Comparison of the senior student's viewpoint about team working in Kurdistan University of medical sciences

Background: In regard to enhancement of efficiency and productivity of an organization in terms of teamwork, it is necessary to shift to team-centered training for increasing confidence in health care systems. Therefore it is needed to assess the effect of academic training on students’ viewpoint in team working.

Methods: This was a cross-sectional study and was done in the Kurdistan University of medical sciences in 2012. The subject was all of the students in first and last semesters of medical, nursing, Laboratory Sciences, Anesthesiology, Operating room, radiology and Midwifery courses. Sample size was 410 people. A questionnaire was used, which its validity and reliability has been confirmed.

Results: 526 questionnaires were completed, in which the first term student were 177 cases and the last term were 149 cases. There was no significant difference among freshmen and senior students’ aspect about team working (P-value > 0.05).

Discussion: It should be considered that the team working is different from task, although both of them are necessary for team. In addition it must be said that knowledge and skills are not adequate for doing task and they must be along with team working approach. Therefore it is necessary to consider the training of team working in university.

Keywords: team working; Education; Inter-professional Education

ORIGINAL ARTICLE

مقایسه دیدگاه دانشجوین ترم اول و ترم آخر دانشگاه علوم پزشکی کردستان در مورد کار تیمی

زمینه و هدف: پژوهش با هدف بررسی تاثیر کار تیمی، عوامل پیشنهادی و عوامل علیه کار تیمی، در دانشجویان علوم پزشکی کردستان است. مطالعه به صورت تحقیقی، شاهدی و آزمونی اجرای می‌شود.

روش: پژوهشی یک مطالعه توصیفی-تحلیلی می‌باشد که شامل دو گروه 62 نفری در دانشگاه علوم پزشکی کردستان می‌باشد. آماری‌های زیر به ترتیب از گروه دانشجویان ترم اول و ترم آخر گرفته شده است.

نتایج: با استفاده از آماری‌های توصیفی و تحلیلی، نتایج نشان داد که کار تیمی در دانشجویان ترم اول بیشتر مورد استقبال داشته است. بنابراین نتایج نشان داد که دانشجویان ترم اول بهترین نتایج را در کار تیمی داشته‌اند.

در نتیجه، اگرچه تعداد روزهای کارگری در دانشجویان ترم اول بیشتر مرتبه ای از دانشجویان ترم دوم داشته باشد، اما نتایج نشان داد که کار تیمی در دانشجویان ترم اول بهترین نتایج را داشته است.

گروه یک: دانشجویان ترم اول در دانشگاه علوم پزشکی کردستان

مقدار نتایج نشان داد که کار تیمی در دانشجویان ترم اول بیشتر مورد استقبال داشته است. بنابراین نتایج نشان داد که دانشجویان ترم اول بهترین نتایج را در کار تیمی داشته‌اند.

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INTRODUCTION

In the past two decades, in order to achieve organization success, the emphasis on teamwork along with the organizational and individual factors, has significantly soared. Considering the boosted efficiency and productivity of an organization by teamwork, the shift toward team-oriented approach can increase the trust in health care organizations (2). Patient care is a complex process which one is not capable of handling it alone. All members of the health care team should be able to form a cohesive, coordinated and organized team to work together. Traditionally, doctors, nurses and other health care professionals had worked as separate units. Despite the significance of teamwork in health care, most clinical units as a series of trades, work separately. The fact is that most members of these teams are rarely trained together. Furthermore, they are from diverse disciplines and training programs. Thus, they are less capable of teamwork. Teamwork is profoundly noteworthy for patient’s safety and teams are committing fewer errors in comparison with individuals especially when team members know their responsibilities well (3).

The Institute of Medicine (IOM) had recommended all health care professionals to be trained for providing patient-centered care as members of inter-professional teams, with an emphasis on evidence-based practice, quality improving approaches and updated information (4). It seems that in our country, little attention had been paid to the importance of teamwork in designing and implementing curricula for health care fields (5, 6). The reason may vary to numerous reasons such as different curriculum of diverse fields, hidden curriculum, unfamiliarity of policy makers and academics about new educational strategies and performing educational programs single professionally as well.

Now it must be seen that academic education and students’ confrontation with a variety of unpredictable conditions in the bedside and the intellectual maturity of the students during their studentship years is changing their views about teamwork? The purpose of this study is to determine the significance of teamwork in health care, most clinical units as a series of trades, work separately. The fact is that most members of these teams are rarely trained together. Furthermore, they are from diverse disciplines and training programs. Thus, they are less capable of teamwork. Teamwork is profoundly noteworthy for patient’s safety and teams are committing fewer errors in comparison with individuals especially when team members know their responsibilities well (3).

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The total anesthesiology students participated in the study was 38 of which 18 were first term and 20 were last term students. There was no significant statistical difference between first term and last term students regarding teamwork and inner feelings concerning other disciplines (p>0.05).

The total radiology students participated in the study were 44 of which 24 were first term and 18 were last term students. There was a significant statistical difference in both teamwork (p=0.00) and inner feeling (P=0.00) regarding other disciplines among first term and last term students.

The total midwifery students participated in the study were 48 of which 21 were first term and 27 were last term students. There was no significant statistical difference between first term and last term students regarding teamwork and inner feeling concerning other disciplines (p>0.05).

**DISCUSSION**

According to the team description, team members must be aware of their duties in the team. Ambiguity in the team structure can lead to disagreement in teams about ability, duty allocation, members’ roles in team and responsibility of members in the team (7). Thus, health care teams must have common goals and must cooperate to provide the best possible care for the patients. Moreover, they must be trained together so that everyone knows his or her role in the team. The solution to this issue seems to be inter-professional training. In fact, it is a kind of training that members learn together and from each other to increase collaboration and improving patient care (9). Studies in this field had shown that team-based trainings in the clinical environment will encourage learners to learn from peers (10). Marry et al. (2002) hold a course to train teamwork for the physicians and nurses. The goal of this project was to reduce adverse events in the hospital emergency departments which led to a reduction in clinical errors from 30% to 4% (11). Bradley et al. used inter-professional trainings for teaching CPR to doctors and nurses. The inter-professional group had better team performance and had more positive approach toward this type of education (12).

In another study conducted by Momeni et al. (2010) in Kurdistan University of Medical Sciences on training CPR to improve team performance, the results indicated that CPR training inter-professionally was significantly more effective than the usual method (13). Lack of teamwork attitude in university students probably stems from single professional training and lack of teamwork experience with other disciplines. Taking the results of this study into account which indicated that the students’ perspective had not changed concerning teamwork during their educations, it seems that the present educational system had no program for teaching knowledge and necessary approach regarding teamwork. Furthermore, another study conducted in Yazd University indicated that the condition of that university is not appropriate for teaching teamwork. These conditions include prioritizing teaching with new strategies of education such as problem solving, promoting critical thinking and encouraging students and teachers to learn new sciences (5). Other studies had shown that the infrastructure for team training is not ready in Iran as well.

By teacher training, promoting the cooperation spirit, creating teamwork attitude and motivation, it is possible to create necessary preparation among them. Another result of the present study indicated that there were diverse attitudes among students of different disciplines regarding teamwork. However, this difference may be related to identity, autonomy and professional status. The high tendency of midwifery students regarding teamwork was probably due to high sensitivity and responsibility of this disciplines toward the safety of the mother and child simultaneously.

With regards to inner feelings regarding other disciplines, the tendency of teamwork among the midwifery students had led them to have a positive attitude about other health care professionals and consider them as their own complementary. It is recommended to conduct further

**Table 1: The mean scores of first term and last term students regarding teamwork and inner feelings**

<table>
<thead>
<tr>
<th>Field</th>
<th>Midwifery</th>
<th>Medical Laboratory</th>
<th>Radiology</th>
<th>Anesthesiology</th>
<th>Nursing</th>
<th>Medicine</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Last term</td>
<td>First term</td>
<td>Total</td>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>51.5</td>
<td>42.3</td>
<td>46.9</td>
<td>50.3</td>
<td>49.4</td>
<td>51.3</td>
</tr>
<tr>
<td>First term</td>
<td>21.5</td>
<td>20</td>
<td>56.6</td>
<td>20</td>
<td>49.2</td>
<td>21.5</td>
</tr>
<tr>
<td>Last term</td>
<td>19.2</td>
<td>15.9</td>
<td>46.2</td>
<td>16.4</td>
<td>46.6</td>
<td>24.1</td>
</tr>
<tr>
<td>Total</td>
<td>26.1</td>
<td>24</td>
<td>45.8</td>
<td>21.8</td>
<td>44.9</td>
<td>23.8</td>
</tr>
<tr>
<td>First term</td>
<td>23.5</td>
<td>23.3</td>
<td>46.9</td>
<td>23.5</td>
<td>46.9</td>
<td>24.1</td>
</tr>
<tr>
<td>Last term</td>
<td>24.8</td>
<td>24.8</td>
<td>45.9</td>
<td>24.8</td>
<td>45.9</td>
<td>24.8</td>
</tr>
</tbody>
</table>

*In the field of inner feeling lower score is better.*
studies in other universities among other midwives to prove this point more strongly. It seems that lack of teamwork spirit and attitude among the students is due to the lack of understanding of the principles of teamwork, single profession training and lack of team work experience with other disciplines. Teaching principles of team work can solve this issue to a large extent. Therefore, adding teamwork principles to the medical students’ curriculum, teaching some of the practical courses inter-professionally, team-based training, teaching the theoretical sciences by problem solving methods and discussion in small groups can be helpful. It must be considered that teamwork is different from task; however both are crucial for teamwork. In addition, in health care, knowledge and skills are not sufficient in performing tasks and it must go along with teamwork performance (14).

Hence, teamwork training in universities is vital. Considering the obtained results for increasing productivity, strategies for teaching principles of teamwork and providing the students with teamwork attitude must be taken into account. Last but not least, studies had shown that teamwork training leads to improving listening skills, feedback, reactive and communication skills (15). Therefore, today’s students as tomorrow’s employees must be able to communicate with their colleagues as team members effectively and with patients and their families as clients efficaciously.

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REFERENCES

1. Kazemi m. [barrasi sazeh kifiat kar timi va eslah abzar andazegiri], faslnameh olom modiriat iran, spring 2011, 6(21): 19-46. (Persian)
5. Aramon h. [tasir maharahtaeh kar timi bar amalkard amozeshi va pajoheshi daneshjoyan be tafkik gensiat], majale elmi pajoheshitahghighat zanan, 1388(3)1. [Persian]
6. Ansari m a, ghazanfari a, Ansari sh. [didgah ke karmandan darbare awamel moaser bar asarbakhshi teamhaye jarahi dar bimarestan hame amozeshi vabaste be daneshgah olom pezegski isfahan2008]. Faslimeh elmi-pajoheshi modiriat salamat, winter 2008/34/11. (Persian)
9. Irajpour A.R; Barr H; Abedi H; Salehi Sh; Changiz T: A Shared learning in Medical Science Education in the Islamic Republic of Iran:An investigation. Journal of Interprofessional Care, 2009; 1–11, iFirst article.
10. Haghani f, ravani poor m. Nursing Students’ Point of View on Application of Team Member Teaching Design (TMTD), Iranian journal of medical education, winter 2010(5):10. (Persian)
16. Taiebi j, maleki m. [team moaser], entesharat simaye farhang 2004. (Persian)