UNRAVELING INFLUENCING FACTORS ON BELGIAN NURSES' KNOWLEDGE: DOES EDUCATION MAKES A DIFFERENCE?

Background

Growing challenges in healthcare such as an aging population, an increase in care-dependency, new technological developments, and the importance of evidence-based practice result in a rising demand for highly educated nurses. To comply with European guidelines, an updated professional and competency profile was published in Belgium followed by the extension of the bachelor's program. In Belgium, two types of nurses are being trained at different educational levels to be allowed into practice (i.e., EQF level 6 and level 7). However, in practice, there is little differentiation in responsibilities between different levels of education. This raises the question if there is a difference in the acquired knowledge between education levels and if there could be other explanatory factors of nurses' knowledge?

Aim(s)

This study aims to identify the influencing factors of knowledge in nurses in Flanders, Belgium.

Methods

In this cross-sectional survey study, we included Belgian nurses from various sectors to explore the factors influencing nursing knowledge. The online survey comprised demographics and a multiple-choice knowledge test which was developed and validated using the Delphi method involving educational experts and practitioners. Each test question had four answer options, with only one correct answer. A multiple linear regression analysis was used to investigate multiple influencing factors on nurses' knowledge.

Results

A total of 620 nurses were included in the study, with the majority being female (77,3%) and residing in Antwerp (55,5%). The mean age was 41,4 years (SD 11,0). Nurses tend to score higher when they work in a hospital ($p<0.001$). In univariate analysis male nurses scored higher compared with female nurses ($p=0.016$). Additionally, education makes a difference in the total score of the questionnaire ($p<0.001$). Graduate nurses scored 68,7%, while registered nurses scored 72,2%, and those with a master's degree 76,7%. Motivation follows additional courses and taking refresher courses is associated with a higher score. Moreover, a difference was reported between work regimens, with full-time nurses achieving the highest scores regardless of their sector ($p<0.001$). Finally, the number of years of work experience was negatively associated with general knowledge ($r=-0,353$, $p<0.001$).

Discussion

Work regime, experience and education all have an impact on nurses' knowledge. In other countries, such as the Netherlands, refresher courses are mandatory to be licensed for practice. An important limitation of this study was that the a priori sample size was not reached. This could be due to the length of the questionnaire and the possibility for student nurses to fill out the questionnaire who were excluded for analysis.

Finally, most participants lived in the province of Antwerp (55,5%) reducing generalizability.

Implications and future perspectives

Our findings suggest a variation in knowledge among nurses, potentially impacting care quality and patient safety. Prioritizing lifelong learning could address this variation, positively impacting knowledge and ultimately improve care quality. Furthermore, these findings can contribute to further political discussion regarding skill-mix in care teams and differentiated practice in nursing.

References

1. Federale Raad voor Verpleegkunde. Beroeps-en competentieprofiel Verpleegkundige verantwoordelijk voor algemene zorg. [Internet]. Available from:

https://overlegorganen.gezondheid.belgie.be/nl/documenten/beroeps-en-
competentieprofielverpleegkundige-verantwoordelijk-voor-algemene-zorg. [Accessed on 16/04/2023].

2. KU Leuven. Verpleegkunde wordt vierjarige opleiding – Nieuws & events. [Internet]. Available from https://associatie.kuleuven.be/nieuws/nieuws/verpleegkunde_vierjaar. [Accessed on 16/04/2023].

3. Scholingseis verpleegkunde: Ministerie van Volksgezondheid, Welzijn en Sport; 2023. Available from: https://www.bigregister.nl/herregistratie/criteria-per-beroep/verpleegkundige/scholingseis.

4. The Prep handbook. London: NMC Nursing & Midwifery Council; 2010.

5. Continuing professional development: Ahpra 2021. Available from: https://www.nursingmidwiferyboard.gov.au/Registration-Standards/Continuing-professionaldevelopment.aspx.

6. Renew your certification with the American Nurses Credentialing Center: American Nurses Association; 2017. Available from: https://www.nursingworld.org/certification/renewals/.