

1 **Title**

2 Differences in professional values between nurses and nursing students: A gender perspective.

3 **ABSTRACT**

4 **Aim:** To compare Spanish nursing students' and registered nurses' perception of professional values from the perspective of gender and professional
5 experience.

6 **Background:** Nursing has traditionally been a female profession, however, the analysis of professional nursing values from a gender perspective has received
7 little attention. The integration of professional values typically begins during academic life and is, thereafter, reinforced during professional activities.

8 **Methods:** A descriptive cross-sectional study was conducted with 159 students (97.4% females) and 386 registered nurses (86.8% females) from primary
9 healthcare centers, hospitals, and management positions within the public health system. The validated Spanish adaptation of the Nurses Professional Values
10 Scale was used. This instrument measures three dimensions: ethics, commitment, and professional mastery. Descriptive statistics were used to analyze the data,
11 together with bivariate analysis using the chi-squared test.

12 **Results:** Females granted more importance to professional values. Important gender differences among students were detected. Ethical values were considered
13 to be the most important for both students and nurses, followed by professional mastery and commitment. The importance given to values progressively
14 decreased in the groups under study: students, less experienced nurses, and expert nurses (in decreasing order).

15 **Conclusions:** Significant gender differences exist with regards professional nursing values. The values related to professional commitment and mastery should
16 be integrated and promoted during academic education and specifically focus on male students' perceptions. As professional experience increases, the
17 importance attributed to professional values decreases.

Implications for Nursing Policy: Professional nursing values should be promoted among universities, health services, and professional organizations, encouraging their dissemination, implementation, and evaluation.

Keywords: Gender; Nursing; Nursing students; Professional Ethics; Professional experience; Professional values.

INTRODUCTION

For centuries, the nursing profession has been linked to caring for people, which means adopting a humanist perspective and examining the nature and essence of each individual. Within the health professions, ethical values have traditionally been recognized as being an essential and inherent aspect of dealing with people (Schmidt et al. 2018). A recent review has revealed that the values related to altruism are evident and well-documented in numerous investigations. However, there is less evidence of values related to the improvement of quality, personal authority or self-care. Furthermore, increasing their relevance to both the academic world and clinical practice should be researched further (Elliott 2017). This system of values and beliefs is reflected by the way nursing care is provided, and may be influenced by social, cultural, and/or political factors. These values can be modified through educational, clinical, and personal experience (Jiménez-López et al. 2016; Parandeh et al. 2014). Universities must play a key role in the adoption of these values (Kantek et al. 2017; Kaya et al. 2016). They represent the starting point for teaching these essential principles and for forming the nurse's or nursing identity (López-Pereira et al. 2017). It is important for university educational programs to incorporate and emphasize these values in nursing education, as today's society expects to receive nursing care that is based on ethical principles and quality. Many concepts linked to professional values (commitment, resource management, need for self-assessment) are not included in the official text books but are, rather, reflected by isolated or fragmented content covered in various subjects. However, the increase of online

campuses and the scientific literature management in the classroom, etc., provide excellent opportunities to update this material and incorporate the training in values in a consistent manner.

Throughout their university education, nursing students will recognize the need to understand these values, not only from a theoretical point of view, but also from a moral and practical one. Additionally, they are aware that professional values can influence the quality of the care that patients receive (Lyneham et al. 2016). The incorporation of professional values into professional activity leads to multiple benefits for nurses. Foremost, they constitute a reference framework for decision-making during practice (Gallegos et al. 2015; Kaya et al. 2017) as well as increasing job satisfaction and motivation (Kaya et al. 2017).

BACKGROUND

Throughout history, the nursing profession has been, and continues to be, predominantly female. The main objective of this profession is to provide nursing care (Galbany-Estragués et al. 2017). The social concept of "care" has traditionally been assigned to women as an extension of the feminine role (Galbany-Estragués et al. 2017). According to a recent study (Baez et al. 2017), gender differences and the self-perception of empathy in caring for others can generate a bias that contributes to maintaining certain stereotypes and gender roles related to the nursing profession. Considering that professional values are based on social and cultural values, there may be gender differences in the perception of professional nursing values.

Values are learned directly, or indirectly, by observing the behavior of others. Upon entering university, students essentially bring their own personal values, the product of prior socialization. However, these values do not guarantee the development of professional values. More precisely, the first contact with professional values occurs in academic life (Kantek et al. 2017) and these change throughout the university years (Kaya et al. 2016). In this context, it has been confirmed that nursing students identify professional values during faculty years, especially ethical values (López-Pereira et al. 2017). However, the values

linked with other dimensions, such as the advancement of both profession and professional mastery, are considered less important. Thus, nursing students' perception of the faculty members coincides with what has been observed among professional nurses (Poorchangizi et al. 2017).

It has been confirmed that the perception of professional values may be related to students' concept of the profession (professional self-concept) (Çöplü et al. 2018). Students' prior experience in healthcare should also be appraised, as well as their ethical and moral codes and prior educational activity (Rose et al. 2018).

According to the model of Benner (Ayers 2008), nurses acquire a set of skills and values as their work experience increases, and extensive professional experience may be necessary to integrate the professional values into their daily practice and become aware of their importance. The progressive acquisition of professional values can be influenced by the interaction with colleagues and the institutional values of the health center or by situations experienced when caring for patients (Clark 2009; Mathooko 2013). It is also important to consider the influence of the educational level of nurses on the incorporation of professional values into daily practice (Sibandze & Scafide, 2018).

Finally, although there are numerous international studies on professional nursing values and gender (Sibandze & Scafide, 2018), in some cases the results are conflicting (Bang et al. 2011), also few studies have researched professional values according to gender, and according to the views of students and professionals with varying levels of experience. In Europe and in Spain, research in this field is even scarcer, which justifies the need for an analysis of professional values considering gender and both the viewpoints of nursing students and nurses.

METHODS

The aim of this study was to compare the perception of professional values in nursing students and between male and female registered nurses in Spain, according to gender and their professional experience.

A cross-sectional descriptive study was conducted. This design was selected to perform a descriptive approach to the importance normally given to these values, as it allows us to access a large number of students and professionals simultaneously, and does not attempt to demonstrate causality.

Participants

Taking into account the reference population (200 nursing students and 1200 nurses), we estimated a sample size with the following parameters: 95% confidence level, an expected proportion of 50%, and a margin of error of 5%. To perform the study, it was necessary to include 155 students and 343 nurses (adjusted to a 15% attrition). Prior to the study, we considered the gender distribution of nursing professionals registered in Spain, with approximately 85% of nurses being female. We subsequently maintained this distribution in our results, i.e. the female students and nurses equaled approximately 86% and 87%.

This gender distribution is similar to that of the United States where, according to a report by Montana State University (Center for Interdisciplinary Health Workforce Studies), the percentage of registered male nurses is around 11%. These data also coincide with those of the UK where, according to the Nursing and Midwifery Council, approximately 11% of the registered nurses were male.

The sample included in the study consisted of 545 participants. We selected 159 third- and fourth-year nursing students (20 male and 139 female) from a university in the north of Spain. First- and second-year students were excluded. This inclusion criterion was in order to achieve a perception of certain professional values that can only be observed during student-nurse-patient interaction (i.e., requesting help/collaboration when one cannot meet the patient's needs). All students enrolled in the selected academic years were invited to participate.

The nurses' sample consisted of 386 registered nurses (51 male and 335 female) working in primary health-care centers and hospitals within two healthcare districts of Northern Spain. The inclusion criteria were being an active worker at the time of the study and voluntarily accepting to participate. The nurses were

classified into two groups according to their professional experience: less-experienced nurses (1-15 years of experience) and expert nurses (>15 years of experience). This classification was performed using the model by Benner (Ayers 2008) as a reference.

Data collection

We collected the following socio-demographic data: age and gender was recorded for both groups, whereas, for the sample of nurses, the following socio-demographic variables were recorded: professional experience in years and workplace setting (hospital, primary care, teaching).

Professional values were assessed using the "Escala de Valores Profesionales de Enfermería" (EVPS), validated for the Spanish context (Basurto-Hoyuelos 2010) and originally based on the Nurses' Professional Values Scale. This scale includes 26 professional nursing values divided into three dimensions: ethics, professional commitment, and professional mastery. A 5-point Likert scale is used to rate each variable (ranging from *Not Important* to *Very Important*). The Ethics dimension (nine items) features aesthetic, moral, and ethical values. The Professional Commitment dimension comprises eight items related to active engagement in the person's professional development and that characterize a profession of service focused on the human being, based on holistic and humanistic aspects. Professional Mastery (nine items), is based on technical aspects of nursing as well as tacit knowledge, such as know-how, and the ability to make the most appropriate decision when required. The completion time for the questionnaire was approximately 10 minutes.

The questionnaires were collected in the classrooms and nurses' workplaces between January and June 2015. Two researchers followed a specific protocol for data collection in the workplace setting. Each participant received the documentation of the study, with the request to complete it. The questionnaire was completed anonymously. A box was used to collect the questionnaires.

Ethical considerations

99 The Ethics Committee on Clinical Research of the Principality of Asturias (N° 18/15) granted permission for the study, alongside the directors of the
100 participating centers. Students and nurses were fully informed about the study and their voluntary and confidential participation. Consent was requested in order
101 to participate in the research.

102 Data analysis

103 Data were analyzed using the SPSS program v.21.0. Variables are expressed as percentages. The following categorical variables were considered: gender,
104 university postgraduate education, work setting, and professional values in each dimension analyzed in the EVPS questionnaire. Age and professional
105 experience are represented by means and standard deviations. For professional experience, the median (standard deviation) was calculated, and the
106 Kolmogorov-Smirnov test was used to verify its possible normal distribution. The 95% confidence intervals (CI) of the categorical variables are included in the
107 descriptive analysis. Comparison of professional nursing values of the study groups by gender was performed using the Pearson's chi-square test. Values of $p <$
108 .05 were considered statistically significant.

109 **RESULTS**

110 In the total sample, 87.0% were women (95% CI [84.0, 89.9]). This distribution was maintained in the analyzed groups: 87.4% of the students (95% CI [82.0,
111 92.9] and 86.8% of the nurses (95% CI [83.3, 90.3]) were women. The average age of the students was 23.4 years ($SD = 5.14$) and of the nurses, 41.9 years (SD
112 $= 11.3$). The nurses worked in primary care (27.2%; 95% CI [22.6, 31.8]), hospitals (68.9%, 95% CI [64.2, 73.7]), or teaching (3.9%; 95% CI [1.8, 5.9]). The
113 average professional experience was 18.5 years ($SD = 11.9$). The value of the median for professional experience was 16 ($SD=11.9$). Its distribution was non-
114 normal ($p < .001$). By grouping this last variable, we found that 49.7% (95% CI [44.6, 54.0]) had between one and 15 years' work experience compared to
115 50.3% (95% CI [45.1, 55.4]) who had more than 15 years' professional experience.

116 Regarding the ethical dimension (Table 1), we detected significant gender differences in most of the values analyzed, with a higher percentage of women who
117 considered these values to be important. The most notable differences were regarding meeting the needs of culturally different populations, which was very
118 important for 62.9% of women compared to 47.9% of men ($p < .001$) and protecting the rights of patients undergoing research processes. The latter was
119 considered very important for 76.4% of women compared to 63.4% of men) ($p = .004$).

120 Gender differences were detected in the perception of ethical values among the students. The female nursing students granted significantly more importance to
121 caring for patients with different lifestyles, without prejudice ($p < .001$). Meeting the needs of culturally diverse populations was very important for 78.4% of
122 women compared to 50% of men ($p < .001$).

123 In the group of less-experienced professionals, we detected gender differences in the patients' right to privacy (99.4% of women considered this as fairly or
124 very important compared to 90.9% of men, $p = .006$) and confidentiality (quite important or very important for 97.6% of women compared to 90.9% of men),
125 $p = .04$).

126 Within the group of more experienced nurses, differences were observed in the ethical dimension centered on practicing the profession with loyalty and respect
127 for the patient ($p = .001$), protecting the rights of patients, in general ($p = .04$), and on research processes ($p = .04$), with women granting more importance to
128 these aforementioned values, compared with men. These three items were very important for 79.2% of women compared to 56.3% of men. Within this
129 dimension, the most important value for both males and females was to ensure patients' confidentiality. However, in this item, we also detected overall gender
130 differences ($p = .01$), and in the less-experienced professionals ($p = .04$) and the students ($p = .03$), with women, once again, attaching more importance to this
131 value than men.

132

Regarding professional commitment (Table 2), we also detected significant gender differences in six of the eight analyzed values. Women considered these values to be more important than men. Although all the values were considered important, overall, the importance given to these values decreased compared to the ethical values. Protecting the population's health and safety was considered the most important value, especially by the women, considered very important for 83.9% compared to 71.8% of men ($p = .001$). Promoting the profession by becoming actively involved in health-related activities was considered very important for 69% of the women, compared to 49.3% of the men ($p = .007$).

Gender differences were also noted with regard to participation in research and its application in clinical practice. The importance granted was significantly higher for the female students (very important for 52.5% versus 30% men) ($p < .001$), whereas 10% of male students only considered this as being important. Additionally, in the less-experienced nurses, the percentage who considered it as being very important increased compared to students (58.2% in women 36.4% in men ($p = .02$)). No differences were detected between male and female expert nurses. Among students, 72.7% of the women considered peer review very important compared to 50% of the men ($p = .001$).

Generally, as work experience increased, the importance conceded to the values of professional mastery decreased (Table 3). We detected significant gender differences in asking colleagues for help when required (this was very important for 59.4% of women compared to 37.1% of men) ($p < .001$), establishing quality criteria in clinical practice (very important for 81.6% of women compared to 70.4% of men) ($p = .02$), and promoting equitable access to nursing care and health (68% of women compared to 54.9% of men) ($p = .03$). Regarding seeking additional information to update knowledge, overall differences were detected ($p < .001$), especially in the group of experts, which was very important for 73.3% of female expert nurses compared to 58.6% of male expert nurses ($p = .005$). These values were considered to be more important for the women. Within professional mastery, taking responsibility for one's own practice was most important value.

DISCUSSION

151 This study analyzed the importance of professional values among students and nurses from a gender perspective. Furthermore, we could interpret the viewpoint
152 of these values through three key figures: students completing their university education (undergraduate students), professionals at the beginning of their
153 professional career (less-experienced nurses) and those with a minimum of 15 years of work experience (expert nurses).

154 According to our results, women gave more importance to the professional values in all analyzed dimensions (ethics, professional commitment, and
155 professional mastery) however, this appraisal decreased as their professional experience increased.

156 Generally, the importance attached to professional values was high, which is similar to findings in other studies carried out among nursing students (Alkaya et
157 al. 2018; Ayla et al. 2018; Donmez et al. 2016) and professionals (Cetinkaya-Uslusoy et al. 2017; Fernández-Feito et al. 2017; Poorchangizi et al. 2017). The
158 ethical values were considered to be the most important, followed by professional mastery and, lastly, professional commitment. These data are consistent with
159 the results of a study on values, work setting, and professional experience carried out with nurses in hospitals and primary care centers in Asturias, Spain
160 (Fernández-Feito et al. 2017).

161 In general, women granted more importance to the ethical values, although the largest gender differences were detected among the students. These results are
162 similar to those obtained by Allari et al. (2017), where the female students valued the aspects linked to ethics (such as confidentiality, privacy, etc.) the highest,
163 while their ratings of the values associated with professional activities, public policy, or peer review were lower.

164 The female nursing students considered the care received by people from other cultures or different lifestyles to be very important, perhaps due to the common
165 ideals of the nursing profession. The students granted more importance to ethical values than the nurses, with this importance decreasing as their professional
166 experience increased. The students' viewpoint is probably related to the specific university training received on this subject, and because they predominantly
167 identify these ethical values in their teachers (López-Pereira et al. 2017). However, this reality may also be conditioned by the importance traditionally
168 attributed to ethics within the nursing field (Kangasniemi et al. 2015), by both students and professionals.

169 These findings partially coincide with other research (Bijani et al. 2017) where justice was the most appreciated value, especially among nursing instructors and
170 nurses, followed by the values directly related to care. If we compare this with our study, ethical values are most important. Also, these authors did not detect
171 gender differences in the professional values global score, which is contrary to our findings. Indeed, ethical values are inherent in our profession, as reflected in
172 the International Council of Nursing in their Code of Ethics by Nurses. This code refers to four elements: people, nursing practice, the profession, and co-
173 workers and it includes comprehensive care that defends human rights (including the rights according to culture), dignity, respectful treatment, etc. This code is
174 being revised to develop an international framework document that gathers the main aspects of the nursing profession and to stimulate the creation of other
175 more local regulations adapted to the reality of each country or organization. Besides emphasizing key human values such as dignity, respect or non-
176 discrimination, it is necessary to respond to new situations that require a global approach such as artificial intelligence or technology and its applications, as all
177 these aspects have an impact on healthcare and nursing practice (Stievano & Tschudin, 2019).

178 The professional commitment values were more important for women. The protection of the population's health was the most important value in this domain.
179 We observed a clear commitment to the advancement of the profession among the younger generations of women. Thus, the female students considered
180 participating in peer reviews, advancing the profession through health activities, or promoting research and its practical application to be significantly more
181 important than did their male counterparts. Further studies are required to help us to understand these differences because, although university education is the
182 same for both genders, there are distinctive differences between the respective viewpoints of the nursing profession.

183 Concerning this issue, according to various studies conducted in Turkey (Çöplü et al.2018) or Iran (Badiyepeyma et al.2014) in general, a more internalized
184 experience of the concept of nursing has been confirmed among the female students in relation to the professional attributes, professional self-concept, or
185 willingness to remain in the profession. Furthermore, as other authors have commented (Bijani et al.2017), there is an important gender influence in
186 professional values, especially in female students.

187 As professional experience increased, the importance attached to professional mastery decreased. However, the most important value for both sexes was
188 accepting responsibility for one's own practice. This result, once again, reflects the connection between the clinical area and the importance granted to the
189 various factors (Gallegos et al. 2015). As with professional commitment, female nursing students emphasized the importance of those values related to
190 increasing the quality of care, updating knowledge, or requesting help when the patient's needs cannot be met.

191 If we consider our results together with other international studies (Alkaya et al.2018; Ayla et al.2018; Çöplü et al. 2018), most studies have found that overall,
192 nursing students demonstrate a high regard for professional values. However, some authors (Alkaya et al.2018) have detected differences between nursing
193 students in America and Turkey, suggesting a different view of nursing and the influence of other possible factors, such as nurses' access to better living
194 conditions when choosing this profession. At the same time, American nursing students also demonstrated differences in the importance of certain values, such
195 as competence, education, or self-assessment when compared to Taiwanese students (Alfred et al. 2013).

196 As in other research (Clark 2009), the students granted more importance to the professional values compared to the nurses. These findings of decreasing
197 professional values do not coincide with other studies (Bijani et al. 2017; Gallegos et al. 2015; Monroe, 2019, Poorchangizi et al. 2017) where the opposite
198 effect was observed. However, our findings about the different appraisal of professional values among students and nurses was recently confirmed in a similar
199 study conducted in Iran, which included the vision of instructor nurses, finding significant differences among the three groups in all the domains analyzed. We
200 believe that our results can be explained by the fact that the Spanish nurses had more experience with over half having more than 15 years' experience.
201 Although this may also be associated with higher professional burnout, nonetheless, the commitment to values that is intrinsically linked to the profession is
202 maintained. Special attention should be paid to the group of more experienced nurses. They most likely perceive their university formative stage from a
203 distance, and some may perform their daily practice focused on direct patient care, without reconsidering the importance of certain professional values (e.g.,
204 continuous self-assessment). It would be recommendable to analyze the role that these professionals play in influencing students and younger nurses and acting

205 as an example, with regards their professional values (Sibandze & Scafide, 2018). It is especially important to review the commitment of these expert
206 professionals towards their ethical values. As demonstrated elsewhere, if these nurses incorporate these values in their care, they may become role models in the
207 workplace for nurses in training or with less experience (Monroe, 2019).

208 To better understand the importance of values and to deepen our knowledge of the study topic, we recommend performing further qualitative studies to obtain a
209 deeper understanding of the differences detected, especially among nursing students, where we have detected significant gender differences as in Ayla et al.
210 (2018), in contrast to other studies (Bang 2011; Bijani et al. 2017). There is some controversy in the literature on this issue, however, if the education received
211 by female and male students is the same, however the importance given to values is clearly different, several factors may be influencing this finding. For
212 example, it may be that the underlying reasons why students chose this profession are influential, or differences in the concept of care may be significant, or
213 perhaps students are influenced by their mentors during clinical placements.

214 It would also be interesting to examine the nurses' viewpoint of the values according to their professional experience, as the results regarding the importance of
215 this variable in the value system are contradictory. In the case of nurses, it would be interesting to conduct qualitative research to study in what manner these
216 values are applied at work or how nurses consider the same, and how other factors influence how these are implemented (e.g. work environment, number of
217 patients cared for, training received, or what actions are promoted at their institution (in the sense of their hospital or health center) in order to integrate these
218 values in their work. Finally, we believe that the commitment of the academic, health, and professional institutions and of the nursing students is necessary to
219 reinforce the education in, and implementation of, all the professional values linked to nursing.

220 Implications for Nursing Practice

221 The differences detected between men and women may reflect a different conception on professional roles in nursing, i.e. we understand and exercise our
222 profession differently. Based on these findings, educational and reflexive activities can be performed with all professionals, especially with men, in order to
223 better understand their vision on this subject. This aspect should be further researched both locally and internationally.

224 Differences among students are especially striking, it appears that women represent a profile of nurses who are more committed to ethical values, research or
225 improving the quality of care. It is important to consider these results and how they compare with other countries, as students represent the future nursing
226 professionals and this finding may mark differences in the nursing care provided. A recent study (Bahadir-Yilmaz, 2018) highlighted the influence of education
227 in values and its impact on improving students' attitudes towards older people. Providing quality care services towards an ageing population, especially in
228 developed countries, is a worldwide priority, as already formulated in the WHO publication on Global strategic directions for strengthening nursing and
229 midwifery 2016–2020, where nurses are recognized as being an essential element for the improvement of health outcomes and the management of health
230 services (World Health Organization,2016).

231 Implications for Nursing Policy

232 Universities play a key role in the design of curricula and the inclusion therein of transverse training in values. We should reflect on the presence of these
233 values during this educational stage because, as mentioned, they increase the quality and humanity of the care provided. Furthermore, it is useful to provide
234 health institutions with studies on the nurses' perception of their profession with the aim of designing interventions to increase professional well-being and the
235 quality of the care provided.

236 Limitations

Among the limitations, a possible acquiescence bias in the responses obtained regarding the degree of importance of professional values should be considered. In addition, in the case of the students, their minimal contact with the professional reality could influence their perception of the topic of study. We are also aware of the low participation of men in the study. However, the distribution of participants according to gender represents the reality in our country, both among students and among professionals, where, approximately, solely 15% are male. It would be interesting to perform longitudinal studies among nursing students to explore how professional values are integrated throughout university education and to assess their evolution once the newly qualified nurses enter the workplace. However, this type of design requires a significant amount of time and financial resources (minimum 6-7 years).

Lastly, we must consider the influence of Spanish culture on the vision of the nursing profession and its values. In Spain, women are typically associated with the provision of care in family settings and in society, as well as within the nursing profession. This circumstance can condition the importance assigned to values, where women assume that values that are closer and more associated with the profession are values directly linked with care, whereas men identify with other aspects of the profession. This cultural influence is most likely shared by other Mediterranean countries such as Portugal, Italy, or Greece.

CONCLUSIONS

Significant gender differences exist in the perception of professional values in nursing. The women in our study gave more importance to the values integrated in all dimensions analyzed (ethics, professional commitment, and professional mastery). These differences were particularly evident among the group of students. This finding highlights the importance of analyzing, in depth, the professional view of nursing among men and women, as well as assessing education provided in values, which is currently integrated in the curricula of most international universities. Those values considered to be the most relevant among the students and

254 professionals belonged to the ethical dimension. This may be related to the training received and the basic principles associated with the performance of the nursing
255 profession. However, the remaining values, associated with professional commitment and professional mastery, should be addressed, as they are also important to
256 promote the profession and to improve the quality of care and professional socialization. It would be interesting to analyze the professional values in relation to
257 other variables directly related to the nursing profession (working environment, job expectations, or identity) and patients' appraisals through comparative studies at
258 an international level.

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327 **Table 1. Analysis of professional values (Ethics dimension) in nursing students and nurses according to gender and professional experience.**

	MEN						WOMEN						
	Total	Not important	Somewhat important	Important	Fairly important	Very important	Total	Not important	Somewhat important	Important (%)	Fairly important	Very important	p-value
	n	(%)	(%)	(%)	(%)	(%)	n	(%)	(%)		(%)	(%)	
Accept responsibility for meeting the health needs of a culturally diverse population													
Student	20	0.0	10.0	5.0	35.0	50.0	139	0.0	0.0	2.9	18.7	78.4	0.000**
Less-experienced Nurses	22	0.0	9.1	4.5	36.4	50.0	170	0.0	1.2	9.4	25.9	63.5	0.05
Expert Nurses	29	0.0	10.3	13.8	34.0	44.8	165	0.6	1.2	13.3	29.1	55.8	0.07
TOTAL	71	0.0	9.9	8.5	33.8	47.9	474	0.2	2.0	8.8	26.1	62.9	0.000**
Protect patients' moral and legal rights													
Student	20	0.0	0.0	5.0	15.0	80.0	139	0.0	0.0	0.0	6.5	93.5	0.01*
Less-experienced Nurses	22	0.0	4.5	0.0	13.6	81.8	169	0.0	0.6	1.8	15.4	82.2	0.34
Expert Nurses	29	3.4	3.4	6.9	27.6	58.6	165	0.0	0.6	4.2	19.4	75.8	0.04*
TOTAL	71	1.4	2.8	4.2	19.7	71.8	473	0.0	0.4	2.1	14.2	83.3	0.05
Act as advocate for the patients' rights													
Student	20	0.0	0.0	10.0	20.0	70.0	139	0.0	0.7	1.4	23.7	74.1	0.15
Less-experienced Nurses	22	0.0	4.5	13.6	36.4	45.5	170	0.0	0.6	7.1	27.6	64.7	0.13
Expert Nurses	29	3.4	3.4	13.8	24.1	55.2	163	0.6	1.2	11.0	26.4	60.7	0.55
TOTAL	71	1.4	2.8	12.7	26.8	56.3	472	0.2	0.8	6.8	26.1	66.1	0.08
Provide care without prejudice to patients with different lifestyles													
Student	20	0.0	0.0	15.0	10.0	75.0	139	0.0	0.0	0.0	16.5	83.5	0.000**
Less-experienced Nurses	22	0.0	0.0	18.2	27.3	54.5	170	0.0	2.4	4.7	20.6	32.4	0.06
Expert Nurses	29	0.0	3.4	17.2	34.5	44.8	163	0.0	1.8	11.7	27.6	58.9	0.54
TOTAL	71	0.0	1.4	16.9	25.4	56.3	472	0.0	1.5	5.7	21.8	71.0	0.005**
Respect patients' right to intimacy													
Student	20	0.0	0.0	0.0	10.0	90.0	139	0.0	0.0	0.7	6.5	92.8	0.79
Less-experienced Nurses	22	0.0	0.0	9.1	4.5	86.4	170	0.0	0.0	0.6	13.5	85.9	0.006**
Expert Nurses	28	0.0	0.0	10.7	17.9	71.4	165	0.0	0.0	4.2	17.0	78.8	0.35
TOTAL	70	0.0	0.0	7.1	11.4	81.4	474	0.0	0.0	1.9	12.7	85.4	0.04*
Oppose professionals who perform inappropriate or questionable practices													
Student	20	0.0	10.0	5.0	20.0	65.0	136	0.0	1.5	6.6	24.3	67.6	0.16
Less-experienced Nurses	22	0.0	4.5	13.6	13.6	68.2	169	0.6	3.0	5.3	26.6	64.5	0.44
Expert Nurses	28	0.0	0.0	10.7	25.0	64.3	163	1.2	3.1	11.0	25.2	59.5	0.86
TOTAL	70	0.0	4.3	10.0	20.0	65.7	468	0.6	2.6	7.7	25.4	63.7	0.69
Protect the rights of patients participating in research processes													
Student	20	0.0	5.0	10.0	15.0	70.0	139	0.0	0.0	2.2	20.9	77.0	0.01*
Less-experienced Nurses	22	0.0	0.0	13.6	13.6	72.7	170	0.0	0.6	3.5	19.4	76.5	0.19
Expert Nurses	29	0.0	3.4	10.3	34.5	51.7	165	0.0	0.6	6.1	17.6	75.8	0.04*
TOTAL	71	0.0	2.8	11.3	22.5	63.4	474	0.0	0.4	4.0	19.2	76.4	0.004**

Practice the profession taking into account the principles of loyalty and respect for the person													
Student	20	0.0	0.0	0.0	0.0	100.0	139	0.0	0.0	0.7	5.0	94.2	0.55
Less-experienced Nurses	22	0.0	0.0	4.5	22.7	72.7	170	0.0	0.6	2.4	10.6	86.5	0.35
Expert Nurses	29	0.0	0.0	3.4	37.9	58.6	165	0.0	0.0	3.0	10.9	86.1	0.001**
TOTAL	71	0.0	0.0	2.8	22.5	74.6	474	0.0	0.2	2.1	9.1	88.6	0.007**
Ensure the patient's confidentiality													
Student	20	0.0	0.0	0.0	15.0	85.0	139	0.0	0.0	0.0	2.2	97.8	0.03*
Less-experienced Nurses	22	0.0	4.5	4.5	4.5	86.4	170	0.0	0.0	2.4	9.4	88.2	0.04*
Expert Nurses	29	0.0	3.4	6.9	13.8	75.9	165	0.0	0.6	4.2	7.3	87.9	0.26
TOTAL	71	0.0	2.8	4.2	11.3	81.7	474	0.0	0.2	2.3	6.5	90.9	0.01*

328 * p<0.05 ** p<0.01

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353 **Table 2. Analysis of professional values (Professional Commitment dimension) in nursing students and nurses according to gender and professional**
354 **experience.**

	MEN						WOMEN						p-value
	Total	Not important	Somewhat important	Important	Fairly important	Very important	Total	Not important	Somewhat important	Important	Fairly important	Very important	
	(n)	(%)	(%)	(%)	(%)	(%)	(n)	(%)	(%)	(%)	(%)	(%)	
Protect the health and safety of the population													
Student	20	0.0	0.0	0.0	15.0	85.0	139	0.0	0.0	0.0	7.9	92.1	0.39
Less-experienced Nurses	22	0.0	45.0	4.5	27.3	63.6	169	0.0	0.0	3.6	16.0	80.5	0.20
Expert Nurses	29	0.0	3.4	3.4	24.1	69.0	165	0.0	0.0	2.4	17.0	80.6	0.08
TOTAL	71	0.0	2.8	2.8	22.5	71.8	473	0.0	0.0	2.1	14.0	83.9	0.001**
Participate in decisions about the distribution of resources													
Student	20	0.0	10.0	20.0	25.0	45.0	139	0.0	0.0	13.7	38.8	47.5	0.002**
Less-experienced Nurses	21	0.0	4.8	19.0	42.9	33.3	169	0.0	2.4	13.6	39.6	44.4	0.71
Expert Nurses	29	0.0	6.9	24.1	27.6	41.4	165	0.0	1.2	12.1	33.3	53.3	0.06
TOTAL	70	0.0	7.1	21.4	31.4	40.0	473	0.0	1.3	13.1	37.2	48.4	0.002**
Participate in peer review processes													
Student	20	0.0	0.0	30.0	20.0	50.0	139	0.0	0.0	5.0	22.3	72.7	0.001**
Less-experienced Nurses	22	0.0	0.0	4.5	13.6	81.8	169	0.6	0.6	4.7	15.4	78.7	0.99
Expert Nurses	28	0.0	3.6	10.7	14.3	71.4	164	0.6	0.6	10.4	17.7	70.7	0.67
TOTAL	70	0.0	1.4	14.3	15.7	68.6	472	0.4	0.4	6.8	18.2	74.2	0.18
Initiate actions for the improvement of professional settings													
Student	20	0.0	0.0	10.0	35.0	55.0	139	0.0	0.0	6.5	23.7	69.8	0.42
Less-experienced Nurses	22	0.0	4.5	4.5	45.5	45.5	170	0.0	1.2	7.6	22.9	68.2	0.07
Expert Nurses	29	0.0	0.0	20.7	27.6	51.7	163	0.6	1.2	8.0	34.4	55.8	0.29
TOTAL	71	0.0	1.4	12.7	35.2	50.7	472	0.2	0.8	7.4	27.1	64.4	0.22
Advance the profession by actively engaging in health-related activities													
Student	20	0.0	0.0	5.0	40.5	55.0	139	0.0	0.0	0.7	18.0	81.3	0.02*
Less-experienced Nurses	22	0.0	0.0	9.1	45.5	45.5	170	0.0	0.6	6.5	21.8	71.2	0.08
Expert Nurses	29	0.0	3.4	6.9	41.4	48.3	165	0.0	2.4	11.5	29.7	56.4	0.58
TOTAL	71	0.0	1.4	7.0	42.3	49.3	474	0.0	1.1	6.5	23.4	69.0	0.007**
Recognize the role of the professional nursing organizations in the construction of health policy													
Student	20	0.0	0.0	10.0	25.0	65.0	139	0.0	0.0	6.5	36.0	57.0	0.58
Less-experienced Nurses	22	0.0	4.5	18.2	31.8	45.5	170	0.0	2.4	12.4	40.0	45.3	0.75
Expert Nurses	29	3.4	17.2	17.2	27.6	34.5	164	3.0	3.0	15.2	33.5	45.1	0.03*
TOTAL	71	1.4	8.5	15.5	28.2	46.5	473	1.1	1.9	11.6	36.6	48.8	0.02*
Participate in nursing research and put into practice the relevant findings													
Student	20	0.0	10.0	0.0	60.0	30.0	139	0.0	0.0	8.6	38.8	52.5	0.000**
Less-experienced Nurses	22	0.0	4.5	36.4	22.7	36.4	170	0.0	2.4	12.4	27.1	58.2	0.02*
Expert Nurses	28	0.0	7.1	17.9	32.1	42.9	165	1.2	3.0	16.4	35.8	43.6	0.81
TOTAL	70	0.0	7.1	18.6	37.1	37.1	474	0.4	1.9	12.7	33.5	51.5	0.03*
Participate in activities of professional associations													
Student	20	0.0	5.0	35.0	40.0	20.0	138	0.0	1.4	17.4	44.2	37.0	0.14
Less-experienced Nurses	22	4.5	9.1	13.6	50.0	22.7	170	0.6	4.1	15.3	43.5	36.5	0.26
Expert Nurses	29	0.0	13.8	31.0	20.7	34.5	165	4.2	5.5	18.8	37.6	33.9	0.11

355	TOTAL	71	1.4	9.9	26.8	35.2	26.8	473	1.7	3.8	17.1	41.6	35.7	0.04*
356	* p<0.05	** p<0.01												

357 **Table 3. Analysis of professional values (Professional Mastery dimension) in nursing students and nurses according to gender and professional**
358 **experience.**

	MEN						WOMEN						
	Total	Not important	Somewhat important	Important	Fairly important	Very important	Total	Not important	Somewhat important	Important	Fairly important	Very important	
	(n)	(%)	(%)	(%)	(%)	(%)	(n)	(%)	(%)	(%)	(%)	(%)	p-value
Engage in a continuous process of self-assessment													
Student	20	0.0	0.0	15.0	30.0	55.0	139	0.0	0.0	6.5	30.9	62.6	0.40
Less-experienced Nurses	22	0.0	0.0	13.6	40.9	45.5	170	0.0	1.2	7.1	37.6	54.1	0.64
Expert Nurses	29	0.0	6.9	6.9	41.4	44.8	163	0.6	2.5	11.7	30.7	54.6	0.47
TOTAL	71	0.0	2.8	11.3	38.0	47.9	472	0.2	1.3	8.5	33.3	56.8	0.56
Request help/collaboration when one cannot meet the patient's needs													
Student	20	0.0	20.0	20.0	25.0	35.0	139	0.0	1.4	16.5	28.1	54.0	0.001**
Less-experienced Nurses	21	0.0	4.8	33.3	28.6	33.3	169	0.0	1.2	13.6	24.3	60.9	0.03*
Expert Nurses	29	0.0	0.0	20.7	37.9	41.4	165	0.0	1.2	12.7	23.6	62.4	0.15
TOTAL	70	0.0	7.1	24.3	31.4	37.1	473	0.0	1.3	14.2	25.2	59.4	0.000**
Establish quality criteria as a guide to practice													
Student	20	0.0	0.0	5.0	20.0	75.0	139	0.0	0.0	0.0	11.5	88.5	0.02*
Less-experienced Nurses	22	0.0	0.0	9.1	22.7	68.2	170	0.0	0.6	3.5	13.5	82.4	0.36
Expert Nurses	29	3.4	0.0	3.4	24.1	69.0	164	0.0	0.6	7.9	16.5	75.0	0.11
TOTAL	71	1.4	0.0	5.6	22.5	70.4	473	0.0	0.4	4.0	14.0	81.6	0.02*
Promote and maintain levels of professionalism in the learning activities planned for students													
Student	20	0.0	0.0	10.0	15.0	75.0	139	0.0	0.0	3.6	16.5	79.9	0.43
Less-experienced Nurses	22	0.0	0.0	4.5	31.8	63.6	170	0.0	0.6	4.1	26.5	68.8	0.94
Expert Nurses	29	0.0	10.3	10.3	34.5	44.8	165	0.6	1.2	9.7	25.5	63.0	0.04*
TOTAL	71	0.0	4.2	8.5	28.2	59.2	474	0.2	0.6	5.9	23.2	70.0	0.05*
Find additional training to update one's knowledge and skills													
Student	20	0.0	5.0	5.0	15.0	75.0	138	0.0	0.0	1.4	11.6	87.0	0.04*
Less-experienced Nurses	22	0.0	0.0	4.5	13.6	81.8	169	0.0	0.0	2.4	15.4	82.2	0.82
Expert Nurses	29	0.0	6.9	10.3	24.1	58.6	165	0.0	0.0	9.1	17.6	73.3	0.005**
TOTAL	71	0.0	4.2	7.0	18.3	70.4	472	0.0	0.0	4.4	15.0	80.5	0.000**
Promote equitable access to nursing care and health in general													
Student	20	0.0	0.0	10.0	25.0	65.0	138	0.0	0.0	0.7	24.6	74.6	0.02*
Less-experienced Nurses	22	0.0	0.0	13.6	27.3	59.1	170	0.0	0.6	5.9	25.3	68.2	0.55
Expert Nurses	29	0.0	6.9	10.3	37.9	44.8	164	0.0	1.2	8.5	28.0	62.2	0.11
TOTAL	71	0.0	2.8	11.3	31.0	54.9	472	0.0	0.6	5.3	26.1	68.0	0.03*
Accept responsibility for one's practice													
Student	20	0.0	0.0	5.0	15.0	80.0	139	0.0	0.0	0.7	10.8	88.5	0.23
Less-experienced Nurses	22	0.0	0.0	4.5	9.1	86.4	170	0.0	0.6	2.4	15.3	81.8	0.79
Expert Nurses	29	0.0	0.0	3.4	27.6	69.0	165	0.0	0.0	4.2	15.8	80.0	0.30
TOTAL	71	0.0	0.0	4.2	18.3	77.5	474	0.0	0.2	2.5	14.1	83.1	0.62

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Maintain professional competence in one's professional practice													
	Total	Not important	Somewhat important	Important	Fairly important	Very important	Total	Not important	Somewhat important	Important	Fairly important	Very important	p-value
	(n)	(%)	(%)	(%)	(%)	(%)	(n)	(%)	(%)	(%)	(%)	(%)	
Student	20	0.0	0.0	0.0	25.0	75.0	139	0.0	0.0	0.7	14.4	84.9	0.45
Less-experienced Nurses	22	0.0	0.0	0.0	13.6	86.4	170	0.0	0.6	1.8	21.2	76.5	0.73
Expert Nurses	29	0.0	6.9	6.9	20.7	65.5	165	0.0	1.8	6.7	17.0	74.5	0.40
TOTAL	71	0.0	2.8	2.8	19.7	74.6	474	0.0	0.8	3.2	17.7	78.3	0.49
Refuse to participate in practices that are ethically opposed to the professional values acquired													
Student	20	0.0	5.0	5.0	10.0	80.0	138	0.0	2.9	1.4	27.5	68.1	0.28
Less-experienced Nurses	20	0.0	10.0	10.0	20.0	60.0	170	0.0	1.8	9.4	21.2	67.6	0.19
Expert Nurses	29	0.0	10.3	10.3	20.7	58.6	164	0.6	2.4	6.1	22.0	68.9	0.24
TOTAL	69	0.0	8.7	8.7	17.4	65.2	472	0.2	2.3	5.9	23.3	68.2	0.05

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* p<0.05 ** p<0.01