



Determining the Relation between General Health and Educational Progress among Paramedical Faculty's Students of Tehran Medical University

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ABSTRACT

Considering the fact that students studying various fields of Study will have the responsibility to create, maintain and improve society's level of health, they should be cared for with precision so they can perform and play their role as an educated and expert work force. This is due to the fact that getting accepted in university is a very sensitive period in lives of efficient workforce and active youth in each country, therefore, present study determines the relation between general health and educational progress among paramedical faculty's Students of Tehran Medical University. Method: present research has a descriptive-analytic nature and was executed in a time period during winter of 2016. The target society included all students of paramedical faculty and required data was gathered by an adults' health function literacy questionnaire and general health was also gathered by means of general health questionnaire. In order to present descriptive results of percentage and median and to study and analyses quantitative data, parametric statistical tests were used for normal data and in case there were not normal, non-parametric tests were applied. Findings: Results of present study showed that there is a positive significant relation between general health and educational progress ($r=0.1 / 0 p < .28 / 0$). Still, no significant relation was observed between general health and health literacy ($r= 0.038, p=0.569$). Conclusion: In studying general health aspects with health literacy and educational health motivation, all aspects of general health (physical aspect, anxiety aspect, social function aspect, depression aspect) showed a direct and significant relation with educational progress but presented no significant relation with health literacy. Still, we could observe a positive effect on educational progress and health literacy by trying to improve any of general health factors. In other words, we could use organizational capitals to improve each aspect of general health to increase educational progress motivation.

Keywords: between general health, health literacy, educational progress, students

INTRODUCTION

A great part of an individual's life is spent in their working or educational environment and a totally different condition from their domestic life. Many events and activities in life have a deep effect on their physical and mental health. Effect of problems and stressful factors of educational period on mental and physical health, is very important [1, 2]. General health is a subcategory of health system and is a collection of important social activities and actions which is generally based on a preventive strategy [3]. General health means feeling well, being sure of self-efficiency, competition capacity and self-emergency of potential mental and emotional abilities [4]. Now a day, educating human force is the most important part of higher education and one of the greatest factors of national development [5]. Students' community is one of the greatest communities in the society. Students of each society, are results of spiritual and human efforts of that society are considered as the ones who will make the future of their

country and their health is very important. Therefore, issues related to their health should be taken very seriously and studies should be conducted relating to them [5, 6].

Now a day, a great part of education and information in health system is presented in written form and a higher level than understandable for individuals [7,8]. The concept of health literacy entered the area of health promotion by an article written by Kibosh in 1997. Then, mentioned to this concept while creating a health promotion dictionary and reasoned that health literacy is a key result of actions related to teach sanitation which should be placed in a wider concept of health promotion and individuals working in health promotion section should pay more attention to such concept [9]. Health literacy, is a universal issue and based on Universal Sanitation Organization, Sanitation plays a critical role in determining inequalities in health, either in wealthy or poor countries [10]. Despite increasing importance of health literacy in improving health of society, few studies have considered such issue in Iran [11]. Based on definition, health literacy is the capacity to obtain, process and understand critical information and required services for proper decision making about health [12]. Some scholars also include awareness of malady's process, self-efficiency and motivation for some political movements in relation to health issues in definition of health literacy [13]. Health literacy includes a series of reading, hearing, analyzing and decision making abilities and ability to use these skills in health situations which don't go back to education years or general reading ability, necessarily [14]. Health literacy is the result of a combined effort between social and individual factors and it considers literacy concerns and dimensions in relation to health. An individual's capacity, is a critical part for health literacy. Motivation to progress is one of the most important acquisitive motivations in each individual which was bring forth by Murray for the first time. The motivation to progress is an individual's desire to over com barriers, trying to achieve a higher version and maintaining high level standards. Individuals with high progressive motivation, desire to be complete and improve their function. They are dutiful and prefer to do challenging jobs, they do things which enables the evaluation of their progress weather based on the comparison with progress of others or other measures. These individuals have great self-respect, prefer individual responsibility and love to become aware of their results in a direct manner. Their marks are good and they take part in university and social activities [14].

Based on studies in Healthcare Strategy Center of United States, individuals with low health literacy have a lower probability to understand and act based on written and speech information presented by health expertise. Therefore, they have a weaker health condition [7], and their condition of being confined in bed and visiting doctors is much higher [15, 16]. They act very weak in self-care [17], have lower preventive care [18] and therefor have to suffer from greater medical expenses [19]. Results obtained from last national survey on evaluating literacy (2006) in United States showed that 36 percent of adults, have a limited, not enough or minimum health literacy. in other worlds, these individuals only can identify one part of information from a short ad simple "less than basic literacy" text, or they can only find information in longer text, in case the text is clear [19]. In Iran, based on a study in five provinces of the country, only 28.1 percent of participants had enough literacy and 15.3 percent had basic or minimum health literacy and 56.6 percent, had insufficient health literacy. Low level of education, old age and poor economic condition were related with insufficient health literacy [20].

University is the main basis of human development in each country; therefore, medical universities of the country have a great mission to educate an efficient, professional and committed human force to solve community's health and medical needs. In such regard, students of subordinate faculties who themselves want to learn, have a great role in progressing high academic goals, which means maintaining and increasing human health. Evaluating students' attitude is one of the important and necessary basis in valuating quality of educational services presented in universities and obtained results from such evaluation are an important factor in improving future function of these units [21]. considering the fact that students in various educational branches will have the responsibility to create, maintain and improve society's health level in the future, we should make sure that they will have the ability to play their role as an educated and expert force properly; because entering university, is a very sensitive time period in life of efficient and active young workforce of each country and it is usually accompanied with many changes in their social and human relationships [2, 23]. Considering above explanations, the necessity to execute such study which can clarify a picture of general health level and effect of health literacy condition and also the motivation to improve it among students, is completely clear. Therefore present study tries to execute a study about general health and health literacy and its relation with educational progress motivation among paramedical faculty students of Medical University of Tehran by means of valid tools and after adjustment and evaluating credibility.

MATERIALS AND METHODS

Present study is of descript-analytical type which was executed in sectional method in Medical University of Tehran in winter of 2016. Research environment is paramedical university. Target society (case study) in present research includes all students of paramedical faculty (856 individuals). Sample volume was selected as 265 individuals based

on Morgan table. categorized accidental sampling method was used based on existing branches students list in the faculty including B.As in Laboratory science (130 individuals), health and medical services management (122 individuals), anesthetize technician (132 individuals), health information technology (155 individuals), surgery room (137 individuals), book keeping (17 individuals) radiology (102 individuals), radiotherapy (36 individuals) and M.A.s in Informatics, Radiobiology, hematology and health technology, book keeping, and Ph.Ds. in information management, hematology and book keeping which included 846 female and 374 males. the criteria to enter the research was being a second or higher year student studying in Tehran medical university's paramedical faculty and students which didn't want to fill the questionnaire, exited the research society.

Required data were gathered by means of Test of Functional Health Literacy in Adults which is one of the most important and valid questionnaires in the world. Its credibility was evaluated in previous study [24] in Persian and mentioned questionnaire was used after receiving permission from its translators. Mentioned questionnaire has two parts: calculative and understanding of real texts related to healthcare. It contains 50 questions which includes preparation guidelines to get ready for taking a picture from upper digestive system, legal part and patient's responsibility in insurance forms and a hospital patient's standard satisfaction form.

Information related to general health was also gathered by means of 28 question General Health questionnaire presented by Goldberg & Hiller (1979) which contains 4 secondary measures and each measure has 7 questions. Mentioned measures include: corporal signs measure, anxiety and sleeping disorder signs measure, social functionality measure, depression signs measure. Among 28 questions of the questionnaire, numbers 1 to 7 are related to corporal signs. Items 8 to 14 study anxiety and sleeping disorder signs and items 15 to 21 are related to social functionality signs; and finally items 22 to 28 evaluate depression signs. The test was scored based on Likert scale which presents five points for each person, four points are related to secondary measures and one point is related to the whole questionnaire.

Hooman (1998) reported the internal coordination of the 28 question General Health questionnaire by means of Chronbach's Alpha for sub ordinary measures equal to 0.85, 0.87, 0.79 and 0.91, respectively and equal to 0.85. to obtain students' progress motivation, progress motivation questionnaire was used. Hermence, is one of the most common pen and paper questionnaires used to evaluate progress requirement. Hermence (1977) created this questionnaire based on theory and practical knowledge existing about the need to progress and studying the background of researches related to the need to progress. primarily questionnaire contained 97 questions which distinguished individuals with high motivation for progress from individuals with low progress motivation based on ten factors as follow, high level of wishes, strong motivation for moving upward, long resistance while facing homework or average difficulty, desire to retry and do half-finished homework, a dynamic understanding of time, the feeling that everything happens quickly, forward-looking, considering the worthiness measure in selecting friends, colleagues and idols, recognizing through good performance in work, doing a work properly, and low risk taking behavior. Hermence chose nine factors or characteristics dividing high motivation individuals from low motivation individuals based on previous researches as the basis for selecting his questions and to gather required material for his questionnaire. After pilot stage and analyzing questions and calculating the correlation of each question with the whole test, 29 questions were selected as the final questionnaire of progress motivation. it also should be mentioned that after analyzing the questions, no significant question was included in the questionnaire based on the 10th characteristic, therefore the final questionnaire is only built based on 9 characteristic. Questions of the questionnaire are expressed in form of unfinished sentences and each sentences is followed by a couple of choices. In order to unify the value of questions, 4 choices are presented for 29 questions of the questionnaire. These items are scored based on intensity of the progress motivation from high to low or low to high. Currency and permanency of questioners were also tested in present research as follow: questionnaires used in this research were studied by seven expertise in management science, sociology and health policymaking expertise and its currency was confirmed after corrections and adjustments were applied. in order to study the permanency of questionnaires (health literacy, general health and educational progress motivation), the questionnaires were distributed among 30 individuals, primarily; and then questionnaires were distributed among same individuals after two weeks. In order to study the currency we used the test-retest method and results indicated that the permanency of this questionnaire is agreeable (permanency of the general health questionnaire 78%, health literacy 82% and educational progress motivation 85%).

In order to present descriptive results of percentage and median and to analyses quantitative data, in case data is normal, we will use statistical tests, t-test, Pearson correlation and variance analysis; and in case data isn't normal we will use equivalent un-parametric tests which means Manvitney test, Pearson correlation and Kruskal Wallis test. What is more, to study the relation between qualitative data we used K2 test and in case the circumstances for K2 was not prepared, we used Fisher's detailed test.

RESULTS

Studies of students' general health in physical dimension shows that 76 individuals (34.2 percent) have low physical health, 108 individuals (46.6 percent) have average physical health and 38 individuals (17.1 percent) have high physical health; and in anxiety dimension, 63 individuals (28.6 percent) have low anxiety, 104 individuals (47.3 percent) have average anxiety and 53 individuals (24.1 percent) have high anxiety; what is more, from social function point of view, 25 individuals (11.5 percent) had low social function, 144 individuals (66.4 percent) have average social function and 48 individuals (22.1 percent) have high social function. in regard to depression dimension, 150 individuals (66.7 percent) have low depression, 58 individuals (25.8 percent) had average depression and 17 individuals (7.6 percent) had high level of depression. Generally, the number of students with low, average and high level of condition presented the following results, respectively; 31 (14.2 percent), 104 (3.9 percent) and 48 (21.9 percent).

Table 1. Total General Health with Its Four Dimensions

dimensions	Condition					
	Low		average		High	
	Number	Percentage	Number	Percentage	Number	percentage
Physical signs	76	34.2	108	48.6	38	17.1
Anxiety signs and sleeping disorder	63	28.6	104	47.3	53	24.1
Social function	25	11.5	144	66.4	48	22.1
Depression signs	150	66.7	58	25.8	17	7.6
Total	31	14.2	140	63.9	48	21.9

Study's results showed that 13 individuals (18.6%) among men had low general health. what is more, 36 (51.4 percent) and 21 (30.0 percent) of men, have an average and high level of physical health, respectively. these percentages were equal to 17 (11.5%), 104 (70.3%) and 27 (8.2%) individuals in women, respectively. results of K2 test indicated that there is a significant relation between gender and general health level ($p=0.009$).

Table 2. Studied Students' General Health Condition Based On Gender

gender	General health					The probability
	Very low	Low	average	high	total	
male	(%0)0	(%18.6)13	(%51.4)36	(%30.0)21	(%100)70	0.009
female	(%0)0	(%11.5)17	(%70.3)104	(%18.2)27	(%100)148(%100)19	
total	(%0)0	(%11.4)31	(%63.9)140	(%21.9)48		

Results of the study showed that 32 (59.3%) understudy individuals in management branch have an average general health level. this is while, 13 (61.9%) individuals in IT branch have an average level of general health. the general health level of most students in laboratory science, radiology and surgery room was also average. 23 (74.2%) individuals in laboratory science, 24 (52.22%) individuals in radiology and 24 (75.0%) individuals in surgery room fields had an average level of general health. other information are presented in table 4—4. results of the K2 test showed that there is no significant relation between study field and general health ($p=0.135$).

Table 3. Under Study Students' General Health Condition Based In Study Field

Probability	General Health					Study Field
	Total	High	Average	Low	Very Low	
0.135	(%100)54	(%25.9)14	(%59.3)32	(%14.8)8	(%0)0	Management
	(%100)21	(%19.0)4	(%61.9)13	(%19.0)4	(%0)0	Technology
	(%100)31	(%19.4)6	(%74.2)23	(%6.5)2	(%0)0	Laboratory Science
	(%100)46	(%30.4)14	(%52.2)24	(%17.4)8	(%0)0	Radiology
	(%100)32	(%15.6)5	(%75.0)24	(%9.4)3	(%0)0	Surgery Room
	(%100)22	(%9.1)2	(%68.2)15	(%22.7)5	(%0)0	Anesthesia Technician
	(%100)8	(%0.0)0	(%87.5)7	(%12.5)1	(%0)0	Book Keeping
	(%100)2	(%0.0)0	(%100.0)2	(%0.0)0	(%0)0	Medical Emergency
	(%100)1	(%100.0)1	(%0.0)0	(%0.0)0	(%0)0	Radio Therapy
	(%100)2	(%100.0)2	(%0.0)0	(%0.0)0	(%0)0	Information
	(%100)219	(%100.0)219	(%63.9)14	(%14.2)31	(%0)0	Total

Study's results showed that 6 (17.6%) married individual had low general health. what is more, 22 (64.7%) and 6(17.6%) married individuals had an average and high level of general health, respectively. these percentages were equal to 25 (13.6%), 118 (64.1%) and 41 (22.3%) in single individuals, respectively. results of K2 test show that there is no significant relation between being married and general health ($p=0.380$).

Table 4. Students General Health Condition Based on Marriage Statue

Marriage statue	General Health					probability
	Very low	Low	Average	High	Total	
married	(%0)0	6 (17.6%)	22 (64.7%)	6(17.6%)	(100%) 34	0.380
single	(%0)0	25 (13.6%)	118 (64.1%)	41 (22.3%)	(%100) 184	
total	(%0)0	(%14.2)31	(%63.9) 140	(%21.9) 48	(%100) 219	

Results of the study showed that 1 individual (33.3%) had low, average and high level of general health among individuals with college degree. general health condition of individuals with Bachelor degree and Master degrees were in average level as fallow, 128 (64.3%) and 6(85.7%) individuals respectively. 4 (44.4%) individuals with Ph.D. degree announced their general health level to be average and high. results of the K2 test showed that there is no significant relation between educational level or degree and general health ($p= 0.569$).

Table 5. Health Condition of Students Based On Educational Level

Educational Degree	General Health					probability
	Very low	Low	Average	High	Total	
College	(%0)0	1 (33.3%)	1 (33.3%)	1 (33.3%)	(100%) 3	0.569
Bachelor	(%0)0	28 (14.1%)	128 (64.3%)	43 (21.6%)	(%100) 199	
Master	(%0)0	1(%14.3)	(%85.7) 6	(%0.0) 0	(%100) 7	
Ph.D.	(%0)0	1 (%11.1)	4 (%44.4)	4(%44.4)	(%100) 9	
total	(%0)0	31 (%14.2)	140 (%63.9)	48 (%21.9)	(%100) 219	

Results of variance analysis test show that the median of educational progress score is equal to $66/ 52 \pm 10 /12$ among management students, while this amount was equal to $71/20 \pm 7/13$, $68/03 \pm 13/64$ and $68/03 \pm 13/64$ for technology, laboratory science and radiology students, respectively. Other information are presented in table 4-4. no significant relation was observed between scores' median in studied fields ($p= 0.056$).

Table 6. Median of educational progress score based on the study field of individuals taking part in the study

Study Field variant	Educational progress score median	Probability
Management	66.52± 10.12	0.056
Technology	71.20±7.13	
Laboratory Science	68.13± 03.64	
Radiology	68.13±03.64	
Surgery Room	66.14±55.9	
Anesthesia	65.5±52.52	
Book keeping	61.11±52.25	
Medical Emergency	70.13±33.57	
Total	68.11±20.22	

Results of T-test show that the health literacy score median was equal to 81.45 ± 14.113 in men and 82.58 ± 13.92 in women, where no significant difference was observed between them ($p=0.554$).

Table 7. Students' Health Literacy Score Median Based On Gender

Gender	Health Literacy Score	Probability
Male	81.14±45.13	0.554
female	82.13±58.92	

results of T-test show that there is no significant difference between married and single individuals which would be equal to 83.63 ± 13 and 81.95 ± 14.15 respectively ($p=0.506$).

Table 8. Students' Health Literacy Score Median Based On Their Marital Statue

Marital Statue	Health Literacy Score	Probability
Single	83.13±63	0.506
Married	81.14±95.15	

Results of Enova test show that the median of health literacy score in College, Bachelor, Master and Ph.D. degree is equal to the following, respectively; 73.57 ± 17.69 , 82.46 ± 14 , 77.28 ± 10.49 and 86.10 ± 10.95 , where no significant difference was observed ($p=0.506$).

Table 9. Students Health Literacy Score Median Based On Their Educational Level

Educational Level	Health Literacy Score	Probability
College	73.57± 17.69	0.506
Bachelor degree	82.46±14	
Master Degree	77.28±10.49	
Ph.D.	86.10±10.95	
Total	82.20±13.97	

results of Enova test show that the health literacy score median for each study field is as follow; management 81.15±11.60, technology 82.75±12.53, laboratory science 77.22±18.97, radiology 87.08±7.67, surgery room 83.15±14.46, anesthesia 90 anesthesia16.96, book keeping 66.50 anesthesia1985 and medical emergency 68.40 anesthesia18.25; where a significant difference is observed ($p=0.001$).

Table 10. Students Health Literacy Score Median Based On Study Field

Study Field	Health Literacy Score	Probability
Management	81.15±11.60	0.001
Technology	82.75±12.53	
Laboratory Science	77.22±18.97	
Radiology	87.08±7.67	
Surgery Room	83.15±14.49	
Anesthesia	16±90.96	
Book keeping	66.19±50.85	
Medical Emergency	68.8±40.25	
Total	82.13±20.97	

In order to study the relation between general health and educational progress motivation and health literacy we used Pearson correlation coefficient. results of this test showed that there is a positive relationship between general health and educational progress motivation ($r=0.28$, $p<0.001$). still, no significant relation was observed between general health and health literacy ($r=0.038$, $p=0.569$). in order to study the relation between educational progress motivation with general health and health literacy we used Pearson coefficient correlation. results of the test showed that there is a positive significant relation between educational progress motivation and general health ($r=0.28$, $p<0.001$). there is also a positive significant relation between educational progress motivation and health literacy ($r=0.326$, $p<0.001$). in order to study the relation between health literacy and educational progress motivation and health literacy, Pearson correlation coefficient was used. results of this test showed that there is no positive significant relation between health literacy and general health ($r=0.038$, $p=0.569$). there is also a positive significant relation between health literacy and educational progress motivation ($r=0.326$, $p<0.001$).

Table 11. The Relation between General Health, Educational Health Progress and Health Literacy

Variant	General Health	Educational Progress Motivation	Health Literacy
General Health	-----	$r= 0.280$ $P< 0.001$	$r= 0.380$ $P= 0.569$
Educational Progress Motivation	$r= 0.80$ $p <0.001$	-----	$r= 0.326$ $p < 0.001$
Health Literacy	$r= 0.380$ $p = 0.569$	$r= 0.326$ $p <0.001$	-----

In order to study the relation between dimensions of general health and educational progress motivation and health literacy, Pearson correlation coefficient was used. results of the test showed that there is a positive significant relation between general physical health and educational progress motivation ($r= 0.200$, $p=0.002$), but there is no significant relation between physical general health and health literacy ($r= 0.077$, $p=0.245$). there is also a positive significant relation between general health's anxiety and educational progress motivation ($r= 0.206$, $p=0.002$). no significant relation was observed between general health's anxiety and health literacy ($r=0.002$, $p= 0.973$). a positive significant relation was observed between general health's social function and educational progress motivation ($r=0.284$, $p<0.001$). no significant relation was observed between general health's social function and health literacy ($r=0.064$, $p=0.334$). a positive significant relation was observed between general health's depression and educational progress motivation ($r=0.230$, $p<0.001$). there was also a positive significant relation between general health's depression and health literacy ($r=0.011$, $p=0.886$).

Table 12. The Relation between General Health Dimensions with Educational Progress Motivation and Health Literacy Of Studied Students

Variant	Educational Progress Motivation	Health Literacy
Physical Dimension of General Health	r=0.200 p=0.002	r=-0.770 p= 0.245
Anxiety Dimension Of General Health	r=0.206 p=0.002	r=-0.002 p=0.973
Social Function Dimension Of General Health	r=0.284 p<0.001	R=-0.064 P= 0.334
Depression Dimension Of General Health	r=0.230 p<0.001	r=-0.011 p=0.866disscutio

DISCUSSION

Findings of present research shows that there is a significant relation between gender and general health ($p=0.009$), study field and health literacy ($p=0.001$). We also used Pearson correlation coefficient to study the relation between educational progress motivation and health literacy and there is a positive significant relation between educational progress motivation and health literacy ($r= 0.28$, <0.326 , $p<0.001$). Pearson correlation coefficient was used to study the relation between educational progress motivation and health literacy. Results of this test show that there is no significant positive relation between health literacy and general health ($r=0.038$, $p=0.569$). There is also a positive relation between health literacy and educational progress motivation ($r=0.326$, $p<0.001$), and in order to study the relation between dimensions of general health with educational progress motivation and health literacy, we also applied Pearson correlation coefficient. Results of this test showed that there is a positive significant relation between physical dimension of general health and educational progress motivation ($r=0.200$, $p=0.002$), but no significant relation was observed between physical dimension of general health and health literacy ($r=0.077$, $p=0.245$). There was also a positive significant relation between anxiety dimension of general health and education progress motivation ($r=0.206$, $p=0.002$) but such significant relation was not observed between anxiety dimension of general health and health literacy ($r=0.002$, $p=0.973$). There was a positive significant relation between social function dimension of general health and educational progress motivation ($r=0.284$, $p<0.001$), while no significant relation was observed between social function dimension of general health and health literacy ($r= 0.064$, $p=0.334$). There is a positive significant relation between depression dimension of general health and educational progress motivation ($r=0.230$, $p<0.001$) and also a significant positive relation between depression dimension of general health and health literacy ($r=0.011$, $p=0.886$).

Alizadeh gathered data from a collection of 223 samples in his study (all obstetrics students studying in Medical University), which 43 did not answer, so the final sample collection data was gathered from 180 individuals. The majority of students (60 percent) were in complete health. There was no significant statistical relation between the median of general health total score and emotional intelligence of students with their grade average ($p>0.05$) but a significant statistical correlation was observed between emotional health total score median and students' general health total score ($r=0.19$, $p=0.01$). Considering the results of this study, there is a positive correlation between elements of emotional intelligence and elements of general health such as social function, depression and anxiety which can lead to increase educational progress [25,37]. In study by Karimi[26], it was observed that the educational progress median is equal to 16.34 among girls and 15.82 among boys, so it was concluded that level of educational progress is higher in girls in comparison to boys. girls' score median was higher than boys in both sub-measures of internal and external motivation and this difference is completely significant from statistical point of view while, no significant difference was observed among boys and girls in relation to lack of motivation sub-measure. Yeganeh[27] executed Pearson Correlation method, step by step regression and T-test of independent groups. Results of this study, show the existence of a significant positive relation between emotional intelligence, time management and life quality with educational progress ($p<0.01$). Analyzing step by step regression showed that emotional intelligence, time management and life quality can significantly predict educational progress.

Rudbary[28] showed that gender, educational level and faculty are among effecting factors on educational progress. Accepting higher education and female students, using local quota and providing welfare condition and equipment's could effect this progress. Accepting a large number of students in medical courses and higher education is one of the reasons why students might not succeed. RahimiParandjani[29,36] also showed that successful students have a better educational history, meaning 47 percent of these students had a high school graduation average score higher than 19 but only 18 percent of unsuccessful students had a high school average score higher than 18. Results indicated that successful students often had parents with higher educational degrees and unsuccessful students had parents with lower educational degrees ($p<0.05$). many results related to decrease of educational progress among students of various medical fields and branches in health and paramedical University did not show any significant relation between decrease in educational progress and their study field or branch ($p=0.594$). Considering factors

effecting educational progress in regard to some variants such as accuracy and concentration in class and regional quota to get accepted in University's acceptance exam, a significant difference was observed among successful and unsuccessful students. Khashai showed in his study [30-32] that individuals with higher self-respect had a better educational progress in comparison with people with lower self-respect. Therefore, we can probably use self-respect empowerment methods to develop educational progress, but we should note that, we cannot consider this as a general and public rule for every community due to special reasons such as cultural differences and quick changing nature of factors during time [33]. NajafiMehri [34,37] showed in his study that parents' age median was equal to 43.33 ± 16.5 . Based on findings analysis, the health literacy score of all mothers was equal to 6.67 ± 2.13 and it was higher than fathers' score equal to 7.61 ± 4.16 . based on results presented by independent statistical T-test, level of mothers' health literacy is higher than fathers in regard to nutrition, growth and development, hygiene information and total health literacy ($p < 0.05$). There is also a significant relation between increase in educational degree level and health literacy level ($p < 0.05$). Results also showed that parents with child care books at home have a higher health literacy and individuals using internet instead of traditional information search method, to search for health and hygiene information, have a higher health literacy level.

Atashkar's[35,36] study showed that health literacy is not enough in 79.6 percent of elderlies, marginal 11.6 percent of them and only 8.8 percent of participants had enough health literacy and information. a significant statistical relation was observed between health literacy level with age, gender, marital status, educational degree and household's income, in mentioned study; meaning, there was not enough health literacy among individuals with greater age, lower education, lower income, divorced individuals and widowers and widows and it was more common among women. Individuals with lower health literacy level would need medical care more than others and had a greater background for being hospitalized. Mentioned study found no significant statistical relation between level of health literacy and going to emergency section among study samples. individuals with higher level of health literacy usually would go to hospital for check-ups and screening tests while individuals with lower health literacy would usually use medical services due to illness and health problems and evaluated their general health condition to be better ($p < 0.001$). They also used Prostate-specific antigen screening test in men ($p < 0.001$) and Fecal occult blood test screening for children ($p = 0.003$) more than others. No significant statistical relation as observed between health literacy level and mammography in elderly women. Generally, this study showed that health literacy level is insufficient in women which presents the necessity of paying more attention to health literacy in health promotion programs.

CONCLUSION

Findings of this study indicates a direct relationship between health literacy and educational progress motivation, meaning as level of health literacy goes higher, students will have a better educational progress motivation and educational performance. Therefore we could present required workshops and educational courses to increase their health literacy so we can increase students' educational progress motivation and in such manner investigate in health literacy. From the other hand, no significant relation was observed between health literacy and general health. A significant positive relation was observed between general health and educational progress motivation. Therefore we feel that it is necessary to have a detailed program and planning to educate students and improve students' health in this center. All dimensions of general health (physical dimension, anxiety dimension, social function dimension, depression dimension) showed a significant and direct relation with educational progress motivation while studying the relationship of general health dimensions with health literacy and educational progress motivation but they did not show any sign of significant relationship with health literacy. Still we can witness a positive effect on educational progress and health literacy by trying to improve each of dimensions related to general health. In other words, we could use organizational capital to improve each of aspects or dimensions related to general health in order to increase educational progress motivation.

It is worth mentioning that, research society in present study is limited to paramedical faculty students of Tehran Medical University, therefore it is suggested that present research should be executed in other faculties of Tehran Medical University and also other Medical Universities so we can generalize the results. We suggest to interested scholars in similar areas to study the relation of health literacy with students' mental health, economic condition and social condition to determine their effect on students educational progress as an effective and useful factor in their educational future.

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