

Perception Of Medical Students In Hail University About A New Trends In Medical Education

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Abstract:

Objectives: To evaluate medical students' perception about problem based learning (PBL) and the total number of beneficiaries of this trends and its effectiveness .

Study Design: A cross-sectional study design, the study conducted among medical student at hail university UOH, HAIL.

Subjects: On perception of PBL learning, The target population was all male and female medical undergraduate students who studied the hybrid PBL curriculum in UOH in 2016-2017.

Result : the response rate was (90.6%), (46.4%) were males and (53.6%) were females giving a male to female ratio = 1:1.5.

students' response toward benefit from PBL in which Most of them agreed with that the PBL was much benefit than LBL .

(37%) agreed with PBL help in linking knowledge of basic and clinical sciences,(37.7%) agreed with PBL and SDL help in improving the language.

finally (33.9%) agreed with used PBL and SDL information as a reference for studying.

in conclusion : students perception about PBL and SDL was variable.

introduction

Problem based learning (PBL) has become an integral component of medical curricula around the world (1). It is an innovative strategy that changes the teaching context from teacher-centered learning to student-centered, so it gives the students a chance to monitor their own learning and thus gain a degree of self-direction and independence, and it is not only an interesting methodology but also as one that promotes problem-solving and communication skills.

Students activate their prior knowledge and build on existing conceptual knowledge framework, develop critical thinking, clinical reasoning and good communication skills (2,3,4,5). The effectiveness of PBL has forced medical institutions to adopt this system as an operating strategy in their curricula. Initially, introduced as a case-based tool by McMaster University in mid-1970's, it was subsequently implemented by Maastricht University, Harvard Medical School and followed by many Asian medical schools including Kingdom Saudi Arabia (KSA). (6)

PBL has many advantages; it facilitates the acquisition of generic competencies and attitudes including team work, chairing a group, listening carefully to others, respect for colleagues' views, critical evaluation of literature and use of many resources of knowledge (journals, libraries, world wide web etc). It encourages a deep approach to learning, promotes identification of relevant issues and prepares students for life-long learning in health care professions. However, after so many years of successful implementation

of PBL as a gold standard in many medical schools all over the world, many challenges and drawbacks have been identified from literature and effectiveness of this method is being questioned (7). All these advantages also accrue from PBL as seen in many other studies.

The apparent disadvantages of PBL include: failure of students to develop an organized framework for their knowledge, inhibition of good teachers sharing their enthusiasm for their subject with students, teachers may not have skills to facilitate PBL sessions, lesser faculty acceptance of PBL, lower level of satisfaction among students in early years of program and lack of consistency in PBL classes (8,9).

Many worldwide studies have a reported a positive impact of PBL on the learning process. However, a few studies were conducted in Asia, especially in KSA, on the student's perception of the PBL session, and indicated controversy between Malaysia and KSA, a study showed that the PBL induced better interpersonal skills and knowledge, clinical practice, as well as a better attitude towards patient. However, in Malaysia, they showed that PBL was time consuming, and can be substituted by other instructional methods. (10)

And there is also a study talk about PBL as best a new trend education was made in College of Medicine, Princess Nourah bint Abdulrahman University (PNU), Riyadh, KSA students perceived PBL positively While positive

perception was maximum for integration of basic science into clinical knowledge and critical thinking, it was least for identification of knowledge gap and problem solving.

Students also valued PBL in enhancing communication skills and promoting positive interpersonal relations. However, majority of students disagreed to have more frequent PBL sessions or to increase PBL exam marks. (6)

And this are other study made in Harvard School of Dental Medicine that show a variant student perception toward PBL : there are a very limited number of well-designed controlled studies evaluating the effectiveness of PBL in dental education. The data in those studies reveal that PBL does not negatively influence the acquisition of factual knowledge in dental students and PBL enhances the ability of students in applying their knowledge to clinical situations. In addition, PBL positively affects students' perceived preparedness (11)

Aim

The aim of the current study was designed to evaluate the students' perceptions towards the PBL and the total number of beneficiaries of this trends and its effectiveness in facilitating the understanding and conservation of medical students in Hail university.

Methods

Study subject: we conducted this cross sectional study at college of medicine, UOH, HAIL; KSA on based an anonymous and self-administered questionnaire also used Google form questionnaire.

On perception of PBL learning The target population was all male and female medical undergraduate students who studied the hybrid PBL curriculum.

The questioner was done in one month "February 2017". However, uncompleted questionnaire were excluded.

Data Collection Methods:

the questionnaire was developed based an extensive literature search using the web based search engines PubMed and Google scholar.

We used key words ' problem based learning ', 'PBL in hybrid curriculum '. It was further revised by the PBL expert education.

The questionnaire was divided into 3 parts:

The first part questions 1- 4, which measured the student's perception toward the benefits of PBL sessions.

The second part questions 5-9, which measured the students' perception toward How the PBL improve their dependent learning.

The third part questions 10-14, which measured the student perception toward How the PBL dose improve their skills " English language & research " These questions were answer on 5- points like scale as:

- (1) Strongly agree, (2) Agree, (3) No different
- (4) Disagree, (5) Strongly disagree.

Data Analysis:

data were coded, and analyzed using SPSS " version 24.0"

Chi squared was used to test for association in questions 1,6,11,14.

A P value < 0.05 considered to be significant.

Ethical consideration:

Prior to commencement of study, the proposal was submitted to Ethical Review Committee, Faculty Of Medicine, UOH for approval.

Verbal permission was taken from students.

result

394 of students' responses to questionnaire for total 435 questionnaires was distributed, the response rate was (90.6%). Out of 394 response 183 (46.4%) were males and 211 (53.6%) were females giving a male to female ratio = 1:1.5 . Of these, 78 (19.7%) were second year students, 73 (18.5%) from third year students, fourth year students were 70 (17.7%), 83 (21.0%) from fifth year students and finally the six year students were 90 (22.8%). Table-1

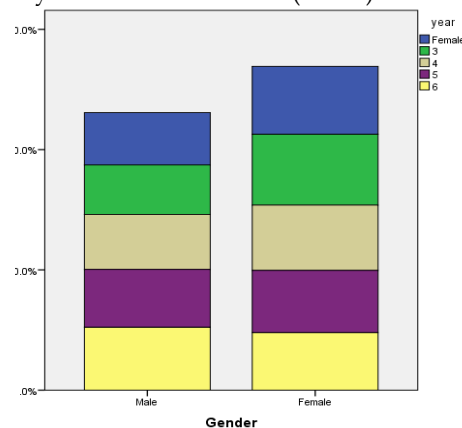


Table- 1: Distribution of age and year

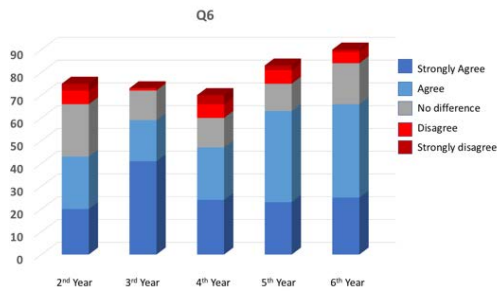


Table- 2

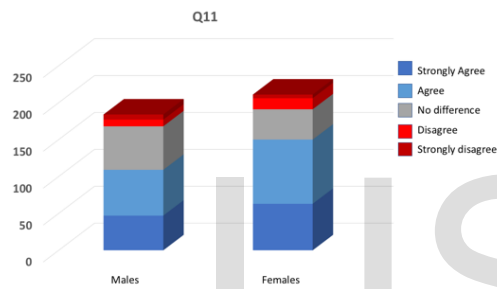


Table- 3

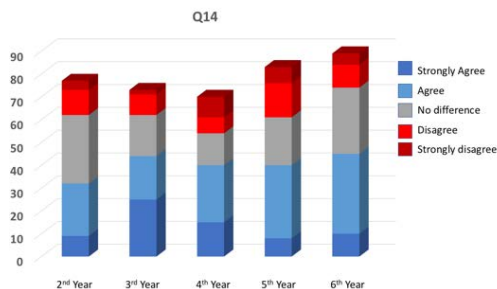


Table- 4

the students' response to word benefit from PBL which included 4 items, Most of them agree with that the PBL was much benefit than LBL 164 (41%) no significant difference was observed between male and female ($p=0.280$) and between years ($p=0.075$), 181 (45.8%) agree with that the PBL helps in enhancing the quality of learning, in addition 156 (39.5) agree about PBL facilitates more enjoyable and more effective learning, finally 181 (45.8%) agree with that the PBL help in self-regulated learning.

PBL improved dependent learning and skills include 10 items.

Most of student 159(40.3%) agree with PBL helps in establish discussion, planning and management of cases, 146 (37%) agree with PBL help in linking knowledge of basic and CLINICAL sciences no significant difference between male and female ($p=0.236$) and significantly different between years ($p=0.001$)(table- 2),

161(40.8%)agree with PBL helpful in clinical practice, and 154(39%)agree with SDL help student to take the additional information and formation clearer picture of lectures.

in addition 136 (34.4%) strongly agree with that matter to what type of reference using in SDL, 156(39.5%) agree about SDL improves performance in collection the information and presentation, 149(37.7%) agree with PBL and SDL help in improve language significant different between male/ female ($p=0.044$) and no different between years ($p=0.384$) (table-3), and 173(43.8%)agree about able to solve a case from what learned in SDL and PBL, 159(40.3%) agree with PBL and SDL encourage student teamwork, finally 134(33.9%) agree with used PBL and SDL information as reference for studying no significant different between male and female and there is significant different observed between years ($p=0.002$) (table-4).

Discussion

Several studies have considered PBL among the best educational strategies that empowers students in the health fields to develop higher cognitive, communication and research skills [1,2,3,4] many medical schools continue to shift from the traditional lecture based learning (LBL) to PBL [5-6]. And to the SDL as well. curriculum. The student's self-assessment and evaluation of their knowledge and its application is a valuable process in learning to identify areas of improvement [7]. The present study is based on students' perceptions of PBL sessions in a system-based hybrid.

The Students whose involved in this study they preferred PBL to lectures for better linking knowledge of basic and clinical sciences, 37% of them agree that PBL help in linking knowledge of basic and CLINICAL sciences with no difference between male and female but significant difference between years

that are highly supported by study established in King Saud university as they reported " PBL students were better in applying basic sciences knowledge to a clinical case, and demonstrated greater skills in the areas of hypothesis generation, and communication

skills " (8).Also this study is supported by previous studies that showed that PBL sessions lead to better factual recall, and a substantial increase in students' knowledge and skills. (9,10)

Our study demonstrates that the overall students' perception was positive, most of the students agree with PBL and SDL help in establishing discussion, planning and management of cases.

We observed that Students who are in the final years are more agreeable on this point. We believe that comes from integration of PBL with clinical sessions, and having more experience in dealing with PBL. Most of the students agree that PBL facilitates more enjoyable and more effective learning, and Same results are also concluded by other researchers .

Students agree with PBL and SDL help them in improving their English language and it is significantly different between male and female, we found female are more agreeable to this point, and it improves their performance in collecting the information and in their presentations.

There is a significant different between years in which more agree in 6th year, more disagree in 5th year , no different is more in 2ed year , in Kuwait, study was established shown that students enrolled in PBL system achieved higher scores per topic as compared to students enrolled in traditional system for both single best multiple choice question exam and objective structured practical examination (OSPE) in a respiratory physiology course[19]. Similarly, the PBL positive effect was evident in a randomized multicenter study in pharmacology and in the National Board of Medical Examiners (part 2) clinical science examination .

at the end There is no study enough to support or refused our result in this Question, finally PBL and SDL can be used as references in studying the subject, 34.4% of the student agree that it matters to what type of reference they are using in the SDL.

Conclusion :

In conclusion students' perception about PBL and SDL was variable. PBL and SDL help in establishing discussion, planning and management of cases, facilitates more enjoyable and more effective learning. Help student in improving their English language and improve their presentation.

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