

Amsterdam University of Applied Sciences

Perceptions of community care and placement preferences in first-year nursing students

a multicentre, cross-sectional study

van Iersel, M.; Latour, C.H.M.; De Vos, Rien; Kirschner, Paul; Scholte op Reimer, W.J.M.

DOI

[10.1016/j.nedt.2017.09.016](https://doi.org/10.1016/j.nedt.2017.09.016)

Publication date

2018

Document Version

Final published version

Published in

Nurse Educ Today

License

CC BY

[Link to publication](#)

Citation for published version (APA):

van Iersel, M., Latour, C. H. M., De Vos, R., Kirschner, P., & Scholte op Reimer, W. J. M. (2018). Perceptions of community care and placement preferences in first-year nursing students: a multicentre, cross-sectional study. *Nurse Educ Today*, (60), 92/97. [10.1016/j.nedt.2017.09.016]. <https://doi.org/10.1016/j.nedt.2017.09.016>

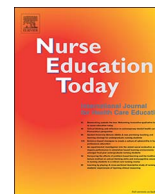
General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please contact the library:

<https://www.amsterdamuas.com/library/contact/questions>, or send a letter to: University Library (Library of the University of Amsterdam and Amsterdam University of Applied Sciences), Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.



Perceptions of community care and placement preferences in first-year nursing students: A multicentre, cross-sectional study

Margriet van Iersel^{a,*}, Corine H.M. Latour^a, Rien de Vos^b, Paul A. Kirschner^{c,e}, Wilma J.M. Scholte op Reimer^{a,d}

^a ACHIEVE - Centre of Applied Research, Faculty of Health, Amsterdam University of Applied Sciences, Amsterdam, The Netherlands

^b Centre of Evidence Based Education, Academic Medical Centre, Amsterdam, The Netherlands

^c Open University of the Netherlands, Heerlen, The Netherlands

^d Department of Cardiology, Academic Medical Centre, Amsterdam, The Netherlands

^e University of Oulu, Oulu, Finland



ARTICLE INFO

Keywords:

Bachelor of Nursing
Career preferences
Community care
Nursing education
Perceptions
Placements
Nursing students

ABSTRACT

Background: Despite increasing shortages of highly educated community nurses, far too few nursing students choose community care. This means that a strong societal problem is emerging that desperately needs resolution. **Objectives:** To acquire a solid understanding of the causes for the low popularity of community care by exploring first-year baccalaureate nursing students' perceptions of community care, their placement preferences, and the assumptions underlying these preferences.

Design: A quantitative cross-sectional design.

Settings: Six universities of applied sciences in the Netherlands.

Participants: Nursing students in the first semester of their 4-year programme (n = 1058).

Methods: Data were collected in September–December 2014. The students completed the 'Scale on Community Care Perceptions' (SCOPE), consisting of demographic data and three subscales measuring the affective component of community care perception, perceptions of a placement and a profession in community care, and students' current placement preferences. Descriptive statistics were used.

Results: For a practice placement, 71.2% of first-year students prefer the general hospital and 5.4% community care, whereas 23.4% opt for another healthcare area. Students consider opportunities for advancement and enjoyable relationships with patients as most important for choosing a placement. Community care is perceived as a 'low-status-field' with many elderly patients, where students expect to find little variety in caregiving and few opportunities for advancement. Students' perceptions of the field are at odds with things they believe to be important for their placement.

Conclusion: Due to misconceptions, students perceive community care as offering them few challenges. Strategies to positively influence students' perceptions of community nursing are urgently required to halt the dissonance between students' preference for the hospital and society's need for highly educated community nurses.

1. Introduction

The international shift in healthcare from intramural to extramural is associated with aging populations and an increase in chronic diseases and multimorbidity; both global phenomena (Afshar et al., 2015; WHO, 2008). For the nursing profession, people with chronic conditions living outside of a facility and receiving healthcare at home are fast becoming a large and important population (Altman et al., 2015). To reflect the

current shift in healthcare delivery, one such challenge is to ensure that nursing students receive appropriate theoretical programme-content and placement experiences. Therefore, both general profiles for baccalaureate nursing education (AACN, 2008; NMC, 2010) and those in the Netherlands (Lambregts et al., 2014) increasingly contain elements of community care.

However, many Western countries are experiencing a problematic shortage of community nurses (Bloemendaal et al., 2015; Larsen et al.,

* Corresponding author at: ACHIEVE - Centre of Applied Research, Faculty of Health, Amsterdam University of Applied Sciences, Tafelbergweg 51, 1105 BD Amsterdam, The Netherlands.

E-mail addresses: m.van.iersel@hva.nl, http://twitter.com/@m_iersel (M. van Iersel), c.h.m.latour@hva.nl (C.H.M. Latour), r.vos@amc.uva.nl (R. de Vos), Paul.Kirschner@ou.nl (P.A. Kirschner), w.j.m.scholte.op.reimer@hva.nl (W.J.M. Scholte op Reimer).

<http://dx.doi.org/10.1016/j.nedt.2017.09.016>

Received 19 January 2017; Received in revised form 5 July 2017; Accepted 26 September 2017

0260-6917/ © 2017 Elsevier Ltd. All rights reserved.

2012; Norman, 2015). One solution for this problem is to find nursing students who want to work in this area in their future profession. Baccalaureate nursing students' career choices, however, are not in line with the labour market problem (Fenush and Hupcey, 2008; McCann et al., 2010). They mostly prefer to work in the hospital (Kloster et al., 2007; McCann et al., 2010), and do not see community care, more specifically the generalist home-based care, as an attractive line of work (Bloemendaal et al., 2015; Fenush and Hupcey, 2008; McCann et al., 2010; Norman, 2015). All of this together means that a strong societal problem is emerging that desperately needs resolution.

2. Background

There has been research on students' perceptions and preferences related to clinical fields and career choice, as well as on the influence of placement experiences. At present, a majority of nursing students in the final phase of their education tend to favour a hospital career, as they see such 'medical nursing' involving complex techniques as challenging and attractive (Happell, 1999; Kloster et al., 2007; McCann et al., 2010). Community care, in contrast, is less popular (Happell, 1999; Larsen et al., 2012) and is not seen as 'real nursing' (Norman, 2015; Van Iersel et al., 2016a), possibly influenced by students' negative perception of working with elderly patients (Kloster et al., 2007; Koh, 2012; Liu et al., 2013).

Most nursing students at the beginning of their study have limited knowledge of the profession, and what they 'know' is often determined by stereotypes in the media, such as in television programmes and on YouTube® (Jubas and Knutson, 2012; Kelly et al., 2012). During their programme, students develop an image of the possibilities that the variety of clinical fields offers them. This orientation process helps them form an opinion as to which specialist area is most desirable for a future career. Exposure to clinical fields via practice placements in a system of clinical rotations, along with course experiences, influence their choice (Betony, 2012; Bjørk et al., 2014; Fenush and Hupcey, 2008; Hickey et al., 2012; Larsen et al., 2012; Millns Sizer et al., 2016), specifically with regard to organisation and setting during the last phase of their education (Anderson and Kiger, 2008). Students prefer placements which offer them the opportunity to practice clinical skills and the possibility to become a useful member of the nursing community (Murphy et al., 2012). Many students also prefer working with younger and relatively healthy people who can regain their health (DeKeyser Ganz and Kahana, 2006; Kloster et al., 2007).

Students see community care as a field where clinical skills are scarce, and where the patient will not really recover (Kloster et al., 2007). In addition, practice placements in community care are often seen as challenging, as this environment requires them to be innovative and creative in problem-solving and relationship building (Babenco-Mould et al., 2016). Also, preparation for community care practice is not always optimal, due to a gap between the theory taught along hospital setting and the practice of students in the community care settings (Pijl-Zieber et al., 2015).

To help students to make well-reasoned choices, it is important for educational institutions to identify students' perceptions of different areas of healthcare at an early stage in their studies. A considerable number of first-year students has not yet decided on their preferred career (McCann et al., 2010), and many of them change their preferences during their studies (Kloster et al., 2007). To date, however, there is no detailed information available on students' perceptions of community care early in their studies.

Therefore, the primary aim of this study is to explore the causes for the low popularity of community care in first-year nursing students, so as to positively influence these perceptions with targeted curriculum redesign strategies. For this reason, first-year students' perceptions of community care were explored. A further aim is to determine students' placement preferences related to healthcare areas, along with the assumptions underlying these preferences.

3. Methods

3.1. Design

A cross-sectional multicentre survey study was performed. Where applicable, the 'Strengthening the Reporting of Observational Studies in Epidemiology' (STROBE)-checklist for cross-sectional studies (Von Elm et al., 2008) was used for reporting.

3.2. Participants

Nursing students from six Dutch universities of applied sciences in the first semester of their 4-year programme took part in the study ($n = 1058$). To make generalisation of results possible, a purposive sample from the 17 institutions in the Netherlands was created, based on maximal variation in differences in possible influential characteristics (Creswell, 2008), such as geographic distribution, urbanisation, and religious identity.

3.3. Data collection

Data collection took place in September–December 2014. Major efforts were made to approach all first-year students in these institutions and thus achieve a high response rate. Based on the student enrolment data of the six institutions ($n = 1299$), the response rate was 81%. It is not likely that the students who did not participate in the study were significantly different from those who did. The questionnaires were distributed and collected during allocated class time. For the survey, the Scale on Community Care Perceptions (SCOPE), a valid and reliable instrument (Cronbach's $\alpha = 0.892$), developed in the Netherlands (Van Iersel et al., 2016b), was used. SCOPE is a 35-item scale measuring students' perceptions of community care, healthcare field preferences and underlying assumptions. The instrument contains information on demographic characteristics: gender, age, level of prior education, and previous experience with community care. Thirty-three items in three subscales measure the affective component of perception of community care (11 items), perception of community care for practice placement (5 items), and perception of community care as a future profession (17 items). Each item consists of one construct with anchors at each end, divided by a 10-point visual scale. The option 'I don't know' is added to the placement and profession scale, as it provides information on aspects of the field that students think they lack knowledge of. The final two items measure the current placement preference in six healthcare fields (i.e., mental healthcare, elderly care, medical rehabilitation, care for mentally disabled, community care, and care in the general hospital), and those aspects named in the earlier profession scale that primarily determine this preference.

3.4. Ethical considerations

The Ethical Review Board of the Open University of The Netherlands approved the study (reference U2014/07279/HVM). Students were informed about the research project's purpose and procedure via their institutions' digital learning environments. They were also informed that all information was confidential, the data were processed anonymously, and that non-participation would in no way impact their studies. As this information was repeated during the administration in class, the completion and return of the questionnaires was perceived as giving consent to participate in the study.

3.5. Data analysis

The data were manually entered by double data entry to catch any input errors after which they were analysed using IBM SPSS® version 22 (IBM Corporation, Armonk, NY). To summarise the distribution of the demographic data, frequencies, percentages, mean, SD and range were

used. For the analyses of 33 items of the three subscales on community care perceptions, descriptive statistics were used (mean, SD), as well as for the placement preferences (n, percentage).

4. Results

4.1. Demographics

Of the 1058 participating students, 932 (88.1%) were female and 126 (11.9%) male. This is typical for nursing programmes in the Netherlands. Mean age was 18.8 years (SD = 2.4, range 17–43). Of these, 858 (81.1%) had a completed level of education on secondary education, 149 (14.1%) had completed secondary vocational education, 18 (1.7%) students completed higher education and for 33 students the educational level was ‘other’ (16, 1.5%) or ‘unknown’ (17, 1.6%). Many students had, in some way, experience in community care: 50.1% had family or friends working in this field, 13.8% (had) worked in community care, and of 38.4%, the student or a close family member had experience in receiving home care (note: an overlap in positive answers in these items was possible).

4.2. Students' placement preferences

On the question: “If you were to begin your practice placement next week, where would you choose to do it?”, the majority of the students chose a general hospital (n = 753, 71.2%). Only 57 students (5.4%) chose a community care organisation. Other students preferred a rehabilitation centre (n = 94, 8.9%), and an institution for the mentally disabled (n = 53, 5.0%). Elderly care was the least preferred option (n = 43, 4.1%). Some students mentioned more than one option, which caused a total score of > 100%. Based on the assumption that they did not read the instructions well, and had a preference for more than one field, this information was not excluded from the analysis.

4.3. The affective component scale

When filling in the affective component scale (11 items), students received the following instruction: “We would first like to hear what you think about community care. Working in community care is in my opinion...”. The mean of all items was 6.47 (scale range 1–10), which can be conceived as moderately positive. The majority of the students think that community care is relevant, as the items meaningful, important, and good, receive the highest ratings. Items as attractive, comfortable, and interesting score relatively low (see Table 1).

4.4. The placement scale

The students were asked to give their expectations of practice placement in community care via five items (see Table 2). The responses

Table 1
Affective component scale.

Items	Mean (SD) range 1–10
Total scale	6.47 (1.1)
Useless - meaningful	8.43 (1.7)
Unimportant - important	8.39 (1.8)
Bad - good	8.32 (1.7)
Unpleasant - pleasant	6.25 (1.7)
Old fashioned - modern	6.17 (1.9)
Annoying - agreeable	6.12 (1.6)
Boring - fascinating	6.08 (2.0)
Stupid - fun	6.06 (1.9)
Dull - interesting	5.88 (2.0)
Uncomfortable - comfortable	5.85 (1.7)
Unattractive - attractive	5.36 (2.1)

Table 2
Placement scale.

Items	Mean (SD) range 1–10	‘I don't know’ n (%)
Total scale	6.45 (1.4)	NA ^a
Very few - many opportunities to learn new things	6.97 (2.0)	31 (2.9)
Very little - much variety in the caregiving	6.45 (2.2)	45 (4.3)
Very little - much contact with mentor	6.37 (2.0)	74 (7.0)
My mentor will have very little - much time to evaluate	6.35 (1.9)	148 (14.0)
No - many possibilities to plan learning activities	6.08 (1.8)	181 (17.1)

^a Not applicable.

show only small differences, but the extent to which students have an image of the learning situation differs substantively from the more ‘care-related’ items, as more students here chose the ‘I don't know’ option.

4.5. The profession scale

In the profession scale, students responded to the question: “The following statements are about your expectations of a future profession. When working as a community nurse I expect there to be...”. Students perceive community care as a clinical field with a substantial number of elderly patients and there is hardly any doubt about this, as only five students used the ‘I don't know’ option. They also expect to find a considerable degree of ‘two sides of the same coin’: freedom of action and responsibility. With respect to providing care, contact with family and enjoyable relationships with patients are considered to be the main features. Aspects that could be interpreted as more challenging, like complex care needs, possible health improvement, and variety in care, receive a lower valuation. Students' views on the nature of the work score even lower, indicating that community nursing is seen as a job with low status offering few advancement opportunities (see Table 3).

4.6. A positive choice for a current placement

Finally, students chose three items in the profession scale they considered important for their positive choice for a current placement. They were instructed that the order of the three did not have any

Table 3
Profession scale.

Items	Mean (SD) range 1–10	‘I don't know’ n (%)
Total scale	6.86 (0.9)	NA ^a
Very few - only elderly patients	8.72 (1.3)	5 (0.5)
Very little - plenty of individual responsibility	8.13 (1.4)	14 (1.3)
Very few - much contact with family/kin	7.82 (1.6)	31 (2.9)
Very few - many enjoyable relationships with patients	7.68 (1.5)	35 (3.3)
Very few - many technical nursing skills needed	7.59 (1.8)	8 (0.8)
Very little - a lot of freedom of action	7.14 (1.7)	56 (5.3)
No - continual feelings of work pressure	7.08 (1.6)	44 (4.2)
Very few - little physically demanding work	6.94 (1.5)	34 (3.2)
Very few - many enthusiastic colleagues	6.84 (1.7)	109 (10.3)
Very little - much collaboration with other disciplines	6.68 (1.9)	72 (6.8)
Very few - plenty complex patient care needs	6.41 (1.8)	83 (7.8)
No - a lot of possible health improvement for the patient	6.40 (1.6)	90 (8.5)
Very little - a lot of variety in the caregiving	6.39 (2.0)	35 (5.3)
Poor - good occupational health work-environment	5.82 (1.9)	203 (19.2)
No - many opportunities for advancement	5.69 (2.2)	89 (8.4)
Very little - much collaboration with colleagues	5.52 (2.2)	26 (2.2)
Low - high status work	5.32 (1.9)	98 (9.3)

^a Not applicable.

Table 4
Underlying assumptions in the preference for a placement.

Rank	All fields (n)	General hospital (n)	Community care (n)
1	Opportunities for advancement	Opportunities for advancement	Enjoyable patient relationships
2	Enjoyable patient relationships	Collaboration with colleagues	Variety in the caregiving
3	Collaboration with colleagues	Enjoyable patient relationships	Technical nursing skills needed
4	Variety in the caregiving	Variety in the caregiving	Opportunities for advancement
5	Technical nursing skills needed	Technical nursing skills needed	Contact with family/kin

meaning. The number of times an item was mentioned was calculated, and the five items most mentioned are presented in Table 4, with 1 being most, 2 is second most, etc. (Table 5). The reference point for comparing the results of all fields (left column) was that of the most popular field (i.e., the general hospital) and the results for community care. It is noticeable that ‘opportunities for advancement’ is classified by the students as very important, although students preferring community care scored lower on this item. Other items related to caregiving, especially ‘relationships with patients’, ‘variety in care’ and ‘technical skills needed’, are given as being important for the choice for a current practice placement.

5. Discussion

The key aim of this study was to explore the causes for the low popularity of community care in first-year baccalaureate nursing students. This study confirms the societal problem that community care hardly receives more interest from students than the least popular area of work, namely elderly care. The results of this study provide four important indications or explanations for the unpopularity of community care.

First, the data suggest that in career choice, enjoyment prevails over utility. Students find community care important in terms of societal needs, but the field does not attract them in a more personal way, as their responses on the affective component scale indicate that items reflecting ‘utility’ (i.e., meaningfulness, importance) score highly (> 8), while items reflecting ‘enjoyment’ (i.e., personal appeal) score relatively low (< 6.5). Potentially, this indicates the problem of media influence on beginning students who are yet to develop sufficient knowledge about the profession (Phillips et al., 2015). Dutch news media often present homecare provided by lower skilled caregivers in a negative light (i.e., high workload), while the important role of higher educated community nurses is neglected. As students at this stage of their education are not fully aware of the different roles of caregivers in community care, this information potentially leads to misconceptions, and thus negatively impacts students’ perceptions.

Second, students rate a placement in community care as only moderately attractive and it is not their preferred choice. This is an important obstacle because students see placements as the most important part of their education in becoming confident and competent nurses (Perli and Brugnoli, 2009). As such, a vicious circle threatens to emerge. Due to the negative image, the choice for placement that could influence this image is negatively assessed, and due to the lack of placement, which significantly impacts the choice of profession (Baglin and Rugg, 2010), the chance of modifying the existent image seems non-existent.

Third, students expect to care for many elderly patients in the field. Due to perceived physical limitations and deterioration in the last phase of life, students have stereotypically negative perceptions of the elderly as group as being unhealthy and dependent; relatively common perceptions among nursing students (Koh, 2012; Potter et al., 2013). They

also believe that working with the elderly is depressing and boring, due to limited communication and health improvement (Henderson et al., 2008). Since our students associate community care with elderly patients, the conviction that a community nurse will primarily work with older people will very likely have an adverse effect on students’ perceptions of community care.

Finally, students’ perceptions of a profession in community care do not correspond with their reasons for preferring a placement. To gain an understanding on this, the results in Tables 3 and 4 were compared, showing an imbalance by two means. On the one hand, aspects of a profession in community care with a low score, such as ‘opportunities for advancement’ and ‘variety in caregiving’ (5.69 and 6.39 respectively) are perceived as important for a placement. On the other, elements that students do expect to find in community care do not determine a positive choice for a placement, such as elderly (8.72), individual responsibility (8.13) and family and kin (7.82). Also, the majority of students see collaboration with colleagues as important, and this can counter any interest in community care. Students preferring community nursing see this as less important, which is potentially related to the individualistic role of the community nurse in the care provided.

All of the above leads to the conclusion that nursing students have a limited idea of what nursing in community care actually entails, underestimating the complexity of the field and the high academic standards required of practitioners to ensure appropriate nursing care in the patients’ own home. Students also do not seem to realise that the patient population on a hospital ward is not as diverse as in the community and that patients in the hospital are often elderly too (Bleijenbergh et al., 2012). Although we cannot expect students to understand the full concept of a community nurse at this time of their studies, this study shows that their preferences about clinical fields are partly based on preconceived ideas and misconceptions, and that they are not sufficiently aware of this.

If the consequence of this is that students choose placements in other areas than in community care, it is a missed opportunity for them and for the field: students who experienced working in the community, especially in the final stage of their programme, felt that they were taking on the role of ‘a real nurse’. They learned to manage care, building confidence while working independently with patients and colleagues in a healthcare network (Kloster et al., 2007; Anderson and Kiger, 2008; Babenko-Mould et al., 2016).

However, educators can only try to change perceptions from the start of the programme. Although preferences for the hospital appear to be quite consistent during the period of education (McCann et al., 2010), in many cases, students’ perceptions and preferences are not static and therefore changeable (Hayes et al., 2006; Kloster et al., 2007).

To influence students’ perceptions, educational institutions need to work on their information management and on curriculum redesign, shifting the focus from hospital care to preparation for the advanced nursing roles in the community. The image of this area that they present, however, should also match the reality that students experience during placement, otherwise a false image is created resulting in the opposite effect. This also places a lot of responsibility with the institutions that offer placement opportunities. It is important to ensure that a placement in community care offers students many appealing factors in taking on an advanced nursing role, that entails much more than individual care alone (Philibin et al., 2010). Providing care in diverse circumstances without pre-existing protocols, fostering self-management in the social structure of the patients’ own home, a population-based prevention approach, and interprofessional collaboration in a healthcare network, are things that are very complex and require specific traits for community nurses (Illingworth et al., 2013). The need for specified staff to work across university and placement settings is deemed essential for supporting these placements (Betony, 2012). If this can be achieved, it is likely that more students will see community

care as a desirable choice for a placement and possibly for their future profession, which will contribute to decreasing workforce shortages and thus benefit society in general.

Our results generally correspond with previous research on students' career choices both at the start and during their studies (Happell, 1999; DeKeyser Ganz and Kahana, 2006; Kloster et al., 2007; McCann et al., 2010). The perceived limited challenges of elderly care concur with previous research on students' perceptions (Stevens, 2011; Koh, 2012; Haron et al., 2013; Liu et al., 2013; Neville and Dickie, 2014). Major demographic and societal changes in healthcare have, apparently, had little or no impact on students' choices and perceptions, a result supported by earlier research of DeKeyser Ganz and Kahana (2006). So, we are facing a global challenge with the acquisition of student nurses for community care, and the key element in achieving this is modifying students' views and experiences.

5.1. Study strengths and limitations

The strength of this study is its large sample size and high response rate compared to other studies. The large sample size with variation in possible influential characteristics implies high representativeness for the target population. This condition adds to the relatively favourable generalisability of the study. A limitation is that healthcare systems, cultures, and political developments across the globe differ, so one must be cautious with generalisation to populations in other countries without considering these differences. A second limitation is that the students were only permitted to select from a limited number of options for their placement, which may have prevented some of them from having another viable choice in an area not mentioned.

Future research should pay greater attention to how curriculum-redesign can lead to a better understanding of community care, hopefully leading to more students choosing this field, with a rich and realistic idea of what this type of nursing entails. Of particular interest is the question of what elements in the curriculum are effective in achieving this and how they need to be altered. The effect of a redesigned curriculum on the development of perceptions on different areas of practice, in particular community care, can be measured in a longitudinal research design. This will make further development of targeted curriculum redesign strategies possible.

6. Conclusion

The findings in this study demonstrate that the urgent problem on the labour market regarding the shortage of community nurses in many Western countries will not be solved with the short-term influx of motivated young graduates. Most nursing students enter their education with an orientation towards working in a general hospital and there are a number of clear reasons why only few students show an interest for community care. To recruit student nurses in community care, educational organisations and representatives from the field should collaborate in offering valuable learning experiences that will decrease misconceptions and that foster an optimistic career outlook on this clinical field.

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.nedt.2017.09.016>.

Acknowledgements

We extend our thanks to all students who participated in this research, and the programme directors and colleges of the participating universities of applied sciences: Saxion University of Applied Sciences Deventer/Enschede, University of Applied Sciences Utrecht, HZ University of Applied Sciences Zeeland, Christian University of Applied Sciences Ede, and Hanze University of Applied Sciences Groningen, for their collaboration and permission to conduct this study.

Conflict of interest

The authors declare that there are no conflicts of interest.

Funding

This study was funded by ZonMw, the Netherlands Organisation for Research and Development, dossier number: 80-80705-98-032.

References

- AACN, 2008. *The Essentials of Baccalaureate Education for Professional Nursing Practice*. American Association of Colleges of Nursing, Washington, DC.
- Afshar, S., Roderick, P.J., Kowal, P., Dimitrov, B.D., Hill, A.G., 2015. Multimorbidity and the inequalities of global ageing: a cross-sectional study of 28 countries using the World Health Surveys. *BMC Public Health*. <http://dx.doi.org/10.1186/s12889-015-2008-7>.
- Altman, S.H., Stith Butler, A., Shern, L., 2015. *The Future of Nursing: Leading change, advancing health*. Institute of Medicine, National Academies of Sciences, Engineering and Medicine, Washington, DC.
- Anderson, E.E., Kiger, A.M., 2008. I felt like a real nurse - student nurses out on their own. *Nurse Educ. Today* 28 (4), 443–449.
- Babenco-Mould, Y., Ferguson, K., Atthill, S., 2016. Neighbourhood as community: A qualitative descriptive study of nursing students' experiences of community health nursing. *Nurse Educ. Pract.* 17, 223–228.
- Baglin, M.R., Rugg, S., 2010. Student nurses' experiences of community-based practice placement learning: a qualitative exploration. *Nurse Educ. Pract.* 10, 144–152.
- Betony, K., 2012. Clinical practice placements in the community: A survey to determine if they reflect the shift in healthcare delivery from secondary to primary health care settings. *Nurse Educ. Today* 32, 21–26.
- Bjørk, I.T., Berntsen, K., Brynildsen, G., Hestetun, M., 2014. Nursing students' perceptions of their clinical learning environment in placements outside traditional hospital settings. *J. Clin. Nurs.* 23, 2958–2967.
- Bleijenberg, N., Jansen, M.J.M., Schuurmans, M.J., 2012. Dutch nursing students' knowledge and attitudes towards older people - A longitudinal cohort study. *J. Nurs. Educ. Pract.* 2 (2), 1–8.
- Bloemendaal, I., Van Essen, G., Kramer, S., Van der Windt, G., 2015. *Vraag en aanbod van wijkverpleegkundigen 2015–2019 (Supply and demand of community nurses 2015–2019)*. Centrum Arbeidsverhoudingen Overheidspersoneel (CAOP), The Hague, The Netherlands.
- Creswell, J.W., 2008. *Educational research: Planning, conducting and evaluating quantitative and qualitative research*. Pearson, Upper Saddle River, NJ.
- DeKeyser Ganz, F., Kahana, S., 2006. Perceptions of Israeli student nurses regarding clinical specialties and factors that influence these perceptions. *J. Adv. Nurs.* 56 (1), 88–98.
- Fenush, J.K., Hupcey, J.E., 2008. An investigation of clinical unit choices by graduating baccalaureate nursing students. *J. Prof. Nurs.* 24 (2), 90–95.
- Happell, B., 1999. When I grow up I want to be a...? Where undergraduate student nurses want to work after graduation. *J. Adv. Nurs.* 29 (2), 499–505.
- Haron, Y., Levy, S., Albagli, M., Rotstein, R., Riba, S., 2013. Why do nursing students not want to work in geriatric care? A national questionnaire survey. *Int. J. Nurs. Stud.* 50, 1558–1565.
- Hayes, L.J., Orchard, C.A., McGillis, Hall L., Nincic, V., O'Brian-Pallas, L., Andrews, G., 2006. Career intentions of nursing students and new nurse graduates: A review of the literature. *Int. J. Nurs. Educ. Scholarsh.* 3 (1), 1–18.
- Henderson, J., Xiao, L., Siegfloff, L., Kelton, M., Paterson, J., 2008. Older people have lived their lives: First year students' attitudes towards older people. *Contemp. Nurse* 30, 32–45.
- Hickey, N., Sumsion, J., Harrison, L., 2012. Why nursing? Applying a socio-ecological framework to study career choices of double degree nursing students and graduates. *J. Adv. Nurs.* 69 (8), 1714–1724.
- Illingworth, A., Aranda, K.F., De Goeas, S.M., Lindley, P.J., 2013. Changing the way that I am: Students experience of educational preparation for advanced nursing roles in the community. *Nurse Educ. Pract.* 13, 338–343.
- Jubas, K., Knutson, P., 2012. Seeing and Be(liev)ing - How Nursing and Medical Students Understand Representations of Their Professions. *Stud. Educ. Adults* 44 (1), 85–100.
- Kelly, J., Fealy, G.M., Watson, R., 2012. The image of you: constructing nursing identities in YouTube. *J. Adv. Nurs.* 68 (8), 1804–1813.
- Kloster, T., Hoie, M., Skar, R., 2007. Nursing students' career preferences: A Norwegian study. *J. Adv. Nurs.* 59 (2), 155–162.
- Koh, L.C., 2012. Student attitudes and educational support in caring for older people - A review of literature. *Nurse Educ. Pract.* 12 (1), 16–20.
- Lambregts, J., Grotendorst, A., Van Merwijk, C., 2014. *Bachelor Nursing 2020*. In: Bureau Lambrechts in collaboration with committee BN 2020, Rotterdam, The Netherlands.
- Larsen, R., Reif, L., Frauendienst, R., 2012. Baccalaureate nursing students' intention to choose a public health career. *Public Health Nurs.* 29 (5), 424–432.
- Liu, Y.E., Norman, I.J., While, A.E., 2013. Nurses' attitudes towards older people: A systematic review. *Int. J. Nurs. Stud.* 50, 1271–1282.
- McCann, T.V., Clark, E., Lu, S., 2010. Bachelor of nursing students career choices: A three-year longitudinal study. *Nurse Educ. Today* 30 (1), 31–36.
- Millns Sizer, S., Burton, R.L., Harris, A., 2016. The influence of theory and practice on perceptions about caring for ill older people - A literature review. *Nurse Educ. Pract.*

- 19, 41–47.
- Murphy, F., Rosser, M., Bevan, R., Warner, G., Jordan, S., 2012. Nursing students' experiences and preferences regarding hospital and community placements. *Nurse Educ. Pract.* 12, 170–175.
- Neville, C., Dickie, R., 2014. The evaluation of undergraduate nurses' attitudes, perspectives and perceptions toward older people. *Nurse Educ. Today* 34 (7), 1074–1079.
- NMC, 2010. Standard for pre-registration nursing education. Nursing & Midwifery Council, London, United Kingdom.
- Norman, K.M., 2015. The image of community nursing: Implications for future student nurse recruitment. *Br. J. Community Nurs.* 20 (1), 12–18.
- Perli, S., Brugnolli, A., 2009. Italian nursing students' perception of their clinical learning environment as measured with the CLEI tool. *Nurse Educ. Today* 29, 886–890.
- Philbin, C.A.N., Griffiths, C., Byrne, G., Horan, P., Brady, A.M., Begle, C., 2010. The role of the public health nurse in a changing society. *J. Adv. Nurs.* 66, 743–752.
- Phillips, J., Cooper, K., Rosser, E., Scammell, J., Heaslip, V., White, S., Harding, A., 2015. An exploration of the perceptions of caring held by students entering nursing programmes in the United Kingdom: A longitudinal qualitative study phase 1. *Nurse Educ. Pract.* 15 (6), 403–408.
- Pijl-Zieber, E.M., Barton, S., Awosoga, O., Konkin, J., 2015. Disconnects in pedagogy and practice in community health nursing clinical experiences: Qualitative findings of a mixed method study. *Nurse Educ. Today* 35 (10), 43–48.
- Potter, G., Clarke, T., Hackett, S., Little, M., 2013. Nursing students and geriatric care: The influence of specific knowledge on evolving values, attitudes, and actions. *Nurse Educ. Pract.* 13, 449–453.
- Stevens, J.A., 2011. Student nurses' career preferences for working with older people: A replicated longitudinal survey. *Int. J. Nurs. Stud.* 48, 944–951.
- Van Iersel, M., Latour, C.H.M., de Vos, R., Kirschner, P.A., Scholte Op Reimer, W.J.M., 2016a. Nursing students' perceptions of community care and other areas of nursing practice - A review of the literature. *Int. J. Nurs. Stud.* 61, 1–19.
- Van Iersel, M., De Vos, R., Latour, C.H.M., Kirschner, P.A., Scholte op Reimer, W.J.M., 2016b. Development and validation of 'SCOPE': an instrument for measuring nursing students' perceptions of community care. (Unpublished results).
- Von Elm, E., Altman, D.G., Egger, M., Pocock, S.J., Gøtzsche, P.C., Vandenbroucke, J.P., 2008. The Strengthening of Reporting of Observational Studies in Epidemiology (STROBE) statement: guidelines for reporting observational studies. *J. Clin. Epidemiol.* 61, 344–349.
- WHO, 2008. The World Health Report 2008: Primary healthcare, now more than ever. World Health Organisation, Geneva, Switzerland.