

Investigation of Knowledge and Attitudes of African and Turkish Nursing Students Regarding the Older Adults; A Comparative Descriptive Study

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Abstract

Objective: The aim of the study is to determine the attitudes and knowledge of African and Turkish Nursing Students with regard to the older adults.

Materials and Methods: This comparative descriptive study was conducted in a private university in Northern Cyprus. A total of 455 African and Turkish nursing students participated in this study. Personal information form, Palmore's facts on aging quiz (FAQ) and Kogan attitudes towards older people scale (KAOPS) were used to collect data. Descriptive statistics, Kruskal-Wallis test, Mann-Whitney U tests and multivariate linear regression were used for data analysis.

Results: The mean FAQ score of the Turkish students was determined to be 30.64 ± 7.15 and the mean KAOPS score was 125.33 ± 13.14 , whereas the mean FAQ score of the African students was 26.33 ± 7.82 and the mean KAOPS score was 122.97 ± 10.30 . No significant difference was found in the students' attitudes towards the elderly in terms of nationality. The Turkish students' knowledge about old age was 3.43 times higher than the African students' knowledge [$R^2=8.9\%$, odds ratio=3.43 (1.93-6.11)].

Conclusion: It was determined that both the Turkish and African students had similar and positive attitudes towards the elderly; however, Turkish students had more knowledge about the elderly.

Keywords: Aging, geriatric care management, geriatric nursing, geriatrics, long-term care

Introduction

"The population aged 60 years and over" is increasing worldwide due to an increase in life expectancy and a decrease in the death rate (1). The increase in the older adults population generally brings with it a new and increased demand for health services. Health care services and those working them, in particular nurses, should have the skills and abilities to be able to meet the needs of this group. In the future, it will become ever more likely that nurses will be involved in the care of older adults (2).

In general, studies examining health professionals' and students' choices about whether to work in geriatric care, as well as their attitudes towards the older adults, have found various noteworthy differences and inconsistencies. Some determined

that nursing students had positive, negative, and neutral attitudes towards the older adults, and that attitudes were less positive in studies conducted since 2000 (3-6). It was stated in a systematic review that both health professionals and students had a negative attitude towards the older adults and that health professionals had even more negative attitudes than students; this change was discussed in the context of social sensitivity and the use of preparatory courses about older adult care in education programs (7-10).

Despite the differences in the results of all these studies, a common finding was that opinions, prejudices, values, beliefs, and attitudes about and towards aging and older adult people directly affect the healthcare services provided to the older adults and may negatively affect the quality of care (2,3,11).

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Culture is an important factor affecting the development of attitudes. Attitudes toward aging and older adult people originate from the cultures in which people live (12-14). Determining the attitudes and knowledge of nursing students from different cultures with regard to the older adults is important in terms of defining the students' levels of awareness and their learning needs. This knowledge will serve to guide educational planning, and practices that develop nursing students' competence to understand the needs of older adults and respond to them effectively, as well as to develop their own self-awareness. The aim of the study was to determine the attitudes and knowledge of African and Turkish Nursing Students with regard to the older adults.

Materials and Methods

Study Population and Design

The research was planned as a comparative descriptive study. The population of the research consisted of 650 Turkish students enrolled in the Turkish formal undergraduate education program of the faculty of nursing and 240 African students (from Nigeria, Zimbabwe, Kenya, Uganda, and Tanzania) enrolled in the English nursing program. No sample selection was made and the aim was to reach all students. Students who agreed to participate in the study were included in the research. A total of 455 students (overall response rate, 51.46%), 329 of whom were Turkish, and 126 of whom were African, participated in the study. The research was conducted in a private university in Northern Cyprus. The nursing undergraduate program in the faculty of nursing lasts four years. The course has both theoretical and practical aspects.

Instruments and Measures

The research data were collected through students' "self-reports using a personal information form to determine the socio-demographic characteristics of the students, "the Palmore's facts on aging quiz" to assess students' knowledge about old age, and the Kogan attitudes towards older people scale."

Questionnaire form: This information form consisted of 13 questions and examines the socio-demographic characteristics of the students and whether they had taken the relevant courses.

"Palmore's facts on aging quiz (FAQ)": The original "FAQ" was developed by Palmore in 1977 and consists of 50 questions, aiming to measure knowledge about old age. It is designed as a true/false test. The form tests the knowledge of the individuals about the physical, psychological and social aspects of aging, as well as misinformation or false ideas about aging. It was revised in 2015 (15). The participants respond by stating whether a statement is true (T) or false (F); a score of 1 is assigned if the answer is right; the score is 0 if the answer is wrong.

Therefore, the total scores range from 0 to 50, with a high score representing high knowledge about the older adults" (15).

"Kogan attitudes towards older people scale": This scale was developed by Kogan (16) to measure the attitudes of individuals towards the older adult. The Turkish validity and reliability study of the scale was conducted by Erdemir et al. (17). The Cronbach alpha value was calculated as 0.84 for the total scale, 0.79 for the negative items, and 0.77 for the positive items. For this study the Cronbach's alpha value was calculated as 0.63 for the total scale, 0.85 for the negative items, and 0.88 for the positive items. The scale is a two-dimensional measurement tool consisting of 34 items: 17 positive and 17 negative items. The score obtainable from the scale ranges between 34 and 204 points. A high score on the scale represents a positive attitude towards the older adults and a low score represents a negative attitude. A score of 102 exactly indicates a neutral attitude towards older adults. The original scale, which was developed by Kogan for African students, was used.

Statistics

The data were evaluated in the "Statistical Package for the Social Sciences (SPSS) 18.0" program. Descriptive statistical methods (number, percentage, mean, standard deviation) were used and statistical significance was taken to be $\alpha=0.05$. In the selection of appropriate hypothesis tests, the "Kolmogorov-Smirnov normality test" was used for the distribution of quantitative variables. The Mann-Whitney U test"" was used for comparisons of two independent groups and the "Kruskal-Wallis test" was used to compare more than two independent groups. For data with statistical significance in the "Kruskal-Wallis test", "Mann-Whitney U tests" were performed for paired-group comparisons. The Tukey test was used to determine the source of the difference in the significant multiple data. A multiple linear regression analysis was performed to examine the scale score and relational models.

Ethical Considerations

Prior to the research, ethics committee approval was received from the "Scientific Research Ethics Committee of the University" and institutional permission was obtained from the faculty of nursing (656-2018). Students consent was received after they had been informed about the purpose, process, and the forms of the research, and that their participation in the study was voluntary.

Results

Of the nursing students included in the sample, 72.3% were Turkish and 27.7% were African, and 37% were aged 20 or below. The mean age of the students was 21.78 ± 2.61 years. 63.7% of the students were female, 95.8% were single, 31.1% were in the fourth year (eighth semester). 68.4% of the Turkish

students and 74.6% of African students had a nuclear family. According to their statements, 68.7% had an income equal to expenditure. 74.2% of students received the most significant social support from their families. 42.9% of the Turkish students lived in a suburban area and 46.5% shared a house with friends, while 74.6% of the African students lived in the city center and 41.3% lived with their families. 23.7% of the Turks lived with their grandparents, while 17.5% of Africans lived with their grandmothers only.

Of the Turkish students, 38.3% perceived the older adults as wise, 54.1% as weak, 16.1% as happy, 57.8% as sick, 54.7% as dependent, 50.8% as lonely, 7.9% as isolated, 80.2% as having normal mental abilities, 90.9% as still being able to function, and 70.2% as compassionate. Of the African students, 43.7% perceived the older adults as wise, 43.7% as weak, 24.6% as happy, 14.3% as sick, 36.5% as dependent, 30.2% as lonely, 8.3% as isolated, 69.6% as having normal mental abilities, 92.9% as still being able to function, and 34.1% as compassionate.

For our sample, 7% of the Turkish students and 9.5% of the African students stated that they wanted to work with older adults after graduation. 6.5% of the Turkish students and 88.9% of the African students had not received training or courses on gerontology; 63.6% of the Turkish students and 66.8% of the African students wanted to receive such courses or training. 18.6% of the Turkish students and 20.7% of the African students did voluntary work in an institution for the older adults.

Table 1 shows the students' mean scores from the FAQ and the KAOPS according to the relevant variables. No statistically significant difference was determined between the mean FAQ and KAOPS scores in terms of students' ages, the place of longest residence, family structure, members of the household, having experience of living with older adults and the status of taking courses about geriatric healthcare.

The mean FAQ score of the Turkish students was determined to be 30.64 ± 7.15 and the mean KAOPS score was 125.33 ± 13.14 , whereas the mean FAQ score of the African students was 26.33 ± 7.82 and the mean KAOPS score was 122.97 ± 10.30 . No significant difference was found in the students' attitudes towards the older adults in terms of nationality. The Turkish students obtained higher scores for the FAQ and the difference between Turkish and African students was statistically significant ($p < 0.01$).

No difference was found between the mean KAOPS scores of the students in terms of marital status, while the FAQ scores of the single students were statistically significantly higher ($p = 0.03$, $F = 0.81$).

The mean scores of the third- and fourth-year students for both the FAQ ($p = 0.04$, $\chi^2_{K-W} = 8.330$) and the KAOPS ($p = 0.02$,

$\chi^2_{K-W} = 9.21$) were higher, and the difference between the mean scores of the first- and second-year students, and the third- and fourth-year students was statistically significant.

No statistically significant difference was found in the mean FAQ scores of the students in terms of family structure and status of voluntarily working in an institution for the older adults, whereas the mean KAOPS scores of those who had a nuclear family ($p = 0.01$, $\chi^2_{K-W} = 8.32$) and who did voluntary work in an institution for the older adults ($p = 0.04$, $Z = -1.99$) were higher. The difference was statistically significant.

For the logistic regression analysis, the KAOPS scores and p-values below 0.20 were analyzed according to nationality, year of study, family structure, status of taking a course, status of voluntarily working in an institution for the older adults, and the FAQ scores in Table 2. The difference between the scores of the groups was not statistically significant ($R^2 = 3.8\%$, $p > 0.05$).

For the FAQ, the OR was performed in a 95% confidence interval with the variables with a p-value of 0.20 and below: Nationality, marital status, year of study, place of residence, household members, family structure, status of taking courses, and KAOPS scores. Only the nationality was significant as a result of logistic regression analysis. The Turkish students' knowledge about old age was 3.43 times higher than the African students' knowledge [$R^2 = 8.9\%$, $OR = 3.43$ (1.93-6.11)].

Discussion

There was "no significant difference between the groups in the students' attitudes" towards the older adults, and both groups had scores that were at a similar level above neutral. When the lowest and highest scores obtainable from the scale are considered, it can be said that both groups had slightly "positive attitudes" towards the older adults. In the literature, Turkish nursing students generally perceived older adults positively (18-20). Studies on the attitudes and perceptions of African nursing students towards the older adults have also showed that they generally had "positive attitudes" towards the older adults (21-23). Studies conducted in both cultures have thus reported that nursing students perceived older adults in a positive light and it has been claimed that this arose from the ongoing presence of traditional family life.

In an other study nursing students who had lived with an older adult individual at home, had cared for older adult family members, and who communicated with older adults every day had "positive attitudes" towards the older adults (19). Similarly, Lambrinou et al. (24) found that most of the students in their study had older adults in their family, had experienced living with them, and had a "positive attitude towards the older adults" in general. In the current study, some of the Turkish students were found to live with their grandparents. Traditional African culture, similarly

to Turkish culture, promotes a positive perception of older adults. In most African societies, older adults are perceived to be worthy of respect and their experience is valued (21,23). According to the ideal of a traditional family, children, grandchildren, and relatives should treat older adults with respect, and help and support them in their daily activities (25). Older adults in

African societies are neither physically nor socially isolated, and they also have fewer psychological problems (26). In the current study similar positive ideas were found in both groups when they were asked about the connotations of "old age". The African students perceived the older adults to be wise, happy, functional, and mentally normal; however, they also

Table 1. Differences in knowledge and attitude scores among different characteristics of students (n=455)

Variables	n (%)	FAQ scores	p-value	Test statistics	KAOP score	p-value	Test statistics
		Mean ± SD			Mean ± SD		
Place of origin							
Turkey	329 (72.3)	30.64±7.15	p<0.01	z=-5.90	125.33±13.14	p=0.10	z=-1.64
Africa	126 (27.7)	26.33±7.82			122.97±10.30		
Gender							
Female	290 (63.7)	29.44±7.15	p=0.65	z=0.445	124.12±11.20	p=0.38	z=0.875
Male	165 (36.3)	29.39±8.35			125.66±14.39		
Marital status							
Single	436 (95.8)	29.57±7.50	p=0.03	z=0.81	124.81±12.65	p=0.26	F=5.50
Married	19 (4.2)	25.89±9.06			121.52±5.61		
Year of study							
1 st year	198 (43.5)	29.92±7.46	p=0.04	x²=8.330	123.38±11.38	p=0.02	x²= 9.21
2 nd year	83 (18.2)	27.38±9.88			122.25±8.99		
3 rd year	98 (21.5)	29.50±6.31			127.82±14.92		
4 th year	76 (16.7)	30.23±6.25			126.65±13.96		
Place of longest residence							
City	220 (48.4)	29.21±8.25	p=0.78	x ² =0.49	125.37±12.01	p=0.26	x ² =2.67
Suburbs	165 (36.3)	29.66±6.56			124.33±13.69		
Village	70 (15.4)	29.52±7.81			123.31±10.67		
Family structure							
Nuclear family	319 (70.1)	29.41±7.55	p=0.20	x ² =3.14	125.42±12.19	p=0.01	x ² =8.32
Extended family	124 (27.3)	28.96±7.37			123.29±13.23		
Fragmented family	12 (2.6)	34.33±9.97			119.33±9.12		
Living place and who lives with							
Lives alone at home	50 (11)	28.84±7.64	p=0.10	x ² =6.21	123.60±10.22	p=0.51	x ² =2.30
Friends in shared house	192 (42.2)	28.95±7.81			125.72±13.60		
Family at home	116 (25.5)	29.06±7.82			123.36±10.83		
Friends in dormitory	97 (21.3)	31.08±6.70			124.75±12.93		
Experience of living with an older adult person							
Yes	81 (17.8)	29.20±7.45	p=0.67	z=-0.413	127.79±12.49	p=0.70	z=-0.38
No	374 (82.2)	29.47±7.64			124.65±12.46		
Status of taking a course on older adult							
Yes	121 (26.6)	30.01±7.49	p=0.19	z=-1.30	127.09±14.20	p=0.08	z=-1.74
No	334 (73.4)	29.20±14.20			123.80±11.66		
Status of voluntarily working in an institution for the older adult							
Yes	94 (20.7)	28.68±8.61	p=0.72	z=0.351	126.40±12.76	p=0.04	z=-1.99
No	360 (79.1)	29.61±7.32			124.21±12.36		

Significant p-values (<0.05) are bolded. SD: Standard deviation, FAQ: Facts on aging quiz, KAOP: Kogan attitudes towards older people

Table 2. Logistic regression analysis of the independent variables (n=455)

Variable	B(SE)	OR	95% CI for OR		p-value
			Lower	Uper	
Place of origin	1.234 (0.294)	3.434	1.931	6.105	<0.000
Marital status	0.002 (0.505)	1.002	0.372	2.694	0.997
Year of study (Ref: 1 st year)					0.852
2 nd year	0.244 (0.420)	1.276	0.560	2.906	0.562
3 rd year	-0.035 (0.359)	0.965	0.478	1.950	0.921
Living place and who lives with (Ref: Lives alone at home)					0.850
Friends in shared house	-0.198 (0.2649)	0.821	0.489	1.376	0.453
Family at home	-0.049 (0.2989)	0.953	0.531	1.708	0.871
Family structure					0.161
Nuclear family	-1.329 (0.706)	0.265	0.066	1.055	0.060
Extended family	-1.355 (0.718)	0.258	0.063	1.052	0.059
Status of taking a course on older adult	0.073 (0.287)	1.076	0.613	1.887	0.799
KAOP score	0.028 (0.204)	1.029	0.689	1.535	0.890

KAOP: Kogan attitudes towards older people, OR: Odds ratio, CI: Confidence interval

negatively perceived the older adults to be sick, lonely and isolated. In the study of Faronbi et al. (21), nursing students stated that they did not see sickness as a necessary part of old age. The majority of the Turkish students in the current study perceived the older adults as mentally normal, functional, and compassionate; however, they also negatively perceived the older adults to be weak, dependent, and lonely. Nevertheless, most of the students in both groups perceived old age positively. In a relatively recent study conducted with nursing students in Turkey, old age was associated with positive expressions, such as "love", "compassion", "trust", "understanding", and "gratitude", as well as with negative expressions such as "whining" and "strange behaviors" (27).

The Turkish students in the current study obtained higher scores from the FAQ, and the difference was statistically significant compared with the scores of the African students. This difference can be explained by the fact that only 6.5% of Turkish students had not taken a geriatrics/gerontology course, whereas most of the African students (88.9%) had not yet taken such a course. Due to the cultural structure of Turkish society, people tend to spend more time with their families or older adults in their close circle, and consider older adult care to be a family responsibility. It can be surmised that this had an effect on the Turkish students' knowledge about the older adults. Another finding in our study was that the percentage of nursing students doing voluntary work in a geriatric healthcare institution was low. This probably arose due to the low number of nursing homes in Northern Cyprus, the relative lack of private care centers for older adults, and the language barrier (their incompetence in Turkish) preventing the African students from working in these types of institutions. When the students' mean

scores were examined according whether they did voluntary work in an institution for the older adults, it was determined that students who did such work had more positive attitudes towards old age. According to the literature, having specific experiences can positively affect an individual's perceptions and attitudes (28,29). Zehirlioğlu et al. (29) found that the scale scores of the nurses who had previously spent time in a nursing home were higher than those who had never visited one. These findings are similar to the results of the current study.

Another striking finding in this study was that very few of the students, only 7% of the Turkish students and 9.5% of the African students, stated that they wanted to work with the older adults after graduation. This result may be associated with the fact that, although students perceived old age positively, both groups found older adults to be dependent. It was determined that 54.7% of the Turkish students and 36.5% of the African students perceived old age to be a state of dependence. It may have been thought that giving care to a dependent patient is both psychologically and physically more difficult than caring for other groups. Moreover, the inadequacy of gerontology education in the curriculum and the lack of knowledge and skills regarding old age and older adult care may lead students to have decreased interest in this field (11,18). Likewise, in other studies found that the number of student nurses who stated a preference to work with older adults was low (4,8,10,30). In the study of Faronbi et al. (21), African nursing students stated that providing older adult care went beyond the requirement of standard nursing care, that it was necessary to have very good knowledge and experience in order to care for the older adults, and that nurses needed to be more patient, happier, and more empathetic. King et al. (30) qualitative study with

nursing students regarding their desire to work with the older adult; they found that students did not wish to work with older adults since older adult care was complex and they did not feel adequately prepared. These findings are similar to those in the current study.

Conclusion

Despite coming from two different continents with different cultures, it was determined that both the Turkish and African students had similar and "positive attitudes towards the older adults;" however, Turkish students had more knowledge about the older adults. It was determined that as the years of study increased, so their knowledge about old age and their "positive attitudes towards the older adults" also increased. The family structure of the students and their status of voluntary working in an institution for the older adults positively affected their attitudes towards old age and older adults. Students' "positive perceptions and attitudes towards the older adults" and old age should be supported by improving geriatric education in the curricula. Given the increasing demand of the older adults population for health services, geriatric education should be an integral part of nursing education to better prepare students for their future professional roles. It is important for graduates to acquire the competencies that will allow them to meet the care needs of the older adults, develop positive attitudes, and adopt a unique nursing perspective in order to provide better care. According to study results; despite "the positive attitudes" of the students, the fact that very few of them prefer to work with older adults and find it difficult to work with elderly individuals both physically and psychologically shows that they do not feel ready to work with older adults with the education they had. These results will contribute to increasing to students' positive perceptions and attitudes towards the older adults by improving geriatric education in the curricula.

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Ethics

Ethics Committee Approval: Prior to the research, ethics committee approval was received from the "Scientific Research Ethics Committee of the University" and institutional permission was obtained from the Faculty of Nursing (656-2018).

Informed Consent: Students consent was received after they had been informed about the purpose, process, and the forms of the research, and that their participation in the study was voluntary.

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Authorship Contributions

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