The attitudes of Kerman medical school interns toward social medicine course

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ABSTRACT

Background: *Interns' attitude has strong association with their experience and judgment. It is actually one of the effective factors influencing the development and modification of medical education.*
Purpose: *The present study was carried out in order to compare the attitude of interns before and after the training course of social medicine.*
Methods: *In this quasi-experimental study data was gathered by using a questionnaire with internal consistency coefficient of 0.86% and 0.89% respectively before and after the course. Interns were selected via convenience sampling. Interns filled out pretest (before taking the course) and post test (after taking the course) questionnaires and the results were compared and analyzed through parametric and nonparametric tests.*
Results: *A total of100 students participated in the study. There was significant difference in mean of attitude score between pretest and post test results (P<0.05). In order to compare the rank of each attitude item in the two stages, 'Sign test" was used. All 27 items showed significant difference (P<0.05). No significant difference was observed between two sexes in both pre and post tests.*
Conclusion: *According to the results of the present study, researchers found out that social medicine training courses had considerable effects on interns' attitude and could cause alterations in their attitude toward social medicine objectives.*
Key words: *ATTITUDE, SOCIAL MEDICINE, INTERN*

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Introduction

Nowadays numerous changes in the health needs of population, the phenomenon of "epidemiological transfer" and fundamental alterations in the manner of medical organization, require physicians to be ready to work in various conditions (2,5). It is difficult to predict the outcome of all these changes; however it is clear that training inventive and caring physicians for working in this dynamic and complicated health system is one of the basic duties of medical curriculum (2).
Improving professional and interdisciplinary communications, acquiring group work skills, the ability to provide service for the society and also acquiring necessary skills for managing social and behavioural aspects of health cares that are the origins of most of our health problems, are among actual skills that medical students have to obtain (2, 18).
It is essential that in medical curriculum along with improving medical knowledge and attention to technology for diagnosis and treatment, physicians be trained to consider a patient with all his humanistic aspects and pay attention to his needs and convenience. This community-oriented attitude toward medical education has lead to some changes in educational programs of medical schools in England, North America and the Netherlands. The traditional medical education limited to training in hospital has been changed to a new one which increases medical students' understanding of their various tasks in future and also improves work group skills in them (12,15,19).
Mattes et al in their study entitled "Teaching in the Community" concluded that in order to meet the society needs, physicians must be equipped with a socio-biology view toward health and disease. For this purpose a community-oriented educational program needs to be designed on the basis of direct communication and cooperation of medical schools with the regional health care system and also presence of medical students in health care fields. In fact in this program medical curriculum

has three complementary components of university, society and primary health care fields (9, 14).
Medical schools are probably unaware of the society sources and social tensions and neither do society organizations, have a perfect understanding of the structure of medical curriculum. Therefore graduates' skills do not completely correspond with values and needs of their society (16, 21).
Internship program is one of the important parts of medical curriculum and it should be designed in a way that prepares medical students for managing actual work positions in future and the educational contents of this program should provide medical students with all skills required for providing satisfactory health services to the community. The social medicine course, through a community-oriented training in the field, attempts to establish and improve interns' skills and train them for working and accepting the responsibility of health team and improving social health (8, 11, 16).
Social medicine as a specialized training, emphasizes on the relationship between medical curriculum and society and its objective is to find the society needs, whether healthy or not, and to meet society needs by adequate programming, management and training (10, 13).
In previous studies, the researchers have concluded that the knowledge and attitude of medical students toward this course and the educational content of the course and also their attitude toward the efficacy of this course are the basis of their learning (8, 17).
Much of the physicians' attitude and most of their behaviors are formed during medical education. While appropriate attitude is one of the important aspects of medical education (18) if these attitudes and behavior don't correspond with social changes, all the efforts of medical team for health care would be insufficient and consequently the organizational potential force would be wasted (2),
As a first step in improving the quality of medical education, the present study was designed to compare the attitude of interns toward social medicine before and after passing the course. It is hoped that the results of this study provide useful information and efficient strategies for educational specialists in their attempts for designing educational programs for medical students.

Materials & Methods

In this quasi-experiment the interns' attitude toward social medicine course was examined before and after passing the course. The interns of social medicine course in Kerman Medical School, who passed the social medicine course from April 2001 to March 2002. Data was gathered by using a questionnaire including 27 attitude evaluating items in three domains of cognitive, affective and behavioral features. The answers to items were graded by Likert Scale to five degrees of "complete agreement", "agreement", "indifference", "disagreement", and "complete disagreement". Content validity was determined and the internal consistency coefficients of 86% based on pre-test score and 89% based on post-test score were obtained by alpha of Chronbach. Subjects were evaluated before enrolling into social medicine course and after passing the course. Data analysis was done by EPI6 software package.

Results

A total of 100 medical students participated in the study and a total of 200 questionnaires were collected after the one-year period of the study. From all subjects, 40% were female, 55% were male and 5% did not specify their sex. In regard to their area of interest for residency program, 31% did not respond, 11% expressed interest in dermatology, 10% in psychiatry and orthopedics, 7% in radiology and cardiovascular diseases and 5% in pediatrics. Only 2% of the subjects showed interest in social medicine as an option for their postgraduate education.
Mean total score of attitude and the scores in three domains of cognitive, emotional and behavioral showed significant difference before and after passing the course ($P<0.0001$) and in all cases mean scores at the end of course showed significant increase comparing to those before the course (table 1).
Sign test was used to compare the rank of attitude scores for items before and after the course and for

TABLE 1. Mean attitude scores of subjects before and after passing the social medicine course

Stage Domain	before		after		T test result
	mean	SD	mean	SD	
attitude	29.6	4.7	35.9	3.1	P<0.05
knowledge	30.8	3.2	36.1	3.1	P<0.05
practice	30.1	4.2	36.2	3.6	P<0.05
total	90.6	10.5	108.2	8.9	P<0.05

all 27 items significant increase in attitude rank was observed after the course (P<0.001).
Attitude scores in three domains of cognitive, emotional and behavioral before and after the course were compared in two sexes and no significant difference was found (table 2).

TABLE2. Mean total score of subjects based on sex before and after passing the course

stage	Sex	female		male		T test result
	score domain	mean	SD	mean	SD	
Pre test	emotional	30.7	4	28.9	5.1	P<0.05
	cognitive	30.8	3.1	30.7	3	P<0.05
	Practice	30.3	3.7	29.8	4.3	P<0.05
	Total	91.9	9.3	89.6	11	P<0.05
Post test	emotional	36.3	2.9	35.8	4.2	P<0.05
	cognitive	36.1	3	36.4	2.2	P<0.05
	Practice	36.2	3.1	36.6	2.8	P<0.05
	Total	108.7	8.2	108.6	6.1	P<0.05
difference	emotional	5.7	4.8	7.1	5.1	P<0.05
	cognitive	5.6	3.6	5.7	3.6	P<0.05
	Practice	5.9	3.4	6.7	5.1	P<0.05
	Total	17.6	10.7	19.5	11.9	P<0.05

Table 3 shows the frequency distribution of attitude ranks for each item before and after the course and based on the trend of attitude change. As it is seen the highest frequency is for the change of attitude from negative to positive and the next highest frequency is for no change in attitude rank before and after the course. Among attitude-evaluating items, the highest rank change is related to the 14th item in which 84% of the subjects showed change of attitude after passing the course and the next highest rank changes were respectively for the 4th, 8th and 25th items.

Discussion

In the present study the interns' attitude toward the training course of social medicine (in three domains of cognitive, affective and behavioral) before and after the passing of the course were compared.
In recent studies carried out in England, researchers concluded that the assessment of attitude of physicians and medical students toward their activities is a professional evaluation. They believe that the evaluation of knowledge and attitude of medical students toward various courses of internship program and their educational content is a valuable evaluation that leads to the development of educational programs (8, 18). Of course the evaluation of attitude comparing to cognitive and psycho behavioral domains has been always neglected.
The definition of attitude as a set of beliefs, interests and behavioral intentions can show the importance of attitude assessment (7, 22).
The most appropriate time for the evaluation of attitude in medical students is during clinical setting and it is considered as a formative evaluation. In this period, different strategies can be used to change intern's attitude. Positive attitude in students is one of the important aspects in medical education (18).
In 1998, attitudes and communicative skills of medical students in England were investigated and Amsterdam University was one of the first universities in which the attitudes of medical students were studied (8, 21).
In Iran, too, during the recent years some researches have been carried out on assessment of attitude and views of medical students toward various courses of the medical curriculum (1,3,4,6).
In spite of the emphasize of medical education on training interns in the hospital, in the present study subjects showed more interest in presence in the fields out of hospitals. Most our subjects (72%) opposed to the item of "hospital is the only appropriate place for passing the educational program" before enrolling into the social medicine ward and this attitude showed 36% increase after finishing this course.
Experts in medical education believe that during internship program, by accepting responsibility out of the educational environment of university, students' skills concerning health care are improved (8).
According to the results of the present study, social medicine course could significantly (60-70%) promote the interns' attitude toward the objectives of this field such as "improving interns' skills inunderstanding health needs", "improving interns' relationships with patients", "encouraging interns to do research in community" and "strengthening the educational role of physicians" (4).

TABLE 3. Frequency distribution of subjects' attitude rank after passing the social medicine course based on the direction of attitude change

No	Attitude-evaluating items	Direction of attitude change		
		+*-	-*+	=
1	Social medicine course is less important than the other courses.	6	46	48
2	I don't have a good feeling toward social medicine course.	7	54	39
3	Presence in educational environments out of the hospital is exciting for me.	8	53	39
4	Social medicine course is not important from people's point of view of.	5	65	30
5	Considering various changes in diseases patterns the value of social medicine Services is feeling more.	5	37	58
6	Professors in social medicine ward do not create sufficient motivation in interns.	5	74	21
7	Social medicine course increases physicians' sensitivity to public convenience.	6	52	42
8	Interns do not take social medicine course as a serious course.	3	62	35
9	Considering rural and urban health care centers, there is no need for social care.	3	35	62
10	Social medicine course complements basic and clinical courses and shows the development of medical curriculum.	10	32	58
11	Social medicine course increases public cooperation in providing health care services.	7	27	66
12	The cooperation of non-physician health experts in the training of interns is not beneficial.	7	47	46
13	It is preferable that social medicine course be deleted and other clinical courses be extended.	6	54	40
14	The content of internship period is the repetition of that of apprenticeship.	5	84	11
15	Hospital is the only appropriate environment for passing medical program.	5	36	59
16	Passing social medicine course strengthens the educational role of physicians.	5	47	48
17	The current services of physicians are enough for the society.	9	32	59
18	Social medicine course increases interns' ability in recognizing social health needs and priorities.	7	57	36
19	Social medicine course is an adequate time for community-oriented medical education.	8	50	42
20	In social medicine course, interns are allowed to have more cooperation in their learning.	4	57	39
21	It is better to decrease the length of social medicine course.	9	53	38
22	I am interested in educational intervening projects for meeting educational needs of community.	9	45	46
23	I have no interest in participating in social medicine projects.	5	55	40
24	Social medicine course improves the relation of interns with people.	7	54	39
25	In social medicine course interns are encouraged to do field researches.	5	62	33
26	I have no tendency for enrolling into social medicine program.	10	37	53
27	I use the help of non-physician health experts in fields.	4	37	59

Moreover this training course could create a positive attitude toward the educational role of health experts (other than physicians) in training medical students. One of the effective factors in improving the quality of medical education is to establish an effective relationship between medical students and other health care personnel and the active participation of health care personnel in the training of medical students (8, 21).

After social medicine course, our subjects found that this course is the appropriate time for the community-oriented medical training. Studies have shown that community-oriented view in medical education is a valid method and strengthens

students' skills in regard to establishing communication with other members of health care team and the management of problem solving (2,21).

After finishing social medicine course, most subjects (84%) expressed disagreement with the item of "the content of internship program is the repetition of apprenticeship", while before starting this course most subjects had agreed with this item. This finding shows that fortunately in spite of interns' presuppositions about the content of social medicine course their attitude has been significantly improved after passing the course.

After passing social medicine course, almost half of the subjects evaluated the "cooperation of non-physician health experts in the training of interns" as beneficial. The cooperation of physicians with other members of health care system in educational activities is of a great importance (9, 11).

In this study, before social medicine course interns believed that the professors of social medicine ward do not create sufficient motivation in interns, but after passing the course this attitude changed into a positive one (74%).

The present study showed a positive attitude in interns in regard to passing the social medicine course and doing the related researches. It is obvious that positive attitude toward social medicine is associated with students' success in managing health care groups in their future positions in health care centers (12, 20).

It is clear that social health cannot be improved without the cooperation of all the involved groups in the health care system, and physicians have a central widespread role in this cooperation. In other words physicians have a key role in the improvement and development of health care programs (2). And for providing a satisfactory health care based on the actual needs of the society, they should have a good deal of knowledge as well as positive attitude (15).

We are well aware that the quality of health care provided for the society is greatly dependent on the quality of medical education. Therefore medical educational programs affect the quality of health services indirectly (2).

In conclusion, the researchers found that social medicine course has positive impacts on the interns' attitude toward this course and could change their attitude toward its objectives. Attitudes are more stable than beliefs, but during educational programs it is possible to change the attitude of medical students (17).

Taylor believes that attitudes can be modified through gaining information from educational and cultural programs (22).

Considering the results of the present study, doing further similar studies about social medicine course and other clinical courses, continuous evaluation of educational wards in order to assess the effect of training on knowledge, attitude and practice of interns and designing lesson plans under the supervision of experienced professors and experts are suggested.

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