

Attitudes Towards the Elderly among Singapore Medical Students

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Abstract

Introduction: It is important that medical students possess the correct attitude towards the elderly and not have an ageist attitude. This is because they will be caring for an increasing proportion of elderly patients. We thus sought to assess the attitudes of our medical students towards the elderly. **Materials and Methods:** We conducted a cross-sectional study assessing the attitudes towards the elderly of 225 first-year and 135 third-year students using a self-administered questionnaire that incorporated the Kogan's Attitudes Toward Old People Scale (KAOP). Elderly people were defined as those aged 65 years and above for this study. **Results:** The majority of first- (98.2%) and third-year (99.2%) medical students had positive attitudes towards elderly people (KAOP score above 102). KAOP scores were not significantly different regardless of seniority (medical student year), gender, race, household income, or having a doctor-parent. Although the mean KAOP score of third-year students was higher than that of first-year students, this was not significantly different ($P=0.062$). **Conclusions:** Medical students in Singapore have a positive attitude towards the elderly. It is important that their medical curriculum continues to have an increasing geriatric component in view of the increasing numbers of older persons that they will be caring for due to the ageing population.

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Key words: Curriculum, Geriatric, Kogan

Introduction

Singapore's population is ageing rapidly. As of the year 2000, 7.2% of Singapore's population was aged 65 and above, while 10.6% was aged 60 years and above.¹ In the next 2 decades, the number of the elderly is expected to increase by more than 3 times the present level to over 1 million persons.² With a greater proportion of the elderly, our doctors will very likely be treating more elderly patients over the years. The burden of chronic, non-communicable diseases is also likely to rise.³ As more of our older persons consume more healthcare services, healthcare providers will have to be more aware of the challenges they will face to appropriately care for this segment of the population. For example, care needs to go beyond treatment of the elderly who have lost their health to include disease prevention, and maintaining function and independence in older people.⁴ Similarly, the containment and optimal management of chronic conditions will require a strong emphasis on patient education.³

Healthcare professionals are reported to be particularly susceptible to ageist stereotyping because of their increased

exposure to elderly and infirm individuals.⁵ A study among oncology health professionals showed persistently negative attitudes towards elderly people regardless of profession, gender and clinical experience.⁵ For medical trainees, the existing literature reveals inconsistent results, with several studies reporting negative attitudes of medical trainees towards old people, particularly first-year medical students,⁶⁻⁸ while others showed neutral or favourable attitudes.⁹⁻¹³ Ageist attitudes towards older persons can negatively affect patient care, resulting in complications in diagnosis and treatment¹⁴ and dissatisfying communication.¹⁵

With an increasing proportion of the elderly in the population in the near future, it is important that medical students possess the correct attitude and knowledge towards older persons. Provision of care for older persons is an important aspect of undergraduate medical training.¹⁶ Examining medical students' attitudes about the elderly will provide valuable information when planning geriatric education in medical school.¹⁷

As far as we know, few studies on medical students' attitudes towards the elderly have been conducted in Asia.

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We thus sought to study this potentially important aspect of patient care among our future doctors.

Materials and Methods

Setting

We conducted a study among first- and third-year medical students for the academic year 2007/2008 at the Yong Loo Lin School of Medicine, National University of Singapore (NUS). This was part of a larger survey that we conducted, the “Study of Personal Health Practices & Attitudes/Perceptions of Medical students towards General Practice, the Aged and Preventive Medicine” (GAP study). First-year students had just started medical school 3 months prior to the study and only had introduction to pre-clinical subjects (via lectures and tutorials). The third-year students were surveyed after introductory lectures on geriatric medicine and exposure to elderly community healthcare services during their 4-week Family Medicine (FM) posting.

Questionnaire

This was a self-administered questionnaire. To assess respondents' attitude towards the elderly, we used the Kogan's Attitudes Toward Old People Scale (KAOP).¹⁸ This is a 34-item tool consisting of 17 positively framed and 17 negatively framed statements, covering characteristics such as residential patterns, cognitive style, personal appearance, personality and discomfort with elderly people. Elderly people referred to people aged 65 years and above. Respondents were asked to indicate the level to which they

agreed or disagreed using a 6-point Likert scale (strongly disagree, disagree, not sure but probably disagree, not sure but probably agree, agree, and strongly agree). To obtain a score, the values of the negatively framed statements were reversed and tallied in with the positively framed statements. The range of scores was 34 to 204 with higher scores representing a more positive attitude. The score indicating a neutral attitude was 102.

Pilot Study

A pilot study to test out the questionnaire was done with 12 third-year students during their FM posting in May 2007. The questionnaire included 14 items including demographic data and the KAOP. Minor adjustments were made following feedback from the students after the pilot study.

Analysis

We analysed the data using SPSS Version 15.0 (SPSS Institute, Chicago, IL). Chi-square analysis was used to compare proportions and independent *t*-test analysis was used to compare continuous variables for statistical significance. Significance level was set at $P < 0.05$.

Results

Socio-Demographic Characteristics and Mean KAOP Score (Table 1)

The respondents consisted of 225 first-year and 135

Table 1. Demographic Characteristics of Study Participants

Characteristics	First-year medical students n = 218 [n (%)]	Third-year medical students n = 124 [n (%)]	X ² P value
Mean age (y) (SD)	19.7 (0.5)	21.9 (0.8)	N.A
Sex [n (%)]			
Male	121 (55.5)	69 (55.6)	0.980
Female	97 (44.5)	55 (44.5)	
Ethnicity [n (%)]			
Chinese	201 (92.2)	105 (84.7)	<0.029
Non-Chinese	17 (7.8)	19 (15.3)	
Household income [n (%)]			
<\$2000	29 (13.3)	9 (7.3)	0.087
≥\$2000	189 (86.7)	115 (92.7)	
At least one doctor parent [n (%)]			
No	196 (97.0)	110 (94.8)	0.366
Yes	6 (3.0)	6 (5.2)	
KAOP Score >102	214 (98.2)	123 (99.2)	0.657
Mean KAOP Score (SD)	135.2 (14.9)	138.2 (13.5)	0.062

KAOP: Kogan's Attitudes Toward Old People Scale; SD: standard deviation

Numbers for each item may not add up to the total number of students due to missing values

third-year medical students. After accounting for missing or incomplete responses, we obtained 342 completed questionnaires (95%). The percentage of completed questionnaires obtained was 96.9% and 91.9% for first- and third-year medical students, respectively.

The majority (98.2% first year, 99.2% third year) of our medical students had positive attitudes towards the elderly (KAOP score above 102). Although the mean KAOP score of third-year students was higher than that of first-year students, this was not significantly different ($P = 0.062$).

Differences in KAOP Scores within Medical Student Year (Table 2)

Table 2 lists the differences in scores between different characteristics within each student year. Within each medical student year, KAOP scores were not significantly different regardless of gender, race, household income, or having a doctor-parent. Because of the small number of students who had negative attitudes, we could not analyse their characteristics meaningfully.

Discussion

It is heartening to find that the overwhelming majority of our medical students had positive attitudes towards elderly people regardless of each student's seniority (medical student year), gender, race, household income, or parent being a doctor.

Our study contrasts with other studies in the literature, where medical students have apparently had at best, a moderately positive,¹⁹ neutral or even negative attitude towards elderly people.^{6,20,21}

One possible reason for this positive attitude among our students is the observation that respect for older persons is a notable tradition among people of East Asia, of which Singapore is a part.²² A study of Singaporean undergraduate social work student attitudes reported that it was necessary to consider the impact of Confucian ethics on Singaporean students when assessing their attitudes towards older adults.²³ Moral codes and social norms are likely to be very much influenced by Confucianism in Singapore, where three quarters of the population are of Chinese descent.²⁴ The traditional basis for elder respect includes the Confucian teaching of filial piety²⁵ which prescribes for older persons to be respected and honoured by their offspring. There is a sense of obligation involving protection, care and financial support towards parents and ancestors. It also stresses status differences among persons based on gender and age.²⁶ Even among Singaporeans of non-Chinese ancestry, such as the Malays, Indians, Pakistanis and Sri Lankans, where Confucianism is not practised, filial responsibility is also emphasised and practised.²³

Another possible reason is that many of the present elderly are active within their family arena, such as looking after their grandchildren, cooking and helping to keep the family traditions alive.²⁷ This could have the effect of letting the young witness first-hand the active roles and functions older adults serve within the family.

With the global ageing trend, medical curricula should promote students' ability to care for older adults by having sufficient representation of the elderly. However, there have been laments of the awkward under-representation of the elderly in the medical curriculum.²⁸ In view of Singapore's

Table 2. Differences in KAOP Scores within Medical Student Year

Characteristics	First year		Third year	
	Mean KAOP Score (SD)	<i>P</i> value	Mean KAOP Score (SD)	<i>P</i> value
Sex				
Male	133.5 (16.0)	0.054	137.4 (14.6)	0.452
Female	137.4 (13.2)		139.3 (12.1)	
Ethnicity				
Chinese	135.7 (14.7)	0.110	138.4 (13.0)	0.754
Non-Chinese	129.6 (17.2)		137.2 (16.7)	
Household income				
<\$2000	134.8 (16.2)	0.886	134.1 (15.5)	0.344
≥\$2000	135.3 (14.7)		138.6 (13.4)	
At least one doctor parent [n (%)]				
No	135.5 (14.2)	0.412	138.8 (13.9)	0.569
Yes	130.5 (24.3)		135.5 (7.8)	

KAOP: Kogan's Attitudes Toward Old People Scale; SD: standard deviation

ageing population, we have to bear this in mind when planning our curriculum although our students generally had a positive attitude towards the elderly. Reuben et al⁶ noted that attempts to generate physicians with good attitudes had to depend on curricular efforts during medical school and residency training as there were few identifiable independent predictors that would help in selecting students who had more favourable attitudes towards older persons. In Singapore, geriatrics was made a compulsory part of the NUS undergraduate curriculum from year 2000 onwards.²⁹ Students have to spend 2 weeks in a geriatrics department in an acute hospital setting.³⁰ However, there are no site visits to elderly intermediate care and long-term care settings except for a 1-day attachment to a community hospital during the students' FM posting.

Besides increasing geriatric knowledge, increased exposure to geriatric patients in the medical curriculum will also lead to students having more positive attitudes towards older people as shown by several studies in which students were exposed to integrated discrete teaching modules.^{21,31,32} A more positive attitude towards older people is also associated with greater interest in Geriatric Medicine as a career.^{19,33}

Nevertheless, we note that our third-year students' KAOP scores were not significantly higher than first-year students' (138.2 vs 135.2) although they already had introductory lectures on geriatric medicine and exposure to elderly community healthcare services while first-year students had no such exposure when surveyed. This may be due to the relatively short total time (about 15 days) of geriatric exposure third-year students had under the curriculum.

Limitations

First, this was a cross-sectional study, thus causality cannot be confirmed. Second, although 2 different years of medical students were studied, prospective studies following students through undergraduate and postgraduate training would have been preferable to see if there is a change in attitude towards older persons as students progress through their medical years. Another limitation is that only first- and third-year students were studied. Thus the results may not be generalisable to students of other years. Finally, we did not study whether students would choose geriatric medicine as a future choice of career and thus could not analyse the association between students' attitude score via the KAOP and choice of geriatric medicine. This could be a possible area for future studies.

Conclusion

Medical students in Singapore have a positive attitude towards the elderly. It is important that their medical curriculum continues to have an increasing geriatric

component in view of the increasing numbers of elderly persons that they will be caring for due to the ageing population.

Ethics Committee

Ethics approval was provided by the National University of Singapore Institutional Review Board (Reference Number 07-156).

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