

# Prejudiced Attitudes of Nursing Students in Southern Spain Toward Migrant Patients

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## Abstract

**Introduction:** The increase in the migrant population in Spain has transformed the cultural profile of public health care users. The purpose of this study is to recognize the subtle and blatant prejudices nursing students have toward migrant patients. **Method:** An ex post facto descriptive study, using a transversal design ( $N = 1,393$ ). **Results:** Males showed a higher degree of prejudice ( $p < .05$ ). Students in their first year have more subtle prejudices than those in their fourth year ( $p < .005$ ). Blatant prejudice increases from the first year to the fourth year of the degree program ( $p < .05$ ). Regarding context, there were differences found between subtle and blatant prejudice (both,  $p < .05$ ), as students in areas with high migratory pressure showed more prejudiced attitudes toward migrant patients. **Discussion:** Students display subtle prejudices, which is why education in culturally congruent health care must be integrated across all levels of nursing education, with the objective of diminishing prejudice against the migrant population.

## Keywords

students, nursing, prejudice, migration, education

## Introduction

International migration grows with each passing year. In 2017, 258 million people migrated around the world, 78 million of them in Europe alone (Department of Economic and Social Affairs, 2017). In Spain, foreign residents constitute 11.4% of the population, of which 34.6% come from countries outside the EU-28, 27.2% from Latin American countries and 22% from Africa (Instituto Nacional de Estadística, 2020), which has led to a substantial modification in the cultural profile of the users of the public health care system (Plaza del Pino et al., 2020). The progressive increase in cultural and religious diversity in destination countries (Segal, 2019) may lead to a change in the attitudes of its population and increased prejudice toward migrants (Sánchez-Ojeda et al., 2019). Several studies have demonstrated how cultural and linguistic diversity compromise the quality of the health care that is offered (Almutairi et al., 2015; Granero-Molina et al., 2019; Hultsjö et al., 2019; Plaza del Pino et al., 2020), with nurses at the forefront of the ethical responsibility of providing culturally congruent health care to all their patients (Desaretz, 2019).

Prejudice is defined as evaluative judgements full of negative emotions directed at the other (outgroup), generating an attitude of rejection that remains relatively stable and lasting over time (Alemany et al., 2019). These negative attitudes

may be manifested in discriminatory behaviors (Plaza Del Pino, 2017), which are justified by the prejudices themselves (Civalero et al., 2019; Ramírez Barría et al., 2016). Openly expressing prejudiced opinions toward a certain group is not an ethical or socially accepted behavior. In addition, the way of expressing prejudices has changed; prejudice can be expressed in an open or blatant way (blatant prejudice [BP]) or in a more subtle way, known as subtle prejudice (SP). Blatant prejudice is characterized by overt expression and nonexistent interaction with the outgroup, since they are considered a threat, whereas SP refers to any less-evident behavior, such as patronizing attitudes toward a group of immigrants (Contreras-Ibáñez & Saldívar, 2018; Palacio et al., 2019). Evidence shows that SP is more common than BP (Civalero et al., 2019). Pettigrew and Meertens (1995), the authors who developed the scale that measures SP and BP, based on the scores obtained on the scale, classify subjects into three types: *equalitarians*, who obtain low

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scores on the BP and SP scale; *subtles*, who score higher on the subtle scale than the blatant scale, and *bigots*, whose scores are generally high on both scales. Nonetheless, a fourth subject also exists, dubbed *errors* or *nonvalids*, which includes those that receive a low score on the subtle scale and a high score on the blatant scale (Augoustinos et al., 2014).

In multicultural societies, nurses as well as the rest of the population, carry prejudices toward the migrant population that condition their practice and their treatment of such patients (Arrey et al., 2017; Dunagan et al., 2016) leading to inequalities in health care (Hatzenbuehler et al., 2013; Lan et al., 2019). Prejudiced attitudes that are observed in society also exist in the university setting, as several studies carried out on this sector of the population have concluded that students possess SP as well as BP toward migrants (Guardia & Nacarí, 2013; Segura-Robles et al., 2016; Sánchez-Ojeda et al., 2019), which encourages us to develop further research in this field. More and more universities are including nursing content related to cultural competence, culturally congruent health care, and attention to cultural diversity in their undergraduate coursework. There are numerous studies that highlight the importance of such training to avoid prejudices and discriminatory attitudes in new nurses (Nielsen et al., 2019; Plaza Del Pino, 2017; Van Keer et al., 2020), although it may also be necessary to develop other initiatives, not only among students, but also with nurses and other health care professionals, to change these types of attitudes (Noble et al., 2014; Plaza del Pino, 2017). Formal education can have positive effects on the reduction of prejudiced attitudes toward migrants (Easterbrook et al., 2016), although the data available are not conclusive (Civalero et al., 2019). In addition, several studies (Gatica & Navarro-Lashayas, 2019; Kuppens & Spears, 2014; Meeusen et al., 2013) report that one of the variables that influences prejudiced attitudes is education level, with university students having more favorable and tolerant attitudes toward migrants (Keshet & Popper-Giveon, 2017), although there are other studies that show that having a higher level of education does not reduce such prejudices (Sánchez-Ojeda et al., 2019).

The coast of Southern Spain, along with the Spanish cities of North Africa, Ceuta, and Melilla, are the main gateways for Africans wanting to reach Europe (Kassar & Dourgnon, 2014), using Spain as a transit country (Bendaoued et al., 2016). Ceuta and Melilla are two Spanish cities in northern Africa where four cultures coexist: Christians with European roots and who practice the Christian faith, Jewish people, Gypsy people, and Berber people of the Muslim faith and who speak the *Tamazight* language. The two largest groups are the European and Berber populations (Sánchez-Ojeda et al., 2019). Muslims in Ceuta constitute 44% of the population (38% native and 6% immigrants, mostly Moroccan people), and in Melilla, 52% (38% native and 14% Moroccan immigrants) (UCIDE, 2020), without taking into account the countless Moroccan people that cross the border daily into both cities, since open

passage is permitted along the Moroccan–Spanish border for those that live in the area. This causes an overburdening of the health care system in Ceuta and Melilla, due to the use of the system by their Moroccan neighbors, mainly in emergency cases and for child birth (Instituto Nacional de Gestión Sanitaria, 2019).

On the southern coast of Spain, the migratory pressure varies by province, with Almería being the province of Andalusia with the highest foreign resident population, 20.28% (Observatorio Permanente Andaluz de las Migraciones [OPAM], 2019). The majority of these foreign residents are immigrants who come to work in the intensive agriculture sector in the area, with more than 31,000 hectares of greenhouses (Cajamar, 2019), which causes a high demand for labor. In Malaga, which has 15.20% foreign residents (OPAM, 2019), the largest nationality is English, while the migrant population is mostly divided between Moroccans and Romanians, dedicated to hospitality, construction, and other low-skilled jobs. A completely different situation can be found in Granada, in which the foreign population is only 6.65%, (OPAM, 2019) and migratory pressure is very low.

Geographic and sociocultural contexts are variables to take into consideration with regard to prejudice, seeing as, following the contact hypothesis of Pettigrew and Tropp (2006), the relationships that are formed with migrants may be related to prejudice attitudes toward the outgroup. Therefore, a person living in a context with an average level of positive intergroup contact is likely to show less prejudice than a person living in a context with minimal intergroup contact (Civalero et al., 2019).

The work of Christ et al. (2014) and Dhont et al. (2011) supports this idea and concluded that intergroup contact plays an important role in reducing prejudiced attitudes; although to encourage a decrease in prejudice, there are certain optimal conditions that must be met (Pettigrew & Tropp, 2006). For this reason, positive contact reduces prejudice, but negative contact can increase prejudiced attitudes (Hayward et al., 2017). Binder et al. (2009) concluded that contact reduced prejudice, but that prejudice diminishes contact. A meta-analysis performed by Pettigrew and Tropp (2008) shows that contact reduces prejudice because it increases knowledge about the outgroup, and as a result, attitudes improve, which coincides with a study by Zagefka et al. (2016). However, the results are not conclusive, therefore, further research should be carried out on the influence of knowledge about the outgroup and an improvement in attitudes (Cervantes et al., 2018).

Focusing on these cities in southern Spain, the objectives of this study are to recognize the subtle and blatant prejudices nursing students have toward migrant patients; second, to analyze these prejudices based on the variables of sex, academic year, and students' contact with the migrant population, comparing cities with high migratory pressure (Almería, Ceuta, and Melilla) with those with low migratory pressure (Málaga and Granada); and finally, to analyze if

differences exist in students' prejudices based on these variables.

## Method

### Design

The design used is ex post facto (Atos et al., 2013), typical of research in health sciences, one of its characteristics being that the variables are not susceptible to manipulation and the variables analyzed have already been given.

### Participants

The study was carried out during the first semester of the 2019-2020 academic year, in the Schools of Health Sciences in Melilla, Granada, Ceuta, Almería, and Málaga (all the Universities are in the south of Spain), on students studying a nursing degree. A nonprobability sample was used to recruit participants. Inclusion criteria to participate were to be enrolled in one of the five universities in the study, in addition the student had to understand Spanish fluently to complete the scale. With the permission of different faculty, students were recruited from the courses in which attendance was compulsory. The questionnaire was completely anonymous and confidential.

### Instruments

For this research, the Subtle and Blatant Prejudice Scale by Pettigrew and Meertens (1995), validated and translated into Spanish by Rueda and Navas (1996) was used. The reliability, measured through Cronbach's  $\alpha = .75$  for SP and  $=.74$  for BP. The scale measures SP and BP using two 10-item Likert-type scales to measure each of the prejudice types. Thus, item responses were scored from 1 to 5, with 1 being *strongly disagree*, and 5 being *strongly agree*, with higher scores indicating greater prejudice. Certain items on the scale are scored in the opposite way (Items 4, 7, 13, 18, 19, and 20). The SP scale consists of Items 1, 3, 5, 6, 11, 12, 14, 16, 18, and 19. Conversely, the BP scale consists of Items 2, 4, 7, 8, 9, 10, 13, 15, 17, and 20. For each of the scales the minimum score is 10 and the maximum 50. Furthermore, the Pettigrew and Meertens scale (1995) classifies subjects into three groups: *equalitarians*, which are the students who obtain low scores in the SP scale as well as the BP scale; *subtles*, who score higher on the SP scale and low on the BP scale; and finally, *bigots*, whose scores are high on both the SP and BP scales. There is an additional classification of *errors*, for those who score low on the SP and high on the BP scale.

### Data Analysis

To analyze the first objective, descriptive analyses (frequency, mean, standard deviation, skewness), and reliability

analysis were performed. To examine the second and third objectives, the adjustment of the normal distribution of the scores using the Kolmogorov–Smirnov test with the Lilliefors and Shapiro–Wilk correction was made; regarding the homoscedasticity, the statistical analyses of contrasts were performed using the Levene statistic (Student's  $t$ , analysis of variance [ANOVA], and multivariate analysis). To detect significance, a 95% confidence interval was used.

### Ethical Considerations

The ethical guidelines and principles for medical research on humans, established by the World Medical Association in the Declaration of Helsinki in its latest version of the 64th General Assembly, Fortaleza, Brazil, October 2013, were followed for this study. This ensured the knowledge and approval of the Research Ethics Committee of the Department of Nursing of the Universities of Melilla, Granada, Ceuta, Almería, and Málaga. The voluntary nature of students' participation was also respected, and confidentiality was guaranteed throughout the study. Each student signed and turned in an informed consent detailing the purposes of the study and their willingness to participate.

## Results

### Sample

The sample consisted of 1,393 students. The distribution of the students by each of the nursing courses of study, academic year, and sex is shown in Table 1.

To analyze the first proposed objective, the prejudiced attitudes toward the migrant population of nursing students, a descriptive analysis was carried out. The SP scale showed a mean score of  $25.93 \pm 6.82$ , with a minimum mean score of 10.00 and a maximum mean score of 48.00, with positive asymmetry (0.163), which shows that the majority of the responses were grouped into the options of disagree and totally disagree.

Regarding BP, the mean score was  $20.13 \pm 6.64$ , with a minimum mean score of 10.00 and a maximum mean score of 50.00, with positive asymmetry (0.570), which indicates that the majority of responses can be grouped into the options of disagree and totally disagree. Table 2 shows a detailed description of each item that constitutes the scales.

Following the classification of the Pettigrew and Meertens scale (1995), the low and high scores of each participant were selected, with mean scores and the percentiles where they were found on each scale used as the criteria (Table 3). Therefore, to find out which participants fall within the *equalitarian* group, the university students who scored below the 20th percentile (SP scale is  $\times - 20.00$  and for BP  $\times 14.00$ ) in both SP and BP were selected, which came to a total of 193 (14.53%) participants with lower scores and therefore nonprejudice attitudes toward the migrant population. In addition, to analyze which students fall into the

**Table 1.** Description of the Participants According to the Variables Sex, Academic Year And Universities.

Sex				Universities					Total
				Melilla	Granada	Ceuta	Almería	Málaga	
Female	Academic year	First	N (%)	67 (6.0)	84 (7.6)	32 (2.9)	108 (9.7)	0 (0.0)	291 (26.2)
		Second	N (%)	64 (5.8)	79 (7.1)	45 (4.0)	48 (4.3)	121 (10.9)	357 (32.1)
		Third	N (%)	66 (5.9)	76 (6.8)	52 (4.7)	37 (3.3)	42 (3.8)	273 (24.6)
		Fourth	N (%)	26 (2.3)	62 (5.6)	49 (4.4)	52 (4.7)	2 (0.2)	191 (17.2)
Male	Academic year	First	N (%)	19 (6.8)	19 (6.8)	11 (3.9)	21 (7.5)	0 (0.0)	70 (24.9)
		Second	N (%)	19 (6.8)	13 (4.6)	11 (3.9)	14 (5.0)	20 (7.1)	77 (27.4)
		Third	N (%)	11 (3.9)	18 (6.4)	21 (7.5)	8 (2.8)	17 (6.0)	75 (26.7)
		Fourth	N (%)	10 (3.6)	19 (6.8)	18 (6.4)	12 (4.3)	0 (0.0)	59 (21.0)
Total	Academic year	First	N (%)	86 (6.2)	103 (7.4)	43 (3.1)	129 (9.3)	0 (0.0)	361 (25.9)
		Second	N (%)	83 (6.0)	92 (6.6)	56 (4.0)	62 (4.5)	141 (10.1)	434 (31.2)
		Third	N (%)	77 (5.5)	94 (6.7)	73 (5.2)	45 (3.2)	59 (4.2)	348 (25.0)
		Fourth	N (%)	36 (2.6)	81 (5.8)	67 (4.8)	64 (4.6)	2 (0.1)	250 (17.9)
	Total	N (%)	282 (20.2)	370 (26.6)	239 (17.2)	300 (21.5)	202 (14.5)	1,393 (100.0)	

**Table 2.** Description of the Students of Subtle Prejudice and Blatant Prejudice.

Subtle prejudice, SP				Blatant prejudice, BP			
Item	M ± SD	Asymmetry	Corrected item-total correlation	Item	M ± SD	Asymmetry	Corrected item-total correlation
1	3.07 ± 1.28	-0.019	0.445	2	2.66 ± 1.30	0.297	0.521
3	2.28 ± 1.10	0.615	0.598	4	1.51 ± 0.81	2.018	0.454
5	2.23 ± 1.74	0.713	0.600	7	2.60 ± 1.24	0.355	0.504
6	2.62 ± 1.18	0.241	0.597	8	1.68 ± 0.95	1.471	0.533
11	2.76 ± 1.08	0.057	0.629	9	2.27 ± 1.02	0.677	0.508
12	3.12 ± 1.09	-0.267	0.528	10	2.02 ± 0.99	0.904	0.681
14	2.86 ± 1.09	-0.010	0.470	13	2.20 ± 1.07	0.607	0.524
16	2.70 ± 1.09	0.105	0.476	15	1.71 ± 0.86	1.119	0.674
18	2.32 ± 1.78	0.666	0.398	17	1.61 ± 0.87	1.161	0.545
19	1.99 ± 0.90	1.118	0.207	20	1.88 ± 1.03	0.972	0.485

*subtle* group, those who had higher than average scores on the SP scale ( $M \geq 32$ ) and lower scores on the BP scale ( $M \leq 14$ ) were selected, with a total of 2 students (0.1%). Regarding the students who fell into the *bigot* classification, there were 164 students (12.34%) who had high scores on the SP as well as BP scales ( $M \geq 32$  and  $M \geq 26$ , respectively). Finally, just 3 students (0.22%) were found to be in the *errors* group. The rest of the students were found to fall somewhere on the continuum in both SP (777 participants, 58.5%) and BP (734 students, 55.3%).

In relation to the second objective, to analyze the prejudiced attitudes of the students toward the migrant population according to the study variables, Table 4 shows the classification of the subjects. In further detail, the results indicate that 54.4% of *equalitarians* and 70.7% of *bigots* have been in contact with the migrant population, compared with 100% of the *subtles* who say they have not. Based on sex, 14.02% of females are *equalitarians* versus 13.16% of

males, 0.08% of females are *subtles*, versus 0.35% of males, and 11.51% of females are *bigots* versus 12.81% of males.

Finally, to analyze if there were differences between the study variables, the inferential analyses were performed based on sex, and the data showed that there were only differences in SP ( $t = -2.480$ ;  $p < .05$ ;  $d_{\text{COHEN}} = -0.171$ ;  $r = -0.085$ ), with the males having more prejudiced attitudes than females ( $M_{\text{MALES}} = 26.86$ ,  $M_{\text{FEMALES}} = 25.70$ ), although the effect was small.

Regarding the variable of academic year, the data showed significant differences in SP ( $F_{3, 1337} = 5.346$ ;  $p < .005$ ) as well as BP ( $F_{3, 1340} = 3.670$ ;  $p < 0.05$ ). It was the students in their first year who obtained the highest scores in SP, which decreased steadily with each additional academic year until the fourth year, in which the averages increase again, reaching similar scores to those of the first year students ( $SP_{1^o} = 26.86$ ;  $SP_{2^o} = 25.06$ ;  $SP_{3^o} = 25.63$ ;  $SP_{4^o} = 26.55$ ). On the contrary, regarding BP, prejudiced attitudes were shown to

**Table 3.** Description of the Students by Their Pettigrew and Meertens (1995) Classification of Subtle Prejudice and Blatant Prejudice.

		Blatant prejudice (BP)			Total, <i>n</i> (%)
		Low scores, BP $M \leq 14$	Average scores, BP $15 \leq M \leq 25$	High scores, BP $M \geq 26$	
Subtle prejudice (SP)	Low scores, SP $M \leq 20$	193 equalitarians	85	3 errors	281 (21.2)
	Average scores, SP $21 \leq M \leq 31$	117	545	115	777 (58.5)
	High scores, SP $M \geq 32$	2 subtles	104	164 bigots	270 (20.3)
Total, <i>n</i> (%)		312 (23.5)	734 (55.3)	282 (21.2)	1,328

**Table 4.** Classification of the Subjects by Sex and Contact With Migrants on the Subtle Prejudice and Blatant Prejudice Scales.

		Blatant prejudice (BP)			Total, <i>n</i> (%)
		Low scores, BP $M \leq 14$	Average scores, BP $15 \leq M \leq 25$	High scores, BP $M \geq 26$	
Subtle prejudice (SP)	Low scores, SP $M \leq 20$	Equalitarians (193)	85	3 errors	281 (21.2)
		Contact	M = 37 F = 148		
	Average scores, SP $21 \leq M \leq 31$	No contact	M = 0 F = 8		
		117	545	115	777 (58.5)
	High scores, SP $M \geq 32$	Subtles (2)	104	Bigots (164)	270 (20.3)
		Contact	M = 1 F = 1		Contact M = 32 F = 106
Total, <i>n</i> (%)	No contact	M = 0 F = 0		No contact M = 4 F = 22	
	312 (23.5)	734 (53.3)	282 (21.2)	1,328	

Note. M = male; F = female.

increase from the first to the fourth years, and it was in the last course where they reached their highest scores (BP<sub>1<sup>o</sup></sub> = 20.46; BP<sub>2<sup>o</sup></sub> = 19.35; BP<sub>3<sup>o</sup></sub> = 20.12; BP<sub>4<sup>o</sup></sub> = 21.03).

To analyze the scores by university, Almería, Ceuta, and Melilla were grouped together for having a high migratory flow and Granada and Málaga together for being areas with low migratory pressure. The data show that there are significant differences in SP ( $t = 4.745$ ;  $p < .001$ ;  $d_{\text{COHEN}} = 0.367$ ;  $r = 0.180$ ) as well as BP ( $t = 4.373$ ;  $p < .001$ ;  $d_{\text{COHEN}} = 0.240$ ;  $r = 0.119$ ). Students in areas with high migratory pressure manifest greater prejudiced attitudes, both SP and BP, although the size of the effect is small.

In addition, the multivariate analysis of variance (MANOVA) procedure was performed, using sex and university by migratory pressure as covariates, and the results show significant differences only in BP ( $F = 5.858$ ;  $p < .005$ ; partial  $\eta^2 = 0.004$ ), with the students, males ( $M = 20.42$ ) as well as females ( $M = 20.88$ ), who live in areas of high migratory pressure being the ones that show greater prejudiced attitudes, although the size of the effect is small. Furthermore, the MANOVA inferential analyses based on the covariates academic year and university by migratory pressure, show significant differences in both SP

( $F = 5.598$ ;  $p < .001$ ; partial  $\eta^2 = 0.013$ ) and BP ( $F = 7.978$ ;  $p < .000$ ; partial  $\eta^2 = 0.018$ ; Table 5).

## Discussion

The purpose of this study was to examine SP and BP toward the migrant population displayed by students in nursing degree programs in Ceuta, Melilla, Almería, Málaga, and Granada, if there were differences in each of these cities, and whether they depend on the sex of the student or their academic year.

In the descriptive analysis of the items that compose the two scales, the data show that positive asymmetry exists. The students have a tendency to respond strongly in agreement or disagreement to all the items. This may be interpreted as the product of *social desirability* when asked about subjects where their prejudiced attitudes toward migrants are clearly manifested (Gatica & Navarro-Lashayas, 2019). They may avoid responding negatively so as not to be seen as intolerant (Civalero et al., 2019; Ramírez Barría et al., 2016). Moreover, studies about prejudiced attitudes have shown that the general population has changed its way of expressing prejudice over time, from expressing themselves blatantly or openly to

**Table 5.** Comparison Between the Academic Year and Universities With High/Low Migratory Pressure (N = 1,328).

	Academic year	N	M ± SD	F	p
SP: Universities with high migratory pressure	First	249	26.56 ± 7.45	5.989	<.005
	Second	193	26.64 ± 6.22		
	Third	186	26.58 ± 7.82		
	Fourth	155	26.85 ± 7.41		
SP: Universities with low migratory pressure	First	95	27.72 ± 6.34		
	Second	225	23.67 ± 5.38		
	Third	142	24.45 ± 5.87		
	Fourth	83	25.89 ± 6.65		
BP: Universities with high migratory pressure	First	249	19.98 ± 6.83	7.978	<.001
	Second	193	21.06 ± 6.88		
	Third	186	21.16 ± 7.10		
	Fourth	155	21.27 ± 6.78		
BP: Universities with low migratory pressure	First	95	21.64 ± 6.84		
	Second	225	17.97 ± 5.45		
	Third	142	18.85 ± 5.74		
	Fourth	83	20.57 ± 6.89		

Note. SP = subtle prejudice; BP = blatant prejudice.

using other more implicit or subtle ways (Dovidio et al., 2017). Thus, the scores obtained on the SP scale are higher than those obtained on the BP scale, which supports this idea (Civalero et al., 2019; Sánchez-Ojeda et al., 2019; Segura-Robles et al., 2016).

In relation to the first objective, regarding the classification by Pettigrew and Meertens (1995), the data indicate that more than half the sample take a moderate position on prejudice and thus do not fall within any specific category. The highest percentage of students that fall within one of the classifications are the *egalitarians*, which coincides with results found in the research of Palacios et al. (2019) and Segura-Robles et al. (2016). The percentage of subjects found in the *bigot* category is higher than the percentage in the *subtle* category, which is contrary to the results obtained by Palacios et al. (2019) and corresponds to the results found by Segura-Robles et al. (2016). Students do not mind manifesting their prejudiced attitudes toward the migrant population. Although the number of *bigots* is not high, we must examine these responses and work toward eliminating these outright prejudiced attitudes. This data differs from that of Ramírez Barría et al. (2016) as *subtle* subjects constitute the majority group in their study. It would be interesting to discuss how *social desirability* may influence responses.

Regarding the second and third objectives, our study reflects that males show more SP than females, but there are no differences in BP, which does not correspond with the results obtained by Ungaretti et al. (2018), which concluded that differences do not exist between genders in this aspect. These results also differ from those obtained by Sánchez-Ojeda et al. (2019), where males had higher scores on the BP scale.

When analyzing the academic year, our study shows that as students progress through each academic year, their scores on the SP scale decrease, while they increase on the BP scale. These results are similar to those found by Sánchez-Ojeda et al. (2019) and contrary to those found by Keshet and Popper-Giveon (2017), who concluded that the more education the students received, the less prejudiced their attitudes were. Our results do not allow us to conclude whether education has a positive effect on the reduction of prejudiced attitudes toward migrants (Easterbrook et al., 2016; Gatica & Navarro-Lashayas, 2019; Kuppens & Spears, 2014; Meeusen et al., 2013). However, the results are slightly alarming, as all students from the universities analyzed have been taught specific content on migrations and culturally congruent health care in the subject of Transcultural Nursing and have carried out clinical practices. The methodologies that are taught will have to be reconsidered to make it more practical and experiential, working on reflexivity and critical analysis of reality with a flexible methodology that adapts to students (Plaza del Pino, 2017). The emotional aspects of prejudiced attitudes will also have to be addressed and the contents adapted to the social and cultural reality of the environment. The culturally congruent health care must be incorporated into the clinical practices of the students with cultural care guidelines for migrant patients and surveillance of discriminatory behaviors.

There are numerous studies that have analyzed the influence of contact on the acquisition and maintenance of prejudiced attitudes toward the migrant population; some research insisting it plays a relevant role in reducing prejudices (Christ et al., 2014; Civalero et al., 2019; Pettigrew & Tropp, 2006), others concluded otherwise. In this study, students who come

from contexts with greater migratory pressure (Melilla, Ceuta, and Almería) show increasingly prejudiced attitudes, although the cause is unknown. It may be due to the *quality* of the contact the students have with the migrant population, as in these areas, immigrants generally live in specific segregated neighborhoods and there are certain barriers to their access to the health care system (Plaza del Pino, 2010). Authors such as Cervantes et al. (2018) relate contact and these prejudiced attitudes to other types of variables such as emotional aspects.

### Limitations

Although this study has explored SP or BP of nursing students toward migrants and the differences in prejudice by sex, academic year, and location, lack of awareness as to the causes of these differences is a limitation of this study. It would be necessary to further explore them through a qualitative study, with the aim of designing specific interventions for reducing prejudice, which we will propose in a future research.

### Conclusions

This study provides information about the SP and BP of nursing students toward the migrant population. Half of the students demonstrate moderate prejudice, which must be addressed in order to reduce this bias. The existence of *bigots* among the students is concerning, above all because of the chance that their prejudice could translate into discriminatory behavior when treating migrant patients, which is neither professionally nor ethically acceptable.

The increase in BP with the passing of academic years shows that reflection is needed on the type of education which is being offered to students in the nursing degree program aimed at improving their intercultural competence. The transcultural nursing subject must be rethought and must integrate culturally congruent health care into the clinical practices of the students to guarantee quality care for migrant patients.

The fact that students from contexts with high migratory pressure (Melilla, Ceuta, and Almería) have more prejudice than those in areas with lower migratory pressure (Malaga and Granada) must encourage us to strengthen intercultural education at these and adapt it to their specific point of view.

Education in intercultural concepts and skills in nursing degrees should be a fundamental element that is integrated throughout the degree program, at every level of university education, with the aim of eliminating prejudices toward the migrant population in future nurses.

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