Demographic Data Differences in Perceived Control over Nursing Practice among Nurses Caring for Nursing Home Residents

Mohammad Rababa     Shatha Al-Sabbah     Dania Bani Hamad

Adult Health Nursing Department, Faculty of Nursing/Jordan University of Science and Technology, Irbid, Jordan

Keywords
Nurse · Autonomy · Nursing homes · Older adults · Jordan · Control over practice

Abstract
Introduction: Control over nursing practice is crucial for improved quality of life for nursing home (NH) residents. Nevertheless, little is known about the association of nurses’ demographic data with their perceived control over nursing practice in Jordan and beyond. Therefore, this study aimed at examining the differences in nurses’ levels of perceived control over nursing practice based on their demographic characteristics. Methods: This descriptive-correlational study was conducted on a convenience sample of 163 nurses caring for NH residents. Nurses’ perceived control over nursing practice was measured by the Control Over Nursing Practice (CONP) scale. Results: The participating nurses were found to have low levels of perceived control over nursing practice which varied between the nurse groups according to gender, level of experience, and type of NHs. Discussion/Conclusion: This study is the first quantitative study to examine association between nurses’ demographic characteristics, such as age or years of nursing experience, and their perceived control over nursing practice. Despite the preliminary findings of this study, the findings of this study provide a better understanding of the impact of nurses’ sociodemographic and professional characteristics on their levels of perceived control over nursing practice.

Introduction
Perceived control over nursing practice (CONP) is defined as “the nurses’ ability to shape departmental and organizational policies and practices related to nursing care” [1]. This definition implies that nurses are authorized to make autonomous decisions related to patient care, especially in complex and challenging clinical situations, where nurses need to promptly respond to the unmet health needs of their patients [2–4]. In nursing homes (NHs), nurses need to be actively engaged in everyday discussions and to participate in the decision-making processes related to the treatment plan of residents [5, 6]. Therefore, NH administrators should enhance nurses’ perceived CONP [2, 7, 8]. Enhanced nurses’ perceived
CONP is essential for best health outcomes [9], and it contributes to decreasing iatrogenic complications and patients’ mortality rates [10]. Nurses with high levels of perceived CONP tend to make autonomous decisions related to the treatment plan suitable for NH residents [11, 12]. Therefore, nurses’ levels of confidence increase, allowing them to provide prompt healthcare to NH residents. However, it is often NH managers, rather than nurses, who determine the healthcare plan to be used routinely with NH residents, and nurses may be pressured by NH managers to follow routine decision-making procedures [13]. For example, although it is recommended to use self-report pain tools for communicating NH residents and behavioral pain tools for noncommunicating ones [11, 12], NH administrators insist on self-report tools regardless of NH residents’ sensory and cognitive impairments.

Whilst multiple studies have explored nurses’ perceived CONP, only a few quantitative studies have examined nurses’ perceived CONP. Further, a review of the literature on the association between nurses’ demographic characteristics, such as age or years of nursing experience, and their perceived CONP revealed conflicting findings. Thus, we are interested in examining the differences in nurses’ levels of perceived CONP based on their demographic characteristics.

Methods

Design, Setting, and Sample
This study employed a descriptive-correlational design and used a convenience sample of 160 nurses recruited from 2 public and 2 private NHs in Jordan. The researchers consulted a statistician to calculate the minimum required sample size for this study using G*Power analysis. After entering the following parameters into the A-priori Sample Size Calculator for t test: $\alpha = 0.05$, Cohen’s $d = 0.5$, and $1-\beta = 0.9$, a minimum sample size of 145 nurses was required in this study. An additional 15% of the required sample size was added to control for possible incomplete response. Nurses with at least 1 year of clinical experience caring for NH residents were eligible participants.

Ethical Consideration
Ethical approval was obtained from the institutional review board (IRB) of the university. Written informed consent was obtained from the participating nurses. The researcher emphasized on the voluntary participation and privacy and confidentiality during data collection.

Data Collection
Nurses’ Perceived Control over Nursing Practice
The Control Over Nursing Practice (CONP) scale [14] was used to measure nurses’ perceived CONP. The CONP scale includes 21 items answered with 7 responses, ranging from 1 = “minimal” to 7 = “maximum control.” The possible maximum total score of the CONP scale is 147. Higher scores indicate greater levels of perceived CONP. The face, content, and construct validity of the CONP scale has been established in previous studies. The CONP scale has been used in many previous studies and has demonstrated satisfactory internal consistency reliability score (Cronbach’s alpha of $\geq 0.80$). The CONP scale had a reliability score of a Cronbach’s alpha equal to 0.90 in the current study. The English version of the CONP scale was used if nursing education in Jordanian Nursing College was English.

Demographic Data
Nurses’ demographics, such as age, gender, marital status, level of education, and years of clinical experience, were collected using a self-administered demographics questionnaire. The participating nurses were given a questionnaire pack and were asked to turn in the completed questionnaires to the department manager. The researcher came a week later to collect the completed questionnaires.

Data Analysis
The Statistical Package for the Social Sciences (SPSS) version 25.0 (IBM Corp., Armonk, NY, USA) was used for the statistical analyses. Mean, standard deviation, and frequencies were used to describe the nurses’ levels of perceived CONP and demographic characteristics.
data. A t test was used to examine the differences in perceived CONP levels between the nurse groups based on sociodemographic and clinical characteristics. The significance level was set at $p < 0.05$ for all of the statistical analyses conducted in the study.

**Results**

**Nurses’ Characteristics and Levels of Perceived Control over Nursing Practice**

The mean age and clinical experience of the participating nurses in this study were $31.2 \pm 5.6$ and $7.5 \pm 5.3$ years, respectively. The majority of participants were female ($61.9\%$), single ($57.5\%$), worked in a private NH ($56.9\%$), and diploma-prepared registered nurses ($85.6\%$). The participating nurses scored a below-average score on the CONP scale ($64.8 \pm 13.6$), which indicated a somewhat low level of perceived CONP. Detailed descriptive data are presented in Table 1.

**Differences in Perceived Control over Nursing Practice between the Nurse Groups**

Analysis with the independent samples t test indicated no statistically significant differences in mean CONP scores between single and married nurses or nurses with a bachelor’s degree and nurses with a diploma (all $p$ values $>0.05$, Table 2). However, there were statistically significant differences in the nurses’ CONP scores based on gender, years of experience, and type of NH (i.e., private vs. public). Male nurses and senior nurses had greater perceived CONP ($p = 0.012$ and $0.002$, respectively) than female nurses and junior nurses. Also, nurses working in public NHs had significantly higher levels of CONP than nurses working in private NHs ($p < 0.001$).

**Discussion**

This study is the first quantitative study to examine association between nurses’ demographic characteristics, such as age or years of nursing experience, and their perceived CONP. Despite the preliminary findings of this study, they add to the current understanding of perceived CONP of nurses caring for NH residents. The study findings have shed light on the impact of nurses’ demographic characteristics on their levels of CONP.

The nurses in the current study were found to have low levels of CONP, which is consistent with the findings of previous studies conducted in different clinical settings in Western and Eastern countries [15–17]. However, the levels of nurses’ CONP reported in the current study were lower than what was reported in previous Western countries for instance [16, 17]. This finding could be attributed to lack of multidisciplinary work in Jordanian NHs due to the lack of financial resources and shortages in the healthcare workers. Thus, future research on the impact of multidisciplinary teamwork on the perceived CONP among NH nurses in Jordan is highly recommended.

### Table 2. CONP scores based on nurses’ demographic and professional characteristics data ($n = 160$)

| Nurse groups          | CONP  | p value* | t test | effect size |
|-----------------------|-------|----------|--------|-------------|
|                       | mean  | SD       |        |             |
| Gender                |       |          |        |             |
| Female                | 62.7  | 13.2     | 0.012  | 2.54        | 0.41 |
| Male                  | 68.2  | 13.6     |        |             |
| Marital status        |       |          |        |             |
| Single                | 63.9  | 13.6     | 0.289  | 1.06        | 0.16 |
| Married               | 66.1  | 13.5     |        |             |
| Level of experience   |       |          |        |             |
| Junior                | 62.8  | 13.5     | 0.002  | 3.19        | 0.57 |
| Senior                | 70.2  | 12.3     |        |             |
| Nursing education     |       |          |        |             |
| BSN                   | 64.8  | 13.9     | 0.907  | 0.117       | 0.02 |
| Diploma               | 65.1  | 12.0     |        |             |
| Nursing homes         |       |          |        |             |
| Public                | 72.6  | 12.1     | <0.001 | 7.25        | 1.15 |
| Private               | 58.9  | 11.6     |        |             |

CONP, Control Over Nursing Practice scale; SD, standard deviation. * Significant difference at $p \leq 0.05$. 

Nurses’ Perceived Control over Nursing Practice

Dement Geriatr Cogn Disord Extra 2022;12:1–5
DOI: 10.1159/000521284
Also, in Jordan, NH managers seem to be more restrictive, authoritative, and dominating which hinder nurses from doing what they are authorized to do for their patients. This finding could be attributed to the high prevalence of patriarchal culture in Jordan where women are viewed to be less assertive than men [13]. In the current study, around 68% of our participants were female nurses who might feel more comfortable to report low levels of perceived CONP as this is associated with reduced accountability and responsibility. Therefore, it is highly recommended to qualitatively explore intercultural conceptualizations of perceived CONP among NH nurses in Jordan.

Previous studies have reported that sociodemographic and professional characteristics, including gender, age, clinical experience, and type of NH, may impact NH nurses’ levels of perceived CONP [18–22]. Consistent with these studies, the present study found gender, age, clinical experience, and work setting to impact nurses’ levels of perceived CONP. Consistent with Amini [18], our study found male NH nurses to have higher levels of CONP compared with female nurses. This may be explained by the fact that in Middle Eastern cultures, female nurses are viewed to be less independent and less assertive than male nurses [23].

The current study also found senior nurses to have higher levels of CONP than junior nurses. This supports the findings of a previous study which found that in comparison with senior nurses, younger and less-experienced nurses tend to be more anxious and less confident when making autonomous decisions [19]. This is also consistent with the findings of a previous qualitative study in which most of the interviewed nurses reported that their perceived CONP was developed through clinical experience [19].

Further, our study found type of NH (i.e., private vs. public) to impact NH nurses’ levels of CONP, whereby nurses working in public NHs had higher levels of CONP than nurses working in private NHs. The policies of private NHs primarily focus on cost-effectiveness and transparency, which often results in substantial administrative workloads and decreased levels of CONP among nurses [24]. Also, the healthcare policies in private NHs in Jordan are characterized by doctor-led management and directive autocratic leadership styles, contributing to a lack of motivation and CONP among nurses [24].

**Limitations**

This is the first study to examine the association of nurses’ perceived CONP with their demographic characteristics. However, several limitations related to the measurement tools, sampling method, and design used were present. Recall and selection biases are associated with using self-report questionnaires and convenience sampling, respectively. These biases may be associated with threats to the internal validity and limited generalizability of the findings. Furthermore, the use of a cross-sectional-correlational is associated with type II errors. Another limitation in this study that the perceived level of CONP not actual one was assessed.

**Implications for Nursing Practice**

This study has implications for nursing practice in NHs. Nursing practice policies in Jordan should be reformed in ways which increase nurses’ CONP. This reform could be accomplished through ongoing education and professional training aiming at improving nurses’ levels of knowledge and clinical competencies. Nurse managers also need to enhance and facilitate multidisciplinary teamwork and collaboration among healthcare professionals in NH through enhanced shared governance. Targeting barriers to facilitating nurses’ CONP in NHs by conducting longitudinal and intervention studies should be a priority for the NH manger and nursing scientists.

**Conclusion**

The findings of the current study provide a better understanding of the impact of nurses’ sociodemographic and professional characteristics on their perceived CONP levels. The findings emphasize the need for policy reforms in NHs in Jordan and other Middle Eastern countries in order to increase CONP among nurses. Therefore, the findings of this study could contribute to enhancing the CONP of NH nurses in Jordan and beyond.

**Acknowledgment**

The authors want to thank the Deanship of Research/Jordan University of Science and Technology for facilitating the conduction of this study.

**Statement of Ethics**

This study protocol was reviewed and approved by the Institutional Review Board (IRB) of the Jordan University of Science and Technology, Approval No. (82-2020). Written informed consent was obtained from participants to participate in the study.
Conflict of Interest Statement

The authors have no conflicts of interest to declare.

Funding Sources

This study was funded by the Jordan University of Science and Technology (Grant No. 20200315).

Author Contributions

Conceptualization and study design were conducted by M.R. Data collection and analysis was done by S.A.-S. and D.B.H. Writing, review, and editing were done by M.R., S.A.-S., and D.B.H. All authors have read and approved the final version of the manuscript.

Data Availability Statement

The data that support the findings of this study are not publicly available because they contain information that could compromise the privacy of research participants but are available from the corresponding author (M.R.) upon reasonable request.

References

1. Weston MJ. Validity of instruments for measuring autonomy and control over nursing practice. J Nurs Scholarsh. 2009;41(1):87–94.
2. Achterberg WP, Pieper MJ, van Dalen-Kok AH, De Waal MW, Husebo BS, Lautenbacher S, et al. Pain management in patients with dementia. Clin Interv Aging. 2013;8:1471–82.
3. Gilmore-Bykovskyi AL, Bowers BJ. Understanding nurses’ decisions to treat pain in nursing home residents with dementia. Res Gerontol Nurs. 2013;6(2):127–38.
4. Kaasalainen S, Coker E, Dolovich L, Papaioannou A, Hadjisavvas F, Emili A, et al. Pain management decision making among long-term care physicians and nurses. West J Nurs Res. 2007;29(5):561–80.
5. Mahmeh M, Alasad J, Salami I, Saleh Z, Darawad M. Clinical decision-making among critical care nurses: a qualitative study. Health. 2016;08(15):1807.
6. Paganini MC. Nurses’ autonomy and end-of-life decision making. Nurs Ethics. 2010;17(3):285.
7. Choi S, Kim M. Effects of structural empowerment and professional governance on autonomy and job satisfaction of the Korean nurses. J Nurs Manag. 2019;27(8):1664–72.
8. Papathanassoglou ED, Tseroni M, Karydaki A, Vazaiou G, Kassikou J, Lavdaniti M. Practice and clinical decision-making autonomy among Hellenic critical care nurses. J Nurs Manag. 2005;13(2):154–64.
9. Wilson M, Sleutel M, Newcomb P, Behan D, Walsh J, Wells JN, et al. Empowering nurses with evidence-based practice environments: surveying Magnet®, pathway to Excellence®, and non-magnet facilities in one healthcare system. Worldviews Evid Based Nurs. 2015;12(1):12–21.
10. Rao AD, Kumar A, McHugh M. Better nurse autonomy decreases the odds of 30-day mortality and failure to rescue. J Nurs Scholarsh. 2017;49(1):73–9.
11. Herr K, Bursch H, Ersek M, Miller LL, Swafford K. Use of pain-behavioral assessment tools in the nursing home: expert consensus recommendations for practice. J Gerontol Nurs. 2010;36(3):18–29.
12. Herr K, Coyne PJ, McCaffery M, Manworren R, Merkel S. Pain assessment in the patient unable to self-report: position statement with clinical practice recommendations. Pain Manag Nurs. 2011;12(4):230–50.
13. Rababa M, Aldalaykeh M. Responding to varying levels of certainty about pain in people with dementia after initial pain assessment. Dement Geriatr Cogn Dis Extra. 2019;9(2):271–80.
14. Gerber R, Murdaga C, Verran J, Milton D, editors. Control over nursing practice scale: psychometric analysis. Poster session presented at: National Conference on Instrumentation in Nursing; 1990.
15. Kim BJ, Ishikawa H, Liu L, Ohwa M, Sawada Y, Lim HY, et al. The effects of job autonomy and job satisfaction on burnout among careworkers in long-term care settings: policy and practice implications for Japan and South Korea. Educ Gerontol. 2018;44(5–6):289–300.
16. Oshodi TO, Bruneau B, Crockett R, Kinchington F, Nayar S, West E. Registered nurses’ perceptions and experiences of autonomy: a descriptive phenomenological study. BMC Nurs. 2019;18:51.
17. Skår R. The meaning of autonomy in nursing practice. J Clin Nurs. 2010;19(15–16):2226–34.
18. Amini K, Negarandeh R, Ramezani-Badr F, Moosaefard M, Fallah R. Nurses’ autonomy level in teaching hospitals and its relationship with the underlying factors. Int J Nurs Pract. 2015;21(1):52–9.
19. Georgiou E, Papathanassoglou E, Pavlakis A. Nurse-physician collaboration and associations with perceived autonomy in Cypriot critical care nurses. Nurs Crit Care. 2017;22(1):29–39.
20. Biopoulou KK, While AE. Professional autonomy and job satisfaction: survey of critical care nurses in mainland Greece. J Adv Nurs. 2010;66(11):2520–31.
21. Kuwano N, Fukuda H, Murashima S. Factors affecting professional autonomy of Japanese nurses caring for culturally and linguistically diverse patients in a hospital setting in Japan. J Transcult Nurs. 2016;27(6):567–73.
22. Motamed-Jahromi M, Jalali T, Esghii F, Zaker H, Dehghani L. Evaluation of professional autonomy and the association with individual factors among nurses in the Southeast of Iran. J Nurs Midwifery Sci. 2015;2(4):37–42.
23. AllahBakhshian M, Alimohammadi N, Taleghani F, Nik AY, Abbasl S, Gholizadeh L. Barriers to intensive care unit nurses’ autonomy in Iran: a qualitative study. Nurs Outlook. 2017;65(4):392–9.
24. Kiefert RA, de Brouwer BB, Francke AL, Delnoij DM. How nurses and their work environment affect patient experiences of the quality of care: a qualitative study. BMC Health Serv Res. 2014;14(1):249.