



Ageism towards older people among Dental students: does this need to be discussed during dental training?


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Abstract Due to the increase in life expectancy of the Brazilian population, ageism should be considered taking into account the importance of the well-being and comfort of the older people in dental care. The aim of this study is to characterize and analyze the profile of undergraduate students in a Dentistry course in southern Brazil, in relation to ageism during their training. This is a cross-sectional descriptive study. The following variables were analyzed: gender, age group, race/skin color, living with the elderly, completing a clinical subject, taking a Geriatric Dentistry subject, caring for the elderly in bed or in a wheelchair and providing guidance to caregivers of dependent elderly people; the outcome under study was the presence of ageism against older people. Data analysis was carried out using Pearson's chi-square and Fisher's Exact tests, with $p < 0.05$ considered statistically significant. Of all the students taking part in the study ($n = 407$), the highest prevalence was of students with low ageism (55.3%). When identifying the predictors of ageism, statistically significant differences were observed for age group, in which the youngest (18-23 years) had high ageism; self-declared whites had a higher prevalence of high ageism. Those participants who had already completed a clinical subject showed low ageism. There is a need to implement actions aimed at Dental students right from the beginning. Proposals include strengthening the Geriatric Dentistry extension program, developing elective subjects on the topic and discussion groups with the participation of students and professors on aging. Consequently, it is believed that these practices will provide academic training that is inclusive and respectful of the elderly and has the potential to transform social paradigms.

Descriptors: Ageism. Students, Dental. Health Education.

Prejuicio hacia las personas mayores entre los estudiantes de odontología: ¿necesitamos hablar de este tema durante la formación de un cirujano dentista?

Resumen Debido al aumento de la esperanza de vida de la población brasileña, la discriminación por edad debe ser considerada teniendo en cuenta la importancia del bienestar y la comodidad de las personas mayores en el cuidado odontológico. El objetivo de este estudio es caracterizar y analizar el perfil de los estudiantes de pregrado de odontología en el sur de Brasil, en relación con los prejuicios contra las personas mayores durante la formación. Se trata de un estudio descriptivo transversal. Se analizaron las variables: sexo, grupo etario, raza/color, convivir con un anciano, realizar un curso clínico, realizar un curso de odontología geriátrica, asistir a un anciano en cama o en silla de ruedas y orientar a un cuidador de un dependiente persona mayor, siendo el resultado objeto de estudio la presencia de discriminación por edad contra las personas mayores. Los datos se analizaron mediante las pruebas de Chi-cuadrado de Pearson y exacta de Fisher, considerándose estadísticamente significativo $p < 0,05$. Del total de estudiantes participantes en el estudio ($n = 407$), la mayor prevalencia fue de estudiantes que presentaron baja discriminación por edad (55,3%). Al identificar los predictores de discriminación por edad en estos estudiantes, se observaron diferencias estadísticamente significativas por grupo de edad, en el que los estudiantes más jóvenes (18-23 años) tienen una edad alta; Los estudiantes autoproclamados blancos tienen una mayor prevalencia de discriminación por edad. Aquellos estudiantes que ya habían completado alguna disciplina clínica mostraron una baja discriminación por edad. Es necesario implementar acciones dirigidas a los estudiantes de odontología al inicio del curso. Entre las propuestas están fortalecer la extensión de la odontología geriátrica, desarrollo de cursos electivos

sobre el tema y círculos de conversación con la participación de estudiantes y docentes sobre envejecimiento. En consecuencia, se cree que estas prácticas brindarán una formación académica de manera inclusiva y respetuosa para las personas mayores y tienen potencial para transformar paradigmas sociales.

Descritores: Ageísmo. Estudiantes de Odontología. Educación para la Salud.

Preconceito com pessoas idosas entre estudantes de Odontologia: precisamos falar sobre esse assunto durante a formação de um cirurgião-dentista?

Resumo Em virtude do aumento da expectativa de vida da população brasileira, o ageísmo/etarismo deve ser pensado considerando a importância do bem-estar e conforto das pessoas idosas na assistência odontológica. O objetivo deste estudo é caracterizar e analisar o perfil dos estudantes de graduação de um curso de Odontologia do sul do Brasil, em relação ao preconceito com a pessoa idosa durante a formação. Trata-se de um estudo descritivo transversal. Foram analisadas as variáveis, sexo, faixa etária, raça/cor, morar com idoso, concluir disciplina clínica, realizar disciplina de Odontogeriatrics, atender idoso no leito ou cadeira de rodas e orientar cuidador de idoso dependente, sendo que o desfecho em estudo foi a presença de ageísmo/etarismo contra pessoas idosas. As análises de dados foram realizadas por meio dos testes Qui-quadrado de Pearson e Exato de Fisher, com $p < 0,05$ considerado estatisticamente significativo. Do total de estudantes participantes do estudo ($n = 407$), a maior prevalência foi de estudantes que apresentavam baixo ageísmo (55,3%). Ao identificar os preditores para o ageísmo, observou-se diferenças estatisticamente significativas para faixa etária, em que os mais jovens (18-23 anos) possuem alto ageísmo; autodeclarados brancos apresentam maior prevalência de alto ageísmo. Aqueles participantes que já concluíram alguma disciplina clínica, apresentaram baixo ageísmo. Existe a necessidade de implementação de ações destinadas aos estudantes do curso de Odontologia já no início. Entre as propostas estão o fortalecimento da extensão de Odontogeriatrics, desenvolvimento de disciplinas eletivas sobre o tema e rodas de conversas com a participação de discentes e docentes sobre o envelhecimento. Consequentemente, acredita-se que essas práticas proporcionarão uma formação acadêmica de maneira inclusiva e respeitosa aos idosos e possuem o potencial de transformar paradigmas sociais.

Descritores: Etarismo. Estudiantes de Odontologia. Educação em Saúde.

INTRODUCTION

There are currently various criteria for demarcating what constitutes an older person. The most common is based on the chronological dimension, as is the case in Brazil, where a person over the age of 60 is considered older people^{1,2}. In this context, in Brazil a person with this characteristic already carries the stigma of being old. Over the years, aging has become very different from what people used to know, since older people are more proactive, with healthier lifestyle habits, among other characteristics. In this way, it can be inferred that the ageing process can take many different forms, as there are older people who are part of a family and social context, who practice physical activities, as well as older people who are alone or even hospitalized, needing social support³. However, all these older people suffer some kind of discrimination and negative stereotyping as time goes by.

In Brazil, the need for the participation and social inclusion of the older people, as well as overcoming social discrimination, still do not coincide with the real national demographic transition⁴. Coming closer to respect for the diverse conditions of the human person, the right to be an older person deserves to be highlighted in today's society. In this context, the term ageism emerged and was used for the first time in 1969 by Robert Butler⁵, who defined it as a form of age-related intolerance, that is, anyone could be the target of discrimination because of their age, with children and the older being the most vulnerable groups⁶.

Ageism, then, can be understood as stereotyping, social exclusion, rejection, discrimination and the reduction of an individual based only on their age. In international literature, the universal term in English is ageism and is adapted to Brazil as *ageísmo*, *etarismo* or even *idadismo*, and combating this ageism is considered a global challenge⁷. Compared to other types of prejudice, ageism is the least studied and is often a socially accepted prejudice that is difficult to investigate⁸. This is why it is necessary to combat ageism, since this negative view of older people leads to the creation of stereotypes and, consequently, discrimination⁹.

Ageism can have an undesirable impact on the provision of health care and can lead to poor health outcomes¹⁰. In this regard, when it comes to oral health, it is possible to see that Geriatric Dentistry has been adopted slowly in the country, showing that there is still a lack of preparedness on the part of dental surgeons to attend to this part of the population¹¹. Age prejudice may be one reason for the low number of professionals who choose to study Geriatric Dentistry¹². With regard to Dentistry, many older people have not had oral health care for most of their lives and, as a result, edentulism still has a high prevalence¹³.

In Dentistry, age-related ageism may explain why fewer dental surgeons around the world are opting to pursue postgraduate studies or advanced training in Geriatric Dentistry¹². From this perspective, few of them devote at least part of their time to providing dental care for frail older people in settings other than conventional dental practices, such as at home and in nursing homes¹⁴. In this sense, undergraduate experiences can have a positive or negative impact on the behavior and attitudes of students and future health professionals. It is therefore important to take care in the way students are exposed to theoretical and practical environments with older people¹⁵. It is important to establish educational strategies in undergraduate and specialization courses, with classes addressing ageism to promote changes in attitudes¹⁶. Based on the above, an improvement in awareness of ageism against older people would result in greater patient satisfaction and better clinical results¹⁷.

Given these assumptions, this study is justified by the need to know the prevalence of ageism among Dental students in a course in which this information has never been studied and to subsidize information to combat ageism against older people in undergraduate courses and to prepare students for these confrontations in their professional future. For the purposes of this study, which focuses on discrimination towards older people, the term used will be the compound ageism towards older people in accordance with the international tool for data collection and, at the same time, the word *etarismo* is the Brazilian descriptor for ageism. Thus, the aim of this study is to characterize and analyze the profile of undergraduate students on a Dentistry course in the south of Brazil, in relation to ageism against the older people during their training.

METHODS

This is a cross-sectional descriptive study carried out during the first semester of 2023 in a Dentistry course in southern Brazil. This study is part of the first descriptive stage of a project entitled "Predictors of empathy and levels of ageism towards older people among dental students in southern Brazil" approved by ethical bodies (CAAE: 54780122.6.1001.5347, opinion no. 6,064,421).

Students enrolled in the daytime (1st to 10th semesters) and evening (1st to 16th semesters) undergraduate Dentistry courses at the Federal University of Rio Grande do Sul in 2023 who freely agreed to participate voluntarily and anonymously took part in this study. Of the total number of students actually enrolled in the semester under study (592 students), 407 took part in the survey.

Data was collected using a structured questionnaire applied using two strategies. It was applied online and then in person and in print. Initially, the online strategy was carried out using SurveyMonkey® software. The researchers asked the Undergraduate Committee of the participating course to kindly send an invitation letter prepared by the researchers to the e-mails of all enrolled students containing the link to access the questionnaire and the Free and Informed Consent Form (FICF) for them to read and choose between the options of accepting or not accepting to take part. The research

was previously explained to the Undergraduate Coordinator in charge at the time of the survey. In addition to these aspects, the participating students were informed about the research through social networks (Figure 1).

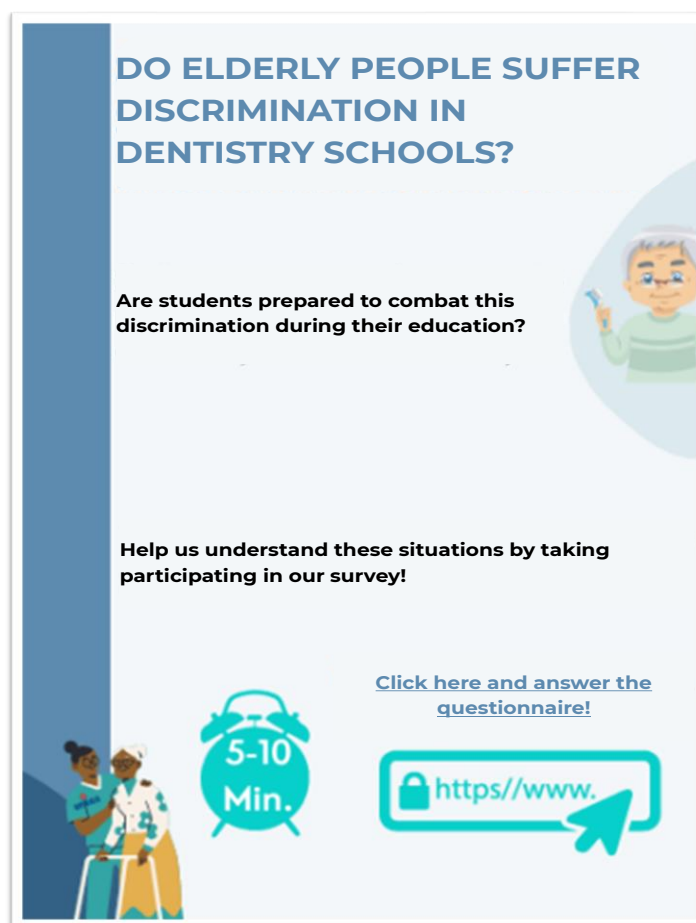


Figure 1. Illustration of the invitation to take part in the survey distributed by e-mail and social networks. Brazil, 2023.

In a second stage, the printed form was the strategy chosen to reach those students who had not received the university's institutional e-mail containing the link to the online questionnaire, due to outdated e-mail addresses and/or e-mails sent to spam boxes, which meant that the student did not have access to the invitation and the questionnaire. In this way, the researchers visited all the day and evening classes in person, applying the printed questionnaires and collecting them for later input into the database.

In operational terms, all the classes were visited during the data collection period. Scholarship holders from the project made a schedule of visits to the classrooms, lasting 15 minutes per class and, with the agreement of the subject leaders, the data was collected in the classroom only with those students who reported that they had not answered the questionnaire online. With the questionnaires and FICFs printed out, so that all the students had access to the survey, the scholarship holders went to the classrooms and carried out this collection in person. The answers to the printed questionnaires were then typed into the same Excel spreadsheet, supplying the same database generated by the online collection tool.

The complete self-administered questionnaire contained an initial part with sociodemographic aspects and experiences during the course. These possible predictors are as follows: the gender variable contained two options, male and female, age (which was later transformed into an age range distributed above and below the average 18-23 years and 24-51 years) and self-declared race/skin color was dichotomized between white and non-white. The predictor for the social variable living with an older person was asked as follows: Do you currently live with an older person? (Yes and No). The contextual variables involving experiences during the course were addressed in the questionnaire through the following

questions: Have you completed any course/subject in Geriatric Dentistry or any clinical or extension activity that dealt with oral health care for the older people up to this point in your training? (Yes and No). Have you had any experience, during your training, of caring for older patients in bed or in a wheelchair? (Yes and No). During your training, have you ever had to talk to/guide a caregiver and/or family member of a dependent elderly patient (Alzheimer's disease or another disease that has left the elderly person dependent) about oral health care? (Yes and No).

In a second part, the questionnaire contained the Ageism Scale for Dental Students - Brazil Version (ASDS-Br), which was translated and culturally validated in Brazil¹⁸ and is free to use. The ASDS-Br contains 12 items referring to questions with Likert-type answers with 6 response options (strongly disagree, disagree, partially disagree, partially agree, agree, strongly agree) and a score from 0 to 5 for each answer. This scale is made up of 3 domains for analysis: 1- General negative perception of the older person; 2- Complexity of caring for the elderly; 3- Positive perception of the older person. As a whole and in the proportional distribution of the scores of these three domains, the scale provides a total score of 0 to 60, and the higher the score in relation to the average of the distribution, the higher the level of ageism of those students.

As a guiding theoretical framework, this research proposes two contexts for analyzing the prevalence, in a population of undergraduate Dental students, of the outcome of high or low ageism against older people presented as ageism towards the older people (Figure 2).

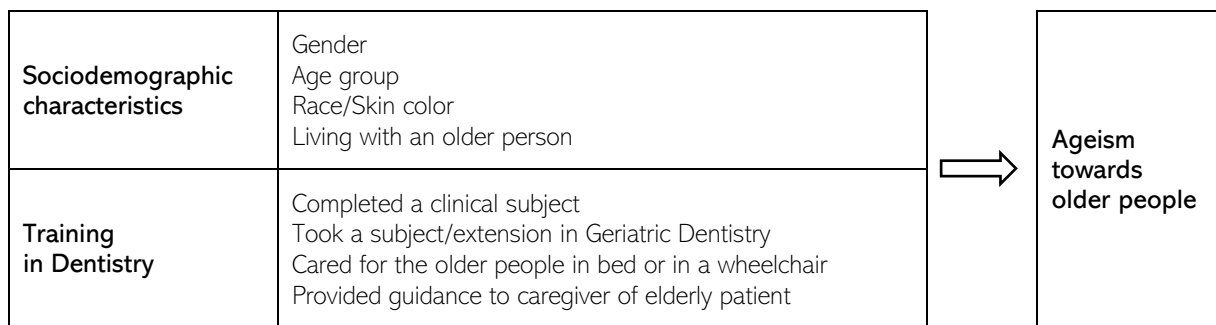


Figure 2. Theoretical chart proposed for the study of ageism with older people in a Dentistry course in southern Brazil, 2023.

All data analyses were conducted using SPSS version 18.2 (IBM, Inc.) using simple frequency, distribution mean and bivariate analyses using Pearson's Chi-square and Fisher's Exact tests, with $p < 0.05$ considered statistically significant.

RESULTS

Of the total number of participants ($n = 407$), the majority were female (74.7%), younger (18-23 years) (54.8%) and self-declared white (82.1%). From a social perspective, 52.8% did not live with older people in the same house during the survey. When looking at variables related to experience during the Dentistry course, it is possible to highlight that 66.8% had completed some clinical subject and 41.3% had already had contact with the subject of Geriatric Dentistry, or some activity or extension course in Gerodontology. In addition to these aspects, 25.1% reported having had the experience of caring for at least one older patient in a wheelchair or even in bed, and 21.1% reported having had the experience of providing guidance to an older person's caregiver on how to care for the patient's oral health (Table 1).

The average distribution of the ageism scale score was 35.9 points, considering the weighted average of the distribution of each of the three components of the scale. Thus, the prevalence of the ageism outcome with older people was presented as low ageism with a score of 0-36 and high ageism with a score of 37-60. Ageism did not differ much between the different levels (high and low), with the highest prevalence being among students with low ageism (55.3%). However, there is a considerable percentage with a discriminatory and reductionist view of the elderly.

When associating the variables that characterized the students taking part in the study with the levels of ageism, important associations were observed, highlighting that younger students ($p=0.015$) and self-declared white students had high ageism ($p=0.004$). It is also important to note that those who declared that they had completed a clinical subject had a higher prevalence of low ageism ($p=0.003$).

Table 1. Characteristics of ageism among Dental students in southern Brazil, 2023.

Variable		Low ageism n (%)	High ageism n (%)	Total n (%)	p
Gender	Male	55(24.4)	48(26.4)	103(25.3)	0.370
	Female	170(75.6)	134(73.6)	304(74.7)	
Age group	18-23	112(49.8)	111(61.0)	223(54.8)	0.015
	24-51	113(50.2)	71(39.0)	184(45.2)	
Race/Skin color	White	174(77.3)	160(87.9)	334(82.1)	0.004
	Non-white	51(22.7)	22(12.1)	73(17.9)	
Living with an older person	Yes	108(48.0)	84(46.2)	192(47.2)	0.393
	No	117 (52.0)	98(53.8)	215(52.8)	
Completed a clinical subject	Yes	164(72.9)	108(59.3)	272(66.8)	0.003
	No	61(27.1)	74(40.7)	135(33.2)	
Subject or extension in Geriatric Dentistry	Yes	97(43.1)	71(39.0)	168(41.3)	0.232
	No	128(56.9)	111(61.0)	239(58.7)	
Cared for elderly in bed or wheelchair	Yes	55(24.4)	47(25.8)	102(25.1)	0.418
	No	170(75.6)	135(74.2)	305(74.9)	
Provided guidance to caregiver of dependent elderly people	Yes	51(22.7)	35(19.2)	86(21.1)	0.236
	No	174(77.3)	147(80.8)	321(78.9)	
TOTAL		225(55.3)	182(44.7)	407(100)	

DISCUSSION

It is necessary to talk about and combat ageism and discrimination against older people during Dentistry training. This study found the presence of ageism, but in the distribution of this outcome there was a higher prevalence of low levels of ageism against older people among students on the course, the setting for this study. In 2023, the majority of students did not have ageism and did not discriminate people due to their older age during their training in Dentistry. It should be noted that the institution under study has a compulsory internship in Geriatric Dentistry in its undergraduate curriculum, with a total workload of 45 hours. The internship is developed by dividing the class into tutorial groups that are assigned to experience oral health care for older people living in long-term care institutions for the elderly (LTCl) affiliated with the university¹⁹. In this context, it is believed that there is a need to understand the diversity of the older population and the complexity of social representations of old age to build actions and public policies²⁰, for health actions and for training health professionals.

Due to the current aging population, more older people are seeking oral health services, so the importance of the training process for future dental professionals should be emphasized to provide more respectful, humane and technically appropriate care for these people²¹. Despite the higher prevalence of low ageism, it is important to note that there was a considerable proportion of students with high ageism. Ageism may be intrinsic in this population. Ageism towards the older people has always been intrinsically present in society, but recently, during the COVID-19 pandemic, the issue has been highlighted, generating negative impacts for the elderly²². In this process, it stands out that younger people show more ageism towards the older people, especially in contemporary times²³. Although this fact is similar to the findings of the present study in relation to younger people being more prejudiced towards older people, no evidence was found in the literature to affirm or refute the fact that Dental students in younger age groups are more prejudiced towards older people during their training in Dentistry.

A recent extensive systematic review, made up of 422 studies with samples totaling more than 7 million participants, found that approximately 95.5% of the studies analyzed identified that ageism has negative consequences for the health

of the older people. Also in this study, it was considered that in less developed countries there is a higher prevalence of the unfavorable effect of ageism on health when compared to developed countries²⁴. Thus, individuals who suffer discrimination in their daily lives because they are old are more likely to develop depression and chronic diseases such as hypertension, resulting in poor physical and mental health²⁵.

In a study in which 477 students from the 10th. Semester of Dentistry at the University of Zurich in Switzerland were interviewed about images of old age²⁶, with data collected on demographic information (gender and age) and experience with people in need of care and/or long-term care institutions for the elderly. As a result, the study provided the following information: the students taking part in the survey were predominantly female (57.4%) with an average age of 26 and more than 80% of students of both genders had had contact with a long-term care institution for the elderly and/or those with long-term care needs. The results indicate that men showed attitudes of low ageism when compared to women. These results differ from those of the present study, in which the predictor "being female" showed a higher prevalence of low ageism²⁶.

No studies were found that addressed the topic of race/skin color in ageism studies with Dental students for comparison with the data found in this study, and it should be a considerable approach to investigating the propensity for high ageism against older people among white students, according to the findings of this study.

To provide health care in a fair and impartial manner, that is, to offer humanized care, education and knowledge must be promoted for health professionals with a compassionate approach, in addition to taking into account the various variables of socioeconomic factors, systemic health and oral health conditions²⁷. It is known that it is beneficial for students to spend time with the elderly during their academic training to broaden their perceptions, but this must be accompanied by scientific and technical knowledge about ageing, which is a factor that modestly improves students' attitudes towards the elderly²⁸. These results corroborate the findings of the present study, in which low ageism is dominant among students who have already taken a clinical subject. Having had some clinical experience, regardless of whether it was with an older person, was shown to be a predictor of low ageism among the students in this sample.

It is noteworthy that the experience of Dental students in a long-term care institution for the elderly (LTCI) did not favor the development of positive attitudes in relation to their view of the older person. In addition, it was reported that students with less financial interest in the profession were more likely to have low ageism²⁹. Financial interest is not a variable under study, but having had some experience of bedside care, as possibly happens in an LTCI, was shown in this study not to be a predictor of low ageism, a fact that is in line with the aforementioned study.

In his study, Marchini (2023)²⁸ emphasized the importance of the teaching staff in terms of interaction with patients, and that this can influence the behavior of students who have their teachers as professional role models. In this sense, the student is naturally focused on the technical aspects of care, but knowledge about ageing and support from teachers can reduce the student's stress so that they understand the patient's general health conditions, ongoing medication and habits to define the appropriate treatment. Consequently, it is of the utmost importance that teachers and instructors show respect, compassion and altruism to set a positive example of care for the student.

It is believed that the present study has some limitations, but they do not invalidate the findings and the originality of the study in Southern Brazil. It is worth noting that the non-response rate was 31.5%. In other words, even though all enrolled students (592) were given the opportunity to participate in the research on the topic of ageism and discrimination against the older people, approximately 1/3 of the students declined to participate, not responding to the questionnaire after reading the consent form. Although students from both the night and day courses answered the questionnaire, this variable was not analyzed, since both courses have the same curriculum, only with a different temporal distribution. It is believed that this variable does not interfere with ageism towards older people among the study participants. In addition to these aspects, this is a descriptive analysis of variables with bivariate association tests individually with the outcome. No multivariate analysis was performed. Therefore, this is a study of the prevalence of characteristics, and it is not possible to affirm the causality of the outcome and the relationships studied.

This study raises the issue of the need for dentistry courses to address the fight against ageism towards older people. Based on the findings of this study, it is suggested that the topic be addressed and discussed with students at the beginning of the course by promoting discussion groups and perhaps elective courses on ageism with the participation of professors and students, as well as encouraging students to participate in activities such as extension in Geriatric Dentistry and/or subjects/courses in the area of Gerontology if they are offered, as is the case of the undergraduate course in this study. By acting in this way, it is believed that there will be contextualization and information to enrich the training of dental surgeon with empathy and compassion in the care, attention and respect for the older people.

CONCLUSION

The conclusion is that low ageism towards elderly people was more prevalent among students who had already completed a clinical subject during their undergraduate studies; and that high ageism was more prevalent among students aged between 18 and 23 years and among self-declared white students. The other sociodemographic variables, as well as other experiences during the Dentistry course which was the setting for the study, were not found to be predictors of ageism with elderly people.

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