Present looking into the future: a cross- sectional study among medical students in India on Ageism

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ABSTRACT

Introduction

Ageism is the stereotyping, prejudice and discrimination against people on the basis of their age. A lack of understanding of the ageing process leads to anxiety and prejudices which make us distance ourselves from the elderly. [1] This fear among medical fraternity can lead to a deterioration of the care of the elderly. Thus, this study was undertaken among medical students to determine the proportion of ageism among them and understand the factors affecting ageism.

Methodology

This study was done on 163 medical students to estimate the proportion of ageism, the aging anxiety and to assess their knowledge about ageing. Fabroni scale of ageism, Palmore's amazing facts on ageing scale and anxiety about ageing scale was administered to the participants through an online google form. Chi- square and t- test were applied to assess the association among factors with the presence of ageism.

Results

The mean score was lesser (64.55) on Fabroni scale and Palmore's scale (13.3) if their grandparents lived with them showing lesser ageism. However, anxiety was found to be significantly higher (14.66) if they lived with elders. Males showed a higher value for ageism in all the 3 scales, however, the difference was only significant in Fabroni Scale (p<0.001).

Conclusion

People of all strata and age groups should be encouraged to look at the brighter side of ageing. The younger generation should be encouraged to respect the elderly and look at the optimistic aspects of the greying population..

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INTRODUCTION

Ageism is the stereotyping, prejudice and discrimination against people on the basis of their age. [1] The knowledge that ageism arises out of mind but transmits informally indicates that the youths should identify such situations and heedfully avoid them. [2]

At times, due to our lack of understanding of the ageing process, we presume circumstances which causes us to distance ourselves from the elderly. This leads to seclusion of the elderly which causes various health problems in them, especially mental issues such as anxiety and depression. [1]

India is believed to be a gerontocratic country, [2] a land where the elders of the family have the supreme power over family matters. Even so we are seeing that ageism is on a rise in India. The original concept of joint family and children growing up in the company of *dada- dadi* of the household is seen diminishing in the current times. It is primarily due to the migration of children to the cities or other continents for better job opportunities which leads to the young generation growing away from the shadow of elders. This is evident from the rising incidences of elderly abuse and the 'mushrooming old age homes' across the country. [2] According to the 2016 Ministry of Statistics and Programme Implementation India, there are 103.9 million elderly residing in India with 8.5% of them above 60yrs. According to the 2014 projected estimate by Help Age India, by 2050, this population will increase to 325 million or 20%. On an average the elder population is growing by 3.5% annually in India. [1]

Ageism is worrisome if it infiltrates into the healthcare delivery system. The prejudices lead to poor healthcare provision and mistreatment of the geriatric patients. It leads to more anxiety in the elderly leading to poorer immune status causing further deterioration of their health due to the feeling of triviality [1]. It not only adds to their insecurity but also adds to their decreased contribution to the society [3].

Thus, the following study was undertaken to assess the proportion of ageism among the medical students, their anxiety about ageism and knowledge about the elderly and assess factors determining ageism.

Methodology

This was an online cross- sectional study conducted among medical students of India over a period of 3 months (Nov 2020 to Jan 2021). A Google form questionnaire was created and circulated through WhatsApp groups among known medical students and their colleagues. Universal sampling technique was used to select the participants. Submission of the Google Form was considered as their consent to the study. Institutional Ethical Committee approval was obtained before initiation of the study.

Considering 90% response rate for an online form with 95% confidence interval and 5% of difference, the expected sample size was 139. The form was kept open for the study duration after which the link was disabled. Hence, a final sample size of 163 was obtained.

Names or any other information giving away the identity of the participant was not collected. Hence, the anonymity of the subjects included was assured. The scales were marked as compulsory questions and hence, skipping of questions was evaded.

Data collection tools

The study was conducted among 163 medical students through the use of Google form questionnaire.

The questionnaire was divided into 4 parts (the scales being previously validated):

1. <u>Demographic details</u>: Included age, gender, post description, if they lived with their grandparents, how much time did they spend with their grandparents and how they liked spending time with them

2. <u>Fabroni scale of Ageism</u>: This is a 29-item, 4 point- Likert scale from 1 (strongly disagree) to 4 (strongly agree), with 6 items being reverse scored. The score ranged from 29- 116; higher the scores more the degree of ageism. [3]

3. <u>Palmore's Amazing facts on ageing scale</u>: This is a 25 item, true or false scale, with all the odd numbered statements being false and even numbered statements true. The correct statements were marked 1 and incorrect 0. The scale is used to assess general physical, mental

and social realities of ageing. The score ranged from 0-25; higher score indicating better knowledge about ageing (lesser ageism).[4]

4. Anxiety about ageing scale: This is a 20 item, 5 point- Likert scale from -4 (strongly disagree) to +4 (strongly agree). The AAS has been shown to be negatively correlated with attitudinal measures of ageism as well as overall knowledge about the aging process. The scores range from -80 to +80; higher the scores, more the ageism. [5,6]

Statistical analysis

Data were compiled in MS Excel and analyzed using SPSS version 26 (licensed to JSSAHER). Descriptive data were represented as mean and standard deviations. Tests of normality- Shapiro-

Wilks test and histogram plot were done for the ageism scores and the scores were represented as mean and standard deviation along with their p-values. Parametric tests i.e. one sample t-test and independent sample t-test were applied to Fabroni and Anxiety about Ageing Scores. Mann-Whitney U- test was applied for data on Palmore scale and amount of time spent. Chi square test was done to find an association between presence of grandparents and enjoying spending time with them. $p < 0.05$ was considered to be statistically significant. Tables and pie charts were included wherever necessary.

Results

The total number of participants for this study were 163. The mean age group of the study sample was 22 years.

Figure 1 shows the distribution of the participants by gender. It is seen that of the 163 participants, 61(37%) were males and 102(63%) were females
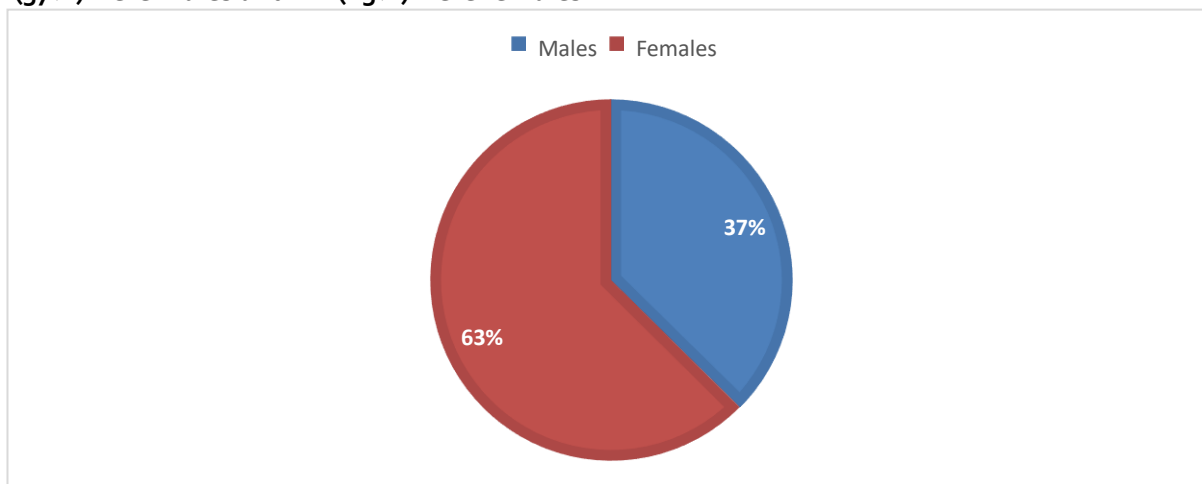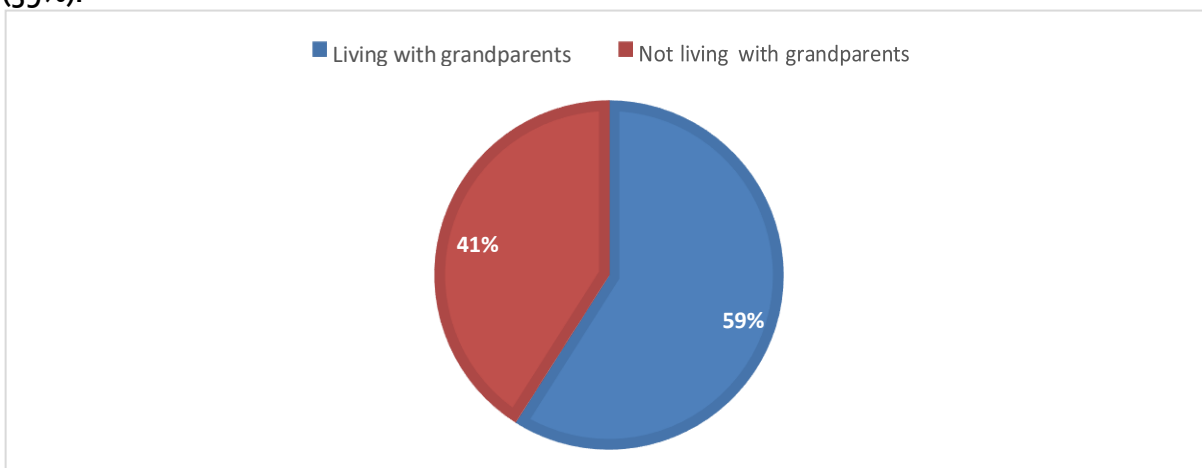

Figure 2 shows that the distribution of the participants by whether they were living with their grandparents. It was found that number of participants living with their grandparents were 96 (59%).
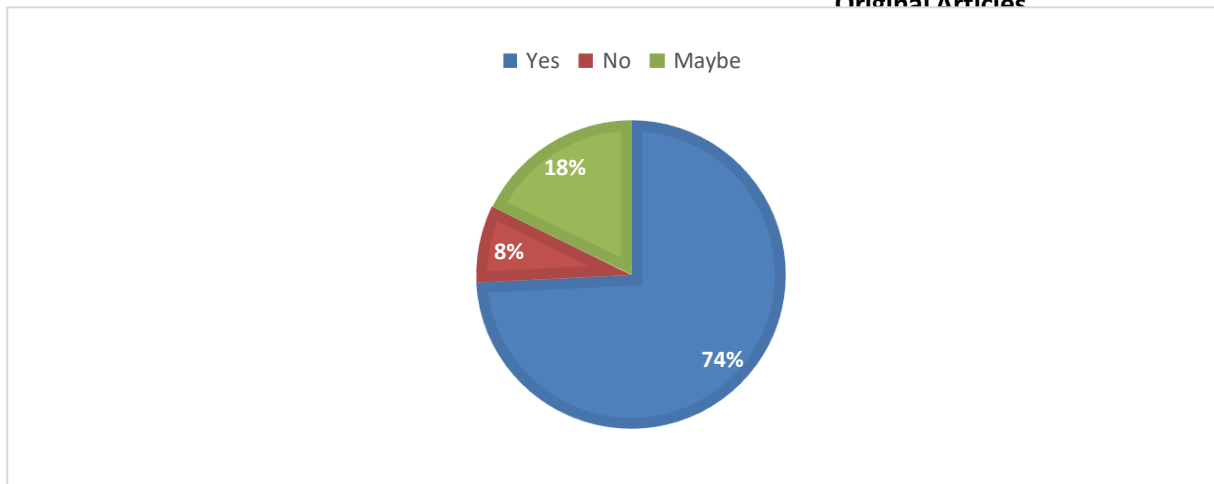
Fig:3 shows the feedback received when asked if the participants liked spending time with their grandparents. It was found that 74% of them agreed that they enjoyed spending time with their grandparents

Table 1 shows the mean scores on Fabroni and Anxiety about Ageing scale among male and female participants. We see that there is a significant association between Fabroni scale and gender i.e. male participants had higher ageism as compared to female participants. There was no statistically significant difference between the AAS scores for males and females. The median scores for Palmore's scale and time spent was 13.00 and 2 hours respectively. The p- value for Mann- Whitney U- test for Palmore's scale and time spent was 0.799 and 0.282 respectively showing that there is no statistically significant difference among the scores and the time spent among male and female participants.

Table 1: Comparing the scores among male and female participants on anxiety scales

Variables	Males		Females		p-value
	Mean	SD	Mean	SD	
Fabroni Scale of Ageism	67.1	10.04	66.36	9.81	0.000*
Anxiety about Ageing Scale	14.52	14.868	13.12	13.283	0.532#

#One sample t-test (mean=72.5, p=0.003)
#Independent sample t-test

Table 2 shows comparison of Fabroni and AAS scores for groups living with or without their grandparents. We see from the table that when living with their grandparents, they have statistically significant lesser ageism on the Fabroni scale and AAS scale. When Mann- Whitney U- test was applied for Palmore's score and amount of time spent, the p- values were 0.913 and 0.000 respectively.

Table 2: Comparison of scores when living with/ without grandparents

Variable	Grandparents Living with them		Grandparents not living with them		*p- value
	Mean	SD	Mean	SD	
Fabroni Scale of Ageism	64.55	8.906	68.10	10.297	0.023
Anxiety about Ageing Scale	14.66	15.661	12.94	12.505	0.438

Independent sample t-test

Table 3 shows the comparison between groups living with/ without their grandparents and if they enjoyed spending time with them. On applying Chi- square test, statistical significance was found (p=0.000223).

Table 3: Comparison of enjoying the time spent when living with/ without grandparents

		Enjoy Spending Time			Total
		Yes	No	Maybe	
Grandparents Present	Count	61	2	4	96
	Percentage	91.0	3.0	6.0	
Grandparents Absent	Count	60	11	25	67
	Percentage	62.5	11.5	26.0	
Total					163

Discussion

The present study was conducted among 163 medical students of which majority (63%) were females. Among the participants, 59% had their grandparents living with them and 74% of them enjoyed spending time with them. The study showed that males had a higher score on all 3 scales of ageism i.e. more ageism than female subjects. However, only Fabroni scale showed statistical significance (p<0.001). If the participants were living with their grandparent, they had a lesser score on Fabroni and AAS scores which meant that they had lesser ageism.

A study done by Chooliyal & Putran et.al showed that only 21.1% of their participants were living with their grandparents. [2] However, in this study, 96 (59%) of the participants were living with their grandparents.

The low proportion in the former study is attributed to the rising concept of nuclear family in the society. However, the increased proportion in the current study could be attributed to the 1st lockdown of COVID-19 during 2020 as many families opted to keep their elderly members close to them during the pandemic.

When the Fabroni scale scores were compared between the entire study population with a known average score, the study group of Allan and Johnson et.al got a mean score of 74.71. [5] In the present study the average score was 66.64 which was significantly lesser than the neutral score of 72.5. This shows that there was lesser ageism among the study participants.

Chooliyal & Putran et.al too found lesser ageism among people living with their grandparents with a mean difference of 11.94 in the scores. [2] This shows that when intergenerational living i.e. child live with their grandparents, it influences the attitude of the young towards elders.

Study by Hofmeister- Tóth et.al in Hungary too showed that men had more ageism as compared to their female participants on FSA and this difference was statistically significant. The difference was also found among age groups wherein it was found that the perception about the older age group was the most negative among young people (18- 29 years). [7]

Allan and Johnson et.al found that their study population had a score of 47.68% on the Palmore's scale. [5] The present study showed a slightly higher score of 52% among the study participants. This shows that the present study population had better knowledge about ageism. However, there was no statistical significance for gender differences on Palmore's score.

In another study conducted by Shiovitz- Ezra et al in Israel to measure ageism among their participants, using Palmore's Facts about Ageism scale, they found that more than 40% of the participants felt that older workers were less efficient workers than young ones. They also found that the participants felt that depression was more common among older workers. This shows that the participants were having misconceptions about aging and were more likely to harbor ageist attitudes. However, the difference in the score showed no statistically significant difference based on age or gender. [8] Study conducted by Yonder and Yildririm to estimate the prevalence of ageism among undergraduate students using Anxiety about ageing scale (AAS) showed that students had a positive score on AAS i.e. positive attitude towards ageing. They suggested that this was so because of cultural factors such as showing respect to the elderly, seeking advice and opinions of the elders and the feeling of responsibility to look after the elders. [9] Similarly the present study found that when exposed to the company of elders in the family, eg. Living with them, the students had lesser score on the AAS showing that exposure to the company of elders reduces the anxiety and misconceptions of ageing.

Similarly, study conducted by Yilmaz and Çolac in Turkey to estimate the proportion of ageism using AAS also showed that living with grandparents in the same house (intergenerational living) and more contact with grandparents face to face were important factors which determined positive ageism among students. [10]

Lower scores on Fabroni scale and AAS scale when living with their grandparents from table 2 is also seen in the study conducted by Sum et.al. [11] This again proves that when children are exposed to the company of elders it most likely helps them appreciate the process of growing old and thus have lesser ageism.

Contrary to the findings in this study, several studies suggest that ageism is rising in India. This could have been so due to the COVID- 19 lockdown. Students were either home or more in contact with their family members leading to a possible positive change in their attitude.

CONCLUSION
Accepting that the chronological age of a person does not determine their potential is the need of the hour. Getting old has its own perks such as maturity of one's emotional being and the ability to understand the importance of maintaining stable relationships. Elders deserve our respect not only due to the great number of years lived by them but also their years of experience and ocean of knowledge. Patience is a key tool that the youth need to relearn to deal compassionately with the elderly. They may not be as quick as us but they too have a burning passion to lead a life just as modish as us.
"Age is not lost youth but a new stage of opportunity and growth."- Betty Friedan

LIMITATIONS
As only medical students were assessed in this study, the results cannot be generalised. The age group analysed was narrow. Studies should also be conducted among other age groups, especially among the adolescent students, to understand the necessary early age groups for intervention.

REFERENCES

1. Khangembam, V. (2019). Ageism and the Deteriorating Role of Families towards the Aged in India. *Int'l JL Mgmt. & Human.*, *2*,

2. Choolayil, A.C., & Putran, L. (2020). Ageism among undergraduate students: Do grandparents make a difference?. *Indian Journal of Gerontology*, *34*(3), 333-342.

3. Fraboni, M., Saltstone, R., & Hughes, S. (1990). The Fraboni Scale of Ageism (FSA): An attempt at a more precise measure of ageism. *Canadian Journal on Aging/La revue canadienne du vieillissement*, *9*(1), 56-66.

4. Bennett, R. (2004). Professor Palmore's amazing facts on aging quiz. *Time goesby*, *9*.

5. Allan, L. J., & Johnson, J. A. (2008). Undergraduate attitudes toward the elderly: The role of knowledge, contact and aging anxiety. *Educational gerontology*, *35*(1), 1-14.

6. Looti, M. (2022). Anxiety about Aging Scale (AAS). *Psychological Scales*.

https://scales.arabpsychology.com/s/anxiety-about-aging-scale-aas/

7. Hofmeister-Tóth, Á., Neulinger, Á., & Debreceni, J. (2021). Measuring discrimination against older people applying the Fraboni scale of ageism. *Information*, *12*(11), 458.

8. Shiovitz-Ezra, S., Ayalon, L., Brodsky, J., & Doron, I. (2016). Measuring ageism based on knowledge, attitudes and behavior: Findings from an Israeli pilot study. *Ageing International*, *41*, 298-310..

9. Yönder, M., & Yildirim, J. G. (2020). Undergraduate Students' Attitudes Towards Ageism and Affected Factors. *Yaşlı Sorunları Araştırma Dergisi*, *13*(2), 98-106.

10. Yılmaz, F., & Çolak, M. Y. (2017). The effects of intergenerational relations and ageing anxiety on attitudes towardageism. *Acad Res Int*, *8*(2), 45-54.

11. Sum, S., Emamian, S., & Sefidchian, A. (2016). Aging educational program to reduce ageism: Intergenerational approach. *Elderly Health Journal*, *2*(1),33-38

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