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Attitudes toward aging in Portuguese nursing students

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Abstract

The demographic structure of Portugal is undergoing a rapid change and, as a direct result, the aging index rose from 102 to 128 in the 10 years between 2001 and 2011 (INE, 2012). One of the essential goals of nursing care is to promote the independence and autonomy of patients, making a direct, positive impact on the quality of life of older people. Therefore, the attitudes of nurses about aging and older people are of utmost importance, particularly as they are reflected in the way nurses perceive and interact with their patients and in how they provide nursing care. So it is crucial to develop positive attitudes towards aging and the elderly in nurses and nursing students. The study aims to describe Portuguese nursing students' attitudes toward aging. We undertook a descriptive study of 140 students in a public, Portuguese nursing school during the 2011/2012 academic year. A questionnaire was used to gather data, including students' demographic variables, opinions as assessed in the Inventory of Attitudes toward Aging, and the contact participants with elderly persons. The mean score on the Inventory of Attitudes toward Aging was $\bar{X} = 2.05$ (SD = 0.32), suggesting negative attitudes toward aging, particularly as identified by scores in factor 1 and factor 3. Difference across gender was not significant for factors 1, 2, 3, and 4, respectively ($p = 0.423$), ($p = 0.668$), ($p = 0.377$), ($p = 0.067$). No differences were found across mean attitude scores and gender or across attitudes and living with older people. No correlation was found between nursing students' attitudes and age groups, in the majority of the studied factors. Additional research into attitudes toward aging is needed among Portuguese nursing students in their final year of study as well as in hospitals. Future research should be extended to students from other higher education schools of nursing.

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1. Introduction

Statistics point out that populations are aging worldwide and the same is taking place in Portugal. According to the 2011 Portuguese census, the percentage of young people decreased from 16% to 15% between 2001 and 2011, while the elderly population increased from 16% to 19%. Consequently, the Portuguese aging index rose from 102 to 128 between 2001- 2011 (INE, 2012). Thus, aging has become one of the major challenges that Portuguese society faces, and to which answers must be found (Carrilho & Patrício, 2009).

After retirement, many people live between 20 to 40 years, a fact which creates the need for better quality of life and independence (Celik, Kapucu, Tuna & Akkus, 2010). Promoting independence and autonomy are goals of nursing care, which aims to directly improve the quality of life of older people. Nurses, as members of an interdisciplinary team, have a key role in providing care for the elderly, and must, therefore, have a direct influence on the quality of care (Celik, Kapucu, Tuna & Akkus, 2010). This quality of care is closely related to the attitudes of professionals. Nurses and nursing students' views about aging and older people are reflected in clinical practice, in the way they perceive and interact with patients and in how they implement nursing care. Today's nursing students will become tomorrow's professionals, so it is crucial to nurture positive attitudes towards aging and the elderly in these caregivers (Celik, Kapucu, Tuna & Akkus, 2010).

According to social psychology, attitudes are beliefs and feelings that predispose our reactions to objects, people and events (Myers, 2003). According to Neto (1998), few concepts in social psychology have received so much attention as that of attitudes. This author also points out that attitudes are more successfully measured than defined. For this research, attitudes are defined as synthetic evaluations of a psychological object, according to bipolar attributes (good/bad, harmful/beneficial) (Neri, 2006).

Attitudes toward aging in nursing students have been studied in recent years by several researchers in Sweden, Brazil, Jordan, Greece, Turkey and Portugal (Soderhamn, Lindencrona & Gustavsson, 2001; Neri & Jorge, 2006; Hweidi & Al-Obeisat, 2006; Lambrinou, Sourtzi, Kalokerinou & Lemonidou, 2009; Celik, Kapucu, Tuna & Akkus, 2010; Cordeiro & Vicente, 2010; Magalhães, Fernandes, Antão & Anes, 2010). Results have identified negative views of aging by nursing students (Celik, Kapucu, Tuna & Akkus, 2010). However, final year nursing students reported more positive attitudes toward older people than younger students (Hweidi & Al-Obeisat, 2006). This author proposes that a potential explanation might be lower levels of knowledge and educational experience with old age on behalf of the younger students, whereas older students may have older parents, which might positively affect their attitudes. Thus, we can hypothesize that the attitudes of nursing students toward aging may change under the influence of age, sex, education, clinical setting and family contact with the elderly (Neri & Jorge, 2006).

Rees, King & Schmitz (2009) call for campaigns to raise awareness and change negative attitudes towards aging. These negative attitudes need to be reduced due to the growth of the elderly population (Van Dussen & Weaver, 2009). Ferrario, Freeman, Nellett & Scheel (2007) identified a set of measures which may potentially contribute to positive student views of aging: (i) emphasis on the normal changes and the positive aspects of aging, (ii) expert teachers in gerontological nursing, (iii) contact with older people as early as possible, and (iv) clinical experiences with healthy elders living in the community as well as elderly people with acute and chronic diseases.

2. Aim

The aim of the study was to describe Portuguese nursing students' attitudes toward aging.

3. Methods

We undertook a descriptive study of 140 nursing students (out of a population of 270) in a public nursing school in the city of Porto during the academic year 2011/2012. Criteria for participation included being a first year nursing student and attending the first lesson on aging.

A questionnaire was used to gather data, including students' demographic variables, contact with elderly persons and their opinions, as assessed in the Inventory of Attitudes toward Aging. This tool consists of 20 items on a five point Likert scale, categorized into four factors (we used the original scale factors), namely (1) - Expectations regarding activity (items 6, 4, 3, 14, 19, 12, 5, 8, 11, 1, 20); (2) - Feelings toward aging (items 10, 16, 2, 17); (3) - Expectations regarding satisfaction (items 15, 18, 9) and (4) - Anxiety about death (items 7, 13). The Inventory of Attitudes toward Aging was originally developed by Sheppard (1981) and adapted to Portuguese by Neri (1986). The instrument reliability was 0.88 and 0.98 and the test-retest ranged from 0.80 to 1.00 for all items (Neri, 1986). This instrument showed correspondence between the original English version and its translation into Portuguese (Neri, 1986).

The author of the Portuguese version of the Inventory of Attitudes toward Aging agreed to its use and the school gave its ethical approval to the projects. Participants gave their informed consent.

Questionnaires were coded according to the guidelines of the author (Neri, 1986) and the analysis was performed using SPSS 21.0 for Windows. Data analysis began with an exploratory analysis in which standard descriptive statistics were computed to provide insight into the main characteristics of the sample (Caldevilla, Costa, Teles & Ferreira, 2013). To detect any association between variables, t-tests were conducted to compare mean attitudes scores across gender, age and contact with elderly persons with a P value ≤ 0.05 considered to be statistically significant.

4. Results

The participants were 140 nursing students (126 women, 14 men) with a mean age of 18.7 years (SD = 2.34; Range = 17 to 34). Only 8.6% (12) of the students work, 4.3% of whom in administrative positions, according to the National Classification of Occupations; 91.4% do not (128). Nearly 60% of the students' mothers worked, 20.7% as unskilled workers. As for students' parents, 62.8% worked also, in the following professions: 28.6% in agriculture and fishing, 17.1% in administrative jobs and 17.1% in middle level professional positions. The majority of the students, 76.4%, do not live with elderly people. Of those 23.6% who did, most lived with an elderly family member (22.9%). More than half of the students (59.3%) refer having more than 5 contacts per month with elderly people. To analyze students' attitudes towards aging, we calculated the mean (\bar{X}), the Standard Deviation (SD), the mode (Mo) and the Min-Max, for each item of the Inventory of Attitudes toward Aging, as shown in Table 1.

Table 1 - Characterization of items according to the Inventory of Attitudes toward Aging

ITEMS	Inventory of Attitudes toward Aging			
	n=140			
	\bar{X}	SD	Mo	Min- Max
1 – It is in youth that people tend to have the greatest satisfaction in life.	3.39	1.16	4	1-5
2 – I get worried when thinking about getting old.	2.94	1.27	4	1-5
3 – There is little likelihood of feeling fulfillment in old age.	1.46	0.76	1	1-5
4 – It is possible to have an active sex life in old age.	1.69	0.96	1	1-5
5 – I hope to enjoy my old age.	1.17	0.67	1	1-5
6 – There is no reason for an elderly person not to remain active.	2.05	1.04	2	1-5

Inventory of Attitudes toward Aging				
ITEMS	n=140			
	\bar{X}	SD	Mo	Min- Max
7 – It's hard to face the idea of death itself.	4	1.03	4	1-5
8 – Life offers little to older people, beyond worry and discomfort.	2.10	1.11	2	1-5
9 – When I am old, I hope to have more free time and fewer responsibilities.	2.55	1.15	2	1-5
10 – I'm afraid to think of the physical weakness caused by age.	2.31	1.03	2	1-5
11 – Old age is the darkest period of life.	1.70	0.95	1	1-5
12 – I hope to continue to feel good about myself regardless of age.	1.21	0.68	1	1-5
13 – It is better to die earlier than to face old age in this society.	1.65	0.98	1	1-5
14 – When I am old, most things will be boring and uninteresting.	1.39	0.66	1	1-5
15 – When I am old, I hope to feel satisfied with what I have accomplished in life.	1.14	1.53	1	1-5
16 – I think I'll feel lonely in old age.	2.35	1.17	2	1-5
17 – I hate to think that my spouse or partner may die before me.	2.17	0.86	5	1-5
18 – When I am old, I hope to feel as happy as in my youth.	1.31	0.67	1	1-5
19 – You can find companionship in old age.	1.35	0.79	1	1-5
20 – In old age you can see that life has been worth living.	1.26	0.71	1	1-5

From the Table 1 we can see that the top-scoring items are: "It's hard to face the idea of death itself." (\bar{X} =4; SD=1.03), "It is in youth that people tend to have the greatest satisfaction in life" (\bar{X} =3.39; SD=1.16), "I get worried when thinking about getting old" (\bar{X} =2.94; SD=1.27). Scores are lower in the itens "When I am old, I hope to feel satisfied with what I have accomplished in life." (\bar{X} =1.14; SD=1.53), "I hope to enjoy my old age" (\bar{X} =1.17; SD=0.67) and "I hope to continue to feel good about myself regardless of age" (\bar{X} =1.21; SD=0.68).

To gain further insight into nursing students' attitudes toward aging, the research team analyzed the scores for each Inventory of Attitudes toward Aging factor, as shown in Table 2.

Table 2- Characterization of factors according to the Inventory of attitudes toward aging

Inventory of attitudes toward aging			
FACTORS	n=140		
	\bar{X}	SD	Min- Max
1 – Expectations regarding activity	1.70	0.39	1.09-4.27
2 – Feelings about aging	2.94	0.46	1.75-4
3 – Expectations regarding satisfaction	1.66	0.56	1-5
4 – Anxiety about death	2.82	0.71	1-4.5

The results showed that nursing students had negative attitudes towards aging as identified by the score in factors 1 and 3. The Mann Whitney test was used to compare the mean attitude scores between males (n=14) and females (n=126). Difference across gender was not significant for factors 1, 2, 3, and 4, respectively (p= 0.423), (p= 0.668), (p= 0.377) and (p= 0.067).

Additional Mann Whitney tests were conducted to compare Inventory of Attitudes toward Aging scores for those students living with older people (23.6%) and those who did not (76.4%). No differences were found for factors 1, 2, 3, and 4, respectively ($p= 0.721$), ($p= 0.899$), ($p= 0.098$) and ($p= 0.597$).

To explore differences in attitudes between nursing students, we divided participants by age, students ≤ 20 years and students > 20 years, and then proceeded to perform a Spearman's test. Correlation analysis showed an association only between "Expectations regarding satisfaction" (factor 3) and age ($p= 0.05$). However, no statistically significant relationships were found between age and factors 1, 2 and 4, respectively ($p= 0.979$), ($p= 0.694$) and ($p= 0.215$).

5. Discussion

Findings suggest that nursing students' attitudes toward aging are negative, which is worrying. Our study identified that students entering nursing school have negative attitudes about aging, findings which echo those of other researchers (Lovell, 2006; Ferrario, Freeman, Nellett & Scheel, 2007; Celik, Kapucu, Tuna & Akkus, 2010). Students score higher the items suggesting youth as the period in which individuals have greatest satisfaction in life and those indicating fear of ageing and death. Celik, Kapucu, Tuna & Akkus (2010) explain that this negative perception about old age is due to the majority of Turkish older people live inactive and unproductive after their retirement. According to Neri & Jorge (2006) negative attitudes toward the elderly may arise from personal beliefs, values, culture, experience, or observations. Van Dussen & Weaver (2009) postulate that students may reproduce negative images from the media about the aging and elderly population, that do not reflect the reality of most seniors today. Different results were found by Neri & George (2006). These authors refer a positive attitude towards aging in the participants of the study (nursing students). However, these students had already information and training about aging and work with elderly. For researchers, this is a matter of extreme importance which has not yet received sufficient attention from the nursing educators in Portugal.

At the university degree level, we observed curricular disciplines dealing with responses to disease, self-care and continual care networks (Nogueira, 2012), which seem to us to be appropriate. However, the theory and practice of gerontological/geriatric nursing has not yet been established as an independent discipline (Costa, 2005). The study of Santos, Lopes, Gemito, Casas-Novas & Pinheiro (2013) supports previous data. Investigation into the documentation in a sample of 26 Portuguese nursing schools (public and private) identified that the names of disciplines dealing with issues of gerontology are diverse and some focused on both adults and the elderly. Of the 30 disciplines analyzed by the authors, only 14 are specific to the elderly. This lacuna must be overcome.

However, it is recognized that, with increasing age, the probability of developing health problems and chronic diseases increases, as does the resulting demand for health care. Therefore, healthcare for older people is becoming a higher and higher priority for such professionals, especially nurses (Mckinlay & Cowan, 2003; Ryan, Melby & Mitchell, 2007; Lambrinou, Sourtzi, Kalokerinou & Lemonidou, 2009). Our findings offer valuable insight to nursing educators, as they provide important background information about the need to raise students' awareness of issues of aging and to encourage their interest in this population.

6. Conclusion

The Inventory of Attitudes toward Aging, originally developed by Sheppard (1981) and adapted to Portuguese by Neri (1986), was a key tool. It is categorized into four factors: *Expectations regarding activity*; *Feelings toward aging*; *Expectations regarding satisfaction* and *Anxiety about death*. This is a useful tool for assessing students before beginning clinical practice, where they will come into contact with senior citizens.

The overall mean score on the Inventory of Attitudes toward Aging was $\bar{X} = 2.05$ (SD = 0.32), which indicates negative attitudes toward aging. Nursing students were found to have negative attitudes toward aging in factor 1 and factor 3. No differences were found across mean attitude scores or gender. The same happened regarding attitudes and living with older people. Correlation analysis showed an association only between “Expectations regarding satisfaction” and age. No correlation was found between age and the other nursing students’ attitudes.

From these results, even related to students at the beginning of their graduation, we want highlight six main issues for reflection: (1) Students need to understand the aging process and the transformation of both the body and the mind in order to integrate information about caring the older people; (2) There is a need to prepare mentors to support students during clinical education, helping them to promote self-care, develop helping relationship with the elderly and discuss case studies; (3) As research shows, nurses should be able to support elderly in the basic activities of life but also in matter of cognitions and emotions; more knowledge about depression, dementia and low cognitive impairment are needed in the curriculum; (4) Health professionals are facing in Europe a increasingly diverse population; students must be prepared to provide culturally competent care. When older people are from minority groups, they usually manifest a lower capacity of integration and sharing values and cultural patterns of the local culture. That is why curriculum should prepare nurses to competent culturally care.

Additional research is called for, particularly focusing on Portuguese nursing students in their final year of study and within hospital settings about attitudes toward aging. Students from other schools of nursing should also be assessed.

The limitations of this study include the limited sample size and the choice of a convenience sample. Our findings are, therefore, limited to our sample.

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