

What Factors Affect the Attractiveness of Nursing Profession?

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Effective measures are required to mitigate the persisting nursing staff shortage. The identification of factors for choosing the profession is important for planning recruitment strategies. This study presents nursing students' perceptions of factors that had influenced their decision to apply for the nursing program. Data was collected in March 2022 from 94 first, second and third-year nursing students in Finland. The qualitative data was analyzed using inductive content analysis. Factors that could make nursing more appealing:

1. Advancing the role of nursing at the level of individuals, organizations, and society
2. Meaningful nursing duties
3. More influence over one's work
4. Better working conditions and well-being at work
5. Development of nursing leadership
6. Work and career advancement

Factors that can decrease the appeal of the nursing profession:

1. Decreased appreciation of nursing within the profession and in society
2. Mismatch salary vs. demanding workload and working conditions
3. Mismatch between staff resourcing and workload
4. Lack of support and encouragement from leaders
5. Working atmosphere detrimental to psychological well-being

It is essential to invest in promoting the image of nursing at the level of individuals, organizations and society and to support nurses' occupational wellbeing and career pathways.

Keywords: *Attractiveness, nursing, nursing students, experience, Webropol research*

Introduction

Nursing staff shortage is internationally an alarming problem and the crisis is expected to deteriorate over the next years (Van der Heed and Aiken 2013, World Health Organization 2016, Drennan and Ross 2019). The demand for nurses is increasing globally; 9 million new nurses (International Council of Nursing 2023) and 40 million new social and healthcare professionals may be needed by 2030 (World Health Organization 2018). Effective workforce planning is required to

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ensure sustainable health systems (Drennan and Ross 2019). Recruitment and retention of nurses to ensure safe, first-rate care are thus major concerns for hospitals and other healthcare organizations (World Health Organization 2020).

Also Finland, where this study was conducted, faces a long-term shortage of qualified healthcare staff (Ministry of Education and Culture and Ministry of Social Affairs and Health in Finland 2023). There is a need for professionals with an extensive basic competence, but also for nurses with specialist knowledge and skills. Given the demographic changes in Europe, including Finland, the need for healthcare professionals will likely continue to grow. Both the population and the workforce are ageing (Wismar et al. 2018).

The need to increase the appeal of the nursing profession has been recognized nationally and internationally. The image of the profession requires strengthening. Recent reports have revealed decreased work satisfaction, linked with developments like a skewed work-life balance or the COVID-19 pandemic (International Council of Nursing 2023).

Social and healthcare education is still a popular career choice in Finland, although a negative trend has been observed recently. The practical nursing option (upper secondary vocational qualification) has become less interesting to applicants, compared to the year 2010. There were fewer applicants than places in the period 2017–2020 (Lith 2021). The appeal of nursing degree programmes at Universities of Applied Sciences also decreased in relative terms from 2022, although in absolute terms the number of new students grew, due to the increased volume of student places (Ministry of Education and Culture and Ministry of Social Affairs and Health in Finland 2023). The government in Finland (2023) seeks to prevent dropouts from nursing schools and from the nursing profession and to promote international students' opportunities to undertake practical training (Ministry of Education and Culture and Ministry of Social Affairs and Health in Finland 2023).

The identification of factors for choosing the nursing profession is essential for planning recruitment strategies. This study presents Finnish nursing students' perceptions of factors that generally affect the attractiveness of the profession and of factors that had influenced their personal decision to apply for the nursing programme.

Literature Review

Drawing from an international scoping review, (Drennan and Ross 2019), it could be suggested that the appeal of nursing profession is affected by nurses' perceived "net advantage" associated with the job. It combines individual factors (including competence and family), job characteristics, the organization (e.g., image, whether private or public) and the location of the workplace (Drennan and Ross 2019). Much of the nursing research deals with job characteristics and healthcare organizations.

In Finland, the attractiveness and retention in nursing have been studied from the perspective of nursing students (Salminen-Tuomaala and Herttuala 2022,

Salminen-Tuomaala 2023a), nurse teachers (Salminen-Tuomaala 2023a) and nursing professionals (Coco 2019, Coco and Roos 2020, Helander et al. 2019, Keto 2024). Based on studies with nurse leaders, nurses and practical nurses, the appeal of the profession has decreased, but nursing is still considered a meaningful, important career (Coco 2019, Coco and Roos 2020). According to nurse leaders, nursing has suffered from staff shortage, poor pay, physical and psychologically demanding work, workplace violence and constant change (Coco and Roos 2020). Novice nurses feel overwhelmed by the increasing workloads and demands (Helander 2019); many of them, faced with stress and burnout symptoms, consider leaving the profession (Kox et al. 2020, Kox et al. 2023). Lack of personal support at work is one of the factors diminishing the appeal of nursing (Salminen-Tuomaala and Seppälä 2022).

On the other hand, several studies have concentrated on factors that increase the attractiveness of nursing (Al-Hamdan et al. 2017, Goodare 2017, Seitovirta, 2018, Slåtten and Lien 2022, Smit and Lawson, 2022, Salminen-Tuomaala 2023a, Salminen-Tuomaala 2023b). Important contributors to the attractiveness and retention in nursing have been found to involve safety, appreciation and pay that equates with the level of responsibility (Nurdiana et al. 2019). Strong support from nurse leaders (Nurdiana et al. 2019) and compassionate leadership (Salminen-Tuomaala and Seppälä 2022) with open interaction (Herttuala et al. 2023) can help retain the workforce. Nurses working in emergency medical services also emphasized pay, leadership and collegiality in improving nurse recruitment and retention (Keto 2024.)

Other factors important for the attractiveness and retention of the profession have been found to involve professional development, career opportunities (Slåtten and Lien 2022, Smit and Lawson 2022) and systematic orientation programmes (Brook et al. 2019). The transition-to-practice programmes implemented report improvements in retention, wellbeing and clinical competence (Melissant et al. 2024). The programmes involved experienced nurses mentoring newcomers individually or in groups, for example on clinical decision-making and specialized skills. According to a systematic review, the length of successful interventions was 27–52 weeks. (Brook et al. 2019, Ojala et al. 2020). Besides mentoring, clinical work supervision may help reduce turnover (Ojala et al. 2020). Also physical and social factors should be addressed in efforts to promote job satisfaction and commitment (Colombo 2016). Nurse leaders' wellbeing at work should not be overlooked either, as reminded by Herttuala et al. (2023).

The latest generations to enter the labour market (z and y) may have different expectations, compared to earlier generations. For example, it has been suggested that the youngest working generation (z) have shorter attention spans and appreciate more experiential and interactive learning compared to earlier generations. Their recruitment and retention may require personalization, digitalization and alignment with their lifestyle choices (Tussing et al. 2024). In the generation preceding generation z, millennial nurses have been reported to be significantly less satisfied with their work compared to earlier nurse generations and more likely to have perceptions that may have an adverse effect on job satisfaction and engagement. Effective strategies to address the needs of the

millennials might include ongoing mentoring, support for professional development and positive feedback (Waltz et al. 2020).

The Aim of the Study

The study aimed at producing information that can be used to make the nursing profession more attractive to potential workforce.

The research problem was:

What factors are associated with the attractiveness of the nursing profession?

Data Collection and Analysis

A total of 168 first, second and third-year nursing students in a Finnish University of Applied Sciences were contacted via e-mail and informed of the study in March 2022. A digital (Webropol) survey with quantitative and qualitative questions was used. This article reports the findings for the qualitative items only.

The purpose of the qualitative data collection was to produce information for inductive analysis, to bring out phenomena essential from the study perspective and to reveal things, which might otherwise remain unnoticed (Flick 2018). Phrases and sentences that formed a meaning unit or represented a response to the research problem were the unit of analysis in this study (Graneheim and Lundman 2004).

After reading the participant contributions through several times to gain an overview of the data, the investigator picked out relevant phrases and sentences, leaving out empty filler words. These reduced items were colour-coded, grouped into categories and provided with descriptive titles. A further study and comparison of these categories yielded more abstract, higher order categories. Finally, these higher order categories were collapsed into the main category (Graneheim and Lundman 2004, Elo et al. 2022).

Research Ethics and Rigour

The study followed national guidelines on research integrity (Finnish National Board on Research Integrity TENK 2023). Research permission was granted by the Director of Research and Innovation at the University of Applied Sciences, where the study was conducted. Participation was voluntary and the participants remained anonymous.

Qualitative research can be evaluated from the perspectives of credibility, confirmability, reflexivity and transferability (Kylmä and Juvakka 2012). The fact that nursing students responded to an open question based on their personal experiences, increases the credibility of this study. To ensure confirmability, the research process was described as far anonymity allowed. Having had a long

career in nursing, the investigator reflected on her preconceptions of the topic to minimize researcher bias. Such insight into one's biases and rationale for decision-making is critical to rigour. Study rigour was further supported by a clear and focused research question. Finally, a short description of the study context and participant backgrounds makes it easier for readers to assess the transferability of the findings internationally. The findings are at least transferable to Finnish nursing contexts.

Results

The response rate was 56% (n=94). All participants were Finnish-speaking citizens of Finland. Most participants, 91.5%, were women. The age range was 20-60 years (mean 28 years, median 25 years). Part of the participants had a vocational qualification (practical nurse) and a few had a Master's degree in another field. Many participants had experience of nursing through their work as practical nurses.

The two-fold results are presented under the titles *Nursing students' perceptions of what increases the attractiveness of the nursing profession* and *Nursing students' perceptions of what decreases the attractiveness of the nursing profession*, with six and five and sub-categories respectively. The results include translations of direct participant quotes.

Nursing Students' Perceptions of What Increases the Attractiveness of the Nursing Profession

According to the nursing students, the following six sub-categories were significant for the appeal of the nursing profession: (1) *Advancing the role of nursing at the level of individuals, organizations and society*; (2) *Ensuring meaningful nursing duties*; (3) *Increasing influence over one's work*; (4) *Improved working conditions and wellbeing at work*; (5) *Development of nursing leadership*; and (6) *Work and career advancement*.

First, the participants emphasized the importance of appreciating the nursing profession individually, and at the levels of organizations and society. The appreciation of nursing should start with every nurse and their attitude towards the profession, colleagues and nursing practice. Appreciation from supervisors, clients/patients and peers was considered essential for making the profession appealing to new applicants. The image of the profession should be improved and the concrete effects and usefulness of nursing publicized more widely. To give examples of the participants' statements: "Improving the image of the profession, making authentic successes known to the public through social media" and "revealing the role of nursing in alleviating human suffering".

Second, the participants commented on the importance of offering a wide variety of meaningful nursing duties. Variability, specialization options and a chance to deliver individual, high quality nursing without hurry, were mentioned as means to increase the attractiveness of the profession. One participant listed, "a

genuine experience of helping, sufficient time to encounter patients, your work makes a difference”.

Third, the participants felt that having more influence over the work and work conditions, for example through planning of more flexible working hours, would improve the appeal of the profession. An open, flexible and dialogical workplace culture was also mentioned. In the participants' own words, “the possibility to influence your working hours”; “supervisors taking employees' ideas and wishes into consideration when they develop the working conditions”; and “open interaction between ward manager and nurses, listening to all nurses”.

Fourth, the participants commented on the importance of occupational wellbeing. This could be achieved through investing in a good working atmosphere and working conditions. As one participant formulated, the organization should “invest in factors that improve occupational wellbeing”. The factors mentioned that could improve new recruits' occupational wellbeing, commitment and feeling of safety, included long-term work contracts and early career mentoring. The participants stressed the importance of flexibility when addressing employees' individual needs, wellbeing and family situations. They said, for example, “flexible rota planning, taking family situations into account”. Other factors included reasonable workloads and salaries, and effective communication to keep the whole staff properly informed. Respect for nursing values, ethical principles and collegiality, were also mentioned in the participant contributions. For example, “fostering collegiality, bringing a strong sense of ethical values”.

Another proposal from the participants was to develop nursing leadership. The participants suggested that a deeper level of consideration and appreciation towards employees would make the profession more appealing to the potential workforce. Humanity, compassion and flexibility were called for. To quote the participants, “A humane and friendly attitudes towards employees; compassion and encouragement are needed”; and “An encouraging, compassionate leader can help retain the employees in the organization, and its good reputation will attract new nurses into the system”.

Last, the participants mentioned career development as a means to improve the appeal of the nursing profession. As examples, they listed effective orientation, learning opportunities at work and further training paid by employers. The profession would be much more interesting, if organizations effectively supported nurses' efforts to pursue further education and offered positions that met their qualifications. Examples of the participants' comments included “Making continuous learning possible at the workplace”; “Career advancement, appreciation of further training and creation of a position that matches your education”; and “If you complete a Master-level degree at a University/University of Applied Sciences, you should get a position that matches your education and a higher salary”.

Nursing Students' Perceptions of What Decreases the Attractiveness of the Nursing Profession

In contrast, the following five sub-categories represent study participants' perceptions of what decrease the appeal of the nursing profession: (1) *Decreased*

appreciation of nursing within the profession and in society; (2) Mismatch salary vs demanding workload and working conditions; (3) Mismatch between staff resourcing and workload; (4) Lack of support and encouragement from leaders; and (5) Working atmosphere detrimental to psychological wellbeing.

Many study participants felt that, compared to earlier decades, nursing had become less appreciated among nurses themselves and in society in general and its image had suffered. Negative publicity in the news and social media, for example nurses' own recounts of their experiences or of notorious workplaces, were likely to decrease the appeal of the profession. To quote some participants, "Talking about the miserable salary and poor leadership in the social media"; "This commotion about nurses' salaries, strikes, guilt-tripping nurses"; and, "The social media exacerbates grievances".

Second, many study participants agreed that the compensation nurses received was not commensurable with the job requirements and working conditions. The nurses' education and level of responsibility was not reflected in their earnings. The physical and psychological stress, fixed term employment contracts and the occasionally poor or demanding working conditions all contributed to the decreased appeal of nursing as a profession. In the participants' own words, "Constantly working beyond your strength, too long shifts, hard work"; "One contract after another for substitutes and not having any holiday affects your motivation"; "The salary is too low for the level of responsibility and demands"; and, "Temp jobs don't motivate you".

Third, the participants referred to the imbalance between the workload and staff resources as a circumstance that eroded the appeal of the nursing profession. In some organizations, the nurse-patient ratio was below the recommended level, and the situation was further aggravated by staff shortage. Excessive workloads, responsibility over a high number of critically ill patients, constant hurry and working overtime were mentioned as conducive to stress, exhaustion and feelings of inadequacy. If prolonged, the resources-workload balance could lead to lack of commitment and burnout. The participants described the situation as follows: "Increased workloads"; "No time to recover when you have extra shifts because of staff shortage and sick leaves; constant tiredness and palpitations"; "Fear of errors, because you are alone responsible for too many critically ill patients"; "Getting home you are so tired that you have no energy to do anything, you are close to tears".

According to the participants, lack of support from nurse leaders could also undermine the appeal of the nursing profession, especially if leaders failed to cultivate a compassionate and encouraging attitude towards the staff. The participants reported that some supervisors were inflexible, remained distant, did not acknowledge staff needs and wishes or did not seem to appreciate substitute nurses. Some quotes from the participants were: "The supervisor does not know staff members by name, does not appreciate their competence or the hard work"; "They pay no attention to the coping problems, you always have to stretch"; and "Nothing seems enough".

Finally, the study participants described a working atmosphere detrimental to psychological wellbeing, motivation and appeal of the profession. Competition,

jealousy and lack of collegiality among staff were mentioned as possible causes of a poor working atmosphere. Staff members were at risk of becoming cynical and “getting stuck in negative talk”, talking behind each other’s back or not treating nursing students fairly. According to the participants, a working atmosphere detrimental to psychological wellbeing was characterized by lack of sensitivity towards clients and colleagues. To quote two participants: “Lack of sensitivity, cynicism, indifference towards colleagues and patients when you get too exhausted”; “Students are not appreciated, they are allocated the hardest basic nursing duties; a full contribution is expected, which means you have no chance to ask questions. You don’t dare to ask about new things, you just do the routine and try to avoid carped at.”

Discussion and Conclusions

This survey with 94 nursing students presents students’ perceptions of what increases and decreases the attractiveness of the nursing profession. The participant contributions seem to represent positive expectations and wishes on one hand, and experienced reality on the other hand. In other words, the results leave an impression of an imbalance of what nursing students desired and what they actually experienced in healthcare organizations. This finding is reminiscent of earlier research reporting young novice nurses overwhelmed by lack of perceived competence, heavy workload, work-life imbalance and inability to deliver high-quality care (Kox 2020). The findings may also reflect the different expectations of the latest generations to enter the nursing professions (Waltz et al. 2020, Tussing et al. 2024).

The participants stressed the importance of increasing the appeal of the nursing profession through influencing attitudes at the levels of individuals, organizations and society. Much depends on how the nursing professionals themselves communicate about their profession on social media platforms.

Other means that could increase the attractiveness of the nursing profession involved meaningful duties, career advancement options, influence over one’s work and better working conditions. Support for personal wellbeing at work was considered essential. Nurse leaders should know their staff members by name and be available and genuinely present. Compassionate leadership, with encouragement and positive feedback and a supportive atmosphere without mutual competition or jealousy were called for to improve work motivation and commitment to the organization. The participants wished for an opportunity to practice nursing without constant time pressure and ethical burden. According to the results, employee wellbeing could be improved through open dialogue, flexible rota planning, longer work contracts and effective mentoring and orientation.

In contrast, the findings showed that negative social media publicity, for example during the Corona pandemic, and pay that did not equate with the level of responsibility, decreased the appeal of the profession. It is important to address the disparity between resources and workloads.

In conclusion, recruitment of new nurses calls for changes in attitudes and in the image of nursing at the levels of individuals, organizations and society. To make nursing a more appealing choice, nurse leaders could focus on nurses' career advancement and on their wellbeing at work through improved working conditions and compassionate leadership.

References

- Al-Hamdan Z, Manojlovich M, Tanima B (2017) Jordanian nursing work environments, intent to stay, and job satisfaction. *Journal of Nursing Scholarship* 49(1): 103–110.
- Brook J, Aitken L, Webb R, MacLaren J, Salmon D (2019) Characteristics of successful interventions to reduce turnover and increase retention of early career nurses: A systematic review. *International Journal of Nursing Studies* 91(Mar): 47–59.
- Coco K (2019) *Vetovoimatekijät erikoissairaanhoidossa. Kysely tehläisille sairaanhoitajille.* (Attraction factors in specialized nursing care. Survey to nurses in Tehy trade union). Publication Series of Tehy Trade Union of Qualified Social Care, Healthcare and Early Childhood Education Professionals B:1/2019.
- Coco K, Roos M (2020) *Sosiaali- ja terveystieteen työolot ja vetovoima – lähihoitajien näkemyksiä vetovoimaan vaikuttavista tekijöistä: perehdytys, osaaminen, työolot ja kuormitus.* (Working conditions and attractiveness in social and healthcare services – practical nurses' perceptions of factors that affect the appeal of the profession: orientation, competence, working conditions and workload). Publication Series of Tehy Trade Union of Qualified Social Care, Healthcare and Early Childhood Education Professionals B.
- Colombo F (2016) *The Nursing Workforce: Past Trends, Future Developments.* Available at: <http://www.oecd.org/health/health-systems/Nursing-workforce-February2016.pdf>.
- Drennan VM, Ross F (2019) Global nurse shortages: the facts, the impact and action for change. *British Medical Bulletin* 130(1): 25–37.
- Elo S, Kajula O, Tohmola A, Kääriäinen M (2022) Laadullisen sisällönanalyysin vaiheet ja eteneminen. (Steps and phases of qualitative content analysis process). *Hoitotiede (Journal of Nursing Science in Finland)* 34(4): 215–225.
- Finnish National Board on Research Integrity TENK (2023) *The Finnish code of conduct for research integrity and procedures for handling alleged violations of research integrity in Finland. Guideline of the Finnish National Board on Research Integrity.* TENK 2023 Publications of the Finnish National Board on Research Integrity. 1st Edition. Helsinki, Finland.
- Flick U (2018) *The SAGE Handbook of Qualitative Data Collection.* Thousand Oaks, California: SAGE Publications Ltd.
- Goodare P (2017) Literature review: why do we continue to lose our nurses? *Australian Journal of Advanced Nursing* 34(4): 50–56.
- Graneheim UH, Lundman B (2004) Qualitative content analysis in nursing research: concepts, processes and measures to achieve trustworthiness. *Nurse Education Today* 56: 29–34.
- Helander M, Roos M, Suominen T (2019) Nuorten sairaanhoitajien näkemyksiä ammatista lähtemisestä. (Young nurses' reasons for leaving the profession). *Hoitotiede (Journal of Nursing Science in Finland)* 31(3): 180–190.
- Herttua N, Konu A, Kokkinen L (2023) Working as a nurse manager and being in the middle of one's career is connected to lower work well-being. *International Journal of Healthcare Management* 17(2): 227–237.

- International Council of Nursing (2023) *Recover to Rebuild Investing in the Nursing Workforce for Health Care Effectiveness*. Available at: https://www.icn.ch/sites/default/files/2023-07/ICN_Recover-to-Rebuild_report_EN.pdf.
- Keto K (2024) *Etelä-Pohjanmaan hyvinvointialueen ensihoitopalvelun vetovoiman ja pitovoiman edistäminen*. (Promoting attraction and retaining employees of primary response care in the Welfare Area of South Ostrobothnia). Master's degree in Social Services and Health Care, Advanced Clinical Practitioner. Seinäjoki University of Applied Sciences.
- Kox JHAM, Groenewoud JH, Bakker EJM, Bierma-Zeinstra S, Runhaar J, Miedema HS, et al. (2020) Reasons why Dutch novice nurses leave nursing: a qualitative approach. *Nurse Education in Practice* 47(Aug): 102848.
- Kox JHAM, van der Zwan JS, Groenewoud JH, Runhaar J, Bierma-Zeinstra S, Bakker EJM, et al. (2023) Predicting late dropout from nursing education or early dropout from the profession. *Science Talks* 5: 100106.
- Kylmä J, Juvakka T (2012) *Laadullinen terveystutkimus*. (Qualitative Health Research). Helsinki, Finland: Edita Prima Oy.
- Lith P (2021) *Sote-alojen työvoimamarkkinat ja koulutuksen vetovoima*. (Labour market in social and healthcare services and appeal of the education). Helsinki, Finland.
- Melissant HC, Hendriks RRA, Bakker EJM, Kox JHAM, Rietveld N, Miedema HS, et al. (2024) Interventions that support novice nurses' transition into practice: A realist review. *International Journal of Nursing Studies* 157: 104785.
- Ministry of Education and Culture and Ministry of Social Affairs and Health in Finland (2023) *Sosiaali- ja terveystieteiden korkeakoulutuksen kehittäminen –hanke*. (Project for Developing the Higher Education of Social and Health Sector). Final report. Helsinki, Finland: Publications of the Finnish Government 15.
- Nurdiana N, Hariyati TS, Gayatri D (2019) Head nurse strategy for increasing nurse retention: A factor analysis. *Enfermería Clínica* 29(Suppl 2): 560–566.
- Ojala P, Juntunen J, Niskala J, Mikkonen K, Parisod H, Heikkilä K, et al. (2020) *Mitkä tekijät ovat yhteydessä sairaanhoitajien työtyytyväisyyteen ja työssä pysymiseen?* (What Factors are Associated with Work Satisfaction and Retention of Nurses?) Finland: Hotus Nursing Research Foundation.
- Salminen-Tuomaala M, Herttuala N (2022) What factors influenced students' decision to choose nursing? *European Journal of Applied Sciences (EJAS)* 10(5): 284–293.
- Salminen-Tuomaala M, Seppälä S (2022) Nurses' ratings of compassionate nursing leadership during the Covid-19 pandemic – A descriptive cross-sectional study. *Journal of Nursing Management* 30(6): 1974–1980.
- Salminen-Tuomaala M (2023a) What factors affect the attractiveness of nursing education-nurse teachers' experiences. *European Journal of Applied Sciences* 11(5): 352–365.
- Salminen-Tuomaala M (2023b) Factors associated with attractiveness and retention in nursing. *European Journal of Applied Sciences* 11(3): 160–174.
- Seitovirta J (2018) *Sairaanhoitajien palkitseminen erikoissairaanhoidossa, perusterveydenhuollossa ja yksityisessä terveydenhuollossa*. (Registered Nurses' Rewarding in Finnish Specialized Medical Care, Primary and Private Healthcare). Dissertation in Health Sciences 491. University of Eastern Finland, Faculty of Health Sciences.
- Slåtten T, Lien G (2022) Frontline nurses' appraisal of organizational attractiveness and the role of management support, interdepartmental collaboration climate and service quality of care. *International Journal of Quality and Service Sciences* 14(2): 197–216.

- Smit BW, Lawson KM (2022) Growth mindsets increase flexible work arrangement attractiveness: a policy-capturing study. *Personnel Review* 52(1): 342–362.
- Tussing TE, Chipps E, Tornwall J (2024) Differences in the nursing workforce: Strategies for nurse leaders. *Nurse Leader* (Apr). (In Press).
- Van der Heed K, Aiken LH (2013) Nursing workforce a global priority area for health policy and health services research: a special issue. *International Journal of Nursing Studies* 50(2): 141–142.
- Waltz LA, Muñoz LR, Weber Johnson H, Rodriguez T (2020) Exploring Job Satisfaction and Workplace Engagement in Millennial Nurses. *Journal of Nursing Management* 28(3): 673–681.
- Wismar M, Maier CB, Sagan A, Glinos IA (2018) Developments in Europe's health workforce: addressing the conundrums. *Eurohealth* 24(2): 38–42.
- World Health Organization (2016) *Global Strategic Directions for Strengthening Nursing and Midwifery 2016–2020*. Geneva: WHO.
- World Health Organization (2018) *Global Strategy on Human Resources for Health: Workforce 2030*. Available at: https://www.who.int/hrh/resources/pub_globstrathrh-2030/en/
- World Health Organization (2020) *State of the World's Nursing Report 2020: Investing in Education, Jobs and Leadership*. Available at: <https://www.who.int/publications/item/9789240003279>.