# Professional Values of Nigerian Nursing Students

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## ABSTRACT

***Background:*** *Nursing professional values (NPV) acquired during student's professional education are fundamental to enacting appropriate care-giving behaviors, and efficient practice upon graduation. Evidence suggests that differences exist in the perception and enactment of NPV among practicing nurses. NPV has been understudied in Nigeria.* ***Aim of the study:*** *This study assessed the professional values of Nigerian nursing students.* ***Materials and methods:*** *The cross-sectional descriptive study purposely enlisted 233 final year nursing students (mostly females (77.7%) with a mean age of 25 ± 2.7 years) sampled from 4 selected nursing education programs in South-eastern Nigeria. Their professional values were measured using Weis and Schank modified version of Nurses Professional Value Scale-Revised (NPVS-R). Data were analyzed using descriptive statistics of means and standard deviations while analysis of variance was used for inferential statistics set at p>0.05 alpha level of significance.* ***Results:*** *Respondents rated all the value item statements high above the accepted mean decision score of 3.0. The highest and least important rated value subscales by the respondents were altruism 4.10 ± 0.60 and autonomy 3.89 ± 0.65 subscales respectively. Female students scored 'respect confidentiality of patient's information' and 'document nursing care accurately and honestly' (4.50) highest, whereas the males scored highest 'give full attention to the patient/family when giving a care' (4.50). Although the overall NPV means score was higher in females (201.40 ± 27.33) than the males (197.19 ± 32.92), there was no significant mean score difference (p>0.05) between them.* ***Conclusions:*** *The students were found to have high professional value scores suggestive of in-depth common value orientation. Nurse educators are encouraged to lay emphasis on those items scoring lowest.*

**Keywords:** Standards of nursing care, Efficient practice, Nursing students

## INTRODUCTION

One factor that significantly affects conduct is the values and convictions that one holds about an issue, phenomenon or a profession. Values are states of mind, convictions, and needs that guide human conduct [1]. Values are fundamental to nurses so as to keep up elevated expectations of the nursing care when they go into practice. Professional values are standards for actions acknowledged by the members of a professional group which acts as a framework for assessing and regulating the conduct of the group [1].

Nursing students' consciousness of their professional values and the impact on their conduct is a center piece of humanistic nursing care [2]. Development of these professional values starts as one enters the nursing training institution and continues even after completion of training and becomes consolidated through lived experiences of the nurse as a professional [3]. It is expected that the new student on entering into the training institution comes with many personal values that reflect the person's culture [4]. During the course of the training, the student is expected to embrace and practice those values inherent in the chosen profession. This is because values held by nurses are essential to maintain the standards of nursing care. The instructors influence the students in the course of the teaching-learning process to acquire and learn expectations of the profession by modeling, teaching and appraising high these values morality [5].

Five core professional values of altruism, autonomy, human dignity, integrity, and social justice have been found to

typify nursing as a profession [6]. Being conscious of these professional values in nursing is of paramount importance because it influences the quality of services delivered to the clients. The caring professional nurse puts these values into action in clinical practice [7,8]. Thus, professionalism is nothing but a passion in displaying a specialty knowledge, skills and behavior patterns that typify the profession in practice or how a person explains the concept of his/her actions, the beliefs, and values that guide one's way of life [9].

Researchers of Nurse's professional values (NPV) among baccalaureate nursing students have found greater similarities than differences in values across the levels of training in values contrary to expectations that each level of nursing school education should result in an increase in professional values [10]. Bang, et al., in their study found that undergraduate nursing students' professional values were significantly higher in students who entered nursing schools following their aptitude or desire for the professional job than those who entered the schools just because their entrance scores were sufficient.

Scores were also higher in students who were planning to pursue graduate study than in those who had not yet decided, and with significant differences found among the respondents in different regions [4]. Kobra, et al., further reported in their study that all the students, irrespective of university affiliation agreed that professional values are important issues in nursing. The most and least important factors they identified were trust and activism, respectively [11]. On value profile of 152 nursing, undergraduate students' personal development by Thorpe and Loo altruism value had significantly higher mean scores as against life style, advancement, autonomy, authority, creativity, economic and risk values [12].

On the contrarily, Kubsch, et al., noted in their study that differences exist in the perception and enactment of professional values among practicing nurses [13]. These observations, however, provided a lot of studies globally on professional value with counter results [14]. However, in Nigeria, there is the paucity of studies on NPV. Therefore, this study was set to investigate whether there were significant differences in professional values of nursing students and in relation to their gender characteristics in South-eastern Nigeria.

## MATERIALS AND METHODS

### Design and Sample

The study adopted a cross-sectional descriptive survey design. Four nursing education institutions in South-eastern Nigeria were conveniently selected. These were 2 Federal-owned hospital-based 3 year diploma programs, and two Federal University-based 5 year degree programs. Despite the diversities in program type and structure, both programs were controlled and accredited by the same professional body, Nursing and Midwifery Council of Nigeria (NMCN), and their students partake in the same professional certification examinations for General Nurses [15]. Only students in their final year class that is, 300 and 500 levels for the diploma and degree programs respectively were purposively selected for study because these students at this time had completed their lectures in nursing ethics and have had experiences in clinical posting and therefore can give an experiential account of their value orientation. Total of 233 students who met the above stated inclusion criteria was enlisted for the study.

Data were collected using a 50 item 2-part questionnaire. The first part consisted of respondents characteristics, while the second part sought their Nurses Professional Value (NPV) orientation. The tool was adapted from 2 sources; the modified version of NPVS-R developed by Weis and Schank and from Nursing Student's Handbook, Union College Division of Nursing, New York [16,17]. Total 24 items statements were drawn from student's handbook whereas the 26-item statement came from the NPV-R; the 2 versions were modified, rearranged and lined according to the 5 subscales. The scale comprised 5 subscales each consisting of a short descriptive phrase and interpretive commentary; altruism (8 items), autonomy (6 items), human dignity (11 items), integrity (13 items) and social justice (12 items). The Likert-style questions were positively worded, hence items with weighted mean scores $\geq 3$ implied respondent agrees with the statement and rated item as important NPV. The instrument was faced and the content was validated by 3 nursing faculty academic members. The reliability of the instrument was established through a pre-test administered once to 20 (10%) qualified students but in another institution with similar characteristics to study

institutions. Data were subjected to Cronbach's alpha test which yielded a reliability coefficient of 0.87 which was considered high and reliable.

Ethical clearance for the study was obtained from the Ethics and Research Committees of the University of Nigeria Teaching Hospital Enugu, while administrative permits were obtained from various institutional authorities. All eligible respondents were informed about the objectives of the study, assured of the confidentiality of any information given and voluntary nature of participation and that refusal to participate would not in any form affect their academic achievement. The questionnaires were de-identified by the coding system to identify each respondent and institution. Only those who gave their informed consent were given the questionnaires to complete.

The students were introduced to the researchers by the school research assistant and the class instructor. After an explanation of the study, those who consented were given and completed the self-administered questionnaire during a break period. The completed questionnaires were collected on the spot, and each respondent took 20-30 minutes to complete it.

Data analysis was performed with the aid of statistical package of the social sciences (SPSS) software version 17 using proportions, percentages, means, standard deviations and analysis of variance (ANOVA) at an alpha level of $p < 0.05$.

## RESULTS

Out of the 247 copies of a questionnaire distributed, 233 (94.3%) were properly filled, returned and analyzed.

**Characteristics of the Respondents**

Table 1 showed that the respondents were predominately females (77.7%); with mean and standard deviation age of $25 \pm 2.7$ years, with 128 (54.9%) university-based, and 105 (45.1%) hospital-based.

**Table 1 Demographic profile of the respondents (n=233)**

| Variables | Frequency (F) | Percentage (%) |
|---|---|---|
| **Gender** | | |
| Female | 181 | 77.70% |
| Male | 52 | 22.30% |
| **Age (Years)** | | |
| 20-29 years | 225 | 96.60% |
| 30-39 years | 5 | 2.10% |
| 40 years and above | 3 | 1.30% |
| **Mean ± SD** | $25 \pm 2.70$ years | |
| **Marital Status** | | |
| Single | 218 | 93.60% |
| Married | 15 | 6.40% |
| **Program Type** | | |
| Hospital-based | 105 | 45.10% |
| University-based | 128 | 54.90% |
| **School** | | |
| UNEC University-based | 106 | 45.50% |
| NAU University-based | 22 | 9.40% |
| UNTH Hospital-based | 52 | 22.30% |
| NAUTH Hospital-based | 53 | 22.80% |

Table 2 illustration indicates that the item means scores of the 50 items in the modified NPVS-R statements ranged from $3.51-4.48 \pm 1.19-0.76$. The top 10 highest scored items were distributed as follows; 5 sub-scale of altruism (4 out of 8 items), autonomy (1 out of 6 items), human dignity (1 out of 11 items), integrity (2 out of 13 items), and social justice (2 out of 12 items) with mean scores that ranged from $4.28-4.48 \pm 0.91-0.76$. 'Respect confidentiality of patient's information' (item 12) was the highest scored item (4.48), whereas 'respect rights of others to input in planning care' (item 11) was the lowest scored item (3.51). However, the total mean score for the NPVS was $200.46 \pm 28.40$.

**Table 2 Nursing student's mean scores and standard deviations on the 50 items of NPVS (n=233)**

| Sub-scale | Items | Mean | SD | Rank |
|---|---|---|---|---|
| Altruism | Give full attention to the patient/family when giving care. | 4.44 | 0.75 | 3 |
| | Seek to update knowledge/skill through additional education | 3.91 | 0.95 | 31 |
| | Work with a multi-disciplinary team | 4.29 | 0.89 | 9 |
| | Commitment to function | 4.33 | 0.77 | 7 |
| | Offers emotional support/positive enforcement to peers | 3.95 | 0.97 | 27 |
| | Act as a patient advocate | 4.28 | 0.91 | 10 |
| | Maintain standards in learning activities | 3.61 | 1.08 | 47 |
| | Consultation/collaboration to meet patient's need | 3.97 | 0.97 | 26 |
| Autonomy | Respect the rights of others to give input to the plan of care | 3.86 | 0.96 | 35 |
| | Support patient autonomous decision | 3.59 | 1.14 | 48 |
| | Respect rights of others to input in planning care | 3.51 | 1.19 | 50 |
| | Respect the confidentiality of patients information | 4.48 | 0.76 | 1 |
| | Honor individual right to refuse treatment | 3.7 | 1.14 | 45 |
| | Protect/respect the moral and legal right of patients | 4.18 | 0.83 | 14 |
| Human dignity | Share opinions as own; allow others to speak for themselves. | 3.88 | 1.06 | 33 |
| | Provide care without prejudice of life styles | 3.82 | 0.92 | 38 |
| | Respect others, values, beliefs and self | 4.04 | 0.91 | 23 |
| | Value cultural/spiritual differences in patients, peers, faculty | 3.87 | 0.97 | 34 |
| | Safeguard patient's right/privacy | 3.99 | 1.01 | 25 |
| | Respectfully discusses differences of opinion | 3.73 | 0.96 | 43 |
| | Participate in peer review | 3.84 | 1.04 | 36 |
| | Enhances others self-esteem through words and actions | 3.78 | 0.98 | 40 |
| | Provide nursing care based on needs irrespective of character | 4.27 | 0.9 | 11 |
| | Maintain confidentiality of patients/family | 4.37 | 0.82 | 5 |
| | Provide constructive criticism | 3.56 | 1.22 | 49 |
| Integrity | Take accountability for own actions and accepts the consequences of those actions | 4.06 | 0.91 | 22 |
| | Engage in ongoing self-evaluation | 3.75 | 1 | 47 |
| | Seek and use feedback for personal/professional growth | 3.92 | 0.87 | 30 |
| | Report unethical practices objectively and factually | 4.41 | 0.8 | 4 |
| | Be honest, truthful and respects the confidentiality | 4.21 | 0.93 | 13 |
| | Keep commitments and is dependable, punctual and trustworthy | 4 | 0.92 | 24 |
| | Maintain competency in area of practice | 4.12 | 0.84 | 17 |
| | Document nursing care accurately and honestly | 4.47 | 0.84 | 2 |
| | Clarify misconceptions | 4.16 | 0.9 | 15 |
| | Encourage open discussion of controversial issues in nursing profession | 3.94 | 1.11 | 29 |
| Social Justice | Makes a decision based on professional standards, research, and data | 3.83 | 0.96 | 37 |
| | Seek to remedy errors made by self and others | 3.81 | 0.93 | 39 |
| | Establish standards as a guide for practice | 3.71 | 0.91 | 44 |
| | Promote the health and safety of the patient | 4.13 | 0.86 | 16 |
| | Advocate for patient and profession | 4.33 | 0.76 | 6 |
| | Promote equitable access to nursing and health care | 4.11 | 0.86 | 18 |
| | Refuse to participate in illegal practice | 3.89 | 0.89 | 32 |
| | Participate in public policy decisions in distribution of resources | 4.09 | 0.93 | 21 |
| | Assume responsibility for meeting the health needs of a culturally diverse population | 4.11 | 0.99 | 19 |
| | Recognize the role of professional association in shaping health care policy | 3.67 | 1.07 | 46 |
| | Accepting multiple perspectives on issues and ideas | 3.77 | 1 | 41 |
| | Aware of own prejudices and implications of biases | 4.09 | 0.91 | 20 |
| | Promotes universal access to health care | 3.95 | 1 | 28 |
| | Allocates resources fairly and utilizes resources wisely | 4.27 | 0.91 | 12 |
| | Delegate nursing function | 4.33 | 1 | 8 |

**Adjusted Mean Scores on Nursing Professional Values of Respondents**

The subscales with the highest adjusted mean score were in 'altruism' (4.10); and the lowest in 'autonomy' (3.89) as indicated in Table 3.

**Table 3 Adjusted mean scores and standard deviations of nursing students professional values (n=233)**

| Sub-scale | No. of items | Mean | Standard deviation | Rank |
|---|---|---|---|---|
| Altruism | 8 | 4.1 | 0.6 | 1 |
| Autonomy | 6 | 3.89 | 0.65 | 5 |
| Human dignity | 11 | 3.92 | 0.65 | 4 |
| Integrity | 13 | 4.03 | 0.6 | 3 |
| Social justice | 12 | 4.06 | 0.62 | 2 |
| Total | 50 | 4.01 | 0.55 | - |

**Nursing Professional Values by Gender**

Table 4 showed that the female respondents had the highest total mean score of 201.40 ± 27.33 and males had 197.19 ± 31.92.

**Table 4 Total means on professional values of female and male nursing students (n=233)**

| Variable | Gender | N | Mean | SD |
|---|---|---|---|---|
| TPV | Female | 181 | 201.3978 | 27.33489 |
| | Male | 52 | 197.1923 | 31.92211 |
| TPV: Total professional values | | | | |

In Table 5 the highest subscale with the highest mean by the male and female was 'altruism' (4.12 ± 0.56 and 4.09 ± 0.61) and lowest was 'human dignity' (3.79 ± 0.74 and 3.96 ± 0.62).

**Table 5 Group mean scores and standard deviations of female and male nursing students five core professional values (n=233)**

| Sub-scale | No. of items | Female (n=181) | | | Male (n=52) | | |
|---|---|---|---|---|---|---|---|
| | | Mean | SD | Rank | Mean | SD | Rank |
| Altruism | 8 | 4.09 | 0.61 | 1 | 4.12 | 0.56 | 1 |
| Autonomy | 6 | 3.91 | 0.65 | 4 | 3.81 | 0.67 | 4 |
| Human dignity | 11 | 3.96 | 0.62 | 5 | 3.79 | 0.74 | 5 |
| Integrity | 13 | 4.06 | 0.55 | 3 | 3.93 | 0.73 | 3 |
| Social justice | 12 | 4.07 | 0.59 | 2 | 4.03 | 0.74 | 2 |
| Total | 50 | 4.03 | 0.51 | - | 3.94 | 0.63 | - |

Table 6 illustrations showed that the 50 NPVS-R items mean scores for both female and male ranged between 3.53-4.450 ± 1.18-0.76 and 3.44-4.50 ± 1.24-0.70 respectively. The top 10 highest scored items were from the 5 sub-scales of altruism (3 out of 8 items), autonomy (1 out of 6 items), human dignity (2 out of 11 items), integrity (2 out of 13 items), and social justice (2 out of 12 items). The mean scores of the top 10 items ranged from; 4.50-4.25 (females) and 4.50-4.15 (males). However, female nursing students scored highest in items; like 'respect confidentiality of patients information', 'document nursing care accurately/honestly', and 'report unethical practices objectively and factually', whereas males rated highest on 'give full attention to patient/family when giving care', 'delegate nursing function', and 'respect confidentiality of patients information'.

**Table 6 Female and male nursing students mean scores and standard deviations on the 50 items of NPVS-R (n=233)**

| Sub-scale | Items | Female (n=81) | | | Male (n=52) | | |
|---|---|---|---|---|---|---|---|
| | | Mean | SD | Rank | Mean | SD | Rank |
| Altruism | Give full attention to patient/family when giving care. | 4.42 | 0.76 | 5 | 4.50 | 0.70 | 1 |
| | Seek to update knowledge/skill through additional education | 3.87 | 0.98 | 35 | 4.00 | 0.84 | 20 |
| | Work with multi-disciplinary team | 4.29 | 0.91 | 9 | 4.26 | 0.84 | 8 |
| | Commitment to function | 4.33 | 0.79 | 6 | 4.36 | 0.68 | 4 |
| | Offers emotional support/positive enforcement to peers | 3.97 | 0.96 | 26 | 3.88 | 1.02 | 28 |
| | Act as a patient advocate | 4.29 | 0.93 | 10 | 4.23 | 0.87 | 10 |
| | Maintain standards in learning activities | 3.59 | 1.08 | 48 | 3.71 | 1.07 | 41 |
| | Consultation/collaboration to meet patient need | 3.96 | 1.02 | 28 | 4.01 | 0.77 | 18 |
| Autonomy | Respect the rights of others to give input to the plan of care | 3.9 | 0.96 | 33 | 3.75 | 0.96 | 39 |
| | Support patient autonomous decisions | 3.62 | 1.11 | 47 | 3.50 | 1.26 | 47 |
| | Respect rights of others to input in planning care | 3.53 | 1.18 | 50 | 3.44 | 1.24 | 50 |
| | Respect the confidentiality of patient information | 4.5 | 0.76 | 1 | 4.40 | 0.77 | 3 |
| | Honor individual right to refuse treatment | 3.73 | 1.08 | 43 | 3.61 | 1.33 | 45 |
| | Protect/respect moral and legal right of patients | 4.18 | 0.83 | 15 | 4.19 | 0.84 | 12 |
| Human dignity | Share opinions as own; allow others to speak for themselves. | 3.93 | 1 | 31 | 3.73 | 1.23 | 40 |
| | Provide care without prejudice of life sty les | 3.84 | 0.92 | 39 | 3.76 | 0.89 | 34 |
| | Respect others, values, beliefs and self | 4.11 | 0.86 | 21 | 3.81 | 1.01 | 31 |
| | Value cultural/spiritual differences in patients, peers, faculty | 3.88 | 0.96 | 34 | 3.81 | 1.02 | 32 |
| | Safeguard patient's right/privacy | 4.03 | 0.95 | 24 | 3.86 | 1.18 | 30 |
| | Respectfully discusses differences of opinion | 3.72 | 0.98 | 44 | 3.76 | 0.92 | 35 |
| | Participate in peer review | 3.91 | 0.95 | 32 | 3.57 | 1.27 | 46 |
| | Enhances others self-esteem through words and actions | 3.87 | 0.89 | 36 | 3.50 | 1.21 | 48 |
| | Provide nursing care based on needs irrespective of character | 4.25 | 0.91 | 13 | 4.34 | 0.83 | 6 |
| | Maintain confidentiality of patients/family | 4.43 | 0.79 | 4 | 4.15 | 0.87 | 13 |
| | Provide constructive criticism | 3.59 | 1.19 | 49 | 3.46 | 1.33 | 49 |
| Integrity | Take responsibility/accountability for own practice | 4.11 | 0.88 | 22 | 3.90 | 0.95 | 26 |
| | Engage in ongoing self-evaluation | 3.79 | 0.94 | 41 | 3.63 | 1.17 | 44 |
| | Seek and use feedback for personal/professional growth | 3.95 | 0.84 | 29 | 3.81 | 0.99 | 33 |
| | Report unethical practices objectively and factually | 4.45 | 0.77 | 3 | 4.25 | 0.88 | 9 |
| | Be honest, truthful and respects confidentiality | 4.27 | 0.89 | 12 | 4.01 | 1.01 | 19 |
| | Keep commitments and is dependable, punctual and trustworthy | 4.02 | 0.91 | 25 | 2.92 | 0.94 | 24 |
| | Maintain competency in area of practice | 4.13 | 0.86 | 19 | 4.09 | 0.79 | 14 |
| | Document nursing care accurately and honestly | 4.5 | 0.84 | 2 | 4.36 | 0.84 | 5 |
| | Clarify misconceptions | 4.22 | 0.82 | 14 | 3.96 | 1.11 | 22 |
| | Encourage open discussion of controversial issues in nursing profession | 3.95 | 1.08 | 30 | 3.92 | 1.21 | 25 |
| | Makes a decision based on professional standards, research, and data | 3.87 | 0.91 | 37 | 3.71 | 1.12 | 42 |
| | Seek to remedy errors made by self and others | 3.82 | 0.91 | 40 | 3.76 | 1.04 | 36 |
| | Establish standards as a guide for practice | 3.69 | 0.91 | 45 | 3.76 | 0.92 | 37 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Promote the health and safety of the patient | 4.15 | 0.85 | 16 | 4.05 | 0.91 | 16 |
| | Advocate for patient and profession | 4.33 | 0.74 | 7 | 4.34 | 0.83 | 7 |
| | Promote equitable access to nursing and health care | 4.12 | 0.86 | 20 | 4.05 | 0.87 | 17 |
| | Refuse to participate in illegal practice | 3.87 | 0.91 | 38 | 3.98 | 0.87 | 21 |
| | Participate in public policy decisions in distribution of resources | 4.08 | 0.94 | 23 | 4.09 | 0.91 | 15 |
| Social justice | Assume responsibility for meeting the health needs of a culturally diverse population | 4.15 | 0.96 | 17 | 3.96 | 1.10 | 23 |
| | Recognize the role of professional association in shaping health care policy | 3.66 | 1.03 | 46 | 3.69 | 1.21 | 43 |
| | Accepting multiple perspectives on issues and ideas | 3.77 | 0.98 | 42 | 3.76 | 1.07 | 38 |
| | Aware of own prejudices and implications of biases | 4.14 | 0.87 | 18 | 3.90 | 1.05 | 27 |
| | Promotes universal access to health care | 3.97 | 0.97 | 27 | 3.88 | 1.09 | 29 |
| | Allocates resources fairly and utilizes resources wisely | 4.29 | 0.82 | 11 | 4.21 | 1.10 | 11 |
| | Delegate nursing function | 4.30 | 0.92 | 8 | 4.42 | 0.93 | 2 |

Table 7 indicated that there was no significant gender difference in professional values orientations of male and female nursing students at 0.05 level of significance, $F(1,231)=0.89$, $p>0.05$. The null hypothesis was therefore accepted.

**Table 7 Summary table of one-way ANOVA for the significant gender difference in professional values of nursing students**

| Source | Dep. variable | Sum of sq. | Df | Mean sq. | F | Sig. | Partial eta sq |
|---|---|---|---|---|---|---|---|
| Gender | | 714.427 | I | 114.427 | | | |
| Error | TPV | 186465.436 | 231 | 807.201 | 0.885 | 0.348[+] | 0.004 |
| Total | | 187179.863 | 232 | - | | | |

[+]: Not Significant (p>0.05) key; Df=Degree of freedom

## DISCUSSION

The nursing professional values measured from a group of nursing students in Nigeria showed that all the items statements on the modified version of NPV-R scales were rated important. Although some items received a higher rating, none of the items was rated below the decision mean value of 3.0. This showed that nursing students irrespective of gender and training background considered important the behaviors described as values in the nursing profession for the delivery of quality nursing care. This observation is dissimilar to the findings of Donmez and Ozsoy who reported that although nursing students have strong professional values; however NPVS-R was significantly higher in female students who chose their profession willingly, had information about values and were members of a professional organization [5]. Interpretation of these findings showed that student's favorable disposition to chosen profession influenced their rating of values, the higher the level of disposition, the more one's value orientation. Sequel to that Lin, et al., further observed that nursing student's professional values and behavior were not different from that of practicing nurses [18]. Of which, one may not be surprised that the obtained behavior did not differ to that of practicing nurses despite the fact that the former is more exposed and experienced. This is because students even while in training are guided by the ethics of the profession and believed they are professionals and members of the profession [19]. More so, education is aimed to develop in one of the values and attributes expected in one's field of practice [19].

However, of all the 5 subscales in the NPV-R scales, altruism subscale and an item from autonomy subscale 'respect confidentiality of patients' information' were rated highest in contrast to, human dignity subscale and autonomy item statement 'respect the rights of others to give input to planning of care' which were relatively rated low. These findings indicate that while respondents regarded nursing as a caring and helping the relationship, the unsatisfying score in 'human dignity' and autonomy item 'respect rights of others to give input to the planning of care' need to be improved. This result is consistent with a prior study that the caring value of nursing correlates with patients 'right to participate in the care and also supports patients' autonomous decision making [20]. Therefore, it is not surprising that respondents rated high altruism value as the most important value in nursing. Not with standing this result, Rassin in the study; nurses professional and personal values rated highest the 3 values of human dignity, equity among patients, and prevention of suffering, whereas altruism and confidentiality values were rated low [21]. It is suggestive that the methodology used by Rassin must have influenced the obtained result. This is because the study not only involved

2 different instruments to measure personal and professional values but also measured values of practicing nurses across cadres with long years of experience, unlike the present study that only measured values of nursing students with NPVS-R [22]. Dissimilar to findings of other researchers regarding respecting the legal and ethical rights of patients as the most prominent value, in nursing profession, Al-Banna reported precision and accuracy as highest rated value in nursing profession whereas Posluszny in a study involving both sophomore and senior baccalaureate nursing students considered trust, caring and justice significantly more important than activism value [17,23]. Findings of previous studies in relation to nurse's professional values are suggestive of the importance attached to that aspect of professional value. Therefore, continuous efforts are required by nurse educators to better prepare nursing students for the work environment as a registered nurse.

**Differences in Gender**

In this study, female nursing students scored higher than their male counterpart on the total professional values although the difference was not statistically significant. It could be inferred that the lower mean scores of the male are because they are fewer in number. Since the number of males is increasing it may be necessary to conduct further studies using a similar number of males and females to ascertain the difference. However, though both groups scored highest in 'altruism' subscale, male students scored higher than the females contrary to the statement that caring is synonymous with females and that nursing is a feminine profession [24]. Female respondents scored highest in 'respect confidentiality of patients' information (autonomy item statement) whereas males scored highest in 'give full attention to the patient/family when giving a care' (altruism item statement). These findings are suggestive of, though caring as an altruistic attribute is synonymous with nursing, the value statement 'respect for confidentiality' which is an autonomic attribute forms a perfect correlates with caring. Hence, each value item statement is as important as the other and should be considered so during the teaching learning process. Nurse educators must endeavor to enhance all aspects of professional values, develop appropriate strategy and methods of teaching to embrace all the various aspects of values scored low.

Similarly, considering the number of males involved in this present study, the result obtained may be inconclusive because the relationship between gender and NPV has been contradictory in the literature. Thorpe and Loo in their study observed differences in the way both genders perceive the values of the profession [13]. Male students from both diploma and baccalaureate programs scored lower on the NPVS than did female students from other programs [25]. A study of male nurses by Lee, et al., however, indicated that certain caring behaviors performed by male nurses differ from their female colleagues [26]. Peterson, et al., also reported an interaction between age and gender. Their findings suggest that ethical attitudes develop at different rates for each gender, with the differences diminishing as age increases [27]. To support this claim, Hayes reported some differences in some of the subscales in the demographic characteristics regarding ethnicity, marital status, gender and age [28]. However, recurrent in literature is the limited number of male participants in the study as in this study. Therefore, qualitative study is suggested with an equal number of males and females for conclusive results or a full study involving only males regarding their value orientations.

**Study Limitations, Strengths, and Implications for Nursing**

Confining the sample to 4 schools of nursing in Nigeria was a limitation to the study. However, the program type representation of the sample represents the general value orientations of nursing students in Nigeria despite differences in institutions of training. Implications for future research include replication of this study with the same students 1 year after graduation, to determine whether their values have changed or remained the same. The greater claim could also be made by examining the values of nursing students in a different geographical location and using a larger sample size. Also, studies could be carried out on students entering the program with related degrees, what values these students have upon entering a program of study and how they may be different from the students with no prior degrees.

<div align="center">

**CONCLUSION**

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Professional values development among nursing students is paramount since values are measures of quality care and professional growth. Findings from the study revealed that nursing students had strong professional value orientation as none of the 50 modified NPV-R scale value statements scored below the decision mean value. Female nursing students scored higher than their male counterpart on total professional values. However, there was no significant gender difference in professional values rated by all the respondents. Though the majority of the respondents rated

high values for nursing, a lot still need to be done to maintain the standard as well as promote high rating in those with relative scores. Nurse educators can facilitate this process through role modeling behaviors related to these values and by an unrelenting commitment to teaching in that aspect of the curriculum.

## DECLARATIONS

### Conflict of Interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## REFERENCES

[1] Clark, Debra K. *Professional values: a study of education and experience in nursing students and nurses.* Diss. Capella University, 2009.

[2] Verpeet, Ellen, Tom Meulenbergs, and Chris Gastmans. "Professional values and norms for nurses in Belgium." *Nursing Ethics,* Vol. 10, No. 6, 2003, pp. 654-65.

[3] Jiménez-López, F. Rosa, et al. "Values in nursing students and professionals: An exploratory comparative study." *Nursing Ethics,* Vol. 23, No. 1, 2016, pp. 79-91.

[4] Bang, Kyung Sook, et al. "Professional values in Korean undergraduate nursing students." *Nurse Education Today,* Vol. 31, No. 1, 2011, pp. 72-75.

[5] Donmez, Renginar Ozturk, and Suheyla Ozsoy. "Factors influencing development of professional values among nursing students." *Pakistan Journal of Medical Sciences,* Vol. 32, No. 4, 2016, p. 988.

[6] Horton, Khim, Verena Tschudin, and Armorel Forget. "The value of nursing: A literature review." *Nursing Ethics,* Vol. 14, No. 6, 2007, pp. 716-40.

[7] Al-Banna, D. A. "core professional and personal values of nurses about nursing in Erbil City hospitals: A profession, not just career." *Nurse Care Open Access Journal,* Vol. 2, No. 6, 2017.

[8] Aktas, Yeşim Yaman, and Neziha Karabulut. "Professional values in Turkish undergraduate nursing students and its reflection on caring behaviour." *Kontakt,* Vol. 19, No. 2, 2017.

[9] Björkström, Monica E., Elsy E. Athlin, and Inger S. Johansson. "Nurses' development of professional self-from being a nursing student in a baccalaureate programme to an experienced nurse." *Journal of Clinical Nursing,* Vol. 17, No. 10, 2008, pp. 1380-91.

[10] Caldwell, Hope E., and Katie L. Miller. "Professional values in baccalaureate nursing students." 2016.

[11] Kobra, Parvan, Zamanzadeh Vahid, and F. Alsadat. "Nursing students' perspectives on professional values in the universities of medical sciences in Iran." *International Research Journal of Applied and Basic Sciences,* Vol. 3, No. 6, 2012, pp. 1183-91.

[12] Thorpe, Karran, and Robert Loo. "The values profile of nursing undergraduate students: Implications for education and professional development." *Journal of Nursing Education,* Vol. 42, No. 2, 2003, pp. 83-90.

[13] Kubsch, Sylvia, Georgette Hansen, and Vicki Huyser-Eatwell. "Professional values: The case for RN-BSN completion education." *The Journal of Continuing Education in Nursing,* Vol. 39, No. 8, 2008, pp. 375-84.

[14] Alfred, Danita, et al. "Comparison of professional values of Taiwanese and United States nursing students." *Nursing Ethics,* Vol. 20, No. 8, 2013, pp. 917-26.

[15] Nursing and Midwifery Council of Nigeria. "Standards of nursing-midwifery education and practice in Nigeria". Nurses and Midwifery Council of Nigeria, 2010.

[16] Weis, Darlene, and Mary Jane Schank. "Development and psychometric evaluation of the nurse's professional values scale-revised." *Journal of Nursing Measurement,* Vol. 17, No. 3, 2009, pp. 221-31.

[17] Union College Division of Nursing Student Handbook. "Christian values." 2017, https//www.ucollege.edu/nursing/student%20 Handbooks/Christian%20values.pdf.

[18] Lin, Yu-Hua, et al. "Changes in Taiwanese nursing student values during the educational experience." *Nursing Ethics,* Vol. 17, No. 5, 2010, pp. 646-54.

[19] Plotnikoff, Ronald C., Kylie Hugo, and Alberta Casey. "Perspective transformation in RN-to-BSN distance education." *Journal of Nursing Education,* Vol. 40, No. 7, 2001, pp. 317-22.

[20] Erickson, J., and Sally Millar. "Caring for patients while respecting their privacy: Renewing our commitment." *Online Journal of Issues in Nursing,* Vol. 10, No. 2, 2005.

[21] Rassin, Michal. "Nurses' professional and personal values." *Nursing Ethics,* Vol. 15, No. 5, 2008, pp. 614-30.

[22] Shahriari, Mohsen, and Elahe Baloochestani. "Applying professional values: The perspective of nurses of Isfahan hospitals." *Journal of Medical Ethics and History of Medicine,* Vol. 7, 2014.

[23] Posluszny, Laura, and Diane A. Hawley. "Comparing professional values of sophomore and senior baccalaureate nursing students." *Journal of Nursing Education*, Vol. 56, No. 9, 2017, pp. 546-50.

[24] Bartfay, Wally J., et al. "Attitudes and perceptions towards men in nursing education." *Internet Journal of Allied Health Sciences and Practice,* Vol. 8, No. 2, 2010, p. 6.

[25] Simpkins, Sandra D., and Pamela E. Davis-Kean. "The intersection between self-concepts and values: Links between beliefs and choices in high school." *New Directions for Child and Adolescent Development,* 2005, pp. 31-47.

[26] Lee, L. C., C. H. Chen, and Y. O. Yang. "The effect of gender on caregiving: A study of male nurses." *The Journal of Nursing,* Vol. 57, No. 1, 2010, pp. 77-81.

[27] Peterson, Dane, Angela Rhoads, and Bobby C. Vaught. "Ethical beliefs of business professionals: A study of gender, age and external factors." *Journal of Business Ethics,* Vol. 31, No. 3, 2001, pp. 225-32.

[28] Hayes, Tara Lynn. "Exploration of professional values held by baccalaureate and associate degree nursing students." 2006.