Research Article

NURSING PROFESSIONAL VALUES SCALE: PSYCHOMETRIC PROPERTIES OF ARABIC VERSION

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ARTICLE INFO	ABSTRACT
	The development of the code of ethics including the professional values is to guide health care practices especially nursing practice. So in nursing education, a better understanding of undergraduate nursing students' and registered nurses awareness of professional values would be important to inform academic and hospital educators about the areas for improvement. Nursing professional values perceived by Saudi undergraduate nursing students is not clearly understood due to inadequate studies. Therefore, this study is designed to assess the reliability and validity of the Arabic version of the Nursing Professional Values Scale-Revised. The results revealed the scale to be valid and highly reliable to be used in Saudi Arabia, internal consistency reliability of five factors were significantly high ranged from 0.71-0.91. In conclusion this study will remove the necessity to develop a new scale to assess professional values among nursing students and registered nurses, accordingly it will assist future research efforts in assessing professional nursing values, and the effectiveness of different teaching strategies used in nursing colleges and hospitals to promote value development.

INTRODUCTION

Professional ethics are the directives derived from the values and principles that allied to the health practitioners during providing health care services. Healthcare practitioner is a qualified person who directly provides or helps in providing healthcare to patients, whether in the form of diagnostic, curative, or rehabilitative services that affect health condition including physicians, dentists, pharmacists, nurses,…etc. (Saudi Commission for health specialties, 2014). According to Saudi Commission for Health Specialties (SCFHS) health care practitioners are obligated to the following professional values: 1) Devotion and Feeling the Worship of Allah; 2)Demonstration of the Best of Manners including (truthfulness, honesty&integrity, humbleness & respect for others, Patience and Forbearance, passion & love, moderation & fairness); 3) self-accountability; 4)Avoidance of Trivialities and Pettiness (SCFHS, 2014). The SCFHS (2014) also clarified that medical education in a universities, colleges of higher education relies largely on learning on patients or learning from them. Therefore, the healthcare practitioner whether an educator or a learner should comply with the code of professional values mentioned earlier.

Professional values "are standards for action that are accepted by the practitioners and professional group and provide a framework for evaluating beliefs and attitudes that influence behavior" (Weis &Schank, 1997, p. 366). Since professional

values are established in the development of a professional socialization that begins in nursing colleges, it is expected that the nursing education finds itself concerned with the clarification of students professional values. Nursing students' professional values are learned by their own value system which related to their cultural background, social groups, religion, and lived experiences (Cowin& Johnson, 2011).

Culture is considered the most leading cause affecting the system of values (Rokeach's 1968, 1972, 1973). Culture contains sets of values, beliefs, and habits learned during socialization, which shapes the worlds of ideas, perception, decisions, and how individuals act (Spector, 2000; Wros *et al.*, 2004). Different professions have different systems of professional values. Research conducted among 365 nurses and social workers revealed that personal freedom and social justice were central to the values of the social workers, whereas values such as human dignity, caring, humanity, and respect of personal privacy were identified as central to the values of the nurses (Itzhaky *et al.*, 2004).

Although most students enter nursing programs with a strong aspiration to care and to make a difference in peoples' lives, they are often let the ill-fitting attitudes and biases to go and give a chance to 'taking up' of new conceptual understandings and values in the journey from unprofessional person to person centered, compassionate and competent registered nurse (McAllister *et al.,* 2015). As nursing students are future practicing nurses, it is important to recognize their values in

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managing care and competent practice as well as their perceptions about protection the image of the profession upon graduation.

The challenge in higher education for universities and colleges providing nursing programs in Saudi Arabia and worldwide, is concentrated on choosing the right candidates, with the right identity and values appropriate to professional nursing. So development and clarification of professional roles and filtering personal views played a big part in students' professionalization in to nursing (Howkins & Ewens, 1999). In Leners *et al.'s* (2006) study, professional values measured with the Nursing Professional Values Scale (NPVS)by (Weis & Schank, 2000) from a group of baccalaureate nursing students, the researchers stressed on the importance of discovering personal and professional experiences for building creative teaching opportunities into the nursing curricula. According to Weis & Schank (2002) the development of professional values differs according to education and experience and begins in formal educational programs. Also they clarify that value formation has cognitive and affective components, including both intellect and feeling, and student values are changed during the education process. Although the importance of nursing curricula containing core professional nursing values is well established, a few nursing schools have already incorporated them into their curricula formally (Shaw&Degazon, 2008). Information regarding professional values may be useful for different collectives: nursing practitioners, educators and managers, and policy makers (Martin *et al*., 2003; Horton *et al.,* 2007; Payne, 1988; Rassin, 2008; Schank& Weis, 2000; 2002).

The instruments developed to measure values that have been found to reflect the personal view of the individual with respect to values and their importance in different environments, in clinical practice, and in teaching are few. The values as recognized by student nurses are: respect and concern for the interests of the patient (Kelly, 1991); the ability to listen, assertiveness, compassion, empathy, kindness, confidence, self-responsibility, tolerance, acceptance (Pérez *et al*., 2002); safety and competence in caring (Lui,2007); altruism, human dignity, privacy, reliability, integrity and autonomy (Fagermoen, 1997); confidence and human dignity (Altun, 2003);equality, liberty and human dignity (Eddy *et al*., 2005; Tadd *et al*., 2006). With respect to the values of work and clinical practice, they recognize intellectuality and stimulation (Fagermoen, 1997); satisfaction with the job done, self-realization and altruism (Bellarts, 1992).

The instrument "Nursing Professional Values Scale –Revised (NPVS-R)" developed by Weis and Schank (2004) was designed to investigate the perception of nursing students or nursing professionals regarding the importance of nursing professional values. These are defined as relevant to the profession and based on the Code of Ethics for nurses (American Nurses Association, 2001) and are practically similar to the professional values included in the Saudi Code of Ethics (SCFHS, 2104). This scale is also being used in other international research, studying the reliability and cultural validity of the instrument (Martin *et al*., 2003; Hoyuelos *et al.,* 2010). So investigating the psychometric properties of the Weis and Schank revised version of the nursing professional value scale (NPVS-R) will help to increase knowledge about the values held and the degrees of importance that nursing professionals in the Saudi Arabia give to values. This methodological study tool reliability and validity testing will remove the necessity to develop a new scale, saving time and money. In addition this study will assist future research efforts in assessing professional nursing values among nurses or students, and the effectiveness of different teaching strategies used in nursing colleges to promote value development.

MATERIAL AND METHODS

Design

This study included three stages: 1) translate process of the original English version of NPVS-R into the Arabic version; 2) pilot study to evaluate the participants' understanding of the translated NPVS-R; and 3) cross-sectional survey to test the psychometric properties of the translated NPVS-R.

Ethical Consideration

Approval for the study was attained from the college of nursing ethical committee. Permission to use the NPVS-R was obtained from the tool designers. Informed consent was gathered for the survey and confidentiality of personal data and with drawal from the study as preferred was certain to the students. In particular, they were assured that their participation would not affect their academic grades.

Sample and Setting

For the second stage, pilot study of 10 students was recruited from the college of nursing at one of the biggest female governmental universities in Saudi Arabia /Riyadh. The main purpose for students' recruitment for pilot was to identify reading and understanding difficulties, and the length of time required for completing the Arabic version of the scale. The participants inclusion criteria were: being Saudi nursing student, third year and above. While for the third stage of the study a cross-sectional design was used to test the psychometric properties of NPVS-R Arabic version. A convenience sample of 50 nursing students who met the inclusion criteria were recruited from the college of nursing at the same governmental university.

Instrument

The Nurses Professional Values Scale (NPVS) was developed in the USA by Weis and Schank to measure professional nursing values based on the 1985 American Nurses Association Code of Ethics for Nurses (2000). The Nurses Professional Values Scale-Revised (NPVS-R) is adjusted version of the original scale and was needed because of the changes of the American Nurses Association (ANA) Code of Ethics for Nurses which was validated by Weis and Schank (2009). The NPVS-R is widely used to measure professional values and has been translated into other languages. Yet, the factors in the factor analysis may differ according to language, and it is not measured whether or not the Arabic version is valid. The NPVS-R includes 26 items based on the nine provisions of the Code of Ethics for Nurses (ANA, 2001). Each item of the NPVS-R contains a brief expressive statement that reflects the interpretive statements of the Code of Ethics of the ANA. Each statement is scored on a Likert-scale of 1–5; 5 being very important and 1 not important. Possible scores range from 26 to 130 points, with higher scores indicating higher levels of

importance given to those values described in the dimension. For each item, the possible answers are: A: not important (1), B: slightly important (2), C: important (3), D: very important (4), E: most important (5). The NPVS-R was designed with five factors supported by psychometric evaluation done by Weis and Schank (2009). Those factors were caring, activism, trust, professionalism, and justice.

Translation Process

NPVS-R was first translated from English to Arabic independently by two English professional translators who were bilingual in English and Arabic languages. Later, the two translated versions and its English version were given to one academic person in the Department of nursing to help in identifying the best translation. Once the best translation was selected, another bilingual person re-translated the Arabic version back to English in order to ensure the equivalence of NPVS-R in two languages. Only a few discrepant items were found between them. After that a panel of experts was formed of three faculty members in nursing from the nursing school specialized in nursing administration, education, and mental health. This process was achieved to assure face and content validity of NPVS-R, in addition to an evaluation of the appropriateness of the items of the instrument to the Saudi culture. Few changes were suggested by the panel of experts concerning rephrasing of some words, wording of sentences in some items that were not culturally acceptable. Later, a Arabic linguist evaluated the final form and her suggestions were incorporated into the translation. After all the modifications were made, the final version of translation was created which was used in this study.

Data collection

Data was collected between June to July, 2016. Before distribution of the tool to the participants in second and third stage of this study, the primary researcher explained the purpose of the study, and stressed that there was no obligation to participate, and that participation had no influence on grades. Also, the researcher explained that students who wanted to participate in the study should read and sign the informed consent which was located at the cover of the scale. While the 10 participants in the pilot have been asked to express their opinion regarding the clarity, level of difficulty to understand statements, time needed to finish the tool, the other 50 participants in the third stage have been asked to answer the tool the researcher went outside the room after placing the tool on a desk. Students who wanted to participate in the study voluntarily picked up the scale, signed the informed consent, and filled it out. The completed scales were retrieved by the researcher when all students left the class.

Data analysis

The Statistical Package for the Social Sciences (SPSS) 22 was used for the data analysis. Content validity or face validity to assess the extent to which a measure represents all aspects of a given construct, was determined through experts reviews as mentioned earlier. Internal consistency reliability of the total instrument was examined using Cronbach's alpha procedure, test-retest reliability, and split-half coefficient, another index of internal consistency, is calculated by splitting the test in half (odd and even numbered items) and correlating the two parts

with adjustment by Spearman Brown formula for the test length. Cronbach's alpha of every factor was also calculated. Concurrent validity of the NPVS-R was demonstrated by estimating Pearson correlation coefficients between the five factors, each item, and total score of NPVS-R.

RESULTS

The results of the pilot study showed that students found the items of the NPVS-R Arabic version easy to understand, they verbalized no need to change in word phrasing, and spent a mean of 15 minutes for completion of the instrument. None of the participants asked the researcher for queries or requests for clarification of any statement in the scale.

In regards to the results of third stage, the participants demographic characteristics: All 50 participant were female, Saudi students. 75% of them were from third year and 25% were from 4th year.

The NPVS-R total score of Chronbach's alpha, the test-retest reliability, and the split-half reliability of 26-item scale was respectively 0.91, 0.80 and 0.79 (Equal-Length Spearman-Brown, n =50). A reflected consequently a high degree of internal consistency among items. The results of the cross sectional survey in regards to internal consistency was shown in table (1), and the results of all five factors also were acceptable ranged from (0.71 to 0.91).

Table 1 Reliability index of NPVS-R and its factors.
N=50

Scale	No. of Items	Cronbach's alpha coefficient	Confidence interval (CI)	P.value
Total NPVS scale	**26**	**0.91**	**0.84-0.96**	**<0.001**
Factor 1: Caring	9	0.85	0.72-0.85	<0.001
Factor 2: Activism	5	0.87	0.76-0.94	<0.001
Factor 3: Trust	5	0.91	0.84-0.96	<0.001
Factor 4: Professionalism	4	0.71	0.40-0.80	<0.001
Factor 5: Justice	3	0.72	0.45-0.88	<0.001

In regards to concurrent validity results the scores of Pearson correlation were moderately to highly significant. The scores of each factor and its items as described by Weis and Schank (2009) in the NPVS-R were shown in table (2). The item in the scale that had the highest correlation score of (0.94) was item # 14 "Accept responsibility and accountability for own practice", while the lowest score was for item # 11 "Recognize role of professional nursing associations in shaping health care policy" with a moderately significant score of (0.57).

DISCUSSION

The present study shows the reliability and validity of the Arabic version of the NPVS-R when applied to Saudi Nursing students. NPVS-R which was derived from the Code of Ethics for Nurses with Interpretive Statements of the 2001 with the five factors Caring, Activism, Trust, Professionalism, and Justice, and all the items in the scale were machining practically the professional values of Saudi Commission for health specialties which are : 1) Devotion and Feeling the Worship of Allah; 2) Demonstration of the Best of Manners including (truthfulness, honesty & integrity, humbleness & respect for others, Patience and Forbearance, passion & love, moderation & fairness); 3) self-accountability; 4)Avoidance of

Table 2 Pearson Correlation Coefficient of NPVS- R factors and items.   N=50

Scale	No. of Items	Correlation
Factor 1: Caring		.71**
16- Protect moral and legal rights of patients		.67**
17- Refuse to participate in care if in ethical opposition to own professional values.		.61**
18- Act as a patient advocate.		.59**
20- Provide care without prejudice to patients of varying Lifestyle.	9	.69**
21- Safeguard patients right to privacy.		.77**
22- Confront practitioners with questionable or inappropriate practice.		.62**
23- Protect rights of participants in research		.78**
24- Practice guided by principles of fidelity and respect for person.		.59**
25- Maintain confidentiality of patient.		.66**
Factor 2: Activism		.87**
4- Participate in public policy decisions affecting distribution of resources.		.82**
10- Advance the profession through active involvement in health-related activities.	5	.79**
11- Recognize role of professional nursing associations in shaping health care policy.		.57**
19- Participate in nursing research and/or implement research findings appropriate to practice.		.92**
26- Participate in activities of professional nursing associations.		.93**
Factor 3: Trust		.92**
1- Engage in ongoing self-evaluation.		.88**
2- Request consultation/collaboration when unable to meet patient needs.	5	.76**
9- Seek additional education to update knowledge and skills.		.69**
14- Accept responsibility and accountability for own practice.		.94**
15- Maintain competency in area of practice.		.91**
Factor 4: Professionalism		.89**
5- Participate in peer review.		.79**
6- Establish standards as a guide for practice	4	.91**
7- Promote and maintain standards where planned learning activities for students take place		.89**
8- Initiate actions to improve environments of practice.		.92**
Factor 5: Justice		.91**
3- Protect health and safety of the public.		.86**
12- Promote equitable access to nursing and health care.	3	.87**
13- Assume responsibility for meeting health needs of the culturally diverse population.		.0.82**

** Correlation is significant at α=0.001 (2-tailed)

Trivialities and Pettiness (SCFHS, 2014). So the results from this psychometric properties evaluation can help to adopt the NPVS-R as assessment tool in Saudi Arabia, and save efforts, time, and money to develop new tool.

The content or face validity results by the panel of experts assure the cultural acceptability of NPVS-R, and there was no need to make any changes over the items or deleting any of them, in addition the concurrent validity results support the inclusion of all scale item. Reliability testing using Chronbach's alpha, test retest reliability and split half, in addition to correlation coefficient of all items in the scale were highly significant and this results guaranteed that there is no need to remove any of the items presented in the original English version of the NPVS. These results were similar to many studies done to test the reliability of NPVS-R (Weis &Schank, 2009; Moon, S., *et al*., 2014).

In addition, the translation retranslation method is a process where the majority of the steps are carried out, where many parties involved participate (multidisciplinary: linguistics, academic team) and where a final result is reached by agreement. The study design and the three steps is a structured process, that end with a creation of an instrument that is the same as the original but adapted to Arabic language, and culture.

CONCLUSION

The psychometric properties of Arabic version of the NPVS-R were empirically validated, and the findings of the present study showed the possibility of the national and regional application of the NPVS-R.

As Weis and Schank (2009) recommended, the Arabic version of the NPVS-R could be used and recommended to be used to assess nursing professional values as well as nursing students' professional values. This Arabic version of the scale could serve many research purposes showing how score changes among students by advancing in the years during their learning journey or to evaluate the effects of programs for the development of nursing professional values. And to assure the reliability of the scale the researcher recommend to use the Arabic version of NPVS-R in larger sample size, and should be validated with practicing nurses because the Arabic version in this study was validated with nursing students only. Furthermore, there is a stressing need to develop a qualitative study to discover additional items added to the scale. Also another validation method such as factor analysis, acriterion-related validity test method, could be used to support the validity of the Arabic version of the NPVS-R.

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