

# Research Article

# Magic of Choosing Suitable Course Coordinator Based on Students' Feedback: A Single Center Experience from Saudi Arabia

Mubarak Al-Mansour (),<sup>1</sup> Sabina Nisar Ahmed (),<sup>2</sup> Muhammad Anwar Khan (),<sup>2</sup> Pedrito Nolasco Martin,<sup>2</sup> and Syed Sameer Aga ()<sup>3</sup>

<sup>1</sup>Princess Noorah Oncology Center, National Guard Health Affairs (NGHA),

King Abdullah International Medical Research Centre (KAIMRC), King Abdulaziz Medical City, Jeddah, Saudi Arabia

<sup>2</sup>Department Medical Education, College of Medicine, King Saud Bin Abdul Aziz University for Health Sciences (KSAU-HS), King Abdullah International Medical Research Centre (KAIMRC), National Guard Health Affairs (NGHA),

- <sup>3</sup>Department of Basic Medical Sciences & Quality Unit, College of Medicine,
- King Saud Bin Abdul Aziz University for Health Sciences (KSAU-HS),

King Abdullah International Medical Research Centre (KAIMRC), National Guard Health Affairs (NGHA),

King Abdulaziz Medical City, Jeddah, Saudi Arabia

Correspondence should be addressed to Syed Sameer Aga; agas@ksau-hs.edu.sa

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Background. Medical education is an unusual field whereby a teacher does not receive formal training to become a teacher and is usually marred by quality and effectiveness in imparting the curriculum. To add to the insult, the additive burden of administrating the implementation of the courses does affect the teaching capabilities of a particular teacher. At the College of Medicine (COM), a rigorous procedure for selecting suitable "course coordinators" is followed as they not only serve as administrators for the curriculum implementation but also serve as the role models for the students and their peers as well. Each course coordinator is an important cogwheel in the curriculum as each one can have a positive impact on the overall quality and success of the program. At COM, twenty-one courses are taught in the curriculum, and the execution of each course is led by the duo of coordinator and co-coordinator. The course coordinator is the one primarily involved in the execution, selection of faculty, ensuring smooth flow and delivery of objectives, finalizing and execution of the exam, and responding to students and faculty's needs during and after the course execution and is the primary person to suggest an effective action plan based on needs to improve the course for the upcoming academic year. Aim. The aim of our study was to assess whether a good teacher can be an effective course coordinator and what the impact of a good teacher/course coordinator is on student satisfaction levels. Methods. This study is a descriptive cross-sectional study carried out for five academic years from 2013-14 till 2017-18. The sample included both male and female sections of the medical program, and the courses for the study were selected as consecutive sampling techniques. The data was retrieved from the evaluation units' records for the period of 2013-18. SPSS version 20.0 was used for data analysis. Results. Our data reflects a strong positive correlation between course coordinator, course coordinator as a faculty, overall evaluation of the course, and mean faculty rating. Additionally, a strong positive correlation between the mean evaluation of all domains and overall course evaluation for both preclinical and clinical years of the medicine program was also found. Conclusions. Carefully selected effective teachers as course coordinators do have a positive impact on two domains of the course quality, that is, overall satisfaction and faculty ratings by medical students.

King Saud Bin Abdul Aziz University for Health Sciences (KSAU-HS),

King Abdulaziz Medical City, Jeddah, Saudi Arabia

# 1. Introduction

In the medical education field, the educational environment (EE) which encompasses many domains like the design of the curriculum, the manner of its impartation, the quality of the teachers/faculty, and effectiveness of the learning atmosphere does have a strong bearing on the outcome of the program, its quality of education, and the effectiveness of students learning [1, 2]. With the advent of latest advancements in the field of medical education, medical teaching has shifted towards an inclusive culture of imparting and practicing evidence-based teaching, which has somehow created a culture of training the academicians on how to be an effective teacher [3]. A good teacher is expected to be having a blend of characteristics, some of them being active involvement and good communicator, to bridge the gap and create effective bonding with the students [4].

There is limited evidence on impact of a good teacher as a course coordinator on student's satisfaction with the course. At our medicine program, we aim to graduate qualified physicians by providing them effective EE focusing on the three main domains: quality medical education, research, and community services. The program ensures that the highquality and effective EE is provided under the supervision of the carefully selected competent teachers and course coordinators. As each course's execution and closure are vital for provision of better EE, student's evaluation about each of them during the curriculum execution serves as an indicator of quality education, thus in turn contributing to overall satisfactory program evaluation. The leadership strongly believes that teachers' attitude, commitment, and effective leadership can have a positive impact on programs' success [5].

At our medicine program, a well-designed curriculum based on clear learning objectives is implemented via various specialized and specific courses addressing a particular organ system or specialty. The courses are executed impartially and simultaneously within two parts of the college, male and female, with the help of same faculty. However, to execute the courses effectively in the two parts, different coordinators from each side are chosen from each part. The list of course coordinators is reviewed and modified annually. It is a blend of competent male or female consultants selected based on their expertise, commitment, availability, and student's feedback. The course's coordinator conducts an introductory session where he gives students an overview of the course and answers all their queries.

Since College of Medicine, Jeddah, has an integrated curriculum involving both traditional lectures based teaching and new problem-based learning, the maintenance of the quality over the duration of the curriculum becomes a challenging part. The curriculum is currently executed in two phases, preclinical and clinical, each for a duration of two years (Table 1). Preclinical phase includes ten courses revolving around basic sciences, for example, anatomy, biochemistry, pharmacology, and physiology, while, as in the clinical years, a total of eight courses are executed, which revolve predominantly around clinical teaching. Although it is a prescribed curriculum, the course coordinator and faculty can give their recommendations about additions/deletions to curriculum unit through curriculum modification forms. Course coordinator is the connector that brings many people together to work as a team for efficient execution of the course; he collaborates not only with the faculty and students but also with clinical and academic affairs. He oversees the smooth execution by trying to minimize rescheduling and appropriate selection of exam contents from the question bank provided by the faculty. He is expected to be well connected with the students to promptly respond to the students' needs. In short, he is the one who leads the course and has a pivotal role.

Since in EE a dynamic culture of feedback is necessary for continuous improvement in providing suitable opportunities of learning, we have also adopted a culture of continuous feedback via numerous regular surveys of stakeholders and occasional special external reviews as well. These feedbacks help us to identify the strengths of our EE reflected via performance and achievements of our students and more importantly do also enable us to identify the weaknesses of the program and the execution of curriculum in our EE. These evaluations are used for overall improvement of quality of education and in future planning, as evidence supports its beneficial role in improving not only students' educational experience but also their quality of life [1, 6]. Course evaluation feedback is compiled as end-ofcourse evaluation report, which is a rich source for reflection, where reflection can help the course coordinator and faculty to improve their personal competencies [7]. A need based well-structured faculty enhancement program is successfully being run in the college throughout the year. This not only aims at training the faculty to be an effective and efficient teacher [8] but also caters the academicians to lead courses as course coordinator. Thus, every possible step is taken to continue treading on the path of quality enhancement and maintenance by evaluating, acting, and then revaluating.

Keeping in view the importance of each course as a pivotal foundation for the success of the program, this study was planned to get a detailed insight of the quality of course and its executer, that is, course coordinator based on students' feedback. We aimed to determine any association between rating of the course coordinator to his rating as a teacher, overall course evaluation, and mean faculty rating and to the rating of the course on different domains.

This study was expected to guide us in answering the important question of whether an effective teacher can also serve as an effective course coordinator and whether that could have an impact on successful running of the course as well as overall student's satisfaction with the course quality.

### 2. Methods

2.1. Study Settings. A descriptive cross-sectional study was conducted at COM, KSAU-HS-J, Saudi Arabia. This study was carried out over the course of five academic years between August 2013 and July 2018. The study was approved by the Institutional Ethic and Research Board (IRB) of King

TABLE 1: Curricular MAP at College of Medicine, Jeddah.

Preclinical years (phase 2)								
Year one	Foundation	Musculoskeletal	Respiratory	Cardiovascular	Hematology			
Year two	Neurosciences Endocrine, Nutrition, and Reproductive Health Urology		Gastroenterology	Oncology				
Clinical years (phase 3)								
Year one	Medicine I	Family and Community Medicine	Surgery I	Pediatrics				
Year two	Surgery II	Special Sciences and Mental Health	Obstetrics and Gynecology	Medicine II				
Medical Research I and II are spirally longitudinal run blocks, while Medical Electives is run during the summer break								

Saud bin Abdulaziz University for Health Sciences (KSAU-HS) and King Abdullah International Medical Research Center (KAIMRC).

2.2. Sample Size. Evaluation units' record data was retrieved and analyzed from the academic year 2013-14 till the academic year 2017-18. All the responses from end-of-course evaluation reports from medical students were included. The inclusion criteria for the evaluations were as follows: the questionnaire is to be filled in all aspects; and the response rate for each end-of-course evaluation is to be above 60%. The chosen courses had a blend of both male and female coordinators.

Initially 97 courses executed from August 2013 till July 2018 were chosen: 82 courses on the male side and 15 courses on the female side. After the selection with criteria, 4 courses were dropped and a total of 93 courses were included for analysis.

2.3. Questionnaire Development. A questionnaire for the end-of-course evaluation was developed after thorough discussion with the focus group comprising the college of medicine leadership, medical education experts, quality assurance reviewers, and other vital stakeholders. Thorough literature search helped in aligning our questionnaire with the internationally practiced ones. Content and face validity of the questionnaire were checked by medical education experts. The questionnaire was then subjected to a pilot test on prechosen volunteers to help in identifying any ambiguity and suggest modifications accordingly. Cronbach's alpha for reliability of the questionnaire is available upon request.

The end-of-course evaluation questionnaire had specific questions for specific domains. In domain I, questions regarding the beginning of course in College of Medicine were asked focusing on the clarity of objectives, course outline, assessment tasks, and sources of help. Domain II comprised questions on the execution of the course like course organization, satisfaction with instructors, learning sessions/ availability of resources, block's ability to stimulate one to do his best, and assessments. Domain III comprised questions to assess the learning gained from the course. Regarding the course coordinator, the questions asked were aimed at assessing his responsiveness, effectiveness of planning, knowledge, and command of course contents and his attention to curriculum revision and adjustment needs.

Data collection form for the analysis and evaluation of coordinators for different courses was developed

contextually to collect the data of two components, (a) demographics and (b) evaluation of courses by students, which included components like rating of the faculty, overall evaluation of the course, average evaluation of all domains, course coordinator as a coordinator, and course coordinator as a faculty. All questions were assessed on a five-point Likert scale from 1 to 5, where 1 was considered poor and 5 was considered excellent. When taking a mean of rating, any-thing between 3 and 3.5 was rated as low satisfactory, mean between 3.5 and 3.9 was considered as satisfactory, and 4 and above was considered as highly satisfactory.

2.4. Data Collection and Data Analysis. Data was retrieved from evaluation units' record and was transferred to SPSS for analysis. For descriptive analysis, mean and standard deviation were estimated. The frequency and percentage were computed for categorical variables like batch no., course name, and so forth. For inferential statistics, correlation's test was used to display the association between numerical variables. *P* value less than 0.05 was considered significant. Data was analyzed on SPSS version 20.0 (IBM Corp; Released 2011; IBM SPSS Statistics for Windows, Version 20.0; Armonk, NY).

#### 3. Results

*3.1. Demographic Characteristics.* The data for a total of 93 courses was analyzed; out of those, 78 (83.9%) were conducted at male side, and 15 (16.1%) blocks were executed at female side. 69.9% of the blocks were from phase 2 (preclinical years), while only 30% were from phase 3 (clinical phase). Please refer to Table 2 for more demographic details.

3.2. Association and Difference Based on Gender. When different mean of the rating was calculated based on gender, it was found that courses run at the male and female division of the program had a strong positive correlation between course coordinator and course coordinator as a faculty with significant difference in them for both male and female (P < 0.005). We also found strong positive correlation between average evaluation (all domains) with overall course evaluation and course coordinator rating for gender (male and female) with significant P value <0.001. Please refer to Table 3 for more details.

3.3. Association and Difference Based on Level of Study, That Is, Preclinical and Clinical Phase. When mean of different rating was calculated on the basis of phases, it was

Demographic characteristi	cs	Number of courses		%	
Dhara a fi iana antia a	Phase II (preclinical)	65	69.9		
Phase of imparting	Phase III (clinical)	28		30.1	
Gender-wise execution	Male	78		83.9	
Gender-wise execution	Female	15		16.1	
	Total	93		100	
	Number of courses	Mean	±	Std. dev	
Overall course evaluation	93	3.48	±	.70	
Average evaluation (all domains)	93	3.54	±	.61	
Course coordinators rating (as a coordinator)	93	3.67	±	.89	
Mean faculty rating	93	3.91	±	.35	
Course coordinators' rating (as a teacher)	92	3.70	±	1.04	
Response rate (%)	92	84.48	±	15.65	

TABLE 2: Demographic characteristics of courses.

TABLE 3: Association and difference based on sectional execution of courses in male and female parts of the college.

Gender-wise execution		Number of courses	Mean	±	Std. dev	R	P value
Male	Course coordinators rating as coordinator	78	3.65	±	0.93	0.947	*<0.001
wrate	Coordinators rating (as a teacher)	78	3.73	±	1.08	0.947	
Female	Course coordinators rating as coordinator	15 3.76		±	0.68	0.747	*0.002
Female	Coordinators rating (as a teacher)	14	$14$ $3.53 \pm 0.$		0.74		
Male	Course coordinators rating as coordinator	78	3.65	±	0.93	0.004	* <0.001
wrate	Ave. evaluation (all domains)	78	3.50	±	0.64	0.894	*<0.001
Female	Course coordinators rating as coordinator	15	3.76	±	0.68	0.020	*<0.001
Female	Ave. evaluation (all domains)	15	3.77	±	0.41	0.928	<0.001
Male	Course coordinators rating as coordinator	78	3.65	±	0.93	0.465	* <0.001
wrate	Mean faculty rating	78	$3.92 \pm 0.37$		0.37	0.465	*<0.001
Taurala.	Course coordinators rating as coordinator	15	3.76	±	0.68	0.270	0.164
Female	Mean faculty rating	15	3.88	±	0.22	0.379	
Male	Ave. evaluation (all domains)	78	3.50	±	0.64	0.041	*<0.001
Ivrale	Overall course evaluation	78	3.44	±	0.72	0.941	
Female	Ave. evaluation (all domains)	15	3.77	±	0.41	0.072	* <0.001
remaie	Overall course evaluation	15	3.67	±	0.58	0.972	*<0.001

Correlation test: \* significant value.

found that phase II (preclinical) and phase III (clinical) had strong positive correlation between course coordinator and course coordinator as a faculty with P value <0.001 for both phases, between course coordinator and average evaluation (all domains) with P value <0.001 for both phases, and between average evaluation of all domains and overall course evaluation with P value <0.001 for both phases. Please refer to Table 4 for more details.

3.4. Difference and Association Trend as per Academic Year. When mean rating was calculated on the basis of academic years (AY) among course coordinator and the coordinator as a teacher in that course, it was found that course coordinator as a teacher compared to only course coordinator had strong positive correlation with higher mean for course coordinator as a teacher in all academic years except 2016-2017, where course coordinator (as a teacher) had higher mean value compared to course coordinator with *P* value <0.001; course coordinator mean was higher to average evaluation in all academic years except 2016-2017, where average evaluation (all domains) had higher mean value than course coordinator with *P* value <0.001. Over the years, average evaluation of all domains mean is found to be higher compared to overall course evaluation mean except in the academic year 2013-2014 in which mean overall course evaluation was higher compared to average evaluation (all domains) (P value = 0.002) having strong positive correlation with P value <0.001. Please refer to Table 5 for more details.

### 4. Discussion

This study intended to determine any association between the course coordinator rating and their rating as a teacher. This association would help to identify the importance of careful selection of course coordinator as an important stakeholder and building block. We intended to determine association between the course coordinator rating and the rating on course satisfaction by the students. In this study, a strong positive correlation was found between the course coordinators' rating in a coordinator role and that in a teacher role (P value \*<0.001 and \*0.002), which supports the idea of evaluation based on selection of the course coordinators. Selection of course coordinators from faculty database based on the track record and high ratings by the

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Phase		Ν	Mean	±	Std. dev	R	P value
Dhasa II	*Course coordinators rating as coordinator	65	3.69	±	0.85	0.893	*<0.001
Phase II	Coordinators rating (as a teacher)	64	3.72	±	1.02		
	Course coordinators rating as coordinator	28	3.62	±	1.01	0.005	*<0.001
Phase III	Coordinators rating (as a teacher)	28	3.64	±	1.09	0.985	
Phase II	Course coordinators rating as coordinator	65	3.69	±	0.85	0 969	*<0.001
Phase II	Ave. evaluation (all domains)	65	3.52	±	0.57	0.868	
Phase III	Course coordinators rating as coordinator	28	3.62	±	1.01	0.938	*<0.001
Phase III	Ave. evaluation (all domains)	28	3.59	±	0.71		
Phase II	Course coordinators rating as coordinator	65	3.69	±	0.85	0.526	*<0.001
Phase II	Mean faculty rating	65	3.78	±	0.28	0.526	
Phase III	Course coordinators rating as coordinator	28	3.62	±	1.01	0.693	*<0.001
Phase III	Mean faculty rating	28	4.22	±	0.30		
Phase II	Ave. evaluation (all domains)	65	3.52	±	0.57	0.927	*<0.001
	Overall course evaluation	65	3.46	±	0.65	0.927	<0.001
Phase III	Ave. evaluation (all domains)	28	3.59	±	0.71	0.965	*<0.001
rnase III	Overall course evaluation	28	3.52	±	0.80	0.905	<0.001

TABLE 4: Association and difference based on the level of study, that is, preclinical and clinical phase.

Correlation test: \*significant value. \*BC rating: rating of course coordinator as a coordinator.

TABLE 5: Difference and association trend as per academic year.

Academic year		Ν	Mean	±	Std. dev	R	P value
2012 2014	*Course coordinators rating as coordinator	10	3.51	±	0.93	0.947	*<0.001
2013-2014	Coordinators rating (as a teacher)	10	3.53	±	1.20	0.947	<0.001
2014-2015	Course coordinators rating as coordinator	14	3.62	±	1.26	0.000	*<0.001
2014-2015	Coordinators rating (as a teacher)	14	3.64	±	1.35	0.986	
2015 2016	Course coordinators rating as coordinator	18	3.97	±	0.85	0.926	*<0.001
2015-2016	Coordinators rating (as a teacher)	18	4.09	±	0.96		
2016 2017	Course coordinators rating as coordinator	23	3.56	±	0.78	0.904	* <0.001
2016-2017	Coordinators rating (as a teacher)	23	3.55	±	1.00	0.904	*<0.001
2017-2018	Course coordinators rating as coordinator	28	3.64	±	0.80	0.859	*<0.001
2017-2018	Coordinators rating (as a teacher)	27	3.66	±	0.87	0.839	<0.001
2013-2014	Course coordinators rating as coordinator	10	3.51	±	0.93	0.653	*0.041
2013-2014	Ave. evaluation (all domains)	10	3.19	±	0.52	0.655	0.041
2014 2015	Course coordinators rating as coordinator	14	3.62	±	1.26	0.970	*<0.001
2014-2015	Ave. evaluation (all domains)	14	3.35	±	0.86	0.970	
2015-2016	Course coordinators rating as coordinator	18	3.97	±	0.85	0.938	*<0.001
2015-2016	Ave. evaluation (all domains)	18	3.63	±	0.65	0.938	
2016-2017	Course coordinators rating as coordinator	23	3.56	±	0.78	0.948	*<0.001
2010-2017	Ave. evaluation (all domains)	23	3.65	±	0.49		
2017 2019	Course coordinators rating as coordinator	28	3.64	±	0.80	0.935	*<0.001
2017-2018	Ave. evaluation (all domains)	28	3.62	±	0.54		
2013-2014	Ave. evaluation (all domains)	10	3.19	±	0.52	0.842	*0.002
2013-2014	Overall course evaluation	10	3.43	±	0.54		0.002
2014 2015	Ave. evaluation (all domains)	14	3.35	±	0.86	0.980	*<0.001
2014-2015	Overall course evaluation	14	3.33	±	0.98		
2015-2016	Ave. evaluation (all domains)	18	3.63	±	0.65	0.965	*<0.001
2015-2016	Overall course evaluation	18	3.60	±	0.73	0.965	<0.001
2016-2017	Ave. evaluation (all domains)	23	3.65	±	0.49	0.955	*<0.001
2010-2017	Overall course evaluation	23	3.50	±	0.59	0.935	<0.001
2017 2019	Ave. evaluation (all domains)	28	3.62	±	0.54	0.973	* <0.001
2017-2018	Overall course evaluation	28	3.48	±	0.67	0.973	*<0.001
2013-2014	Course coordinators rating as coordinator	10	3.51	±	0.93	0.151	0.678
2013-2014	Mean faculty rating	10	3.67	±	0.26	0.151	
2014-2015	Course coordinators rating as coordinator	14	3.62	±	1.26	0.465	0.094
2014-2015	Mean faculty rating	14	3.77	±	0.38	0.465	
2015 2017	Course coordinators rating as coordinator	18	3.97	±	0.85	0.428	0.077
2015-2016	Mean faculty rating	18	4.13	±	0.28		0.077
2016 2017	Course coordinators rating as coordinator	23	3.56	±	0.78	0.512	*0.012
2016-2017	Mean faculty rating	23	3.96	±	0.29		*0.012
2017 2019	Course coordinators rating as coordinator	28	3.64	±	0.80	0.498	*0.007
2017-2018	Mean faculty rating	28	3.89	±	0.36		

Correlation test: \*significant value. \*Rating of course coordinator as a coordinator.

stakeholders, especially students, does serve the purpose of implementing the courses more effectively with higher quality. Among many attributes and qualities of an effective teacher, one who is good planner and organizer is regarded as the best in his abilities for the job [9].

In this study, we found that the high rated teachers were good planners in terms of planning the course as a coordinator (Tables 3-5). Usually, a subject expert was chosen as a course coordinator who is expected to play a role of navigator, collaborator, and workflow manager to respond to students' needs, while the good medical teacher should possess numerous qualities like good communication skills, calm personality, nonhumiliating behavior, honesty, knowledge, enthusiasm about job, and emotional control [3, 10, 11]. Kikukawa et al. [12], in their study among Japanese students, found that students identified provision of sufficient support and feedback as an important characteristic of clinical teacher, in concordance with our results, whereby we found that our teacher has been successfully providing adequate support as a course coordinator (Tables 3–5). Here, it is worth mentioning that all our course coordinators were clinicians who have personally gone through the drill of multiple tiers of training and thus were expected to be sensitive to the medical students' needs.

Evaluation of faculty has evolved over the last decade; some evaluate their faculty after each session and some others at the end of course; some use peer evaluation or feedback from teaching experts, while others might interview the students about the teacher's teaching ability. In our program, we evaluate the faculty at the end of course by a verified end-of-course evaluation survey, where the students rate their teachers on a 5-point Likert scale. Since teachers have the ability to inspire others and are said to be collaborators and team builders, we found a strong positive correlation between course coordinators ratings and the students' satisfaction regarding different domains of course, reflecting that the course coordinator had a positive impact holistically. As we had already reported in our previous study, the overall mean score for the students' perception about teachers (SPT) domain of the DREEM questionnaire was found to be 28.51, which was among top three domains of DREEM in our medicine program. Moreover, our students had highly scored the two important questions (teachers are knowledgeable and espouse a patient-centered approach to teaching) of the students' perception about teachers (SPT) domain of the DREEM questionnaire [1].

In this study, we also found a strong positive correlation between course coordinator rating and mean faculty rating by the male students of the college (P < 0.001). As the course coordinators' primary task is to lead a team for effective execution of the course, many studies on leadership have demonstrated that the possession of key leadership skills is helpful in handling a diverse team for the effective resolution of the tasks [11, 13]. In fact, team leaders are found to be vital and the most important component of a team, where they can act as moderators and integrators [14].

Teaching in medical school is a tedious process, where the teacher's role is multifaceted, complex, and demanding. The teacher must be a facilitator, role model, evaluator,

assessor, and course planner [15]. Defining good teacher in medical education is not an easy task and multiple characteristics have been identified. Low et al. [16] identified good communicators with sound subject knowledge, enthusiasm, and detailed explanation to be important for a good medical teacher; meanwhile, in clinical settings, approachability, constructive feedback, and participation encouragement mattered more to the students. Many factors have been described, which discriminate excellent clinical teaching from the ordinary one; some of them have good communication skills, ability to involve students actively, availability, and support as described by [4, 10, 11, 17]. In this study, information was gathered from end-of-course evaluation report, where the students were asked whether the course coordinator was a responsive, motivated, and effective planner and addressed curriculum revision and adjustment needs and how would they rate their knowledge of the course contents. All these questions define the expected attributes of a competent course coordinator which are few of the attributes of a competent teacher. Many students consider collaboration skills as an important characteristic of a good teacher as described by well-known studies [18]. The course coordinator acts as a collaborator and facilitator who works as a binding force and bridges different resources, and these are eminent in our study.

Teachers do have a pivotal role in improving the student's educational environment (EE), as reflected in numerous DREEM studies and related studies around the world [1, 19-21]. A supportive environment can lead to effective learning and decrease the stress that students face in undergraduate education [22]. Strong communication skills, empathy, knowledge, and enthusiasm are some of the important characteristics identified as characteristics of a good teacher in Pakistan by [3]. The course coordinator is considered as one of the pillars who is able to provide the students with a learning environment by his collaborative skills and support specifically with provision of guidance to different learning materials. We found a positive correlation between course coordinator rating and his rating as a teacher and overall course satisfaction which is consistent with literature that describe effective planning and multitasking as important attributes of a good teacher [15, 23] and can be evident in our study that good and seasoned instructors could have a positive impact on students' satisfaction.

Validity and reliability of student evaluation have been a hot controversial topic of discussion. Numerous factors have been linked to the higher students' satisfaction in the surveys [24, 25]; while some studies show availability of food during an evaluation session to have a positive impact on students' satisfaction [26], other studies have considered factors like the rank of the faculty, leniency in exams, and grade satisfaction [27, 28] to be important in affecting the satisfaction rating by the students.

On dissecting the data further into the courses run in preclinical and clinical years, we found that course coordinators rating as a coordinator positively correlated to that as a teacher, average evaluation of all domains, mean faculty rating, and overall block evaluation (P < 0.001; Table 4). This

is concordant with other DREEM studies [29], where the students from preclinical years rated their teachers higher. Moreover, it has been reported that females tended to rate their educational environment higher [30], which was similar to the trend in this study as well. Female students in our study rated all domains higher than their male counterparts, giving an insight into their higher satisfaction on educational environment, whereas the male students rated coordinators rating (as a teacher) and mean faculty rating higher as compared to females. This leads to an impression about difference in opinion under almost the same educational environment, which is contradictory to the findings at Jizan where loopholes and lower satisfaction in the female students made them think of assuring uniformity to improve educational experience for both male and female students [31].

On seeing annual trends, there has been an increase in satisfaction over the block coordinators rating as a teacher and coordinator with a peak in satisfaction around the academic year 2015-16 followed by a dip and then again an increase in students' satisfaction. Average evaluation of all the domains and mean faculty ratings has increased over the passage of time (Table 5). As evident through our study, evaluations and feedback could help institutes get an insight into their performance. Instant remedial measures based on feedbacks could assure maintenance of quality and can be used as a performance indicator worth tracing. This is reiterated by another study in Saudi Arabia (by [1]) where it was recommended to use feedback as a guide to improve and to train the faculty based on the needs identified through feedback.

Although course evaluations might be considered as controversial, still the literature supports their importance [32–37]. In this study, we found a positive correlation between the rating of the course coordinator and the overall evaluation of the course. This study has built up a link between selection of appropriate competent teacher as effective coordinator and mean faculty rating of the course by showing a positive correlation which can be taken as evidence to course coordinator being a driving force to get the team at task effectively.

#### 5. Limitations of the study

Some limitations do exist in our study. First of all, the study was restricted to one medical college and was conducted over five years; hence, it cannot be generalized to other regions of Saudi Arabia or even other parts of the world.

Secondly, faculty's feedback on the course and course coordinator has not been added to this study because of limited response rate from them. Their feedback could have given us a chance to find any association between the response of faculty and students on the course and the course coordinator. It could have given us an idea whether high rating of the course coordinator could have an impact on overall course satisfaction by the fellow faculty members. There is limited evidence available to support the impact of course coordinator on running the course and execution of curriculum. Thirdly, the relationship of a subject expert as a course coordinator or the number of sessions taken by the course coordinator and its impact on students' satisfaction along with qualitative research could have given a deeper and holistic picture on students' opinion.

# 6. Conclusions

Carefully selected effective teacher as course coordinator (CC) can have a positive impact on overall course satisfaction by medical students. CC acts as the driving force to lead the course and has been found to have a positive impact on faculty's performance as a teacher. It can be evident that a good teacher could be an effective planner as a course coordinator leading to a positive impact on students' satisfaction with the course and successful curricular execution.

#### **Data Availability**

Raw data is available on demand from the corresponding author.

# **Ethical Approval**

A proper ethical approval as per Helsinki protocol was taken from Institutional Research Board prior to carrying out this study. This study was approved by the Institutional Review Board of King Abdullah International Medical Research Center (KAIMRC), a research wing of KSAU-HS, Jeddah.

#### Consent

A due informed consent was taken from every participant during the execution of end-of-course evaluation.

# **Conflicts of Interest**

The authors declare that there are no conflicts of interest.

#### **Authors' Contributions**

All authors have critically reviewed and approved the final draft and are responsible for the content and similarity index of the manuscript. **MM and SNA** conceptualized and designed the study and wrote the initial draft of manuscript. **MAK** statistically analyzed the collected data. **PNM** contributed to the dispensation of survey and data collection. **SSA** surveyed the literature and wrote, revised, and proofread the manuscript in the current form.

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