Thi-Qar Medical Journal (TQMJ):Vol.(25),No.(1),2023

Web Site: https://jmed.utq.edu **Email:** utjmed@utq.edu.iq

ISSN (Print):1992-9218, ISSN (Online):1992-9218

Evaluating Student Satisfaction of Educational Program Aspects in University of Thi-Qar / College of Medicine Using Questionnaire Analysis

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Abstract

Objectives: In order to evaluate the educational program of medical sciences in Thiqar College of Medicine as part of this program evaluation process, we designed a student questionnaire based on a definition of quality teaching of basic & clinical sciences and to identify its underpinning dimensions. The study aims to survey the opinion of samples of students, graduates, and lecturers about some of the specifications required in the curriculum and the academic program that meets the requirements of accreditation by Iraqi (national standards for accreditation of medical colleges) (NCAMC)

Subjects:

A total of 338 individuals (undergraduate students of four stages, graduates and lecturers), asked to rate 17 of scientific and skill improving aspects questions about taken curriculum and followed educational program.

Materials and methods:

the questionnaire was administered during the regular class period of 2018/2019 academic year. At the time of the evaluation, officially authorized staff of evaluated activities weren't there.

Results:

Three identifiable parts involved on the questionnaire: instructional techniques, learning evaluation, ethics, and response capability. About 22% of the respondents felt that basic science courses lacked clinical relevance. The evaluations of the students' sufficient knowledge and clinical

and professional skills to assume appropriate responsibility after graduation weren't particularly positive (48.2% negative). Exposure to several activities was rated by respondents as being inadequate (student- centered teaching, critical thinking & lifelong training, training in PHCC, community clinics, rural hospitals, on common transient conditions, knowledge about new technologies…etc) by percentage ranged between 42.4% and 60.9%

Conclusions:

The faculty must address various parts of current educational program in order to successfully and efficiently train students for clinical work. This survey can be used as a tool to identify curriculum trends and the effects of current program revision initiatives in our college of Medicine.

Introduction

College of medicine in Thiqar University was established in 2002. After more than 20 years it became have a good academic staff that that currently teaches 1718 students in the 2022/2023 academic year. Approximately, each year 150 graduates gave license to practice as general practitioner in the country. Our “traditional educational system” broadly divided into 2 parts; each consists of 3 years, the first three years deliver mainly basic biomedical sciences with about 15% clinical sciences (what is called early clinical exposure), while the second three years consist of 85% clinical sciences & 15% basic sciences. The curriculum is crucial for medical education and continues development of standard of education and training programs has grown since the late 20th century, when western curriculum theories were introduced and ministry of higher education curriculum in Iraq was revised. The effectiveness of the curriculum's content and outcomes, as well as any future steps linked to improving it, were evaluated using a variety of ways by medical schools around the world [1, 2]. In order to evaluate how effectively the curriculum is performing, curriculum evaluators gather trustworthy data.

The evaluation process is crucial for program planners, and students' opinions should have been taken into consideration. [3, 4]. Students should be more directly involved in the evaluation of curricula since they are the main learning agents and beneficiaries. Despite the fact that the educational program reviewing employs quantitative and qualitative techniques continuously, the majority of which reported data gathered from educators' perspectives and paid little attention to students' perspectives. Also, students were rarely given the chance to comment on the curriculum and evaluate the efficiency of their own lecturers. To address this, the Graduate Exit Questionnaire (GEQ) is a standard component of the educational process in the United States. These surveys provide information that is utilized for a variety of objectives, such as quality control, identifying curriculum gaps, and longitudinally tracking changes made [7].

Ideally, input from students, lecturers, and administrators should be used to monitor and evaluate whole educational process. [5] Although it is adopt a varieties of learning methods and learning

environments, the objectives have been developed and linked to the competencies expected for day one doctor. [6]

The initiative on accreditation of Iraq medical schools has merged in February/April 2007, and the guidelines have been developed on the basis of the WHO/World Federation for Medical Education Guidelines for Accreditation of Medical Schools, was published in 2005 [8]. One of the most important aspects of the (Iraqi national standards for accreditation of medical colleges) (NCAMC) is its emphasis on continuous evaluation of MD educational program and using its results as a feedback to improve the program quality. So, the College of medicine should continuously revising the curriculum with the results of educational outcomes, adding or removing subjects, but maintaining the overall structure.

Consequently, this study is to investigate the metrics and indicators that allied medicine students utilize to evaluate the effectiveness of the educational program. Out of 42 courses, 27 courses made up this study's respondents background, which can indicate the quality of the curriculum on a broad level rather than from a particular angle. Taking into account students' perspectives during the curriculum's review process could lead to its improvement. This is the first formal, extensive survey that has been carried out at our college. Hopefully, that the survey findings will help head committee make better decisions by giving them relevant information regarding the MD educational program.

Methods and Participants

The study's design was cross sectional and was conducted at college of medicine in University in ThiQar. In order to assess the educational program, we created a preliminary 17-item questionnaire utilizing a set of questions selected from the official guide (NCAMC) [9]. Students were asked to judge the quality of the educational system regarding their perceptions of the program and their competence, as well as the overall satisfaction with their training, were developed.

Out of 600 participants 338 returned the questionnaire. Among these, 53(graduates), and 30 (lecturers) were involved in this survey, while 225 undergraduate students were distributed as 39(2nd stage), 71(3rd stage), 63(4th stage), 82(5th stage) (see the table below). The students of the first and last stages were excluded from this "opinion questionnaire" because the students of the first stage did not have the opportunity to form a mature perception of the college curriculum, while the students of the last stage were immersed in clinical training to fulfil the conditions for their close graduation from the college.

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Table (I)

	Frequency	% Of Stage	% Of Total
2_{nd} Stage	39	22.3%	11.5%
3_{rd} Stage	71	50.7%	21.0%
4_{th} Stage	63	47.7%	18.6%
5_{th} Stage	82	77.3%	24.2%
Graduates	53	67.9%	15.7%
Lecturers	30	29.4%	8.9%
Total	338		100%

The 17-item questionnaire data reflect the responses of undergraduate students, graduates and lectures of college of medicine in the 2018-2019 academic year. According to the official Student Records of July 9, 2018, these 225 respondents represent 35 % of the medical students in addition to those 53 graduates at July 1, 2018 represent 40.7 % of total alumni that year, as well as lecturers represented 27.3% of total academic staff.

Out of 17 –items questions, 10 were dichotomous (yes or no) question, 4 were "Likert Scaling" on a scale from 1 (strongly disagree) to 4 (strongly agree), 2 "Likert Scaling" on a scale from 1 (strongly satisfied) to 5(I don't know). The printed survey was sent to 600 students in total (no student mentioned ethical concerns or conflicts), and 338 valid questionnaires were obtained; however, 85 partial papers were deemed invalid (effective returns-ratio was 56.33%).

Statistic evaluation

The frequency and percentage of responses was calculated by using Excel Microsoft 2017

Results

According to the scaling methods, the 17-item survey was divided into 3 different question groups (represented here in the following sequential figure 1, 2, and 3).

The majority (around 60%) of 2018 medical undergraduates who responded were agreed rather than strongly agreed in "satisfaction with curriculum objectives contents?", and "do students acquired knowledge, skills attitude in health promotion and other disciplines? "questions.

A majority of medical undergraduates who responded to the 2018 survey indicated they agree with the statement "the curriculum prepare you for critical thinking & lifelong learning". Similarly, more than half responses were agreed with the statement, "Level of knowledge and understanding, Skills

and attitudes expected of the students at each phase of the curriculum known to faculty, students and graduates."

The portion of 2018 medical college graduates who were "strongly to moderate satisfied" about "doses curriculum provide you with learning opportunities in all disciplines to practice safely, relevance of contents of basic science to objectives and, Are humanitarian values taught in clinical sciences?

In this survey, the "strongly satisfied" option about the statement:" Are humanitarian values taught in clinical sciences" was dropped from 34.2%, 26.1%, 25.8% to 17.5% by 2nd stage till 5th stage respondents respectively. It is strange that only 10.7% of the lecturers were "strongly satisfied" that "human values are taught in clinical sciences" and only four of every ten (39.3%) lecturers respondents said they "strongly agree" that "the students acquired knowledge, skills attitude in health promotion and other disciplines", to the extent that 3% of the lecturers are not convinced that the students have acquired the necessary knowledge and skills to graduate as doctors, and 14.3% of the teachers believe that "the followed curriculum does not contain all the sciences and subjects required to qualify students as doctors".

The majority of the second and 3rd stages students in our college (represent 51.4%,51.6% respectively) answered (yes) to their question "if they had felt that the staff and students in the college dealt with a kind of discrimination and unequal treatment on the basis of color, sex and race…..etc.

While this sense of inequality in treatment decreased in the next two academic stages (35.5% for 4th and 24.7% for 5th stage) but arise dramatically among of graduates (63%)

The results of this survey will be a starting point for continuing to sense the level of student satisfaction about the quality of the current followed academic curriculum in our college in the coming years, as we seek to involve the student in selecting the appropriate curriculum.

Appendix 1. Sample of the questionnaire in Arabic/English

Please respond to the following questions as a part of contribution to improve your college performance (*)

Q1/ doses curriculum provide you with learning opportunities in all disciplines to practice safely?

Strongly satisfied ( ) moderately satisfied ( ) Unsatisfied ( ) Unsatisfied at all ( )

Target: students, graduates

هل يوفر لك المنهج فرص التعلم على جميع الاختصاصات لممارسته بامان ؟

Q2/ do students acquired knowledge, skills attitude in health promotion and other disciplines?

Strongly agree ( ) agree ( ) disagree ( ) strongly disagree ( )
Target: faculty, students, graduates
هل يكسب الطلاب المعرفة والمهارات في تعزيز الصحة وغيرها من التخصصات ؟

Q3/ relevance of contents of basic science to objectives?
Strongly satisfied ( ) moderately satisfied ( ) Unsatisfied ( ) Unsatisfied at all ( )
Target: faculty, students, graduates
مدى تطابق محتوى المواد الاساسية مع الاهداف

Q4/ Are humanitarian values taught in clinical sciences?
Strongly satisfied ( ) moderately satisfied ( ) Unsatisfied ( ) Unsatisfied at all ( )
Target: faculty, students, graduates
هل يتم تدريس العلوم الانسانية في العلوم السريرية ؟

Q5/ satisfaction with curriculum objectives contents?
Strongly satisfied ( ) moderately satisfied ( ) Unsatisfied ( ) Unsatisfied at all ( )
Target: stakeholder's؟
ما مدى الرضا عن اهداف البرنامج

Q6/ does the curriculum contain all items?
Strongly agree ( ) agree ( ) disagree ( ) strongly disagree ( )
هل المناهج تحتوى كل المواد

Q7 /are the level of knowledge and understanding. Skills and attitudes expected of the students at each phase of the curriculum known to faculty, students and graduates?
Yes ( ) no ( )
Target: faculty, students, graduate
هل مستوى المعلومات والفهم والمهارات المتوقعة للطالب في نهاية كل مرحلة من المنهاج معروفة ؟

Q8/ presence of new teaching methods fosters student- centered teaching, analytic thinking, and life–long learning? Yes ( ) no ( )
Target: faculty, students, graduates
وجود طرق تدريس جديدية تعزز تعليم الطلاب التفكير التحليلي والتعلم مدى الحياة ؟

Q9/ do they have adequate knowledge about new technologies?
Yes ( ) no ( )
Target: students
هل لديهم معرفة كافية بالتكنولوجيات الجديدة

Q10/ determine how early exposure of student to clinical setting?
Fact ( ) opinion ( )
Target: students, graduates
في اي مرحلة تفضل البدء بالدراسة السريرية ؟

Q11/ presence of training in different setting as rural hospitals, community clinics …..etc.
Yes ( ) no ( )
Target: faculty, students

وجود تدريب في اماكن مختلفة كالمستشفيات الريفية والمراكز الصحية .....الخ

Q12/ training in PHCC, community clinics, on common transient conditions?

Yes ( ) no ( )

Target: faculty, students

التدريب في مراكز الرعاية الصحية الاولية ، المركز الصحية : الحالات المرضية المؤقتة

Q13/ does have a project?

Yes ( ) no ( )

Target: students

هل لديك بحث او مشروع ؟

Q14/ do you have training on issue medical ethics?

Yes ( ) no ( )

Target: students, graduates

هل تم تدريبك على منهج الاخلاق الطبية ؟

Q15/ do you feel equal treatment of staff and students irrespective of gender ethnicity, religion, socio-economic status, and taking into account physical capabilities?

Yes ( ) no ( )

Target: students, graduates

هل تشعر بوجود تساوي في تعامل الطلبة والموظفين معك بغض النظر عن الجنس والطائفة والدين والعوق البدني ؟

Q16/ do you feel you are acquire sufficient knowledge and clinical and professional skills to assume appropriate responsibility after graduation?

Yes ( ) no ( )

Target: students, graduates

هل تشعر انك اكتسبت المعارف الطبية اللازمة تؤهلك لمزاولة عملك طبيبا بعد تخرجك

؟

Q17/ does the curriculum prepare you for critical thinking & lifelong learning?

Yes ( ) no ( )

Target: graduates

هل تشعر بان المنهاج يهيئك للتفكير الحرج والاستمرار بالتعلم طول الحياة؟

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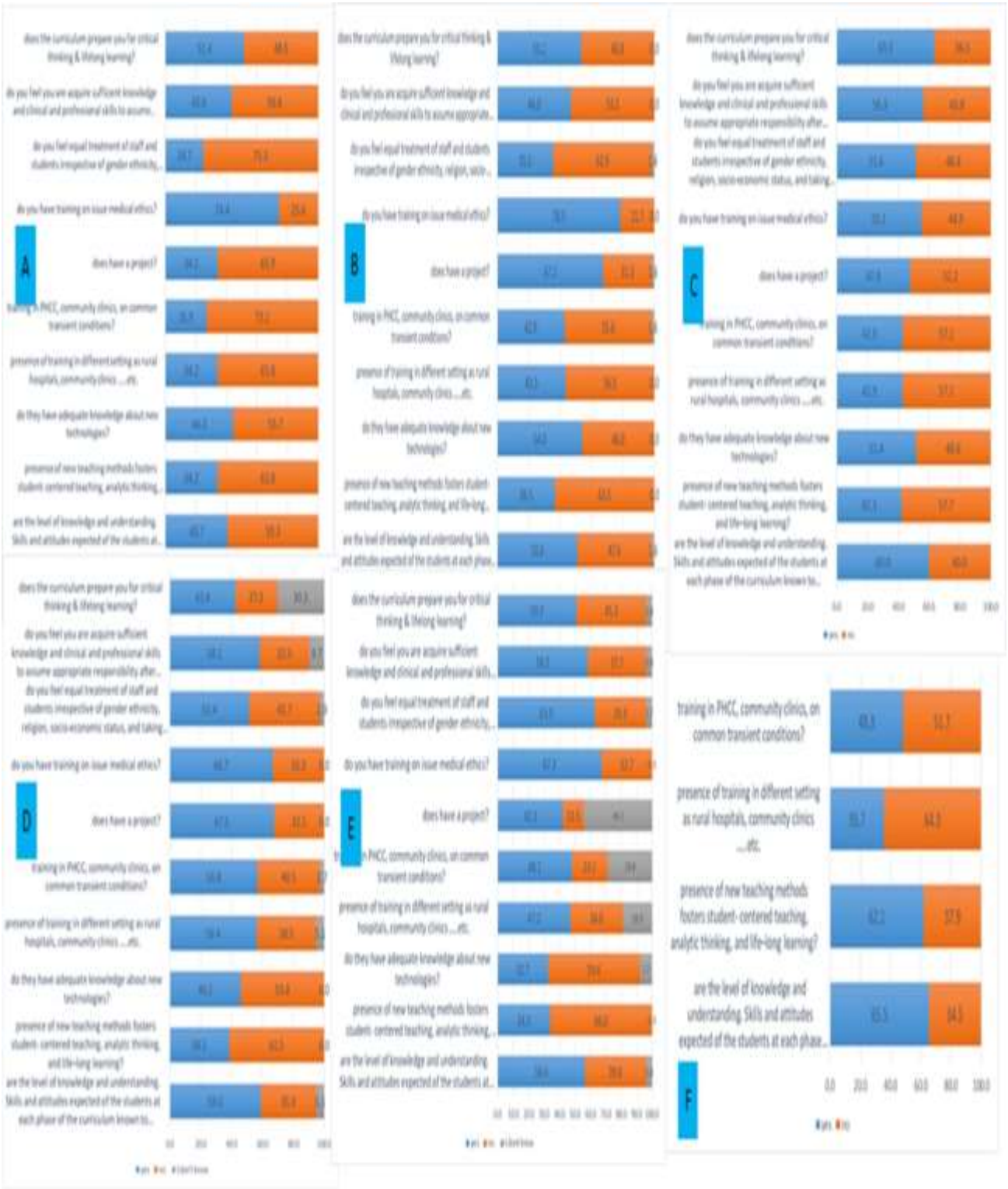

Fig 1 : the analysis curriculum quality questionnaire A- 5th stage, B-4th stage, C- 3rd stage D- 2nd stage E- graduates and F- lecturers

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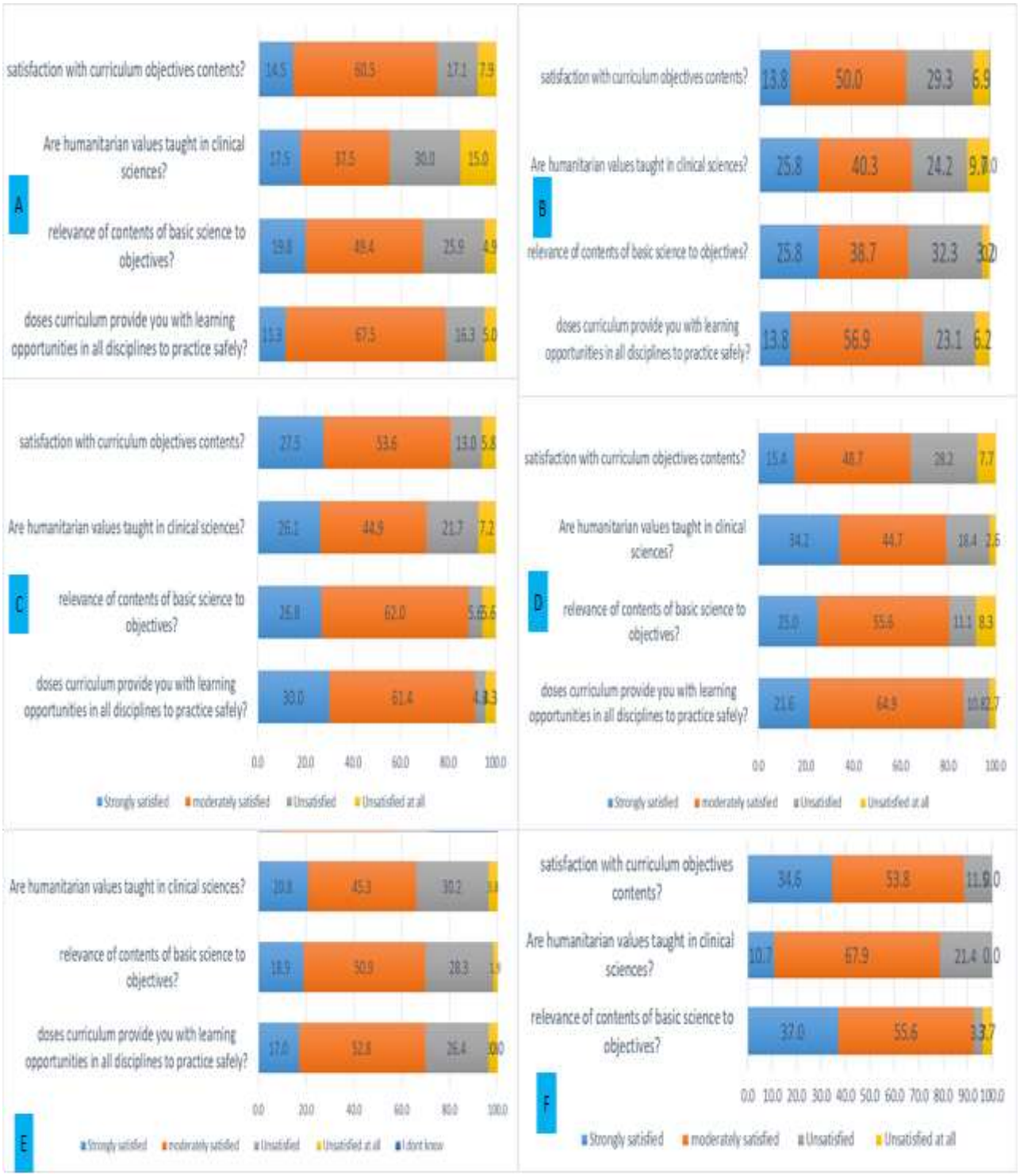

Fig 2 : the analysis curriculum quality questionnaire A- 5th stage, B-4th stage, C- 3rd stage D- 2nd stage E- graduates and F- lecturers

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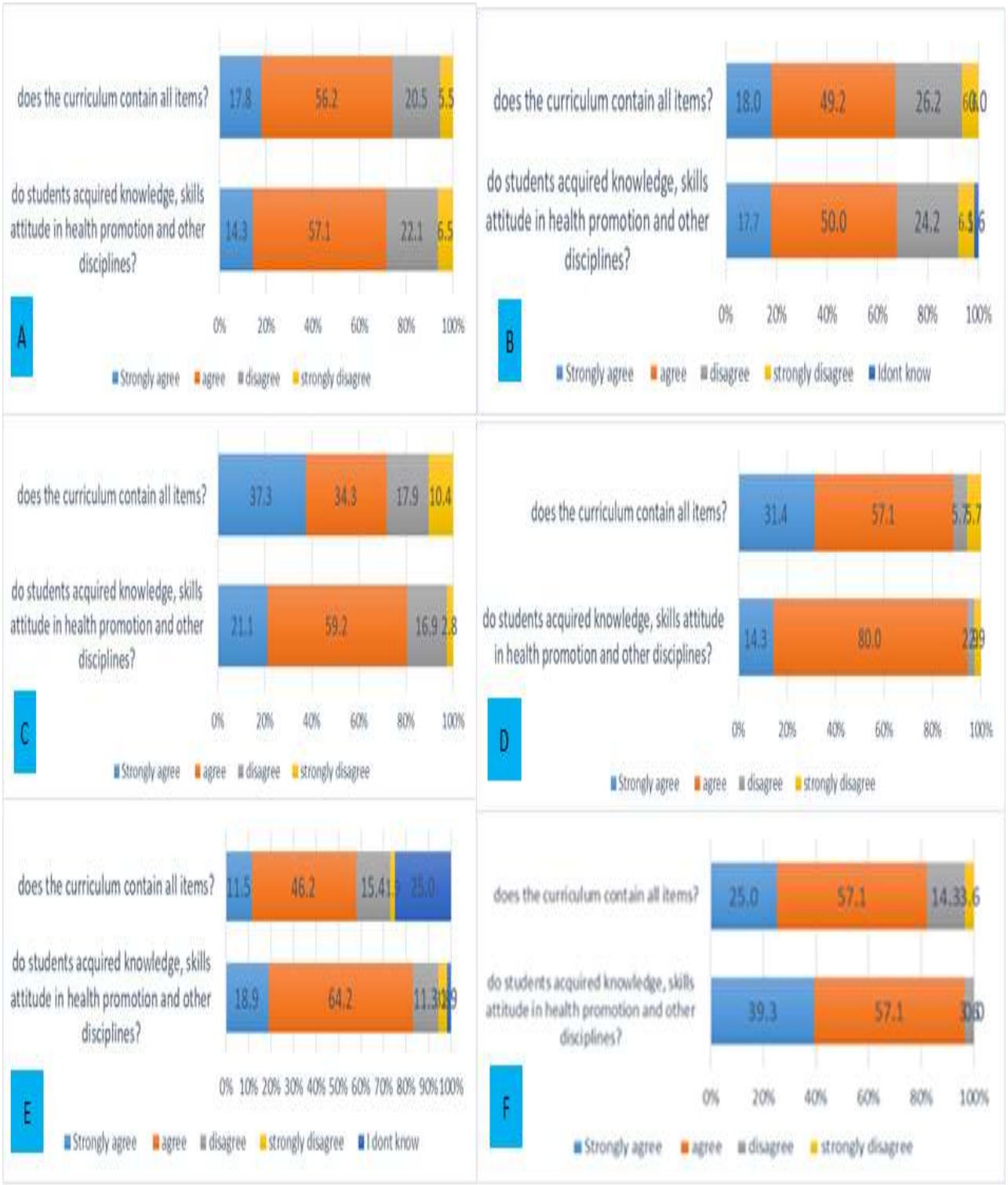

Fig 3 : the analysis curriculum quality questionnaire A- 5th stage, B-4th stage, C- 3rd stage D- 2nd stage E- graduates and F- lecturers

Discussion

The monitoring of whole educational program and appropriate curriculum distribution, are crucial manner for higher education. The development and application of a precise, scientific curriculum assessing system is of utmost theoretical and practical significance for enhancing teaching outcomes. This study looked at the metrics and techniques that use for evaluating the effectiveness of the curriculum according to the perspectives of those concerned with, including teachers and students. Due to the fact that the design of involves every area of teaching, both quantitative and qualitative approaches to the students' evaluation of the curriculum's quality have the potential to be flawed. However, in our study, we used objective (questionnaires) methodologies.

Overall, less than a quarter of the responded students ,were “strongly agreed” that they had met the necessary requirements in the medical college curriculum, while the majority were chosen “moderately satisfied” or “just agree” from sequentially rated scale of agreement

According to our findings, students have high expectations for and acknowledgment of their professors' self-directed learning strategies. Therefore, it may be stated, if we give the indication more weight and encourage its importance in contemporary education, the training of autonomous learning ability as an indicator for evaluating can be improved. Additionally, we must urge medical educators to inspire students to work hard and study on their own. As of right now, we haven't come across any quantitative research on assessment indicators aimed at enhancing medical students' capacity for independent study in any literature linked to course evaluation.

In general, the students’ evaluation of the indicators of the academic program efficiency which used in our college, was objective and weren’t extreme, negatively or positively. Based on that, the majority of students who were surveyed, answered with the positive moderate option"agree” or “moderate satisfied”, while there were the least of them who were “very satisfied” with the college’s policy and the quality of the subjects taught, and the least of them were those who were “disagree” or “unsatisfied” then came “unsatisfied at all” or “strongly disagree”

As a result, this work represents a significant contribution to the theory and practice of course evaluation. According to findings, the 17-item questionnaire is quick, simple to use, valid, and trustworthy. And it can be used as a tool for curriculum evaluation by students. This list of curriculum assessment indicators for students highlighted key elements linked to the curriculum teaching process, including curriculum preparation, efficacy of instruction, and investigation of instructional resources and methodologies, among others. The potential of the aforementioned evaluation indicators to support students' independent learning is their most significant quality. To yet, this study was the first that carried out in our medical college, therefore more research is required to confirm its generalizability.

Our MD programs face significant obstacles, including the existence of large number of under &post graduates medical residents due to central admission system compensation, which necessitates accepting more than the capacity of the college and its teaching hospitals. It is important to note that the findings of this study may not be fully representative of the entire student population, as the survey data only included responses from those who chose to participate. This can potentially introduce selection bias and limit the generalizability of the results. To address this limitation, future research could employ sampling techniques that aim to increase the representativeness of the study sample.

In addition, the challenges faced by the MD program highlighted in this study have been previously documented in the literature (10; 11). These issues underscore the need for ongoing evaluation and improvement of medical education programs to ensure that they effectively prepare students for the demands of clinical practice.

1- While a majority of medical undergraduates agreed that they were satisfied with the curriculum objectives and content, a significant number of respondents were not strongly satisfied. This suggests that there may be areas for improvement in terms of meeting the needs and expectations of students.

2- While many students agreed that the curriculum prepared them for critical thinking and lifelong learning, there were concerns about the relevance of the contents of basic science to objectives, as well as the teaching of humanitarian values in clinical sciences. This highlights the need for greater attention to these areas in the curriculum.

3- There were discrepancies between the satisfaction levels of lecturers and students in some areas, such as the acquisition of knowledge, skills and attitudes in health promotion and other disciplines. This suggests that there may be a lack of communication and collaboration between lecturers and students in terms of curriculum development and implementation.

4- There were concerns about discrimination and unequal treatment on the basis of color, sex, and race, which was reported by a majority of second and third-year students. While this decreased in the later academic stages, it was significantly higher among graduates. This highlights the need for greater attention to diversity and inclusion in the academic environment.

Recommendations:

Based on the results of the survey, there are several recommendations that could be considered to improve the quality of the curriculum and address issues related to discrimination and inequality.

1- It may be beneficial to review and revise the curriculum to ensure that it contains all the necessary sciences and subjects required to qualify students as doctors. This could address the concerns raised by 14.3% of the teachers who believed that the curriculum did not contain all the necessary components.

2- There may be a need to improve the teaching of humanitarian values in clinical sciences. The significant drop in the percentage of respondents who were "strongly satisfied" with this aspect of the curriculum from the 2nd to the 5th stage suggests that there may be issues with the teaching methods or content. It may be necessary to conduct further research to identify the specific areas that need improvement and develop appropriate interventions.

3- The results also highlight the need to address issues related to discrimination and unequal treatment. It may be useful to conduct further research to understand the reasons behind the higher percentage of graduates who reported experiencing discrimination and develop appropriate interventions to address these issues.

4- Involving students in selecting the appropriate curriculum could be an effective way to improve student satisfaction and ensure that the curriculum meets their needs and expectations. This could include conducting regular surveys to gather feedback and involving students in curriculum development and review processes.

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