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Assessing Geriatric Attitudes among Medical Students

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Abstract

Introduction: Geriatrics, defined as the medical specialty that studies and treats the elderly population has been assuming an increasing importance. Bearing in mind that the geriatric population occupies a high rate of consumption of health care and knowing that health professionals are the ones who most need to provide the best possible care, there is an urgent need to evaluate their attitudes toward the elderly and infer how these same attitudes interfere with the provision of care. The main objective of this study is to adapt the "UCLA Geriatric Attitudes Scale" in Portuguese to medical students so that it can later be applied to other health professionals in the most varied contexts. Our second objective was the evaluation, through the application of "UCLA Geriatrics Attitude Scale" of the changes, or absence thereof, of the attitudes of students from the 3rd to the 5th years of the Integrated Master's in Medicine towards the geriatric population.

Methods: The eligible population to be studied was composed of 172 students of the 3rd year, whose response rate was 39.53% (68 responses) and 166 students of the 5th year with a response rate of 36.14% (60 responses). Therefore, a total of 128 responses were obtained, for a total of 338 students. After informed consent, the sample responded to a scale that had been previously translated by certified professionals after authorization by the authors. After the application phase of the research questionnaires, the data collected were processed using the software Statistical Package for the Social Science (SPSS), version 26 with a significance level of 0.05.

Results: Bearing in mind that higher scores correspond to better attitudes, the following results were obtained: the UCLA-GA scale total median score did not differ between academic years (p=.903), sexes (p=.124) or between students with and without close contact with elderly (p=.070) but was higher in single students comparing with married ones (p=.002). Only the students' current average grade was a significant predictor, with the UCLA-GA score increasing an average of 0.8 points per each value in the student average grade (β=0,847; 95% CI 0,201-1,492; p=.011).

Conclusion: Considering the growing panorama of an aging population, measures should be implemented to study and to improve attitudes towards older people. Globally, the population sample studied shows very favorable attitudes from the students towards the geriatric population.

Keywords

Geriatric; Geriatric attitudes; UCLA; Aging; Medical Students Attitudes.

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Acronym List

CI – Confidence Interval;

IQR – Interquartile Range;

UBI – Universidade da Beira Interior;

UCLA – University of California in Los Angeles;

UCLA-GA – University of California in Los Angeles – Geriatric Attitudes.

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1. Introduction

Geriatrics, defined as the medical specialty that studies and treats the elderly population, has become increasingly important due to two phenomena. Firstly, the increase in average life expectancy and, on the other hand, the increase in morbidity and mortality from chronic non-communicable diseases to the detriment of infectious diseases. Therefore, Geriatrics takes care of health and diseases of old age, deals with physical, mental, functional, and social aspects in acute, chronic, rehabilitation, preventive and palliative care for the elderly and goes beyond “medicine centered on disease” offering holistic treatment, in multidisciplinary teams and with the main objective of optimizing functional capacity and improving the quality of life and autonomy of the elderly. (1)

The use of health care tends to increase with age, accompanying the deterioration in the health status of individuals. Bearing in mind the high prevalence of dependent individuals with regard to their basic daily activities, their access to preventive care is therefore extremely relevant in order to avoid, or postpone as much as possible, the appearance of certain conditions, more or less, disabling. (2)

Bearing in mind that the geriatric population occupies a high rate of consumption of health care and, knowing that health professionals spend much of their time to provide them in the best way, there is an urgent need to assess their attitudes and infer how these same attitudes interfere with the provision of care. In this way, UCLA developed a 14-items scale (UCLA Geriatrics Attitude Scale) that allows us to conclude about the attitudes that health professionals demonstrate towards their elders. This scale has been mostly used to understand the importance of educational measures in health professionals. (3)(4)

Thus, studies carried out in 2013 concluded that, for example, when identifying nurses' attitudes towards the elderly, it was found that nurses have a favorable attitude towards the elderly regarding the “Homogeneity of the elderly as a group”, “Personal appearance” and personality” and the “Feelings caused by living with the elderly”. In contrast, the same group has an unfavorable attitude towards the elderly regarding “Interpersonal relationships between generations”, followed by “Cognitive capacities” and “Dependence”. (5)

On the other hand, studies carried out with medical students, have concluded that they have minimal knowledge about aging, moderately positive attitudes towards older adults and little interest in geriatrics. Caring for older people before college was associated with

more positive attitudes, which in turn were associated with intentions to pursue a career in geriatrics, but not preferentially caring for older patients. What is more important, however, is that interest in geriatrics has increased as attitudes have become more positive. (6)

At a global level and, addressing a bibliographic review carried out in Brazil, the presence of negative attitudes towards the elderly by health professionals and students in the health area was observed. Moreover, female professionals and students had more positive attitudes toward the elderly than males. (7) In England, it was found that the attitudes of medical students and doctors towards older patients and their care are multidimensional and involved characteristics of older patients, the typical healthcare processes involved, and the personal and organizational environment of the individual providing their care. Beliefs about older patients included seeing them as respectful towards medical staff, the notion of the importance of 'functional age' and their vulnerability. Overall, emotional responses were negative, although this was mainly in more junior staff. (8)

In the Turkish validation of the present scale, which was carried out between December 2010 and February 2011, applied to 256 individuals, of whom 150 were post-graduates (in the health area) and 106 were pre-graduates (final-year medical and nursing students) there were several conclusions. First, the students obtained results significantly inferior to those of the specialists. Second, it was determined that the attitude towards the elderly is more positive for the upper classes of students and with training in geriatrics. Third, having an elderly relative did not influence respondents' attitudes. The importance of education programs in geriatrics, that allow first contact with healthy elderly people in society, is emphasized and of organized educational processes in order to foster a positive attitude toward the elderly. (9)

Since Geriatrics has come to assume a more important role over the years in Medicine with the aging of the population, it is expected that the teaching of this specialty will cause changes in the perspective with which the elderly is seen and treated by future trained doctors, with an improvement in the care provided to them.

The main objective of this study is the adaptation of the "UCLA Geriatrics Attitude Scale" in Portuguese so that it can later be applied to other health professionals. The second objective is the assessment of the changes, or absence of it, in the attitudes of students from the 3rd and 5th years of medicine at UBI with the teaching of Geriatrics, through the application of this scale.

2. Methods

2.1. Population and Sample

In this research work, the target population was students in the 3rd and 5th years of the Integrated Master's in Medicine at the Faculty of Health Sciences of the Universidade da Beira Interior who cumulatively fulfilled the following criterion: being students of the aforementioned course (there were no exclusion criteria).

Therefore, and considering the criteria, the eligible population to be studied was composed of 172 students of the 3rd year, whose response rate was 39,53% (68 responses) and 166 students of the 5th year with a response rate of 36,14% (60 responses). Therefore, a total of 128 responses were obtained, for a total of 338 students.

2.2. Instrument

For this work it was necessary to develop a data collection instrument, which is attached, consisting of socio-demographic and academic data - gender, age, place of birth and nationality, marital status, socioeconomic status and the current average value - and relationship data with the geriatric population - classification of contact, degree of proximity, context in which it happens, and time spent on each visit.

For the validation of the measurement instrument, authorization was requested by registered letter to the authors of the scale - Reuben DB, Lee M, David JW Jr, Eslami MS, Osterweil DG, Melchiore S, Weintraub NT - and received it on December 15, 2019 via email from Dr. David B. Reuben.

After authorization, the linguistic and conceptual adaptation of the "UCLA's geriatric attitudes scale" was carried out, a process developed in several stages. Initially, the official language was translated into Portuguese by two independent translators, without prior knowledge of the scale. This was followed by the retroversion of the first version of this instrument, which was again performed by two independent translators, without prior knowledge of the scale. In both stages, the translations were certified by a lawyer who, under the honor of the translators, stated that they had been faithfully translated and were in accordance with the original.

The next stage and, after combining the two retroversions in a single document and comparing it with the original instrument, comprised, then, the application of the present instrument, as well as the sociodemographic questionnaire, to a population of 338 students, of whom 172 were from the 3rd and 166 of the 5th years of medicine. This application was carried out with the help of the Google Forms platform (the anonymity and confidentiality of each participant was ensured), given the current pandemic context that thus required the minimum face-to-face contact with the student sample. This procedure aimed to test with the target population not only the format and visual appearance, as well as the understanding of the instructions and the different items, as well as the receptivity and adherence of the contents.

Each of the 14 items that characterize the UCLA Geriatric Attitudes Scale define the degree of agreement of individuals through a scale that varies between Strongly Disagree, Somewhat Disagree, Neutral, Somewhat Agree and Strongly Agree. Except for questions 1, 4, 7, 9 and 14, all the others must have their score reversed before adding to the total score value of the scale, that is, for values of 5, used the value 1, for 4 the value 2, and so on.

Descriptive statistics included absolute and relative frequency, median and interquartile range. Internal consistency was evaluated with Cronbach alpha coefficient and acceptability was assessed with ceiling and floor effects. The Portuguese version of the UCLA-GA questionnaire showed sufficient overall Cronbach α and intraclass correlation coefficients, both of 0.604. Through Cronbach's Alpha, it is possible to evaluate the instrument's internal consistency, which can vary between 0 and 1, with the higher values indicating better internal consistency. However, in some science research scenarios, an α of 0.60 is considered acceptable as long as the results obtained with this instrument are interpreted with caution and consider the computation context of the index.(10)

2.3. Formal and ethical procedures

In order to carry out this research work, it was necessary to proceed to the translation and validation of the scale for the Portuguese population, as previously mentioned. Thus, it was essential to carry out the authorization request to the authors of the referred instrument in order to then carry out its translation and adaptation to the Portuguese language.

The Ethics Committee of the University of Beira Interior was asked for authorization to proceed this study. After certifying that it had no material that would offend ethical and moral principles, on November 17, 2020, the Ethics Committee approved the study whose authorization is attached.

Participation in this study also involved a request for authorization from each of the participants, through free and informed consent, where they declared that all necessary information was provided, as well as the main objectives of the study, which allowed free decision-making to participate in this research work. All elements of the sample were clarified regarding the non-remuneration for participation in this study.

The confidentiality of the data collected and anonymity inherent to an investigation process is one of the focal points of the work. In this regard, keeping confidentiality and anonymity when collecting and processing data was maintained, by ensuring that none of the data was associated with the medical student who made it available, with no personal contact being requested from any of the participants. The data collected was intended only for scientific purposes and statistical treatment.

2.4. Data Processing

After the application phase of the research questionnaires, the data collected were processed using the software Statistical Package for the Social Science (SPSS), version 26 with a significance level of 0.05.

The validation of measurement instruments is based on the realization of a psychometric characterization of them, being necessary to test their fidelity and validity.

The fidelity of a measuring instrument is obtained when a new measurement is made, using the same conditions and the same participants, and a result identical to the initial one is achieved. The test-retest reliability was measured using intra-class correlation based on an absolute-agreement, 2-way mixed-effects model. (11)

In the use of instruments of this kind, it is essential that the measurement of a certain aspect is carried out precisely, that is to say, when it is intended to evaluate an aspect, it is necessary to have a guarantee that the test measures what it is proposed to measure - validity. For group validity, we compared the UCLA-GA scale median total score between students with and without close contact with the elderly using the Mann-Whitney U test. Construct validity was tested by calculating the Spearman correlation coefficient for selected demographic variables. Multivariate linear regression was performed to identify potential predictors of the students attitudes towards the elderly. (11)

3. Results

Table 1 shows the demographic and curricular characteristics of the 128 students.

Female students (74.2%) and those in pre-clinical years were in larger numbers than students undergoing clinical clerkships (53.1% vs. 46.9%). Students were more frequently from a small town (42.2%) and their household was composed by a median of 4 elements while making more often between 1500 and 2999€ per month. Almost every student was single (96.1%; n=123), with exception of 5 married students.

The majority had contact with elderly people (77.3%; n=99), with a median frequency of 2 times per week and a median duration of 65 minutes. A familiar type of contact was found in 97.0% (n=96) of the latter, while 2 students had a professional and other 2 had a social type of contact with the elderly.

TABLE 1 | Sample's demographic and curricular features

Feature	(n=128)
Academic year, % (n)	
3rd year	53.1 (68)
5th year	46.9 (60)
Age (years), median (IQR)	22.0 (3.0)
Sex, % (n)	
Male	25.8 (33)
Female	74.2 (95)
Habitational area, % (n)	
Small village	19.5 (25)
Small town	42.2 (54)
Big town	28.1 (36)
Big village	10.2 (13)
Number of children, median (IQR)	0.0 (1.0)
Household members, median (IQR)	4.0 (1.0)
Wage category (monthly), % (n)	
<650€	3.9 (5)
650-999€	10.9 (14)
1000-1499€	25.0 (32)
1500-2999€	43.8 (56)
>3000€	15.6 (20)
Current average grade, median (IQR)	15.0 (2.0)
Previous course, % (n)	39.8 (51)
Reasons for choosing medicine, % (n)	
Personal preference	72.7 (93)
Vocation	18.0 (23)
Family	1.6 (2)
Money	1.6 (2)
Other	5.5 (7)
Contact with elderly, % (n)	77.3 (99)
Frequency (days/week), median (IQR)	2.0 (2.0)
Duration (minutes), median (IQR)	65.0 (90.0)
Family influence on view over the elderly, % (n)	82.0 (105)

The distribution of partial and total scale scores between selected demographic variables is shown in Table 2. The UCLA-GA scale total median score did not differ between academic years (p=.903), sexes (p=.124) or between students with and without close contact with elderly (p=.070) but was higher in single students comparing with married ones (p=.002). However, there were point differences between groups regarding questions 1, 2, 11 and 14.

TABLE 2 | Comparison of UCLA Geriatric Attitudes Scale median scores between academic years, sexes, and proximity with elderly.

Item	Overall	Academic year			Sex			Close contact with elderly		
		3rd year	5th year	P-value	Male	Female	P-value	Yes	No	P-value
Question 1	4.0 (1.0)	4.0 (1.0)	4.0 (1.0)	.113	**4.0 (1.0)**	**5.0 (1.0)**	**.022**	**5.0 (1.0)**	**4.0 (1.0)**	**.038**
Question 2	5.0 (1.0)	**4.5 (2.0)**	**5.0 (1.0)**	**.033**	5.0 (1.0)	5.0 (1.0)	.137	5.0 (1.0)	4.0 (2.0)	.362
Question 3	3.0 (1.0)	2.0 (3.0)	3.0 (1.0)	.606	3.0 (1.0)	3.0 (1.0)	.416	3.0 (2.0)	2.0 (1.0)	.060
Question 4	5.0 (0.0)	5.0 (4.0)	5.0 (0.0)	.291	5.0 (0.0)	5.0 (1.0)	.376	5.0 (0.0)	5.0 (1.0)	.146
Question 5	4.0 (2.0)	3.0 (5.0)	4.0 (1.0)	.721	4.0 (1.0)	4.0 (1.0)	.094	4.0 (2.0)	4.0 (0.0)	.921
Question 6	2.0 (2.0)	2.0 (6.0)	2.0 (2.0)	.656	2.0 (2.0)	2.0 (2.0)	.400	2.0 (2.0)	2.0 (1.0)	.612
Question 7	4.0 (1.0)	3.0 (7.0)	4.0 (1.0)	.476	4.0 (1.0)	4.0 (2.0)	.892	4.0 (2.0)	4.0 (1.0)	.159
Question 8	4.0 (2.0)	2.0 (8.0)	3.5 (2.0)	.225	3.0 (2.0)	4.0 (2.0)	.058	4.0 (2.0)	3.0 (2.0)	.159
Question 9	3.0 (2.0)	2.0 (9.0)	3.0 (2.0)	.982	3.0 (2.0)	3.0 (1.0)	.105	3.0 (2.0)	3.0 (1.0)	.799
Question 10	5.0 (1.0)	4.0 (10.0)	5.0 (1.0)	.888	4.0 (1.0)	5.0 (1.0)	.096	5.0 (1.0)	4.0 (1.0)	.214
Question 11	5.0 (0.0)	**5.0 (11.0)**	**5.0 (0.0)**	**.046**	5.0 (1.0)	5.0 (0.0)	.080	5.0 (0.0)	5.0 (1.0)	.095
Question 12	5.0 (1.0)	4.0 (12.0)	5.0 (0.0)	.208	5.0 (1.0)	5.0 (1.0)	.847	5.0 (1.0)	5.0 (1.0)	.694
Question 13	4.0 (1.0)	3.0 (13.0)	4.0 (1.0)	.697	4.0 (1.0)	4.0 (1.0)	.808	4.0 (1.0)	4.0 (1.0)	.698
Question 14	5.0 (0.0)	4.0 (14.0)	5.0 (1.0)	.584	5.0 (1.0)	5.0 (0.0)	.157	**5.0 (0.0)**	**5.0 (1.0)**	**.002**
Total score	56.0 (7.0)	52.0 (7.0)	56.0 (8.0)	.903	54.0 (5.0)	56.0 (8.0)	.124	56.0 (8.0)	54.0 (6.0)	.070

Values are Median (Interquartile Range).

The Portuguese version of the UCLA-GA questionnaire showed sufficient overall Cronbach α and intraclass correlation coefficients, both of 0.604 (Table 3). We found an item-total score correlation coefficient ranging from 0.253 and 0.544. None of the students answered the lowest or highest possible in all questions, which shows that there were no floor or ceiling effects. The subgroup analysis regarding internal consistency revealed a higher Cronbach α in 5th year students (0.632), female students (0.609), and in students without contact with the elderly (0.632).

TABLE 3 | Internal consistency of the Portuguese version of the UCLA Geriatric Attitudes Scale

Characteristics	**Cronbach α**
3rd academic year	0.587
5th academic year	0.632
Male gender	0.577
Female gender	0.609
With contact with the elderly	0.587
Without contact with the elderly	0.632
Overall	0.604

Table 4 shows the Spearman's Correlation coefficient between the UCLA-GA scale total score and collected continuous variables. Age (ρ=0.177; p=.045) and student's average grade (ρ=0.219; p=.014) were positively correlated with UCLA-GA scale total score. There was no significant correlation regarding the number of children, household members, and the frequency and duration of contact with the elderly.

TABLE 4 | Spearman correlation coefficients between the total UCLA Geriatric Attitudes Scale total score and continuous variables

Variable	**ρ**	**P-value**
Age	**0.177**	**.045**
Children	0.124	.163
Household members	-0.064	.471
Contact frequency	-0.078	.432
Contact duration	0.025	.807
Current average grade	**0.219**	**.014**

ρ, Spearman's Rho.

A multiple linear regression model including age, current average score and marital status was run to predict the UCLA-GA scale total score and is shown on Table 5 (F=5,453; p=.001). Only the students' current average grade was a significant predictor, with the UCLA-GA score increasing an average of 0.8 points per each value in the student average grade (β=0,847; 95% CI 0,201-1,492; p=.011).

TABLE 5 | Multivariate linear regression model for predictors of the UCLA Geriatric Attitudes Scale total score

Variable	β (95% CI)	P-value
Age	0,186 (-0,154-0,527)	.281
Current average grade	**0,847 (0,201-1,492)**	**.011**
Marital status	-5,115 (-11,583-1,353)	.120

95% CI, 95% Confidence Interval.

4. Discussion

This research work, which involved the participation of 128 students of the Integrated Master's in Medicine, adapted and developed an instrument for measuring geriatric attitudes - Geriatric Attitudes Scale at UCLA - which presents a Cronbach's Alpha of 0.604 indicating an internal consistency which is considered acceptable given the context of scientific research. (9) Compared to the original instrument a slightly lower value is obtained than that found by Reuben et al (1995) (Cronbach´s Alpha of 0.76), a result that can be attributed to a) this scale being initially developed to be applied to healthcare practitioners primary care, having been applied in this study to students b) of clinical and non-clinical years of medicine.

Results of previous studies on the effect of medical training on attitudes towards the elderly in the area of health professionals have been inconsistent, perhaps due to the limitations of the existing attitude scales used by researchers. The UCLA scale of geriatric attitudes validated in this study has solid psychometric properties, which can help to overcome some of these limitations. (3)(4)(9)

In addition to providing psychometric support for this instrument, our study also adds information to the literature regarding the attitudes of students in the 3rd and 5th years of the Integrated Master's in Medicine at the Universidade da Beira Interior. Positive attitudes were found towards the elders in the studied population, with no differences between genders, academic year, or close contact, but there was a slight difference between married and single students. Regarding the results of the scale scores, some specific issues can be seen:

- It should be noted that, in question 1 "It is pleasant to be with the majority of the elderly.", we can conclude that female respondents have higher scores than male elements, with a p-value of 0.022 (which reveals moderate evidence against the null hypothesis). Still, in this same question, it is concluded that a close contact with the geriatric population leads to obtaining higher scores for a p-value of 0.038, because, as expected, the empathy and relationships that are established when having close contact with the geriatric population leads to the emergence of interrelation skills that promote better attitudes towards the elderly.

- Regarding question 2 "The government should redistribute the National Health Service money for the elderly to investigate AIDS or pediatric diseases." there was a difference between academic years with a p-value of 0.033. Thus, 5th grade students

obtained higher scores, that is, there is a higher percentage of students who consider the idea of the redistribution of money from the National Health Service destined to the elderly for pediatric investigation purposes to be unreasonable. This may be due to the greater clinical contact they acquire over the course years, which does not occur yet in the 3rd year and to the conclusion of subjects such as Geriatrics, which prepare students for clinical contact, not only of the associated pathologies to the elderly patient, as well as how to approach, communicate and treat them.

- With regard to questions 3 and 4, which are mainly related to the responsibility for providing care to elderly citizens, both 3rd and 5th year students consider that there is a social responsibility but that, as future doctors, they have some doubts about preference for treatments for younger patients.

- When asked about the consumption of resources that the geriatric population requires (paragraphs 5 and 12) both years and even genders consider that there is a large allocation of resources that is balanced with a fair contribution from the population in relation to the expenditure they present.

- Questions more directed to the aging process itself, which make reference to more confusing states (nº6), the difficulty in obtaining a clinical history (nº8) and the supposed senile slowness (nº13), the students of both years consider having, effectively, a generalized process of confusion that can sometimes make the collection of a medical history more complex. However, they disagree that the elderly act very slowly for modern society, that is, the 3rd year students have a neutral opinion on the subject, while the 5th year students somewhat agree.

- Results obtained with respect to the premise "7 - Older patients value the care they receive more than younger patients." they also show that 3rd graders have no opinion on this, but 5th graders seem to slightly believe that this population places greater value on medical care than the rest. Again, this relationship may be due to the greater contact with the clinical reality that older students present.

- In relation to question nº 9 “I tend to have more compassion for older patients than for younger ones.”, 3rd year students do not consider feeling more compassion based on age difference, and those in the 5th year have a null opinion. When asked about the useless contribution of the elderly to society (No. 10), both groups surveyed disagreed significantly with the statement.

- Regarding item 11 “The treatment of chronic elderly patients is in vain.” there is a p-value of 0.046, which indicates moderate evidence against the null hypothesis. Thus, there is a slight difference in the answers given between the academic years, with lower scores in the 3rd year, which can be justified, again, by the absence of such close contact with the hospital reality that may cause hopelessness regarding the results of the treatment of the elderly chronically ill.

- Finally, with regard to question nº14 “It is interesting to hear the reports of the elderly about their past experiences.” a p-value of 0.002 was obtained for the variable regarding close contact with the geriatric population. This indicates that students who do not have close contact with the elderly, are not used to maintaining a relationship based on communication and do not give due importance to this component, which causes consequences not only communicational, but also, long term relational.

As for the total score of the UCLA-GA scale and the continuous variables collected, it is concluded that only the age of the respondents and the value of the average marks of the course are correlated with the final score obtained. It seems that with the progress of the course and age, respondents acquire communicative and empathetic skills that lead to a better approach to the level of attitudes with regard to the elderly. On the other hand, students with higher averages have higher scores, which leads us to conclude that more dedicated students, who achieve better results and who take greater advantage of the subjects taught, have more favorable attitudes towards the geriatric population. This difference in the UCLA-GA score values can increase an average of 0.8 points for each value in the student's average grade, being the only positive predictor. Combining these two parameters (year of the course and marks) and considering the teaching of Geriatrics in the Integrated Master's Degree in Medicine in the final part of the 3rd year and the 4th year, it is concluded that older students (5th year) who have already had and taken advantage of the classes taught, obtain higher scores in the present scale, so it is possible that the teaching of Geriatrics could be central to the development of interrelational skills of future doctors.

Finally, the limitations of the present study should also be mentioned. To begin with, and perhaps most importantly, the small sample collected. Among the 8 medical schools in Portugal, only 1 of the institutions was selected. On the other hand, it was concluded that attitudes change with training and with the advancement of teaching, but it was not evaluated in what ways this change occurs. It can also be inferred that students who did

not participate in the present study (a total of 220, corresponding to 63.2%) may also be quite representative of the most negative aspects of the scale being validated, such as indifference towards the geriatric population.

In the future, we believe that the expansion of this same scale to other levels will bring an added value with regard to the geriatric population. It would be interesting to do the same study in all Portuguese medical schools, in order to evaluate how well-prepared students from different institutions are for the contact with the elderly population. On the other hand, we believe that it would be pertinent to evaluate students, previously and subsequently to disciplines, such as Geriatrics, in the 3rd year of the Integrated Master's Degree in Medicine at the Universidade da Beira Interior, which focuses only on this population and on how to learn to deal and take care of it.

In relation to other populations to be applied in studies similar to the present, it is assumed that hospital doctors and nurses would be good indicators of a general geriatric attitude in the health system, according to the working time and the time spent with the elderly.

Finally, another sample that would be interesting to study would be institutional workers who use all their professional activity for the benefit of the elderly, having to interrelate with them at various levels.

5. Conclusion

It is concluded, therefore, that, globally, the studied population sample presents very favorable attitudes towards the geriatric population.

Older students (5th grade), who obtain better curricular classifications and who have direct contact with the elderly, have scores significantly higher than the others, which leads us to infer about the importance of the clinical path in the process of maturing these attitudes and the importance of certain teaching subjects, such as Geriatrics, which prepare students for a population that requires specific care.

Thus, and regarding this last medical specialty, I believe that it is important, in the following years, to apply this scale, now adapted in Portuguese, before and after the instruction of Geriatrics. On the other hand, Geriatrics must be focused not only on the pathology most commonly found in the elderly, but also on how to approach it. The training of communication and empathy skills and the demystification of the term "aging" should be central points of this course unit with the purpose of preparing and improving students' attitudes towards their future as health professionals.

Considering the growing panorama of an aging population and the impact of this population in the health system, I believe that all type of measures that could be beneficial should be implemented to study and improve attitudes towards older people.

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[Attachment]

Attachment I – Authorization by the Ethics Committee

Comissão de Ética
Universidade da Beira Interior

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Convento de Santo António
6201-001 Covilhã | Portugal

Parecer relativo ao processo n.º CE-UBI-Pj-2020-087:ID2225

Na sua reunião de 17 de novembro de 2020 a Comissão de Ética apreciou a documentação científica submetida referente ao pedido de parecer do projeto «**Validação e Aplicação da "UCLA Geriatric Attitudes Scale"**», da proponente **Diana Filipa Pereira Osório**, a que atribuiu o código n.º CE-UBI-Pj-2020-087.

Na sua análise não identificou matéria que ofenda os princípios éticos e morais, sendo de parecer que o estudo em causa pode ser aprovado.

Covilhã e UBI

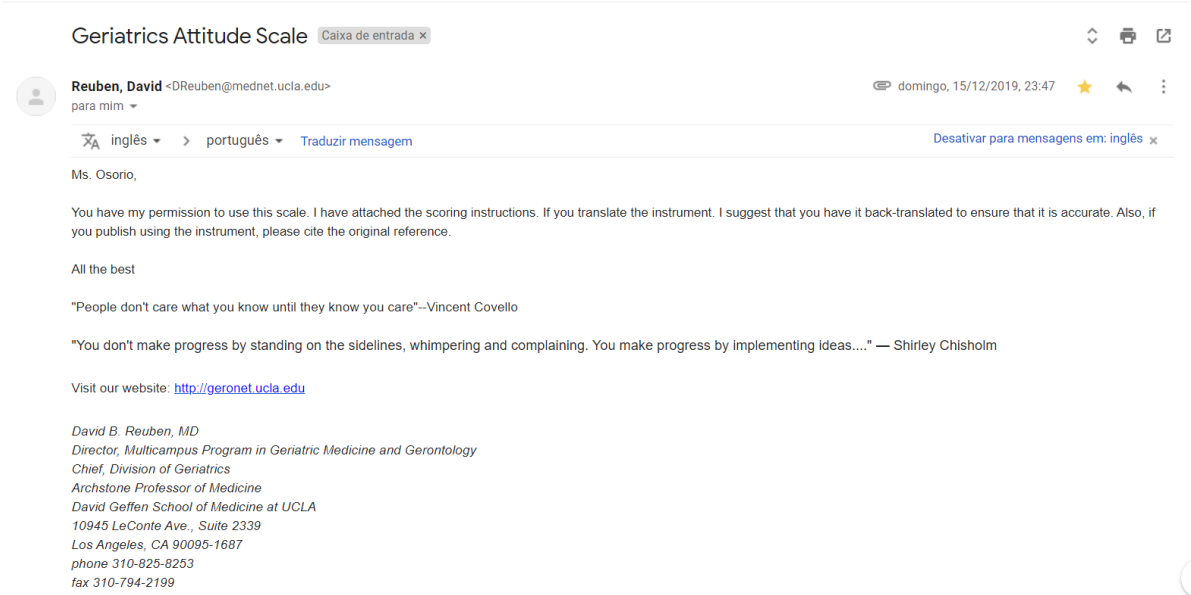
A Presidente da Comissão de Ética

Assinado por: **ANA LEONOR SERRA MORAIS DOS SANTOS**
Num. de Identificação: BI112741975
Data: 2020.12.07 15:51:01+00'00'

CARTÃO DE CIDADÃO

(Professora Doutora Ana Leonor Serra Morais dos Santos)
(Professora Auxiliar)

[Attachment]
Attachment II – Author Authorization



Geriatrics Attitude Scale Caixa de entrada ×

Reuben, David <DReuben@mednet.ucla.edu> domingo, 15/12/2019, 23:47

para mim

inglês › português Traduzir mensagem Desativar para mensagens em: inglês ×

Ms. Osorio,

You have my permission to use this scale. I have attached the scoring instructions. If you translate the instrument. I suggest that you have it back-translated to ensure that it is accurate. Also, if you publish using the instrument, please cite the original reference.

All the best

"People don't care what you know until they know you care"--Vincent Covello

"You don't make progress by standing on the sidelines, whimpering and complaining. You make progress by implementing ideas...." — Shirley Chisholm

Visit our website: http://geronet.ucla.edu

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[Appendix]

Appendix I– Sociodemographic Questionnaire

Questionário Sociodemográfico

Ano Do Curso de Medicina:

- ◯ 3º ano
- ◯ 5º ano

dadas à escala anexa, para que se conclua quanto à mudança da perspetiva que os alunos

Género: *

- ◯ Masculino
- ◯ Feminino
- ◯ Outra: _____

*Obrigatório

Idade *

A sua resposta

me foram fornecidas pela investigadora principal.

Naturalidade *

A sua resposta

Nacionalidade *

A sua resposta

Local de Residência *

- ◯ Uma pequena cidade
- ◯ Uma grande cidade
- ◯ Um pequeno meio rural
- ◯ Um grande meio rural

Estado marital atual *

- ◯ Solteiro/a
- ◯ Casado/a
- ◯ Divorciado/a
- ◯ Viúvo/a
- ◯ Unido/a de facto

Estatuto Socioeconómico (valor aproximado em euros dos rendimentos mensais do agregado) *

- ◯ 650
- ◯ 650-999
- ◯ 1000-1499
- ◯ 1500-2999
- ◯ >3000

Número de filhos *

A sua resposta

Número de elementos do Agregado Familiar *

A sua resposta

Frequentou algum curso anteriormente? *

- ◯ Sim
- ◯ Não

Se sim, qual?

A sua resposta

Em relação ao sucesso académico, qual o valor da sua média atual? (0-20 arredondado às décimas). *

A sua resposta

Quais as razões que motivaram a vinda para medicina? *

- ◯ Familiares
- ◯ Monetárias
- ◯ Gosto pessoal
- ◯ Influência do grupo
- ◯ Vocação/ Aptidão
- ◯ Opção 6
- ◯ Outra:

Mantém contacto próximo com a população geriátrica? (>65 anos) *

- ◯ Sim
- ◯ Não

Se respondeu sim, como classifica o contacto?

- ◯ Familiar
- ◯ Profissional
- ◯ Académico
- ◯ Social

Com que frequência, por semana, contacto com a pessoa mais velha? (0-7 dias)

- ◯ 1
- ◯ 2
- ◯ 3
- ◯ 4
- ◯ 5
- ◯ 6
- ◯ 7

Em média, quanto tempo dispensa, por visita, para passar com a pessoa mais velha? (responda em minutos)

A sua resposta

Considera que a sua família influenciou a forma como vê/ interage com os idosos? *

- ◯ Sim
- ◯ Não
- ◯ Talvez

[Appendix]

Appendix II – Portuguese adaptation of the "UCLA Geriatrics Attitude Scale"

INDICAÇÕES: Por favor utilize a escala para indicar até que ponto concorda ou discorda com cada afirmação. Não existem respostas certas ou erradas. A melhor resposta é aquela que verdadeiramente reflete a sua opinião pessoal. Os termos "idosos" e "doentes mais velhos" mencionados nas perguntas referem-se a pessoas com 65, ou mais, anos de idade.

		Discordo Fortemente	Discordo um pouco	Neutro	Concordo um pouco	Concordo fortemente
1.	É agradável estar com a maioria dos idosos.	1	2	3	4	5
2.	O governo deve redistribuir o dinheiro do Serviço Nacional de Saúde destinado aos idosos para a investigação da SIDA ou doenças pediátricas.	1	2	3	4	5
3.	Se eu pudesse escolher, preferia tomar conta de pessoas mais jovens do que de pessoas mais velhas.	1	2	3	4	5
4.	É responsabilidade da sociedade prestar cuidados às pessoas mais velhas.	1	2	3	4	5
5.	Os cuidados médicos para os idosos consomem demasiados recursos humanos e materiais.	1	2	3	4	5
6.	À medida que as pessoas ficam mais velhas, tornam-se menos organizadas e mais confusas.	1	2	3	4	5
7.	Os doentes mais velhos valorizam mais os cuidados que recebem que os doentes mais jovens.	1	2	3	4	5
8.	Considero que obter o historial médico de um doente mais velho é, frequentemente, um suplício.	1	2	3	4	5
9.	Tenho tendência a ter mais compaixão pelos doentes mais velhos que pelos mais jovens.	1	2	3	4	5
10.	Os idosos, em geral, não contribuem muito para a sociedade.	1	2	3	4	5
11.	O tratamento de doentes crónicos idosos é em vão.	1	2	3	4	5
12.	Os idosos não dão um contributo justo para pagar pelos cuidados de saúde que recebem.	1	2	3	4	5
13.	Em geral, os idosos agem de forma demasiado lenta para a sociedade moderna.	1	2	3	4	5
14.	É interessante ouvir os relatos dos idosos sobre as suas experiências passadas.	1	2	3	4	5

Chave:

Item	Pontuação
1	+
2	-
3	-
4	+
5	-
6	-
7	+
8	-
9	+
10	-
11	-
12	-
13	-
14	+

Para obter a pontuação, é necessário inverter (isto é, 1 para 5, 2 para 4, 3 mantém-se, 4 para 2 e 5 para 1) os resultados que estão marcados negativamente antes de os adicionar às pontuações dos itens positivos para obter a pontuação total.