis 4 was confirmed.

Hypothesis 5: Home-care nurses value people-centred and integrated home care.

Hypothesis 5 concerned people-centred and integrated health services, which includes the delivery of integrated care around people's needs that is effectively coordinated across providers and co-produced by professionals, the patient, the family and the community. It was expected that the organisational and coordination tasks in people-centred and integrated home care enhance nurses' autonomy. Therefore, Hypothesis 5 stated that home-care nurses feel attracted to people-centred, integrated home care.

A research finding of this thesis was that most nurses in home care regard the different aspects of people-centred and integrated home care as attractive (Chapter 6). This applies to both registered nurses with a bachelor's degree and nurses with an associate degree. Therefore, Hypothesis 5 was confirmed.

Hypothesis 6: Home-care nursing staff with a higher level of education experience less difficulty in reporting suspicions of professional misconduct by colleagues than nursing staff with a lower level of education.

Hypothesis 6 covered difficulty in reporting suspicions of professional misconduct. Two types of professional misconduct can be distinguished, viz. misconduct related to incompetence and misconduct associated with impairment. It was hypothesised that the difficulty nursing staff experience in reporting suspicions of professional misconduct is negatively related to their educational level. Nursing staff with a higher level of educational attainment were expected to be better trained in critically reflecting upon practice and to be more accustomed to exerting social control over the behaviour of colleagues, and thereby to experience less difficulty in reporting possible professional misconduct.

In this thesis, it was found that certified nursing assistants and registered nurses with an associated degree experience more difficulty in raising the matter of suspicions of incompetence than registered nurses with a bachelor's degree (Chapter 7). No differences between educational levels were found for reporting suspicions of impairment. Hence, Hypothesis 6 is partly confirmed.

8.3 Answer to the central research question

This section provides an answer to the general research question: *How is autonomy related to the attractiveness of working in home care?* This is done based on the hypotheses described in the previous section.

The research findings in this thesis show that autonomy is positively related to the attractiveness of working in home care. Nursing staff in home care who perceive more autonomy are more engaged in their work and less likely to consider leaving the healthcare sector. Nurses value different dimensions of autonomy: autonomy over patient care; work autonomy; and organisational autonomy. In addition, home-care nursing staff who feel they have more autonomy over patient care are more satisfied with their job. This thesis also offers indications as to how the self-perceived autonomy of nursing staff in home care can be enhanced. It was found that home-care nursing staff in self-directed teams experience more autonomy over patient care than in more traditionally organised work teams. Furthermore, it is plausible that people-centred and integrated home care increases the autonomy of home-care nursing staff. In line with this reasoning, this thesis shows that nurses in home care value the different aspects of people-centred and integrated care.

8.4 Reflections on the main findings

In this section the findings are placed in a broader framework and unexpected outcomes, i.e. hypotheses that were not confirmed or only partially confirmed, are further discussed.

The overall finding that autonomy is positively related to the attractiveness of working in home care is in line with theoretical assumptions in the sociology of professions. According to the literature, autonomy is important for the professionalisation of nurses (Alidina, 2012; Varjus et al., 2011; Wade, 1999). Professions control their own work and exercise discretion over areas of expertise, which is based upon a body of abstract, theoretical knowledge (see for example Freidson, 2001; Abbott, 1988). As the literature suggests that workers find professionalisation attractive (Evetts, 2003), nursing staff are likely to appreciate the autonomy they are granted.

Different dimensions of autonomy will enhance nursing staff's professionalism. The following dimensions of autonomy are distinguished in

the nursing literature: autonomy over patient care; work autonomy; and organisational autonomy (Weston, 2008). This thesis showed that nurses see all three dimensions of autonomy as attractive aspects of their work. It was also shown that working in a self-directed team is positively associated with home-care nursing staff's self-perceived autonomy over patient care. Therefore, self-direction may increase the professionalism of home-care nursing staff.

There may be an area of tension between on the one hand professionalism of home-care nursing staff, which is accompanied by autonomy, and on the other hand accountability of care, supervision of care and its quality, and prevention of unwanted practice variation in the assessment of care needs and care delivery. Confidence in the professional competence of nursing staff determines the degree to which society grants and accepts autonomy. Nursing staff must possess the right skills and knowledge. In addition, it is important that the framework within which nursing staff can act autonomously is laid down in professional codes and rules of conduct. This should also include self-regulation by the professional community. It is important that society can assume that professional misconduct by nursing staff is identified and tackled by the professional community. This thesis shows that a substantial proportion of nursing staff in Dutch home care find it difficult to report suspicions of professional misconduct within their organisation. This may affect the legitimacy of their autonomy.

In the research described in this thesis, no support was obtained for the hypothesis that the value home-care nursing staff attach to autonomy differs between nursing staff with a higher level of education and those with lower educational levels. No evidence was found for the idea that nursing staff with a higher educational level would attach more value to autonomy because they are likely to demonstrate increased professionalism.

However, the scope and context of the autonomy that is granted to nursing staff are likely to differ depending on their qualifications. For example, while Dutch registered nurses with a bachelor's degree have discretion over the assessment of patient care needs, the autonomy of Dutch certified nursing assistants will mainly relate to supporting patients in activities that are part of their daily living and to promoting patients' self-

reliance. This is likely to affect the scope and context of the autonomy that nursing staff with different educational levels value.

Another hypothesis that was not fully confirmed was that nursing staff with a higher level of education experience less difficulty in reporting suspicions of professional misconduct by colleagues than nursing staff with a lower level of education. This hypothesis only holds true with regard to professional misconduct that is associated with incompetence and not with regard to misconduct that is related to impairment. Nursing staff with different educational levels do not seem to differ in the difficulty they experience in reporting suspicions of colleagues' personal problems. However, only hypothetical scenarios of suspected professional misconduct have been examined here. Therefore, additional research is needed on the actual difficulty nursing staff experience in a situation of suspected impairment or incompetence.

8.5 Methodological considerations

This section explains some methodological considerations of the research described in this thesis.

As described in the General Introduction, most studies in this thesis were based on questionnaire surveys among participants of the Nivel Nursing Staff Panel. A strength of using this panel is that we had data on a diverse nationwide group of nursing staff. Another advantage of using this existing panel of nursing staff was that the panel participants had previously committed to participation in survey research. This resulted in relatively high response rates.

A strength of the panel was also the national distribution of the participating nursing staff members in the Netherlands and the home-care organisations they work for. However, the participants in the Nivel Nursing Staff Panel were not entirely representative of all nursing staff in Dutch home care in terms of the level of education and age. This was taken into account in the analysis by testing associations, controlling for covariates and performing analyses for different subgroups.

A limitation of conducting survey research was that no actual behaviour was studied (for instance, actually leaving the home-care sector), only experiences, opinions and attitudes. In addition, the survey research was

cross-sectional in nature. No causal links were investigated. However, it is difficult to carry out real experiments with varying degrees of nursing staff autonomy since it is hard to control for the many other factors that affect work attractiveness. Longitudinal research may therefore provide valuable additional knowledge.

Furthermore, a strength of the research described in this thesis was that online focus groups were conducted in addition to the survey research. Questionnaire research provided valuable quantitative insights, while online focus groups offered in-depth qualitative knowledge on attractive aspects of working in home care.

8.6 Implications for practice and policy

This section outlines the implications of the research findings in this thesis. Recommendations are given for practice and policy. In addition, issues are described that need to be taken into account when increasing the autonomy of home-care nursing staff.

The research findings can help policymakers, home-care organisations, employers' organisations in home care and professional associations to develop strategies for tackling staff shortages in home care. It is recommended that the autonomy of nursing staff in home care is promoted in home-care policy and practice. This thesis shows that autonomy is an important aspect of the attractiveness of working in home care. This suggests that enhancing autonomy can help in retaining nursing staff and attracting new staff.

Recent developments in Dutch home care are likely to enhance home-care nursing staff's autonomy. Registered nurses with a bachelor's degree have been assigned a central position in the community to organise and coordinate care for patients living at home, in collaboration with registered nurses with an associate degree and certified nursing assistants. These nurses are expected to ensure that the healthcare providers or social-care providers with the right competences are deployed or consulted, and to coordinate this properly with their team. In the process, home-care nursing teams collaborate with GPs, allied healthcare professionals, pharmacists and social workers (Stuurgroep Kwaliteitskader Wijkverpleging, 2018)

Enhancing nursing staff's autonomy is also an element in various recent Dutch policy plans and agreements to increase the attractiveness of working in health care. For example, a labour market agenda (Regiegroep Arbeidsmarktagenda, 2017) and an action programme (VWS, 2018b) have been developed aimed at reducing staff shortages in health care: *Aan het werk voor ouderen. Arbeidsmarktagenda 2023* ('Working for the elderly. Labour Market Agenda 2023') and *Actieprogramma Werken in de zorg* ('Action Programme Working in Healthcare'). Both highlight the importance of the autonomy of nursing staff. For example, the action programme states that nursing staff need to be given space to determine what is needed to provide good care based on their expertise. In the labour market agenda, increasing the autonomy of nursing staff is part of the action line for improving the quality of work and the working conditions of nursing staff.

This thesis also indicates that different dimensions of autonomy should be promoted. The following dimensions were distinguished: autonomy over patient care; organisational autonomy; and work autonomy. Recent developments in Dutch home care are likely to boost these three dimensions of autonomy.

The *autonomy over patient care* of Dutch registered nurses with a bachelor's degree is likely to have been increased by their regained responsibility for performing the formal assessment of patients' care needs. In this formal assessment of needs and care, nurses identify patients' situations and their social networks. They use this information, together with clinical reasoning, to arrive at a nursing diagnosis. Subsequently, joint goals and an appropriate approach are determined together with patients and their relatives. Registered nurses with a bachelor's degree assess which care services are to be delivered by which care provider and they then organise the care that is needed (Stuurgroep Kwaliteitskader Wijkverpleging, 2018).

The *organisational autonomy* of Dutch home-care nursing staff is likely to be enhanced as a consequence of the introduction of self-directed teams. The number of self-directing teams in Dutch home care has risen sharply in recent years. Self-directed teams usually have a high degree of organisational autonomy. In addition, this thesis shows that home-care nursing staff in self-directed teams experience more autonomy over patient care.

Furthermore, a recent action plan to reduce healthcare providers' regulatory and bureaucratic burdens is likely to increase home-care nursing staff's *work autonomy* (the freedom and discretion in work scheduling, job processes and work methods). In 2018, the Dutch Ministry of Healthcare, Welfare and Sports presented an action plan to eliminate unnecessary bureaucracy in healthcare. This plan was drawn up in cooperation with various parties within Dutch healthcare (VWS, 2018a). The action plan *(Ont)regel de Zorg*, ('(Fewer) rules for healthcare') aims to end various obligations to register, evaluate and fill in checklists and consent forms. The purpose of the action plan is to reduce rules for healthcare providers and to increase the time they have for the patient. In home care, twelve regulations have been abolished.

Issues for consideration when increasing the autonomy of home-care nursing staff

If the autonomy of home-care nursing staff is going to be enhanced, it is particularly important that nursing staff possess the right competences to provide good care. The quality and continuity of training and peer-to-peer coaching are therefore important. The importance of supporting nursing staff in expanding their expertise is also emphasised in a 2018 agreement regarding home care that was concluded between representatives of Dutch healthcare organisations, patients, nursing staff, municipalities, health insurers and the national government (VWS, 2018c).

Another issue for consideration is that greater autonomy of home-care nursing staff can co-exist with the empowerment of patients. Joint decision-making together with patients and their network in the care process is stressed in the aforementioned Dutch agreement regarding home care (VWS, 2018c). Under that agreement, nursing staff have to involve patients and their social network in the decision-making and provision of care.

As described above, the autonomy of home-care nursing staff can conflict with the need for accountability for the care provided, supervision of the quality of care and the prevention of unwanted practice variation. Legal frameworks and protocols can limit the autonomy of nursing staff. An alternative to restricting the freedom of action of nursing staff is to provide support through quality standards or guidelines. Quality standards do not contain mandatory rules, but provide recommendations for good care and practical tools for bottlenecks that crop up in practice (V&VN, 2016). They

also offer nursing staff the opportunity to deviate from those recommendations when necessary.

Furthermore, it is important that the enhanced autonomy of nursing staff as a professional community is accompanied by rules of conduct and professional codes that are followed and violations that are sanctioned. This benefits the regulatory ability of the professional community and thus the acceptance of nursing staff's autonomy by society. This thesis showed that many nursing staff members experience difficulty in reporting suspicions of professional misconduct by colleagues within their organisation. Any barriers encountered by nursing staff when they attempt to report suspicions of misconduct by colleagues should be removed by professional organisations and healthcare organisations. An example of a barrier that nursing staff may experience is fear about the negative consequences of raising the issue of possible misconduct by colleagues. The safety of those who make such reports should therefore be assured.

Finally, a point of attention when enhancing nursing staff´s autonomy by introducing self-directed home-care teams is that nursing staff need to possess the necessary skills to work successfully as a self-directed team. Some characteristics of successful self-directed teams are shared leadership, trust and mutual respect, effective communication, commitment and a cooperative spirit (Narayan et al., 1996). Training and support may help nursing staff members to gain these skills.

8.7 Recommendations for further research

To ensure a balanced nursing labour market in home care, it is important to gain additional insight into working conditions that are important for the attractiveness of working in home care. This section discusses recommendations for further research into the attractiveness of working in home care and the autonomy of home-care nursing staff.

First, it is recommended that further research is done to establish whether autonomy also affects behavioural outcomes of home-care nursing staff, for instance actually leaving the healthcare sector. Longitudinal research can be valuable here.

It is also recommended that future studies examine whether enhancing autonomy can help home-care nursing staff keep up their work for

longer. In this thesis, a positive relationship was found between the autonomy of nursing staff and the self-perceived ability to continue their work until retirement. However, this study did not specifically focus on nursing staff in home care. The association between autonomy and the self-perceived ability to continue working may differ between nursing staff in different healthcare sectors. A future study might assess this association among nursing staff in home care.

Furthermore, future research may focus on the possible association between autonomy and the health of home-care nursing staff. Pisljar et al. (2011) found that job autonomy has a positive effect on the health of hospital employees in Western Europe (not in Eastern Europe countries). It would be interesting to investigate whether this also applies to nursing staff in home care.

Additional research into the importance of autonomy for home-care nursing staff with different educational levels is needed. In this thesis, it was expected that nursing staff with a higher educational qualification would attach more value to autonomy than nursing staff with a lower level of education. This hypothesis was not confirmed, although it is argued that the autonomy nursing staff value is related to the scope and context of the autonomy they are granted within their work domain. In Dutch home-care practice, clear dividing lines between the tasks of nursing staff with different educational levels are lacking (Francke et al., 2017). This may explain why no major differences were found in the value that nursing staff with different educational levels attach to autonomy. Yet the distinction between the tasks and responsibilities of registered nurses with a bachelor's degree, registered nurses with an associate degree and certified nursing assistants is becoming increasingly well-defined in practice and in policy. For example, new specific job profiles have been drawn up (Stuurgroep, 2015). This may lead to greater differences in preferences for specific working conditions between nursing staff depending on their educational level.

In addition, it is recommended that future studies examine possible relationships between the level of education of nursing staff and the importance they attach to different dimensions of autonomy. For example, it may be that nursing staff with a lower level of education attach particular value to work autonomy while nursing staff with a higher educational level especially value autonomy over patient care.

Further research may also help to gain more insight into factors that deter nursing staff with different educational levels from reporting suspicions of professional misconduct by colleagues within the organisation. This research should preferably focus on actual suspicions rather than hypothetical suspicions of professional misconduct.

Finally, it is recommended that the hypotheses concerning autonomy and the attractiveness of working in home care are also tested in other healthcare sectors with similar characteristics. For instance, the hypotheses may be relevant for nursing staff in nursing homes, where care is also often of a long-term nature and mainly focused on the day-to-day functioning of patients rather than on full recovery.

In the Netherlands, a research programme is due to be initiated aimed at the professionalisation of registered nurses and certified nursing assistants (VWS, 2018c). The programme, funded by the Ministry of Health, Welfare and Sport, will focus on strengthening the image of the occupational group, increasing the attractiveness and quality of the occupation and maintaining sufficient nursing staff in practice. This thesis provides starting points for studies within this research programme.

8.8 Conclusions

Given the growing demand for home care and the nursing staff shortages faced by various countries, it is important to understand the factors that are related to the attractiveness of working in home care. With this insight, working conditions can be improved so that more staff can be retained and new staff can be attracted. This thesis shows that the autonomy of nursing staff, i.e. independence and freedom of initiative, is important for the attractiveness of working in home care.

In this thesis, the relationship between autonomy and the attractiveness of working in home care has been further explored by examining associations with the educational level of nursing staff. Concerning the positive relationship between autonomy and the attractiveness of working in home care, no major overall differences were found between nursing staff with a higher educational level and nursing staff with a lower level of educational attainment.

In addition, three dimensions of autonomy were distinguished: autonomy over patient care; work autonomy; and organisational autonomy. This thesis showed that home-care nurses value all three dimensions of autonomy, and that autonomy over patient care is related to home-care nursing staff's job satisfaction.

This thesis also offers indications as to how nursing staff's autonomy can be enhanced in practice. For instance, it is shown that working in a self-directed team, which probably contributes to nursing staff's organisational autonomy, is positively related to job satisfaction, partly because nursing staff in self-directed teams feel they have more autonomy over patient care. Furthermore, it turned out that home-care nurses value the different aspects of people-centred and integrated care. Delivering and organising people-centred and integrated care is likely to enhance home-care nurses' autonomy.

If home-care nursing staff's autonomy is enhanced, self-regulation by the professional community becomes more important. Nursing staff members should address suspicions of possible professional misconduct by colleagues. This thesis shows that there is still some room for improvement here. It was found that a substantial number of nursing staff find it difficult to raise suspicions of professional misconduct within their organisation.

References

Abbott, A. (1988). *The System of Professions*. Chicago: The University of Chicago.

Alidina, K. (2012). Professionalism in post-licensure nurses in developed countries. *Journal of Nursing Education and Practice,* 3(5), 128. doi: 10.5430/jnep.v3n5p128.

Ellenbecker, C. H. (2004). A theoretical model of job retention for home health care nurses. *Journal of Advanced Nursing,* 47(3), 303-310.

Evetts, J. (2003). The sociological analysis of professionalism occupational change in the modern world. *International sociology,* 18(2), 395-415.

Francke, A. L., Rijken, P. M., De Groot, K., De Veer, A. J. E., Verkleij, K. A. M., & Boeije, H. R. (2017). *Evaluatie van de wijkverpleging. Ervaringen van cliënten, mantelzorgers en zorgprofessionals [Evaluation of community nursing. Experiences of clients, informal caregivers, and healthcare professionals].* Utrecht: NIVEL.

Freidson, E. (2001). *Professionalism. The Third Logic.* Cambridge: Polity Press.

Narayan, M. C., Larose, P., & Marchessault, L. (1996). Achieving succes in home care through the self-directed work group approach. *Home healthcare nurse,* 14(11), 865-872.

Pisljar, T., van der Lippe, T., & den Dulk, L. (2011). Health among hospital employees in Europe: A cross-national study of the impact of work stress and work control. *Social science & medicine,* 72(6), 899-906.

Regiegroep Arbeidsmarktagenda. (2017). *Aan het werk voor ouderen. Arbeidsmarktagenda 2023 [Working for the elderly. Labour market agenda 2023].* Den Haag: CAOP.

Stuurgroep. (2015). *Toekomstbestendige beroepen in de verpleging en verzorging. Rapport stuurgroep over de beroepsprofielen en de overgangsregeling [Future-proof professions in nursing and care. Steering committee report on the job profiles and the transitional regulation].* Retrieved from https://www.nfu.nl/img/pdf/Rapport_toekomstbestendige-beroepen-in-de-verpleging-en-verzorging.pdf

Stuurgroep Kwaliteitskader Wijkverpleging. (2018). *Kwaliteitskader Wijkverpleging [Quality Framework Community Care]*.

V&VN. (2016). *Kwaliteitsstandaarden voor verpleegkundigen en verzorgenden [Quality standards for nurses and certified nursing assistants].* Utrecht: Verpleegkundigen & Verzorgenden Nederland.

Varjus, S. L., Leino-Kilpi, H., & Suominen, T. (2011). Professional autonomy of nurses in hospital settings–a review of the literature. *Scandinavian journal of caring sciences,* 25(1), 201-207. doi: 10.1111/j.1471-6712.2010.00819.x.

VWS. (2018a). *Actieplan (Ont)regel de Zorg*. Den Haag: Ministerie van Volksgezondheid, Welzijn en Sport.

VWS. (2018b). *Actieprogramma Werken in de Zorg [Action programme Working in Healthcare].* Den Haag: Ministerie van Volksgezondheid, Welzijn en Sport.

VWS. (2018c). *Onderhandelingsakkoord wijkverpleging 2019 t/m 2022 [Agreement regarding community care 2019 through 2022].* Den Haag: Ministerie van Volksgezondheid, Welzijn en Sport.

Wade, G. H. (1999). Professional nurse autonomy: concept analysis and application to nursing education. *Journal of Advanced Nursing,* 30(2), 310-318.

Weston, M. J. (2008). Defining control over nursing practice and autonomy. *Journal of Nursing Administration,* 38(9), 404-408.

Summary

In many Western European countries, the need for home care is rising. As this is often not accompanied by sufficient growth in the supply of home-care nursing staff, a number of countries are facing current and expected future shortages of home-care nursing staff. Therefore, it is pivotal to gain insight into working conditions that are related to the attractiveness of working in home care. This knowledge can help in retaining current nursing staff in home care and in recruiting new staff. The central idea studied in this thesis is that autonomy is important for the attractiveness of working in home care. The general research question is:

How is autonomy related to the attractiveness of working in home care?

Autonomy is defined as independence and freedom of initiative in a job (Ellenbecker, 2004). Three dimensions of autonomy are distinguished (Weston, 2008). *Autonomy over patient care* implies individual authority and freedom to make decisions about the content of patient care. *Work autonomy* refers to freedom and discretion in work scheduling, job processes and work methods. Finally, *organisational autonomy* connotes the decision-making that guides the work of the unit, for instance a home-care nursing team.

The general introduction of this thesis (**Chapter 1**) describes the rationale for focussing on autonomy and presents the general hypotheses of this thesis. The specific work setting of home-care nursing staff and the often necessary tailoring of care to the individual living situations of patients enhance nursing staff's autonomy, while other factors, such as protocols and the assessment of care by assessment organisations, can reduce their autonomy. Reasoning from some important contributions to the sociology of professions, it is assumed that home-care nursing staff value autonomy as it contributes to their professionalism. Professions can be characterised by occupational (or worker) control of work and are distinguished from other occupations where the employer, manager or consumer controls the work, i.e. decides what tasks are to be performed, by whom, under which conditions and how (Freidson, 1999).

This thesis also discusses whether the assumed positive association between autonomy and attractiveness of working in home care applies to nursing staff regardless of their level of education. Furthermore, the possibility is examined of a relationship between working in a self-directed team and home-care nursing staff's autonomy over patient care. This thesis also covers the attractiveness of delivering and organising people-centred and integrated care, which is likely to enhance home-care nursing staff's autonomy. The downside of autonomy may be a higher risk of professional misconduct going unnoticed. This thesis explores whether home-care nursing staff know how to deal with suspicions of misconduct by colleagues. The following general hypotheses are addressed in this thesis:

1. Autonomy is positively related to nursing staff's self-perceived ability to remain working until retirement.
2. Home-care nursing staff value autonomy and its three dimensions: autonomy over patient care; work autonomy; and organisational autonomy.
3. Home-care nursing staff with a higher level of education attach more value to autonomy than nursing staff with a lower level of education.
4. Home-care nursing staff in self-directed work teams experience more autonomy over patient care than nursing staff in more traditionally organised teams.
5. Home-care nurses value people-centred and integrated home care.
6. Home-care nursing staff with a higher level of education experience less difficulty in reporting suspicions of professional misconduct by colleagues than nursing staff with a lower level of education.

Chapters 2 to 7 of this thesis contain stand-alone research articles with their own research questions and hypotheses. In addition, the research findings of these studies provide insight into the general hypotheses that are described above.

Chapter 2 focuses on nursing staff in general, who are employed in different healthcare sectors. The purpose of the study described here was to gain insight into the associations between different job and organisational characteristics, job satisfaction, occupational commitment and nursing staff's self-perceived ability to continue their work until the official retirement age. The cross-sectional study was based on a questionnaire in Dutch that was

completed by 730 participants in the Nivel Nursing Staff Panel. Regression analyses and mediation analyses were applied to estimate the different associations. The study showed that autonomy is positively related to nursing staff's self-perceived ability to continue their work until retirement. However, when other job factors and organisational factors were also included in the analysis, work pressure and appreciation by senior management in particular appeared to be associated with the self-perceived ability to remain working.

The study described in **Chapter 3** examines how home-care nursing staff's self-perceived autonomy relates to whether they have considered leaving the healthcare sector and assesses the possible mediating effect of work engagement. A structured questionnaire was completed by 262 registered nurses and certified nursing assistants employed in Dutch home-care organisations. The respondents were members of the Nivel Nursing Staff Panel. Regression and mediation analyses were conducted to test associations between self-perceived autonomy, work engagement and considering leaving the healthcare sector. It was found that nursing staff members in home care who perceive more autonomy are less likely to have considered pursuing an occupation outside the healthcare sector. This is related to their greater work engagement (a mediation effect was found). The negative association between self-perceived autonomy and considering leaving the healthcare sector was found among nursing staff members regardless of their level of education.

Chapter 4 provides insight into aspects of working in home care that nurses find attractive and describes whether these aspects vary for home-care nurses with different levels of education. This explorative, qualitative study involved six online focus groups with 38 Dutch home-care nurses. Thematic analysis of the transcripts revealed, among other things, that home-care nurses see the different dimensions of autonomy (autonomy over patient care, work autonomy and organisational autonomy) as attractive aspects of their work. Both nurses with a higher level of education and nurses with a lower level of education liked having autonomy.

The study that is described in **Chapter 5** considers whether working in a self-directed team is associated with home-care nursing staff's job satisfaction, assesses the mediating effect of autonomy over patient care and explores the moderating effect of educational level on the association between autonomy over patient care and job satisfaction. This cross-sectional study was based on two questionnaire surveys among 191 participants in the Nivel

Nursing Staff Panel working in Dutch home-care organisations. The study showed that home-care nursing staff who work in a self-directed team are more satisfied with their job than nursing staff in teams that are less self-directing. The association between self-direction and job satisfaction is partially mediated by autonomy over patient care. Furthermore, it was found that both registered nurses with a bachelor's degree and certified nursing assistants are more satisfied with their work if they feel they have more autonomy over patient care. No significant association was found between autonomy over patient care and job satisfaction for registered nurses with an associate degree.

Chapter 6 discusses the attractiveness of people-centred, integrated home care. It was expected that home-care nurses value the different aspects of people-centred and integrated home care as the associated organisational and coordination tasks are likely to enhance nurses' autonomy. A structured questionnaire was completed by 177 registered nurses in Dutch home-care organisations. The respondents were participants in the Nivel Nursing Staff Panel. The findings showed that most home-care nurses (70% to 97%) regard the different aspects of people- centred, integrated home care as attractive. No clear differences between the educational levels were found.

Chapter 7 considers the difficulty home-care nursing staff experience in raising the matter of suspicions of professional misconduct by colleagues within their organisation. Two types of professional misconduct were distinguished: misconduct associated with incompetence and that associated with impairment. A questionnaire survey was held among registered nurses and certified nursing assistants employed in Dutch home-care organisations in 2014. The 259 respondents were members of the Nivel Nursing Staff Panel. The study showed that 20% to 52% of the nursing staff find it difficult to report suspicions of different forms of incompetence or impairment. Certified nursing assistants and registered nurses with an associated degree experience more difficulty in raising the matter of suspicions of incompetence than registered nurses with a bachelor's degree. No differences between educational levels were found for reporting suspicions of impairment.

Chapter 8 provides an overall discussion of the knowledge gained by the studies described in this thesis. The general hypotheses 1, 2, 4 and 5 of this thesis were confirmed. It was found that nursing staff who perceive more autonomy are less likely to believe they would be unable to continue their

work until the official retirement (Hypothesis 1). A number of research findings indicate that home-care nursing staff value autonomy and its three dimensions: autonomy over patient care; work autonomy; and organisational autonomy (Hypothesis 2). Nursing staff in home care who perceive more autonomy are more engaged in their work and less likely to consider pursuing an occupation outside the healthcare sector. Nurses see the three dimensions of autonomy as attractive aspects of their work. In addition, home-care nursing staff who feel they have more autonomy over patient care are more satisfied with their job. Hence, the research findings in this thesis show that autonomy is positively related to the attractiveness of working in home care (General research question). Furthermore, it was found that self-direction of a home-care nursing staff team is positively associated with team members' autonomy over patient care (Hypothesis 4). Finally, this thesis shows that most nurses in home care regard the different aspects of people-centred and integrated care as attractive (Hypothesis 5).

Two hypotheses were not (fully) confirmed and suggestions for further research were given. Hypothesis 3 was not confirmed as the research findings indicate that autonomy is positively related to the attractiveness of working in home care for both nursing staff with a higher level of education and staff with a lower educational level. However, it is argued that the scope and context of the autonomy that is granted to nursing staff with different educational levels are likely to be reflected in the scope and context of the autonomy that they value. For example, while Dutch registered nurses with a bachelor's degree have discretion over the assessment of patient care needs, the autonomy of Dutch certified nursing assistants will mainly relate to supporting patients in activities that are part of their daily living and to promoting patients' self-reliance. Furthermore, nursing staff with different educational levels may differ in the importance they attach to the three dimensions of autonomy: autonomy over patient care; work autonomy; and organisational autonomy. It is recommended that further research is done on the value that home-care nursing staff with different educational levels attach to autonomy.

Hypothesis 6 was partly confirmed. This hypothesis only holds true with regard to professional misconduct that is associated with incompetence and not with regard to misconduct that is related to impairment. Nursing staff with different educational levels do not seem to differ in the difficulty they

experience in reporting suspicions of colleagues' personal problems. However, as only hypothetical scenarios of suspected professional misconduct were studied, additional research is recommended that focuses on actual suspicions rather than hypothetical suspicions of professional misconduct.

The study outcomes in this thesis can help policymakers, home-care organisations, employers' organisations in home care and professional associations to develop strategies for tackling staff shortages in home care. It is recommended that the autonomy of nursing staff in home care is promoted in home-care policy and practice. One way of enhancing nursing staff's autonomy is by introducing self-directed teams. This thesis showed that working in a self-directed team, which probably contributes to nursing staff's organisational autonomy, is positively related to job satisfaction, partly because nursing staff in self-directed teams perceive more autonomy over patient care. Furthermore, the organisational and coordination tasks in people-centred and integrated care are likely to increase home-care nursing staff's autonomy. This thesis revealed that home-care nurses value the different aspects of people-centred and integrated care.

If home-care nursing staff's autonomy is enhanced, self-regulation by the professional community will become even more important. Nursing staff members should address suspicions of possible professional misconduct by colleagues. This thesis shows that there is still room for improvement here. It was found that a substantial number of nursing staff find it difficult to raise suspicions of professional misconduct within their organisation.

References

Ellenbecker, C. H. (2004). A theoretical model of job retention for home health care nurses. *Journal of Advanced Nursing,* 47(3), 303-310.

Freidson, E. (1999). Theory of professionalism: Method and substance. International review of sociology, 9(1), 117-129. doi: 10.1080/03906701.1999.9971301.

Weston, M. J. (2008). Defining control over nursing practice and autonomy. *Journal of Nursing Administration,* 38(9).

Samenvatting

(Summary in Dutch)

In veel West-Europese landen neemt de vraag naar thuiszorg toe. Vaak gaat dit niet samen met voldoende groei in het aanbod van zorgverleners. Daardoor worden meerdere landen geconfronteerd met huidige en verwachte toekomstige tekorten aan zorgverleners in de thuiszorg. Het is daarom van groot belang om inzicht te krijgen in werkomstandigheden die samenhangen met de aantrekkelijkheid van werken in de thuiszorg. Deze kennis kan helpen bij het behoud van zorgverleners voor de thuiszorg en bij het werven van nieuw personeel. De centrale gedachte van dit proefschrift is dat autonomie belangrijk is voor de aantrekkelijkheid van werken in de thuiszorg. De algemene onderzoeksvraag is:

Wat is het verband tussen autonomie en de aantrekkelijkheid van werken in de thuiszorg?

Autonomie wordt gedefinieerd als onafhankelijkheid en vrijheid van initiatief in het werk. Drie dimensies van autonomie worden onderscheiden. *Autonomie over de zorg voor cliënten* impliceert individuele bevoegdheid en vrijheid om beslissingen te nemen over de inhoud van de zorg voor cliënten. *Werkautonomie* verwijst naar vrijheid en zelfstandig keuzes kunnen maken met betrekking tot het plannen van het werk, werkprocessen en werkmethoden. *Organisatorische autonomie* heeft ten slotte betrekking op besluitvorming die het werk van een organisatie-eenheid beïnvloedt, bijvoorbeeld een team van zorgverleners in de thuiszorg.

De reden waarom de focus op autonomie ligt komt aan de orde in de algemene introductie van dit proefschrift (hoofdstuk 1). In dit hoofdstuk worden ook de algemene hypothesen van het proefschrift beschreven. De specifieke werksituatie van zorgverleners in de thuiszorg en de vaak noodzakelijke afstemming van zorg op individuele leefsituaties van cliënten bevorderen de autonomie van zorgverleners, terwijl andere factoren, zoals protocollen en centrale indicatiestelling, hun autonomie kunnen beperken. Op basis van enkele belangrijke bijdragen aan de sociologie van professies wordt verondersteld dat autonomie bijdraagt aan de professionalisering van zorgverleners in de thuiszorg en dat zij autonomie daarom waarderen. Professies worden gekenmerkt door beroepsmatige (of werknemers-) controle over het werk en kunnen worden onderscheiden van beroepen waarbij de werkgever, manager of consument het werk aanstuurt, dat wil zeggen bepaalt

welke taken moeten worden uitgevoerd, door wie, onder welke omstandigheden en hoe.

Dit proefschrift gaat ook in op de vraag of het veronderstelde positieve verband tussen autonomie en aantrekkelijkheid van werken in de thuiszorg voor zowel hoger als lager opgeleide zorgverleners geldt. Verder wordt onderzocht of het werken in een zelfsturend thuiszorgteam samenhangt met de autonomie van zorgverleners over de zorg voor cliënten. Dit proefschrift beschrijft daarnaast de aantrekkelijkheid van het organiseren en verlenen van populatiegerichte, geïntegreerde thuiszorg, wat de autonomie van zorgverleners waarschijnlijk vergroot. Het nadeel van autonomie kan een hoger risico op onopgemerkt disfunctioneren van zorgverleners zijn. Dit proefschrift bespreekt of zorgverleners in de thuiszorg weten hoe zij moeten omgaan met vermoedens van disfunctioneren door collega's. De volgende algemene hypothesen komen aan bod in het proefschrift:

1. Autonomie hangt positief samen met het zelf ingeschatte vermogen van zorgverleners om door te kunnen werken tot hun pensioen.
2. Zorgverleners in de thuiszorg waarderen autonomie en de drie dimensies van autonomie: autonomie over de zorg voor cliënten, werkautonomie en organisatorische autonomie.
3. Zorgverleners in de thuiszorg met een hoger opleidingsniveau hechten meer waarde aan autonomie dan zorgverleners met een lager opleidingsniveau.
4. Zorgverleners in zelfsturende thuiszorgteams ervaren meer autonomie over de zorg voor cliënten dan zorgverleners in meer traditioneel georganiseerde teams.
5. Thuiszorgverpleegkundigen waarderen populatiegerichte, geïntegreerde thuiszorg.
6. Zorgverleners in de thuiszorg met een hoger opleidingsniveau vinden het makkelijker vermoedens van disfunctioneren door een collega aan te kaarten dan zorgverleners met een lager opleidingsniveau.

Hoofdstukken 2 tot 7 van dit proefschrift bevatten op zichzelf staande onderzoeksartikelen met eigen onderzoeksvragen en hypothesen. Daarnaast bieden de resultaten van deze studies inzicht in de algemene hypothesen die hierboven zijn beschreven.

Hoofdstuk 2 richt zich op zorgverleners in het algemeen, die werkzaam zijn in verschillende zorgsectoren. Het doel van het in dit hoofdstuk beschreven onderzoek was inzicht krijgen in de relaties tussen verschillende werk- en organisatiekenmerken, werktevredenheid, betrokkenheid bij het beroep en het zelf ingeschatte vermogen van zorgverleners om hun werk voort te kunnen zetten tot de pensioengerechtigde leeftijd. Het cross-sectionele onderzoek was gebaseerd op een Nederlandstalige vragenlijst die werd ingevuld door 730 deelnemers van het Nivel Panel Verpleging & Verzorging. Met behulp van regressieanalyses en mediatieanalyses werden de verschillende verbanden geschat. Het onderzoek toonde aan dat autonomie positief samenhangt met het zelf ingeschatte vermogen van zorgverleners om hun werk voort te kunnen zetten tot hun pensioen. Wanneer echter andere werkkenmerken en organisatiekenmerken werden toegevoegd aan het statistische model bleken met name werkdruk en waardering door de directie geassocieerd met het zelf ingeschatte vermogen om door te kunnen werken.

De focus van het onderzoek dat wordt beschreven in **hoofdstuk 3** ligt op het verband tussen de door zorgverleners in de thuiszorg ervaren autonomie en het al dan overwegen om de zorgsector te verlaten. Ook is de mogelijkheid van mediatie door bevlogenheid onderzocht. De onderzoeksdata waren afkomstig van een gestructureerde vragenlijst die werd ingevuld door 262 verpleegkundigen en verzorgenden werkzaam in Nederlandse thuiszorgorganisaties. De respondenten waren deelnemers van het Nivel Panel Verpleging & Verzorging. Met behulp van regressie- en mediatie-analyses werden verbanden getoetst tussen ervaren autonomie, bevlogenheid en het overwegen om de gezondheidszorg te verlaten. Het bleek dat zorgverleners in de thuiszorg die meer autonomie ervaren minder vaak overwogen hebben om een beroep buiten de gezondheidszorgsector uit te gaan oefenen. Dit hangt samen met hun hogere bevlogenheid (er is een mediatie-effect gevonden). Het negatieve verband tussen ervaren autonomie en het overwegen om de zorgsector te verlaten geldt zowel voor zorgverleners met een hoger opleidingsniveau als voor zorgverleners met een lager opleidingsniveau.

Hoofdstuk 4 geeft inzicht in aspecten van het werk in de thuiszorg die verpleegkundigen aantrekkelijk vinden en beschrijft in hoeverre deze aspecten verschillen tussen hoger en lager opgeleide verpleegkundigen. Dit verkennende, kwalitatieve onderzoek omvatte zes online focusgroepen met 38 Nederlandse verpleegkundigen in de thuiszorg. Thematische analyse van de

transcripten liet onder andere zien dat verpleegkundigen in de thuiszorg de verschillende dimensies van autonomie (autonomie over de zorg voor cliënten, werkautonomie en organisatorische autonomie) als aantrekkelijke aspecten van hun werk beschouwen. Zowel verpleegkundigen met een hoger opleidingsniveau als verpleegkundigen met een lager opleidingsniveau waarderen autonomie.

In het onderzoek dat wordt beschreven in **hoofdstuk 5** werd nagegaan of werken in een zelfsturend thuiszorgteam samenhangt met werktevredenheid van zorgverleners, of er hierbij sprake is van een mediatie door autonomie over de zorg voor cliënten en of opleidingsniveau van invloed is op het veronderstelde verband tussen autonomie over de zorg voor cliënten en werktevredenheid. Dit cross-sectionele onderzoek was gebaseerd op twee vragenlijsten onder 191 deelnemers van het Nivel Panel Verpleging & Verzorging, werkzaam in Nederlandse thuiszorgorganisaties. In het onderzoek kwam naar voren dat zorgverleners die in zelfsturende teams werken meer tevreden zijn met hun werk dan zorgverleners in teams die minder zelfsturend zijn. Bij het verband tussen zelfsturing en werktevredenheid was sprake van gedeeltelijke mediatie door autonomie over de zorg voor cliënten. Verder bleek dat zowel hbo-opgeleide verpleegkundigen als verzorgenden meer tevreden zijn met hun werk als ze meer autonomie ervaren over de zorg voor cliënten. Bij mbo-opgeleide verpleegkundigen werd geen significant verband gevonden tussen autonomie over de zorg voor cliënten en werktevredenheid.

Hoofdstuk 6 bespreekt de aantrekkelijkheid van populatiegerichte, geïntegreerde thuiszorg. Verwacht werd dat verpleegkundigen in de thuiszorg de verschillende aspecten van populatiegerichte, geïntegreerde thuiszorg waarderen, aangezien de autonomie van verpleegkundigen waarschijnlijk zal toenemen door de organisatorische en coördinerende taken die hiermee gepaard gaan. De onderzoeksdata waren afkomstig van een gestructureerde vragenlijst die werd ingevuld door 177 verpleegkundigen in Nederlandse thuiszorgorganisaties. De respondenten waren deelnemers van het Nivel Panel Verpleging & Verzorging. Het onderzoek liet zien dat de meeste verpleegkundigen in de thuiszorg (70% tot 97%) de verschillende aspecten van populatiegerichte, geïntegreerde thuiszorg als aantrekkelijk beschouwen. Er werden geen duidelijke verschillen gevonden tussen hoger en lager opgeleide verpleegkundigen.

Hoofdstuk 7 gaat in op de moeite die zorgverleners in de thuiszorg hebben met het binnen de thuiszorgorganisatie aankaarten van vermoedens van disfunctioneren door een collega. Twee soorten disfunctioneren werden onderscheiden: disfunctioneren geassocieerd met onbekwaamheid en disfunctioneren geassocieerd met persoonlijke beperkingen. In 2014 werd een vragenlijst afgenomen onder verpleegkundigen en verzorgenden in Nederlandse thuiszorgorganisaties. De 259 respondenten waren deelnemers van het Nivel Panel Verpleging & Verzorging. Uit het onderzoek bleek dat 20% tot 52% van de zorgverleners in de thuiszorg het moeilijk vindt om vermoedens van verschillende vormen van onbekwaamheid en persoonlijke beperkingen aan te kaarten binnen de organisatie. Verzorgenden en mbo-opgeleide verpleegkundigen hebben meer moeite met het aankaarten van vermoedens van onbekwaamheid dan hbo-opgeleide verpleegkundigen. Er werden geen verschillen gevonden tussen de opleidingsniveaus bij het aankaarten van vermoedens van persoonlijke beperkingen.

Hoofdstuk 8 bevat een algemene bespreking van de kennis die is opgedaan in het onderzoek dat is beschreven in dit proefschrift. De algemene hypothesen 1, 2, 4 en 5 van dit proefschrift werden bevestigd. Zorgverleners die meer autonomie ervaren zijn minder geneigd te denken dat ze hun werk niet kunnen voortzetten tot het pensioen (hypothese 1). Meerdere onderzoeksresultaten wijzen erop dat zorgverleners in de thuiszorg waarde hechten aan autonomie en de drie dimensies van autonomie: autonomie over de zorg voor cliënten, werkautonomie en organisatorische autonomie (hypothese 2). Zorgverleners in de thuiszorg die meer autonomie ervaren, zijn meer bevlogen en minder geneigd om een beroep buiten de gezondheidszorg te overwegen. Verpleegkundigen zien de drie dimensies van autonomie als aantrekkelijke aspecten van hun werk. Ook zijn zorgverleners in de thuiszorg die meer autonomie ervaren over de zorg voor cliënten meer tevreden met hun werk. De onderzoeksresultaten tonen dus aan dat autonomie positief samenhangt met de aantrekkelijkheid van werken in de thuiszorg (algemene onderzoeksvraag). Daarnaast bleek dat zelfsturing van thuiszorgteams positief samenhangt met de autonomie die zorgverleners in de teams ervaren over de zorg voor cliënten (hypothese 4). Ten slotte laat dit proefschrift zien dat de meeste verpleegkundigen in de thuiszorg de verschillende aspecten van populatiegerichte, geïntegreerde thuiszorg aantrekkelijk vinden (hypothese 5).

Twee hypothesen werden niet (volledig) bevestigd en in hoofdstuk 8 worden suggesties voor verder onderzoek gegeven. Hypothese 3 werd niet bevestigd, aangezien de onderzoeksresultaten erop wezen dat zowel bij hoger als lager opgeleide zorgverleners autonomie positief samenhangt met de aantrekkelijkheid van werken in de thuiszorg. Het is echter aannemelijk dat de reikwijdte en context van de autonomie die wordt toegekend aan zorgverleners met verschillende onderwijsniveaus weerspiegeld worden in de reikwijdte en de context van de autonomie die zij waarderen. Zo hebben hbo-opgeleide verpleegkundigen verantwoordelijkheid over de indicatiestelling, terwijl de autonomie van verzorgenden voornamelijk betrekking zal hebben op het ondersteunen van cliënten bij activiteiten die deel uitmaken van hun dagelijks leven en het bevorderen van zelfredzaamheid. Ook kan het belang dat men hecht aan de drie dimensies van autonomie (autonomie over de zorg voor cliënten, werkautonomie en organisatorische autonomie) verschillen tussen hoger en lager opgeleide zorgverleners. Aanvullend onderzoek naar de waarde die zorgverleners met verschillende opleidingsniveaus hechten aan autonomie wordt dan ook aanbevolen.

Hypothese 6 werd gedeeltelijk bevestigd. Deze hypothese geldt alleen voor disfunctioneren dat verband houdt met onbekwaamheid en niet met persoonlijke beperkingen. Hoger en lager opgeleide zorgverleners in de thuiszorg lijken niet te verschillen in de moeite die ze hebben met het aankaarten van vermoedens van persoonlijke problemen van collega's. In het onderzoek in dit proefschrift werden hypothetische scenario's van vermoedelijk disfunctioneren voorgelegd aan de respondenten. Het wordt aanbevolen om in toekomstig onderzoek het aankaarten van feitelijke vermoedens disfunctioneren centraal te stellen.

De onderzoeksresultaten van dit proefschrift kunnen beleidsmakers, thuiszorgorganisaties, werkgeversorganisaties in de thuiszorg en beroepsorganisaties helpen bij het ontwikkelen van strategieën om personeelstekorten in de thuiszorg aan te pakken. Het wordt aanbevolen om de autonomie van zorgverleners in de thuiszorg te bevorderen in beleid en in de praktijk. Een manier om de autonomie van zorgverleners te vergroten is door het introduceren van zelfsturende teams. Dit proefschrift laat zien dat het werken in een zelfsturend team, dat waarschijnlijk bijdraagt aan de organisatorische autonomie van zorgverleners, positief samenhangt met werktevredenheid, deels doordat zorgverleners in zelfsturende teams meer

autonomie ervaren over de zorg voor cliënten. Daarnaast zullen de organisatorische en coördinerende taken die gepaard gaan met populatiegerichte, geïntegreerde thuiszorg waarschijnlijk de autonomie van zorgverleners vergroten. Dit proefschrift laat zien dat verpleegkundigen in de thuiszorg de verschillende aspecten van populatiegerichte, geïntegreerde thuiszorg waarderen.

Als de autonomie van de zorgverleners in de thuiszorg wordt vergroot, zal zelfregulering door de professionele gemeenschap nog belangrijker worden. Zorgverleners dienen vermoedens van mogelijk disfunctioneren door collega's dan ook aan te kaarten. Dit proefschrift laat zien dat hier nog ruimte voor verbetering is. Een substantieel deel van de zorgverleners in de thuiszorg vindt het moeilijk om vermoedens van disfunctioneren aan te kaarten binnen hun organisatie.

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About the author

Erica Maurits was born on the 23th of February, 1983 in Leiderdorp, the Netherlands. After completing secondary school in 2001, she began her academic studies at the University of Amsterdam. In 2002, she completed the first-year programme ('propedeuse') in Interdisciplinary Social Sciences. Subsequently, she studied Psychology at the University of Amsterdam and specialised in Social Psychology. She obtained her Bachelor's degree (cum laude) in 2005 and her Master's degree in 2006. Erica continued her education with the Master's degree programme in Social Policy and Social Interventions at Utrecht University. She obtained her Master's degree after finishing a Master's thesis on combining work and care in the metals sector in 2007.

After her studies, Erica started working as a researcher at Astri, a research organisation in the field of work, social security and employability. In 2011, she began working as a researcher at Nivel, the Netherlands Institute for Health Services Research. In 2012, she started the research described in this thesis. She combined her PhD-research with other research projects on working conditions of nursing staff. Erica has been working at UWV, the Dutch Employee Insurance Agency, since 2016, where she does research into the Dutch labour market.

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