



Taibah University

Journal of Taibah University Medical Sciences

www.sciencedirect.com



Original Article

The correlates of social determinants to ethico-moral values on professional development of Saudi nursing students



Farhan F. Alshammari, Ph.D.^a, Rizal Angelo N. Grande, Ed.D.^b and Daniel Joseph E. Berdida, Ph.D.^{c,*}

^a Medical-Surgical Department, College of Nursing, University of Ha'il, Ha'il City, KSA

^b Mental Health Nursing Department, College of Nursing, University of Ha'il, Ha'il City, KSA

^c College of Nursing, University of Santo Tomas, Manila, Philippines

Received 14 August 2020; revised 1 November 2020; accepted 4 November 2020; Available online 6 December 2020

المخلص

أهداف البحث: تهدف هذه الدراسة لتحديد مدى إدراك طلاب التمريض للقيم المهنية وارتباطها مع قيمهم الشخصية.

طرق البحث: هذه الدراسة مقطعية وقد تم استخدام استبانة مقياس القيم المهنية للتمريض المنقح لتحديد القيم الشخصية لطلاب التمريض. ضمت العينة ٢٠١ طالبا من كلية التمريض في منطقة حائل في المملكة العربية السعودية.

النتائج: تحتوي الاستبانة على ٢٦ عنصرا. العنصر الأول مرتبط بالحالة الأكاديمية بنتيجة ٠.٠١، والعنصر الثالث مرتبط بشكل رئيس بالجنس بدرجة ٠.٠١، ومستوى اللغة الإنجليزية بنتيجة ٠.٠١، والعنصر الرابع مرتبط بمستوى الطالب في اللغة الإنجليزية بنتيجة ٠.٠٠ إلى ٠.٠١، والعنصر الخامس مرتبط مع الجنس بنتيجة ٠.٠١، والعنصر ١٢ مرتبط مع الجنس بدرجة ٠.٠١ ومستوى الدراسة بدرجة ٠.٠٠، وفي النهاية العناصر ٢٦، ٢٥، ٢٤، ٢٣، ٢٢، ٢١ مرتبطين بشكل رئيس مع مستوى الدراسة. وكانت العناصر التي لها ارتباط عالي للعنصر الاجتماعي للمشاركين مرتبطة مع عنصر العدالة وقيم الرعاية.

نظرا لأن مهنة التمريض هي مهنة رعاية، فإن هذه النتائج تقرّ بحقيقة أن طلاب التمريض مرتبطين بالقيم التي يجسدونها.

هذه الدراسة تؤكد أن الطلاب عندما إدراك كامل بمسؤولياتهم والمسائل الناتجة من نتائج الرعاية التي يقدمونها.

الاستنتاجات: يدرك المشاركون في الدراسة أن سلامة وحماية الصحة العامة من أهم القيم. وكذلك خصوصية المرضى ومشاركة التمريض بالمنظمات الخاصة بالتمريض لها قيم عالية أيضا.

الكلمات المفتاحية: قيم الرعاية؛ الأخلاقيات والمعتقدات؛ طلاب التمريض؛ القيم المهنية؛ المملكة العربية السعودية

Abstract

Objectives: This study determined the perceived professional values of nursing students, which are potentially correlated to their individual profiles.

Methods: This study utilized a cross-sectional design using the Nurse Professional Values Scale-Revised (NPVS-R) to determine nursing students' innate professional values. This study recruited 201 nursing students using a total enumeration sampling from Ha'il region, KSA.

Results: In the 26-item NPVS-R scale, item 1 was correlated to academic status at 0.01; item 3 was significantly correlated to gender at 0.01 and fluency in English at 0.01; item 4 was positively correlated to year level and fluency in English language at 0.00 and 0.0, respectively. Additionally, item 5 was found to be correlated to gender at 0.01; item 12 was correlated to gender at 0.01, year level (0.00), and fluency in English (0.01) and item 21 was correlated to gender and year level at 0.00 and 0.01, respectively. Finally, items 7, 22, 23, 24, 25, and 26 were significantly correlated with year level. The items with the highest correlations to the social determinants of the participants belonged to the values, justice and caring. Since nursing is a caring profession, these findings acknowledge that the values embodied by nursing

* Corresponding address: College of Nursing, University of Santo Tomas, España Boulevard, 1015 Manila, Philippines.

E-mail: deberdida@ust.edu.ph (D.J.E. Berdida)

Peer review under responsibility of Taibah University.



Production and hosting by Elsevier

students are critical. This reaffirms that nurses provide care with responsibility and accountability for its outcomes.

Conclusion: In this study, the participants recognized the protection and safety of public health as the most significant professional value. Similarly, patient confidentiality and the active involvement of nurses in professional organizations was highly valued.

Keywords: Caring values; Ethico-moral values; KSA; Nursing students; Professional values

© 2020 The Authors.

Production and hosting by Elsevier Ltd on behalf of Taibah University. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Introduction

The professional values of nursing students are considered essential in their development as future healthcare providers and are evident in their actions and behaviours during the provision of care.¹ Values reflect a person's unique cultural and ethnic identity.² Thus, as nursing students prepare for professional work, they should develop in themselves the requisite professional qualities to become able nurses.³ To this end, nurse educators are responsible for guiding nursing students on how to develop these professional values. One way to do this is to foster collaboration as a team during their clinical internships.⁴

The United Kingdom (UK) has started hiring qualified nurses by focusing not only on the applicants' knowledge and skills, but also on the values they embody. They refer to this as Values Based Recruitment or VBR. The UK government implemented this new law in support of person-centred care. Under this system, employees are hired based on a set of prescribed values.⁵ Nurse academicians consider professional values as one of the indicators of nursing students' competencies by using a list of professional values expected from undergraduate nursing students.⁶ Professionals in the healthcare field, including nurses, midwives, doctors, and even nursing students who provide care during their clinical practicum, are legally responsible for their actions and discharge of duties toward patients,⁷ even if they do not yet hold a license. The KSA has a multi-diverse population of healthcare providers, such as nurses from different cultural and ethnic backgrounds. A majority of them are from Egypt, Jordan, India, and some from as far as Southeast Asia, for instance, the Philippines (moh.gov.sa).

A study published on professional values of Saudi nursing students specifically focused on the professional values of female nursing students in KSA and explored their perceptions toward their professional values in nursing and assessed the relationship between these values and their year of academic studies.⁸ In contrast, the current study considered both genders to study the professional values of nursing

students. However, along with year levels, it also considered factors such as ethnicity, cultural orientation, and their communities' prior understanding of these values.

The current study inquired into the professional values innate to nursing students as well as the development of these values in them. Specifically, the study determined their social determinants such as gender, year level, academic status, and fluency in English; the perceived professional values of the participants based on their responses to the Nurse Professional Values Scale-Revised (NPVS-R); and the relationship between the social determinants of the participants and their perceived professional values.

Materials and Methods

Research design

This study used a descriptive cross-sectional design with correlational analysis as the primary method of inquiry and derivation of results.

Sampling

A total enumeration or census sampling was employed. Of the 350 students from the male and female campuses combined, those who had enrolled in the Bachelor of Science Nursing Program during the academic years 2016–2017 and 2017–2018 and were enrolled in courses with integrated topics on nursing ethics and professional values, were included as participants. Examples of these courses are Fundamentals of Nursing, Mental Health Nursing, and Nursing Leadership and Management. A total of 250 students were enrolled in those courses. Of the 250 students who passed the eligibility criteria and participated in the survey, 210 returned the questionnaires. After a final check, 201 of the 210 returned questionnaires were found to be properly completed and were analysed in this study.

Setting

This study was conducted at the College of Nursing, University of Ha'il, located in North-western KSA, composed of two major campuses (female and male).

Participants

All the students in the College of Nursing were included in the study sample, provided they met the following eligibility criteria: (1) had enrolled in courses having topics on nursing ethics and professional values during the academic years 2017–2018 and 2018–2019, (2) had participated in the nursing program from the second to fourth year levels, and (3) were classified as either regular or bridging students.

Instrument

This study used the Nurses Professional Values Scale – Revised referred to as the NPVS-R, created by Dr. Darlene Weis and Mary Jane Schank, and published in 2009, after

permission for its use was provided by the authors.⁹ The scale has five factors with alpha coefficients ranging from .70 to .85 and a total scale alpha coefficient of .92. Its construct validity was supported with an overall factor loading range of .46 to .79 coefficient alpha across the five factors labelled Caring, Activism, Trust, Professionalism, and Justice.⁹ The NPVS-R is a psychometrically sound instrument for measuring professional nurses' values and enhancing professional socialization.

Part 1 comprised seeking information about the participants' demographic profiles, which included their gender, year level, fluency in the English language, academic status (bridging, regular), and additional degrees (if any), other than the degree currently being pursued.

Part 2 – the NPVS-R questionnaire – consisted of 26-items on a Likert scale, with responses ranging from 1 (not important) to 5 (most important) across five factors: Caring, Activism, Trust, Professionalism, and Justice. The break-up of the 26 items was as follows: 9 items on Caring (a value that shows concern for patients), 5 items on Activism (the nursing profession's impact on patient care), 5 items on Trust (nurses' duty toward veracity or being truthful to patients), 4 items on professionalism (the conduct of nurses as provided in the Code of Ethics), and 3 items on justice (the nurses' duty of protecting and sustaining the equality and diversity of patients).⁹

Data collection

The data for this study were collected from January 2018 to February 2019. The participants were given ample time to fill-up and complete the survey. Answering the questionnaire was voluntary, thus implying their full consent to participate in the study. During the first 10 min of distributing the questionnaire, the researcher answered questions and clarified the instructions, enabling participants to understand their role in the study. To ensure the anonymity and secrecy of their responses, the participants folded their questionnaires and placed them in an envelope after completion.

Statistical analysis

This study utilized the IBM Statistical Package for Social Sciences (SPSS) Version 22. While frequencies and percentages were used to illustrate the participants' demographic profiles, the Kolmogorov–Smirnov test was used to determine the normality of the gathered data and the Spearman's rho test to derive the degree of correlation.

Results

Demographic profiles of the participants

A total of 201 completed questionnaires were received from 106 (52.7%) males and 95 (47.3%) females, comprising 10.4%, 75.1%, and 14.4% participants enrolled in the second, third, and fourth year levels, respectively. It is noteworthy that with regard to fluency in the English language, 49.8%, 39.8%, and 10.4% of the participants had minimal, moderate, and high knowledge of English, respectively. In relation to their academic status profile, only 15.9%

comprised bridging students, while 84.1% were regular students (Table 1).

Students' ratings in each of the items in the NPVS-R questionnaire

The total mean value was 3.10 based on the participants' responses to the questionnaire. The three top-ranking statements in terms of highest mean values were: item 3 – 'Protect health and safety of the public' – highest at 3.31; items 25 and 26 – 'Maintain confidentiality of patients' and 'Participate in activities of professional nursing associations,' respectively – second highest at 3.30; and item 21 – 'Safeguard patient's right to privacy' – third highest at 3.27. The statements with the three lowest ratings in the questionnaire were: item 1 – 'Engage in on-going self-evaluation' – lowest at 2.75; item 17 – 'Refuse to participate in care if in ethical opposition to own professional values' – second lowest at 2.90; and item 20 – 'Provide care without prejudice to patients of varying lifestyles' – third lowest (Table 2). The total mean score for each factor of the five factors of the NPVS-R is presented in Table 3. The factors justice and caring had the highest mean scores at 3.17 and 3.14, respectively; activism had a mean score of 3.10; while professionalism and trust had the lowest mean scores at 3.06 and 3.02, respectively.

Correlation between the participants' demographic profiles and each of the 26-item statements in the NPVS-R

To determine the degree of correlation between the participants' demographic profiles and their responses to each statement in the NPVS-R questionnaire, the Spearman's rho test of correlation was used. Table 2 indicates that 13 out of the 26 items show some degree of correlation to gender, year level, and fluency in the English language and academic status. Gender is correlated to items 3, 5, 12 and 21. For year level, it is correlated to items 4, 7, 12, 13, 21, 22, 23, 24, 25 and 26. While fluency in English is correlated to items 3, 4 and 12 and lastly, academic status is correlated to item 1. The degree of correlation was set at 0.05 level in a 2-tailed test (Table 2).

Table 1: Demographic profile of the participants (n = 201).

		Frequency Distribution	Percentage Distribution
Gender	Male	106	52.7
	Female	95	47.3
	TOTAL	201	100
Year level	Second	21	10.4
	Third	151	75.1
	Fourth	29	14.4
	TOTAL	201	100
Academic Status	Regular	169	84.1
	Bridging	32	15.9
	TOTAL	201	100
Fluency in English	High	21	10.4
	Moderate	80	39.4
	Minimal	100	49.8
	TOTAL	201	100

Table 2: Mean ratings of the participants to each item of the questionnaire and results of correlation to their demographic profile ($n = 201$).

Items	Mean	SD	Results of Correlation (Statistical Significance 2-tailed)
1. Engage in on-going self-evaluation.	2.75	1.38	Correlated to academic status
2. Request consultation/collaboration when unable to meet patient needs	2.98	1.30	No correlation
3. Protect health and safety of the public	3.31	1.28	Correlated to gender, fluency in English
4. Participate in public policy decisions affecting distribution of resources	3.00	1.24	Correlated to year level, fluency in English
5. Participate in peer review	3.07	1.23	Correlated to gender
6. Establish standards as a guide for practice.	3.11	1.24	No correlation
7. Promote and maintain standards where planned learning activities for students take place.	3.02	1.20	Correlated to year level
8. Initiate actions to improve environments of practice.	3.06	1.18	No correlation
9. Seek additional education to update knowledge and skills	3.10	1.17	No correlation
10. Advance the profession through active involvement in health-related activities.	3.05	1.18	No correlation
11. Recognize role of professional nursing associations in shaping health care policy	3.03	1.17	No correlation
12. Promote equitable access to nursing and health care.	3.11	1.19	Correlated to gender, year level, fluency in English
13. Assume responsibility for meeting health needs of the culturally diverse population	3.14	1.23	No correlation
14. Accept responsibility and accountability for own practice.	3.09	1.17	No correlation
15. Maintain competency in area of practice.	3.21	1.19	No correlation
16. Protect moral and legal rights of patients.	3.09	1.25	No correlation
17. Refuse to participate in care if in ethical opposition to own professional values.	2.90	1.19	No correlation
18. Act as a patient advocate.	3.19	1.18	No correlation
19. Participate in nursing research and/or implement research findings appropriate to practice	3.13	1.20	No correlation
20. Provide care without prejudice to patients of varying lifestyles.	2.96	1.24	No correlation
21. Safeguard patient's right to privacy	3.27	1.20	Correlated to gender, year level
22. Confront practitioners with questionable or inappropriate practice	3.25	1.21	Correlated to year level
23. Protect rights of participants in research	3.21	1.20	Correlated to year level
24. Practice guided by principles of fidelity and respect for person	3.12	1.24	Correlated to year level
25. Maintain confidentiality of patient.	3.30	1.22	Correlated to year level
26. Participate in activities of professional nursing associations.	3.30	1.23	Correlated to year level
Total	3.10		

*Likert scale from 1 to 5 was utilized.

Table 3: NPVS-R Mean score of each subscale ($n = 201$).

NPVS-R Subscales	Mean Score
Factor 1. Caring (9 items)	3.14
Factor 2. Activism (5 items)	3.10
Factor 3. Trust (5 items)	3.02
Factor 4. Professionalism (4 items)	3.06
Factor 5. Justice (3 items)	3.17

Discussion

Among the five domains of the NPVS-R scale, justice and caring emerged as the most important innate values of nursing students, as reflected in their responses, which was the ideal expected outcome. Since nursing is a caring profession, nursing students should realize the importance of

this value for their future professional work. Social determinants such as gender, year level, and academic status clearly specify an understanding of these values by nursing students. For example, at the year levels, the students understand the importance of these values as they progress in their nursing degree programs.

Since professional values are a relevant indicator of the quality of care that nurses provide to their patients, developing these values among students is crucial.¹⁰ Professional values substantiate the actions, behaviours, and decisions of nurses. Individuals' innate values, supported by their unique socio-cultural and ethnic backgrounds, play a key role in the development of values that are significant for nurses.² In KSA, male nurses entering the nursing profession is no longer an unusual occurrence, as seen in the enrolment of more male students. The nursing profession requires

strong moral courage among nurses, and makes no distinctions between genders. Educators and preceptors, as role models, influence the actions and decisions of students. Both male and female nurses pursue the same goal of becoming competent and able nurses who can discharge their duties and responsibilities with confidence and competence.¹¹ It was observed that the number of participants from the third year was significantly greater than the other year levels. The convenience sampling used may have affected the results relating to more third year level students.

Posluszny and Hawley (2017) posited that students in higher year levels had a higher level of professional values compared with those in lower years. While second-year students considered factors like trust, caring, and justice as more significant than activism, senior nursing students viewed trust as more significant than activism and professionalism. There was no significant difference in the scores between the senior nursing students and second-year students, except that activism was given more emphasis by the seniors compared with the other factors in the NPVS-R.¹²

Entering nursing school – a challenging decision for nursing students – is coupled with the pressure of achieving professional competencies during the course of study.¹³ In KSA, employed nurses are given the chance to complete two more years of study toward a baccalaureate degree. This creates a mix of students – regular, unemployed students who started from the first year college, and bridging students who were employed but asked to finish the nursing baccalaureate degree – in various nursing schools and universities.¹⁴ In recent times, there has been less emphasis among nurses on understanding what constitutes their motivation to provide compassionate and humane care to their patients. Culture and ethnic origins can have an impact along with the nurses' ethical provision of care.¹⁵ Among the various functions of a university, one of the pillars, especially in nursing education, is the provision of quality education, which along with the teaching and learning process, includes instruction on ethical values. Values are universal, but individuals' unique cultural and ethnic backgrounds influence their value system.¹⁶

Having even a minimal number of participants who can fluently speak and understand the English language could influence the learning process for various reasons. The textbooks used by the students for major nursing subjects are in English, which could impact their learning of the concepts. The nursing curriculum integrates topics on values, ethics, and morality in all nursing subjects or courses.

Students also acquire values from their instructors. Once imbibed, these professional values eventually become part of their own values.¹⁷ The results showing the mean score in the NPVS-R when classified according to the five factors in [Table 3](#) revealed that Justice had the highest mean score. Justice is valued as an innate part of human existence, and determines the legality of nurses' actions, thought processes, and emotions. It is one of the deciding factors in choosing right from wrong and determines personal and professional efforts.¹⁸ In a study by Kaya et al. (2017), they appraised whether there were differences between the professional and personal values of nursing students from the time they entered the nursing school until graduation.

The study concluded that the years spent by the students in nursing school helped in developing the necessary professional values that would be required on entering the nursing profession.¹⁹ It is of paramount significance that before entering the real world of the nursing profession, nurses acquire these professional values in the academe. Proper professional values will empower nurses to discharge their duties with confidence, accountability, and competence. Nursing education provides students with critical experience for acquiring the necessary values and preparing for the real world.²⁰

The two items on the factor of Caring mention the right to privacy and confidentiality. Items 21 and 22 focus on safeguarding the patients' right to privacy and maintaining their confidentiality. Some critical concerns about the provision of care to patients are those that involve safety, privacy, and abuse. The absence of proper supervision and bullying are some of the other factors. Education is key to making them understand the problems, become more resilient, and respond relevantly to these incidents.²¹ When nursing students witness ethical as well as other issues in the clinical area during their practicum, it usually involves staff nurses. The behaviours of nurses in these hospitals eventually reflect in the students' actions toward patients.²² The formation of ethical values among students are the shared responsibilities of nurse educators both in nursing school and in the clinical setting. Nurse educators are required to provide opportunities for nursing students to unravel their intrinsic professional values in various contexts, whether in the classroom set-up or patient experience. This process of professional formation should be continuous, and every opportunity to learn should be provided.²³

One item in factor 2 of Activism also received a high response score. This implies that neoliberal dynamics in education or practice have inspired the curve of practice toward assertiveness, dynamism, and activism. This leads to a more activist and rational approach to nursing education and training. The item in this factor states that participation in professional nursing associations facilitates a more in-depth appreciation and immersion toward the nursing profession by the students.²⁴ A more refined, specific, and relevant communication system between healthcare providers and healthcare delivery is possible through inter-professional collaboration or IPC. A study by Avrech Bar et al. (2018) implied that healthcare students including those studying for the BS nursing degree understand the necessity of collaborating with other professionals in the healthcare field.²⁵ The factor 'Trust' in the scale is concerned with the provision of a safe and competent practice with sound relevant accountability and responsibility on the part of the nurses, who understand that this is an important aspect of being professional nurses. Ensuring that students are familiar and competent in ensuring competent care begins with the nurse educators, who, with their skills in providing safe and competent patient care, should construct a program for students focusing on this aspect.²⁶ 'Justice' was another factor in the scale that the participants valued greatly as is evident in its mean score – the highest among the five subscales ([Table 3](#)). A high response in item 3, which relates to the protection of health and safety of the public, shows that the participants understand the need for

providing to the community and the people living in it safe nursing care. The duty of creating awareness among students to become sensitive to the healthcare needs of the community rests on nurse educators in the academe or community setting. In addition, they are also tasked to provide opportunities for students to engage in various community activities and develop the requisite skills and thinking to enhance civic and social engagements by applying their nursing techniques during these occasions.²⁷ Professionalism was the only factor that did not feature among the top 5 highest in the itemized number mean of all the 26 items. One reason for this score is that the students have limited, if no exposure, to training and experiences related to being actual professional nurses discharging duties in hospitals. Although students complete a practicum or clinical exposure as part of their curriculum, which allows them to deal with real patients and hospital procedures, the experience gained by registered nurses working in hospitals is very different in many aspects from the experiences of student nurses.²⁸

Limitations

This study focused on a single college of nursing. The findings from this study only represent the perceptions of the surveyed participants. These findings are not generalizable to other nursing institutions across KSA or in other countries.

Conclusion

The participants in this study recognized the protection and safety of public health as the most significant professional value for nurses. Additionally, maintaining patient confidentiality and active involvement in nursing professional organizations were highly advocated professional values. In terms of the five factors that constitute professional values, justice and caring were regarded as the primary essential components of the professional value system of nurses when providing care to their patients.

Recommendations

The students' appraisal of the significance of protecting public health, maintaining the confidentiality of patient data and strong involvement with professional nursing organizations is testament to the awakening of their future obligations as professional nurses. Nursing schools and educators should strengthen and emphasize the importance of these values in the learning process of the students. Further, by integrating methods to create meaningful realizations and applications of these highly perceived professional values in the nursing curriculum, the curriculum will become more relevant to the vision of producing holistic nursing students imbued with appropriate professional values.

Source of funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Conflict of interest

The authors have no conflict of interest to declare.

Ethical approval

The Institutional Review Board (IRB) of University of Ha'il (IRB# H-2016-037) approved this study. A complete list of benefits, perceived risks, and the significance of the study in full detail formed part of the documents submitted to the committee.

Authors' contributions

FA led the conceptualization of the topic focus, searched relevant literature and studies, and provided research materials. RANG developed the study design, sampling plan, collected and organized the data for analysis. He participated in data gathering and implementation of the study protocol. DJEB provided support studies and literature in the derived results, wrote initial and final draft of article, organized the discussion according to the results assessment. All authors participated in the overall implementation of the research protocol. Further, all authors have critically reviewed and approved the final draft and are responsible for the content and similarity index of the manuscript.

Acknowledgments

The authors wish to thank the students, faculty members and administrators of the College of Nursing of the University of Ha'il.

References

1. Alkaya SA, Yaman S, Simones J. Professional values and career choice of nursing students. *Nurs Ethics* 2018; 25(2): 243–252.
2. Rose T, Nies MA, Reid J. The internalization of professional nursing values in baccalaureate nursing students. *J Prof Nurs* 2018; 34(1): 25–30.
3. Abrahamsen B. Nurses' choice of clinical field in early career. *J Adv Nurs* 2015; 71(2): 304–314.
4. Agelii E, Kennergren B, Severinsson E, Berthold H. Ethical dimensions of supervision: the supervisors' experiences. *Nurs Ethics* 2000; 7(4): 350–359.
5. Heaslip V, Scammell J, Mills A, Spriggs A, Addis A, Bond M, et al. Service user engagement in healthcare education as a mechanism for value based recruitment: an evaluation study. *Nurse Educ Today* 2018; 60: 107–113.
6. Elliott AM. Professional values competency evaluation for students enrolled in a concept-based curriculum. *J Nurs Educ* 2017; 56(1): 12–21.
7. Terry L, Carr G, Halpin Y. Understanding and meeting your legal responsibilities as a nurse. *Nurs Stand* 2017; 32(12): 52–63.
8. Allari RS, Ismaile S, Househ M. Professional values among female nursing students in Saudi Arabia. *Stud Health Technol Inf* 2017; 238: 231–234.
9. Weis D, Schank MJ. Development and psychometric evaluation of the nurses professional values scale–revised. *J Nurs Meas* 2009; 17(3): 221–231.

10. Ulusoy H, Guler G, Yildirim G, Demir E. Reliability and validity of the Salford- Scott nursing values questionnaire in Turkish. *Nurs Ethics* 2018; 25(1): 80–91.
11. Riklikiene O, Karosas L, Kaseliene S. General and professional values of student nurses and nurse educators. *J Adv Nurs* 2018; 74(3): 666–676.
12. Posluszny L, Hawley DA. Comparing professional values of sophomore and senior baccalaureate nursing students. *J Nurs Educ* 2017; 56(9): 546–550.
13. Porteous DJ, Machin A. The lived experience of first year undergraduate student nurses: a hermeneutic phenomenological study. *Nurse Educ Today* 2018; 60: 56–61.
14. Almalki M, FitzGerald G, Clark M. The nursing profession in Saudi Arabia: an overview. *Int Nurs Rev* 2011; 58(3): 304–311.
15. Zamanzadeh V, Valizadeh L, Rahmani A, van der Cingel M, Ghafourifard M. Factors facilitating nurses to deliver compassionate care: a qualitative study. *Scand J Caring Sci* 2018; 32(1): 92–97.
16. Boozaripour M, Abbaszadeh A, Shahriari M, Borhani F. Ethical values in nurse education perceived by students and educators. *Nurs Ethics* 2018; 25(2): 253–263.
17. Ranjbar H, Joolae S, Vedadhir A, Abbaszadeh A, Bernstein C. Becoming a nurse as a moral journey: a constructivist grounded theory. *Nurs Ethics* 2017; 24(5): 583–597.
18. Schmidt BJ, McArthur EC. Professional nursing values: a concept analysis. *Nurs Forum* 2018; 53(1): 69–75.
19. Kaya H, Isik B, Senyuva E, Kaya N. Personal and professional values held by baccalaureate nursing students. *Nurs Ethics* 2017; 24(6): 716–731.
20. Kantek F, Kaya A, Gezer N. The effects of nursing education on professional values: a longitudinal study. *Nurse Educ Today* 2017; 58: 43–46.
21. Sinclair J, Papps E, Marshall B. Nursing students' experiences of ethical issues in clinical practice: a New Zealand study. *Nurse Educ Pract* 2016; 17: 1–7.
22. Erdil F, Korkmaz F. Ethical problems observed by student nurses. *Nurs Ethics* 2009; 16(5): 589–598.
23. Haugland BO, Lassen RM, Giske T. Professional formation through personal involvement and value integration. *Nurse Educ Pract* 2018; 29: 64–69.
24. Buck-McFadyen E, MacDonnell J. Contested practice: political activism in nursing and implications for nursing education. *Int J Nurs Educ Scholarsh* 2017; 14(1).
25. Avrech Bar M, Katz Leurer M, Warshawski S, Itzhaki M. The role of personal resilience and personality traits of healthcare students on their attitudes towards interprofessional collaboration. *Nurse Educ Today* 2018; 61: 36–42.
26. Jang H, Lee NJ. Patient safety competency and educational needs of nursing educators in South Korea. *PLoS One* 2017; 12(9):e0183536.
27. Brown CL. Linking public health nursing competencies and service-learning in a global setting. *Publ Health Nurs* 2017; 34(5): 485–492.
28. Nagao N, Tamura Y, Bontje P, Takimoto Y, Hirai M, Ishikawa Y. Different views on treatment decisions by first-year interprofessional healthcare students. *J Interprof Care* 2017; 31(3): 407–409.

How to cite this article: Alshammari FF, Grande RAN, Berdida DJE. The correlates of social determinants to ethico-moral values on professional development of Saudi nursing students. *J Taibah Univ Med Sc* 2021;16(2):240–246.