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Willingness to Work with Older Adults in the Medical Field in Iran in 2017

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Abstract

Background: *Providing good health care for the elderly is one of the most important challenges of aging population. The current study was conducted to assess the willingness to work with elderly people among medical sciences students in Iran.*
Methods: *This cross-sectional study was carried out on a sample of 583 students from medical universities in Tehran, Iran in 2017. A multi-stage stratified random sampling was employed to obtain the study sample. The Willingness to Work with Elderly People Scale (WEPS) was used to measure the dependent variable. Data were analyzed using SPSS software version 23.*
Results: *The study sample consisted of 583 medical sciences students with a mean age of 21.98 (SD=3.63) years old. The total mean score for willingness to work with the elderly in medical students was found to be 72.07 (SD=9.50). The results revealed a significant association between fields of study and willingness to work with older adults (F (7, 575)=2.62, P<0.01).*
Conclusions: *The results of this study showed that, the willingness to work with the elderly is low among students from medical universities in Tehran, Iran.*

Keywords: Aged, Aged care, Willingness, Medical sciences students.
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Introduction

While the increase in elderly population can be indicative of the success of public health policies and social and economic development, it also poses a challenge to the community for maximizing the health, performance, and social participation of the elderly.[1] The aged population is estimated to increase from 12% in the year 2015 to 25% in 2050.[2]

The increase in the elderly population introduces new demands and challenges on the healthcare system. According to the available data, 65% of people over 65 years of age are hospitalized, which is four times the hospitalization rate in people under 65 years of age. The elderly age group accounts for nearly 26% of the medical visits, 38% of emergency referrals, 85% of home-based care, and 90% of nursing home residents.[3]

According to the 2011 census in Iran, the population aged over 60 years increased from 7.99% in 2006 to 8.2% in 2011 and it reached 9.27% in 2015, indicating the advancing age of the Iranian population.[4,5] Most healthcare systems around the world are not prepared to meet the needs of the elderly, often suffering from multiple chronic diseases or geriatric syndrome;[2] Iran is no exception to this fact.

The attention toward people struggling to maintain their health is becoming more and more important. However, the level of interest of teachers and students to work with the elderly complicates the educational efforts,[6] as medical and health students have a key role in promoting the health of the elderly.[7]

Discriminatory practices with the elderly may not necessarily result from the intent, and it indicates the lack of skill and confidence with respect to working with the elderly. Studies conducted in Australia, Brazil, the United Kingdom, Germany, Hungary and the United States showed that, working with the elderly is one of the lowest career choices. For example, only 2% of nursing students said that, they would like to have a job and look at their career prospects in relation to caring for an elderly person.[8]

Given the fact that working with the elderly has less income, as a result, working in this area is of limited value.[9]

In this regard, Rathnayake et al. in a study conducted in Sri Lanka in 2015 among 98 first-year to fourth-year undergraduate nursing students showed that, one-third of the students chose to work with the elderly as their future career.[10]

Moreover, Zhang et al. in a study carried out in China in 2015 showed that, the willingness of Chinese students to care for the elderly was moderate to high.[11]

Shen et al. (2012) showed that, work with seniors is the second priority of the nursing students.[12]

Carlson et al. in a study performed in Sweden in 2015 showed that, there was no significant difference in terms of willingness to work with older adults between two age groups and two groups of gender.[13]

Existing literature shows that, in many countries, the willingness to work with the elderly is among the minimum career choices.[14] In this regard, the current study was designed to assess the willingness to work with elderly people among medical sciences students in Iran.

Materials and Methods

This cross-sectional study was conducted on a sample of 583 students of aging health, health, dentistry, medicine, rehabilitation, paramedical, nursing, and pharmacology at Tehran University of Medical Sciences and Shahid Beheshti University of Medical Sciences, Tehran, Iran. The survey sample was obtained using a multi-stage stratified random sampling method, from October to December 2017.

Willingness to work with the elderly was investigated using the "Willingness to Work with Elderly People Scale" (WEPS)[6] designed and psychometrically evaluated based on the Theory of Planned Behavior (TPB). The questionnaire included demographic information, as well as four sections including attitude to work (individual's positive or negative evaluation of behavior), subjective work (individual's perception of social issues related to the behavior), perceived behavior control and willingness to work (working with the elderly).

The four sections of the questionnaire (WEPS) consist of 20 items (5 questions per section). One question, entitled "preference to work with different age groups," was added at the end of the questionnaire. Responses to each item were scored on a 6-point Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree). The lowest and highest possible scores for willingness to work with the elderly were equal to 20 and 100, respectively. In fact, students with a score of 20 or close to 20 were less willing to work with the elderly compared to the students with a score close to 100.

The questionnaire was distributed among the students and the participant's information remained confidential and anonymous.

The demographic characteristics included age, sex, marital status, field of the study, educational degree, fathers' age, mothers' age, living with grandparents, receiving care by grandparents, visiting rehabilitation center and nursing home, paid and voluntary work experiences, course, participation in the research, congress, and workshop in geriatrics and gerontology field. The questionnaires were completed by two trained interviewers. The questionnaires were anonymous and informed consent was obtained from all the respondents during data collection.

The collected data were managed and analyzed using SPSS software 23.0 for Windows (SPSS Inc., Chicago, IL). The descriptive and inferential statistics were employed to achieve study purposes. After handling the missing values and outliers, the descriptive statistics such as frequency, mean, and standard deviation were used to describe the profile of the respondents. Bivariate analyses including a series of One-Way Analysis of Variance (ANOVA) and Independent Samples T-test were conducted in inferential statistics. The P.V of ≤0.05 was considered as statistically significant.

Results

The study sample consisted of 583 medical sciences students with a mean age of 21.98 (SD=3.63) years old. Table 1 presents the distribution of the study sample in terms of each academic and demographic characteristic. The study findings showed that, 43.6% of the study participants were female and 56.4% of them were male, and 88% of the study participants were single.

A total of 583 students including 156 students of medicine (About one-fourth of the respondents), 118 students of nursing, 16 students of geriatric health, 79 students of public health, 28 students of pharmacology, 107 students of rehabilitation medicine, 24 students of dentistry, and 55 students of paraclinical completed the questionnaire out of 600 students enrolled in the study.

In this study, the highest participation rate belonged to the second-year students accounting for 45.3% of the total study sample, and the least participation rate belonged to the sixth- and seventh-year students each with 1.7% of participation rate.

Undergraduate students constituted about half of the participants (55.2%).Ph.D. students had the lowest participation (0.7%).

Table 1. Profile of the students

Table 1. Profile of the students

Variable	N	%
Sex	254	43.6
−Female	329	56.4
−Male		
Marital status	513	88.0
−single	65	11.1
−Married	5	0.9
−Others		
Field of the study	156	26.8
−Medical	118	20.2
−Nursing	16	2.7
−Aging health	79	13.6
−Public health	28	4.8
−Pharmacology	107	18.4
−Rehabilitation	24	4.1
−Dentistry	55	9.4
−Paramedical		
Educational degree	15	2.6
−PhD /Resident	171	29.3
−General physician	75	12.9
−Master	322	55.2
−Bachelor		
Father Age (60+ years)	124	21.3
Mother Age (60+ years)	59	10.1
Living with grandparents	61	10.5
Geriatrics and gerontology experience	136	23.3
Geriatrics and gerontology voluntary work	97	16.6
Geriatrics and gerontology research	51	8.7
Geriatrics and gerontology course	134	23.0
Geriatrics and gerontology congress	63	10.8
Geriatrics and gerontology workshop	65	11.1
Visiting rehabilitation center	130	22.3
Visiting nursing home	149	25.6
Cared by grandparents	250	42.9

The mean scores of the students' attitude to work, subjective work, perceived behavior control, and willingness to work with elderly (working with the elderly) were determined as 20.44 (SD=3.7), 18.17 (SD=3.79), 15.96 (SD=4.62), and 17.49 (SD=3.23) respectively.

The total mean score for willingness to work with the elderly in medical students was also calculated as 72.07 (SD=9.5).

The greatest willingness to work with the elderly was reported among the students of aging health (M=77.43, SD=9.8) and the lowest among was reported for pharmacology students (M=68.7, SD=10.4).

The findings showed that, married students expressed more willingness to work with the elderly compared to single students; however, students who were divorced or lost their spouses were less willing (M=66, SD=17.5).

The results showed that, female students were more willing to work with the elderly compared to male students (M=72.٢٩, SD=١١,٨). (Please see table 2).

Table 2. Results one-way ANOVAs

Variable	Mean	SD	F	P.V
Marital status				
−Single	72.11	9.1		
−Married	72.29	11.8		<0.05
−Others	66	17.5		
Field of the study				
−Medical	71.89	8.69	2.61	0.01
−Nursing	72.72	9.77		
−Aging health	77.43	9.83		
−Public Health	73.21	10.99		
−Pharmacology	68.75	10.47		
−Rehabilitation	72.83	9.50		
−Dentistry	70.91	6.80		
−Paramedical	68.74	10.40		
Education degree				
−Residents	72.36	9.3	1.52	0.19
−PhD	61.5	12.6		
−General Physician	71.5	8.9		
−Master	72.5	10.5		
−Bachelor	72.40	9.48		

On the other hand, students whose father aged 60 years old or older were more willing to work with the elderly (M=73.5, SD=8.7). In contrast, students whose mother aged 60 years old or older were less willing to work with the elderly (M=72.1, SD=9.4).

The findings showed that, living with grandparents did not influence the medical students' willingness to work with the elderly, as students in both groups expressed equal level of willingness (M=72.2, SD=10). Students who had experience working with the elderly and also those with volunteer experience regarding working with the elderly were more willing to work with the elderly (M=73.7, SD=10.3, M=72.6, SD=10.4, respectively).

Students who had conducted research in the field of gerontology were less willing to work with the elderly (M=71.9, SD=12.2). Students who had attended conferences related to gerontology (M=72.3, SD=9.5) and those who had attended training workshops on issues of the elderly (M=72, SD=12) were not different from other students in terms of willingness to work with the elderly. However, students who had passed specialized courses were more willing to work with the elderly (M=72.7, SD=10).

Students who had visited senior rehabilitation centers were not different from other students regarding willingness to work with the elderly (M=72.1, SD=9.5). However, students who had visited nursing homes were more willing compared to other students (M=72.6, SD=9.5).

The findings showed that, the students who had received care by their grandparents during childhood were more willing to work with the elderly (M=73, SD=9.5).

The ANOVA test was used to determine the differences among the students from different study fields regarding their willingness to work with the elderly. The results revealed a significant association between fields of study and willingness to work with older adults (F (7, 575) =2.62, P<0.01).

The results indicated a significant difference between various groups. The test results showed a significant difference between students of various fields of study regarding the level of perceived behavioral control (F (7, 575) =4.78, P<0.001).

Furthermore, there was a significant difference in the subjective work section between the students with various educational levels (F (4, 578) =3.979, P=0.00).

A significant difference was observed between the students with various educational levels regarding their willingness to work with the elderly (F (4, 578) =2.786, P<0.05).

Independent Samples T-test showed no significant difference in terms of willingness to work with the elderly between women and men (P>0.05) and (df=581). Moreover, a significant difference was found in the perceived behavioral control section between the students whose father aged 60 years old or older and those whose father was younger than 60 years (P=0.00) (df=581). Furthermore, this test was conducted on the students whose mother aged 60 years old or older and those whose mother was younger than 60 years. The results indicated a significant difference in terms of attitude towards the behavior between two groups (P<0.05) and (df=581). The results of a series of independent test has been presented in table 3.

Table 3. Results of independent sample t-tests

Variable	Mean	SD	t	P.V
Sex				
−Female	72.33	9.79	0.56	0.575
−Male	71.88	9.31		
Father's Age (60+ years)				
−Yes	73.53	8.75	1.92	0.055
−No	71.68	9.69		
Mother's Age (60+ years)				
−Yes	71.23	9.93	-0.71	0.474
−No	72.17	9.48		
Living with grandparents				
−Yes	72.39	11.58	0.27	0.785
−No	72.04	9.26		
Geriatrics and gerontology experience				
−Yes	73.77	10.32	2.37	0.018
−No	71.56	9.21		
Geriatrics and gerontology voluntary work				
−Yes	72.62	10.46	0.62	0.534
−No	71.96	9.33		
Geriatrics and gerontology research				
−Yes	71.94	12.23	-0.10	0.914
−No	72.09	9.23		
Geriatrics and gerontology course				
−Yes	72.76	10.7	0.95	0.340
−No	71.87	9.14		
Geriatrics and gerontology congress				
−Yes	72.69	10.24	0.54	0.585
−No	72	9.43		
Geriatrics and gerontology workshop				
−Yes	72	12	-0.07	0.944
−No	72	9.16		
Visiting rehabilitation center				
−Yes	72.17	9.9	0.13	0.894
−No	72	9.3		
Visiting nursing home				
−Yes	72.68	9.57	0.90	0.369
−No	71.87	9.5		
Cared by grandparents				
−Yes	72.94	9.44	1.89	0.058
−No	71.43	9.54		

There was also a significant difference regarding perceived behavioral control between students who had experience of working with elderly patients and others (P<0.05) and (df=581). Students who had passed specialized courses were significantly different from others regarding subjective work and perceived behavior control (P<0.05) and (df=581). There was a significant difference concerning the perceived behavior control between the students who had attended conferences related to gerontology and others (P<0.05) and (df=581).

Additionally, there was a significant difference regarding subjective work and perceived behavior control between students who had attended training workshops related to issues of the elderly and others (P<0.05) (df=581). The Independent Samples T-test showed a significant difference regarding attitude to work between students who had received care by their grandparents during childhood and other students (P<0.05) (df=581).

Discussion

Taking care of the elderly is considered an important part of the work of the healthcare community. Therefore, preparing health professionals to meet the needs of nursing care is very important.[15]

The present study was conducted to investigate the willingness to work with the elderly among the students from the medical universities in Tehran, Iran. As todays' students are service providers to the elderly in the future, their willingness to work with the elderly will determine the quality of services provided.

In the present study, female students showed greater willingness to work with the elderly compared to male students. However, Angela et al showed no significant difference between female and male students. Undergraduate students were more willing to work with the elderly compared to the graduate students. Angela et al also showed that, students who had experience of working with the elderly were more willing to work with them, which is in agreement with the results of our study.[16] Contrarily, Adib Hajbagheri et al showed that, after communication between students with elderly residents of the nursing home, the tendency to work with the elderly decreased.[17]

However, Soiza et al found no significant relationship between the experience of working with the elderly and willingness to work with the elderly.[18]

Chi et al. showed that, the willingness of students who received care by their grandparents during childhood was higher than that of other students, which is in agreement with the results of the present study.

However, the results showed that, the students who lived with their grandparents were more willing to work with the elderly, which is in disagreement with the results of the present study. Chi et al. showed that, students who had experience of voluntary work with the elderly were more willing to work with them, which is in line with the results of the present study.[19]

Haron et al. showed that, 27% of students tended to work in the field of aging after graduation.[20] While in this study, the willingness to work with the elderly was reported as 12%. Cheng et al reported that, students' motivation was modest regarding choosing to work with the elderly.[21] Chua et al. showed that, only one -third of the students intended to choose jobs related to the care of the elderly as their future jobs.[22]

The results of the previous studies showed that, working with elderly people, a less desirable area for future work among students has important implications for educational institutions. It seems that, the educational system does not meet the needs of increasing number of elderly people. Therefore, preparing health-care workers to meet the needs of a population needing health care is considered a challenge.[6]

The elderly require more healthcare services compared to other age groups. Students graduating from medical universities who have to prepare themselves for this challenge are healthcare providers for the elderly. The results of the present study showed that, the willingness to work with the elderly was moderate among the students from the medical universities in Tehran, Iran. Experience of working with the elderly and participation in training workshops related to problems of the elderly could improve the students' willingness to work with the elderly. Therefore, theoretical and practical courses related to geriatrics should be integrated into the students' curriculum.

Also, as attitude towards working with the elderly, mental norms related to working with the elderly and perception of working with the elderly significantly predict the students' willingness to work with the elderly, it is suggested to modify the content of the training courses, to improve the knowledge of the elderly's issues in order to encourage positive attitudes towards working with the elderly. Since medical students comprise one of the most important groups of healthcare providers, specialized courses of gerontology should be included in the students' curriculum so that the students acquire the ability to work with the elderly during their education.

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Conflict of Interest

The authors declare that they have no conflict of interest.

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