ORIGINAL ARTICLE

Comparison of the senior student with junior 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 approach for increasing confidence in health care systems. Therefore it is needed to assess effect of the academic training on students' viewpoint in team working.

Methods: This was a cross-sectional study and was done in 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: 326 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 (Pvalue > 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. Therefor it is necessary to consider the training of team working in university.

Keywords: team working; Education; Inter-professional Education

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مقارنه رؤيه طلاب الفصل الاول و الفصل الاخير في مجال العمل الفريقي في جامعه كردستان للعلوم الطبيه

المقدمه: نظرا الى النتائج الافضل في العمل الفريقي، يعتبر من الافضل الذهاب الى النمط الفريقي في العمل في مجالات الصحه . لذا كان من الضروري دراسه رؤيه الطلاب بالنسبه الى العمل الفريقي .

الأسلوب: إن هذه الدراسه من نوع التوصيفيه . التحليليه . اجريت في عام ١٣٩٠ هـ. ش في جامعه كردستان للعلوم الطبيه تم تجميع المعلومات من جميع الطلاب الفصل الأول و الأخير في مجالات الطب و التمريض و العلوم المخبريه . التخدير، الأشعه و غرفه العمليات و قابله قانونيه الذى بلغ عددهم ٤١٠ شخصا عبر استمارات التي تم تأييدها من قبل. و تم تحليل المعطيات بواسطه SPSS.

النتائج: تم اعاده ٣٢٦ استماره من اصل ٤١٠ منهم ١٧٧ في الفصل الاول و ١٤٩ في الفصل الأخير لم يكن هناك اختلاف نوقيمه بين الفريقين (pvalue =0.225)

الإستنتاج : يجب الإنتباه الى أن هناك فرق بين العمل الفريقي و الوظيفه ولكن كلاهما ضروري بالنسبه الى الفريق واضافه الى ذلك لم تكن المعلومات و المهاره كافيتين في العمل الفريقي .لذا من الضروري تعليم العمل الفريقي في الجامعات و يجب ان توضع خطط لهذا الامر المهم .

الكلمات الرئيسيه: العمل الفريقي– التعليم – التعليم الجامعي – التعليم بين المهن.

گروپ ورک کے بارے میں کردستان میڈیکل یونیورسٹی کے سینئر اور جونیر طلباء کے نظریات کا جائزہ

بیک گراونڈ: کسی بھی ادارے یا تنظیم میں گروپ ورک کے بہتر اور مثبت نتائج نکلتے ہیں جس کی بناپر میڈیکل شعبوں میں بھی اس روش سے فائدہ اٹھایا جاسکتا ہے۔ اسی فائدے کے پیش نظر ٹیم ورک کے تعلق سے میڈیکل یونیورسٹی کے طلباء کے نظریات جاننے کے لئے یہ تحقیق انجام دی گئي ہے۔

روش: یہ ایک تجزیاتی تحقیق ہے جو دوہزار گیارہ میں کردستان میڈیکل یونیورسٹی میں انجام دی گئي تھی۔ اس تحقیق میں میڈیسن، نرسنگ، پیتھالوجی سائنسس، اینیس تھیسیا، ریڈیالوجی، آپریشن روم، اور مڈ وائفری کے طلباء کو شامل کیا جن کی مجموعی تعداد چار سو دس تک پہنچ گئي۔ طلباء کو سوالنامے دئے گئے تھے جن کے اعتبار کو علمی طریقوں سے ثابت کیا گیا تھا۔ نتائج کا تجزیہ ایس پی ایس ایس سافٹ ویر سے اور ٹی ٹسٹ سے تجزیہ کیا گیا۔

نتائج: چارسو دس طلباء میں سے تین سو چھبیس طلباء نے سوالنامے پر کرکے واپس کئے۔ ان میں ایک سو ستتر جونیر طلباء اور ایک سو انچاس سینئر طلباء تھے۔ تجزیے سے ظاہر ہوا کہ ٹیم ورک کے بارے میں طلباء کے نظریات میں کوئي خاص اختلاف نہیں پایا جاتا ہے۔

سفارشات: اس بات پر توجہ رہے کہ ٹیم ورک اور فردی فریضے سے الگ ہے۔ فردی فریضہ اور مل کر کام کرنا ٹیم کے لئے نہایت ضروری ہے، اس کے علاوہ میڈیکل فیلڈ میں فرد کا محض علم اور مہارت کافی نہیں ہوتی ہے بلکہ اس کا کام ٹیم کے ساتھ ہونا چاہیے، اسی بنا پر یونیورسٹیوں میں ٹیم ورک کی اشد ضرورت محسوس ہوتی ہے۔ اس تحقیق سے ٹیم ورک کی ضرورت کا احساس ہوتا ہے لھذا ٹیم ورک کے اصول و ضوابط کی تعلیم کا انتظام کیا گیا ہے۔

کلیدی الفاظ: ٹیم ورک، یونیورسٹی تعلیم، میڈیکل فیلڈ ۔

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

زمینه و هدف: باتوجه به افزایش کارایی و بهره وری بالای یک سازمان در شرایط کار تیمی، تغییر جهت به سمت رویکرد تیم محوری می تواند باعث افزایش اعتماد به سازمانهای مراقبت سلامت شود. باید توجه داشت که کار تیمی، از وظیفه متفاوت است اما هر دوی آنها برای تیم ضروری هستند، بعلاوه در مراقبت سلامت دانش و مهارت در انجام وظیفه کافی نیست و باید همراه با عملکرد تیمی باشد. بنابراین آموزش کار تیمی در دانشگاهها ضروری بنظر می رسد بنابراین این نیاز احساس شد تا تاثیر آموزش دانشگاهی بر دیدگاه دانشجویان نسبت به کار تیمی بررسی گردد.

روش: این پژوهش یک مطالعه توصیفی- تحلیلی می باشد که در دانشگاه علوم پزشکی کردستان در سال ۱۳۹۰ انجام شد. حجم نمونه تمامی دانشجویان ترم اول و ترم آخر در رشته های پزشکی، پرستاری، علوم آزمایشگاهی، هوشبری، رادیولوژی، اتاق عمل، و مامایی که جمعا ۴۱۰ نفر می باشند و به روش سرشماری نمونه گیری شدند. روش جمع آوری اطلاعات پرسشنامه است که روایی و پایایی آن تایید گردیده است روش تجزیه و تحلیل داده ها با استفاده از نرم افزار SPSS و با آزمون تی نمونه های مستقل انجام شد.

یافته ها: از تعداد ۴۱۰ پرسشنامه استاندارد ۳۲۶ مورد پر شده و به محقق برگردانده شد، که از این موارد تعداد ۱۷۷ نفر ترم اول و ۱۴۹ نفر ترم آخر می باشند. در آنالیز انجام شده بین دانشجویان ترم اول و دانشجویان ترم آخر در مورد دیدگاه کار تیمی هیچگونه اختلاف معنی داری دیده نشد($P>0.05$). دانشجویان مامایی حائز بالاترین و دانشجویان پرستاری حائز پایین ترین نمره دیدگاه کارتیمی بودند. دیدگاه دانشجویان پرستاری نسبت به کار تیمی در ترم آخر نسبت به ترم اول افت معنا دار و دیدگاه دانشجویان علوم آزمایشگاهی و رادیولوژی افزایش معنا داری از لحاظ آماری داشت.

بحث و نتیجه گیری: مطالعه حاضر نشان داد که تحصیلات دانشگاهی در مجموع منجر به تغییری در دید دانشجویان نسبت به کا ر تیمها نشده است، بنا براین باید راهکارهایی برای آموزش اصول کار تیمی و آفزایش نگرش کار گروهی در دانشجویان اندیشیده شود.

کلمات کلیدی: کار تیمی، آموزش، آموزش دانشگاهی، آموزش بین حرفه ای

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 whether the current educational system is capable of teaching teamwork and effective collaboration with other medical professional or not. Therefore, in this study it was tried to make a comparison between the perspectives of first term and the last term students in the fields of medicine, nursing, anesthesiology, radiology, laboratory science and midwifery.

METHODS

This study is a cross-sectional study which was conducted in the Kurdistan University of Medical Sciences in 2011. The population of the study was the university students of medical universities and the sample was all the first-term and last-term students (410) in different fields such as medicine, nursing, medical laboratory, anesthesiology, radiology, operating room technician and midwifery. The data collection was RIPLS which is a standard questionnaire. After translation and checking face validity and content validity, it was confirmed by five experts. The reliability of the questionnaire was assessed by Cronbach Alfa Coefficient which was 0/86. The questionnaire included two perspectives: teamwork views and inner feelings regarding other disciplines. Five-point likert scale ranging from completely agrees (1) to completely disagree (5) was used. The total numbers of questions were 20 which included 12 questions on teamwork perspectives and 8 questions on inner feelings. The minimum and maximum scores were 20 and 100 respectively. The final questionnaire was distributed among the target population and was collected immediately. SPSS version 18 and descriptive tests like one way ANOVA and independent T test were used for data analysis.

RESULTS

The total numbers of questioners were 400 of which 360 questionnaires were completed and returned to the researcher. 150 were male (46%) and 176 were female (54%). 177 (54/3%) were first term students and 149 (45/7%) were last term students. Among the respondents, 88 (27%) were medicine students, 59 (18/1%) were nursing students, 49 (15%) were medical laboratory students, 38 (11/7%) were anesthesiology students, 48 (14/7%) were midwifery student and 44(13/5%) were radiology student. The data analysis indicated that there was no significant statistical difference between the mean score of first term and last term students' respectively ($p= 0.225$). (Table 1)

In the team work perspective which included 12 questions, there was a significant statistical difference among students of different disciplines ($p= 0.00$). The highest mean scores of teamwork perspective were related to the students of midwifery, laboratory science, radiology, medicine, anesthesiology and nursing respectively in terms of inner feelings regarding other disciplines, there was a significant statistical difference among different disciplines($p= 0.00$). The midwifery students had the best perspectives and the medicine and anesthesiology students had the worst perspective concerning other disciplines. The radiology, medical laboratory and nursing after midwifery students had the 2nd to 4th ranking.

The total medical students participated in the study were 88 of which 48 were first term and 40 were last term students. There was no significant statistical difference between first term and last term medicine students regarding teamwork and inner feelings concerning other disciplines ($p > 0.05$).

The total nursing students participated in the study were 59 of which 33 were first term and 26 were last term students. There was a significant statistical difference between first term and last term nursing students regarding teamwork ($p=0.00$). The last term students had a lower positive perspective regarding teamwork but there was no difference regarding inner feeling ($p> 0.05$).

The total medical laboratory students participated in the study was 49 of which 31 were first term and 18 were last term students. There was a significant statistical difference between the mean score of first term and last term students regarding teamwork ($p=0.00$). There was no difference concerning inner feelings ($p>0.05$).

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

midwifery			medical laboratory			radiology			anesthesiology			nursing			medicine			
total	last term	first term	total	last term	first term	total	last term	first term	total	last term	first term	total	last term	first term	total	last term	first term	
51.5	42.3	46.9	50.3	56.6	46.6	49.4	51.3	48	46.2	46.6	45.8	44.9	42.3	46.9	47.1	48.7	45.9	The scores of team working
18.4	24.1	23.5	21	20	21.5	19.2	15.9	21.5	24	26.1	21.8	23.8	24.1	23.5	24.1	23.3	24.8	The scores of inner feeling about other fields*

*In the field of inner feeling lower score is better.

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

studies in other universities among other midwifes 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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