Original Article :

Medical Internship Students 'Attitude Toward Compatibility Of Medical Teaching With The Saudi Vision 2030 In Saudi Arabia

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Abstract

Background & Aims:

As a roadmap for economic development and national growth, "Vision 2030" was adopted by Saudi Arabia (SA). With three main pillars, a lively culture, a flourishing economy, and an ambitious nation, SA will achieve its "Purpose 2030 vision." There is also a need to ensure the vision is consistent with both medical and health education. Therefore, the purpose of this study is to assess Medical internship students' attitude toward compatibility of medical teaching with the Saudi vision 2030 in SA. Methods: A cross sectional, descriptive research design was used. A sample of 1200 male and female medical internship students in SA was studied using convenience sampling. The data was collected using a questionnaire which consist of two parts. The first part deals with the demographic data of the respondents, while the second one includes the three health goals of vision 2030 and other general goals.

Results:

The majority of the studied intern students provided average score in relation to facilitating access to health services (88.7%), improving the quality and efficiency of health services (76.1%) and the general goal while only (58.8%) provided high score relat-

الملخص

الخلفية و الاهداف :

اعتمدت المملكة العربية السعودية "رؤية ٢٠٣٠» كخارطة طريق للنمو الاقتصادي والتنمية الوطنية. ستحقق المملكة أهداف «رؤية ٢٠٣٠» من خلال ثلاث ركائز رئيسية هي مجتمع نابض بالحياة واقتصاد مزدهر وأمة طموحة. يسعى المحور الأول (تحويل الرعاية الصحية) إلى تحقيق مجتمع حيوي من خلال إعادة هيكلة القطاع الصحي ليصبح نظامًا شاملاً وفعالاً. سيعزز الصحة العامة من خلال تنفيذ نموذج جديد للرعاية يركز على الوقاية وتحسين الوعي الصحي للمجتمع. لذلك هناك حاجة للتأكد من أن جميع مؤسسات التعليم الطبي والصحي يتوافق مناهجها مع الرؤية.

تهدف الدراسة الى تقييم اتجاهات طلاب التدريب الطبي (الامتياز) تجاه توافق التدريس الطبي مع الرؤية السعودية ٢٠٣٠ في المملكة العربية السعودية.

طريقة البحث :

تم استخدام تصميم بحثي مقطعي وصفي. عينة من ١٢٠٠ طالب وطالبة متدرب طبي على مستوي مختلف من جامعات المملكة العربية السعودية. فيما يتعلق بأداة جمع البيانات، تم تطوير استبيان لهذا الغرض من خلال مراجعة المراجع. يتكون الاستبيان من جزأين. يتناول الجزء الأول البيانات الديموغرافية للمشاركين وهي: (الجنس ، العمر ، الجامعة). بينما يتضمن الجزءالثاني الأهداف الصحية الثلاثة لرؤية ٢٠٣٠ والأهداف العامة

النتائج :

١٢٧٠غالبية الطلاب المتدربين الذين خضعوا للدراسة قدموا متوسط درجات فيما يتعلق بتسهيل الوصول إلى الخدمات الصحية (٨٨,٧٪)،

ed to prevention of health risks. That means that the curricula of College of Medicine on all Saudi Arabia still need to modification to be compatible with vision 2030.

Conclusion:

We found that the curricula of Colleges of Medicine across Saudi Arabia still need modification to be compatible with vision 2030. The Colleges of Medicine are requested to increase the participant of the students in the mobile clinics and activate their role toward their community, update the palliative care as the separate curriculum. Moreover, the Colleges of Medicine must increase the interest with curriculum of medical administration

Keywords:

Medical, internship, compatibility, teaching, Saudi vision 2030

وتحسين جودة وكفاءة الخدمات الصحية (٧٦,١٪) والهدف العام بينما (٥٨,٨٪) فقط أعطوا درجة عالية المتعلقة بالوقاية من المخاطر الصحية.

الخلاصة :

مناهج كليات الطب في جميع أنحاء المملكة العربية السعودية لا تزال بحاجة إلى تعديل لتكون متوافقة مع رؤية ٢٠٣٠. توصي الدراسة أن تقوم كليات الطب بزيادة المشاركين من الطلاب في العيادات المتنقلة وتفعيل دورهم تجاه مجتمعهم وتحديث الرعاية التلطيفية كمنهج منفصل، وزيادة الاهتمام بمناهج التعليم الطبي.

Introduction

As a roadmap for the growth of economic and national development, Saudi Arabia adopted 'Vision 2030.' "The 2030 Vision" set out the overall priorities, objectives, and aspirations of the Kingdom for a prosperous and pioneered nation to be a model of the world class. With three main pillars a vibrant culture, a stable economy, and an optimistic country the Saudi Arabia will attain its Vision for 2030 targets [1]

The first theme (Transforming healthcare) is to make a diverse community a comprehensive and efficient infrastructure by reforming the health industry. It will improve public health by introducing a modern care model focused on prevention and greater understanding of society's health. It would also enhance access to health care by offering optimal coverage, equal regional distribution and extensive, extended e-health and digital solutions. It seeks to constantly enhance healthcare quality in line with international standards and best practices, by focusing on recipient perceptions and satisfaction. [2]

To improve public and local access to health services at the right time, there are four components: an increase in overall capacity (number of beds and medical personnel), sufficient regional allocation (distance from the care provider), timely and affordable access to relevant health services. To increase the overall value giv-

en for benefit recipients, the quality and reliability of health care services as well as the protection of health facilities will be enhanced, and adequate financial sustainability coverage will be assured. In the other hand, it encourages safe living to reduce threats from health emergencies and diseasing from communicated and non-communicable disorders by encouraging preventive health care (such as recognition and vaccination). [3]

In order for all of the preceding to be achieved, all health and educational organization must conform to the vision 2030 [4] So, the interest with medical education is the first goal that rely on achieving most of health strategies for vision 2030. Today's agenda is medical education. What students learn how they learn, how they can learn, where they are going to learn, and how the learning is better structured and measured are problems discussed by health practitioners, the public and policymakers in more general. [5]

The interest in medical education in Saudi Arabia and a rapid expansion of medical schools have increased correspondingly, with the number doubling over the last five years to 5% [6]. In the field of medical education and the creation and publication of the structure for the learning outcome were the contributions of the Saudi Deans Committee and the Saudi Society for Medical Education [7].

The aim of medical education is to prepare young doctors to learn knowledge and skills to meet their community's health needs. [8] In Saudi Arabia there are so many obstacles to medical education. A major challenge worldwide is the increasing global demand for health professionals in general and doctors. The mushrooming of medical schools in the country puts immense pressure on the MOHE to have an adequately trained medical education infrastructure and staff. Furthermore, the expansion of the new medical colleges could potentially raise concerns about the amount versus quality of medical training, if not carefully planned [9].

According to the 2030 vision, the development and growth of the Saudi educational system is a new challenge in the medical education field. [10]. the successful implementation of a 2030 vision depends on the effective training of different fields of education [11]. Therefore, the Ministry of Higher Education has adopted different methods of professional development to improve the effective education practices according to the 2030 vision. [12] The assessment of change needed to meet the demands of the 2030 vision is needed in Saudi universities curriculum and this can only be done by understanding what attitudes students have towards the curriculum and their vi-

sion. Considering all this the purpose of the study is to assess Medical internship students' attitude toward compatibility of medical teaching with the Saudi vision 2030.

Material and Methods

A descriptive cross-sectional study design has been used to test the attitude of medical interns to medical teaching compatibility with Saudi 2030. The study was conducted in Saudi Arabia. A sample of 1200 male and female medical internship students in Saudi Arabia. The sample was chosen by a convenience sampling. Regarding the data collection tool, a questionnaire was developed for this purpose through reviewing of literatures. There were two sections of the questionnaire. The first segment addresses the demographics of the respondents: (Gender, age, university). While the second one includes the three health goals of vision 2030 each goal contains six statements and general questions contains of five statements For each statement participants completed a three-point Likert-scale response ranging from "Disagree" =1 to "Agree"= 3 with the statement.

To verify the reliability of the study tool, it was distributed electronically via the internet to a pilot sample of (400) male and female new graduates of faculty of Medicine in different Saudi Universities. The internal consistency reliability of the questionnaire was measured using Cronbach Alpha, the ICR value was 0.72 which shows that the instrument is reliable.

The participants were given online consent form, which was prepared and outlined the goal of the study and advised that all information would only be used for the intent and results of the study reported in addition. The study also provided participants with information online. After the participants decided to replenish the questionnaire, the scientists submitted the questionnaire online. The data collection process was conducted at all medical college in Saudi Arabia. Prior to conducting an actual report, the study obtained in the subject was subject to informed consent. On-line. The study goal and the research measures had been told to participants. Furthermore, the participant told without a justification of his or her right to cancel the study any time. The topic of the study remains confidential and personal. The data was entered and analyzed using IBM SPSS 26. Frequencies and percentages and reported for qualitative variables. Mean ±SD is given for quantitative variables. Pearson Chi-Square and Fisher Exact tests were applied to observe the associations between qualitative variables. A p-value of less than 0.05 was considered as statistically significant.

Results:

The average age of the respondents was 26.45+0.861 years ranged between 25-27 years. Males represented a higher percentage 666 (55.5%) than females 546 (45.5%) with more than half of the studied students 792 (66%) were in the age group of twenty-six years or more, while 408 (34%) only were in the age group of less twenty-six years old.

Medical internship students' attitude toward Facilities and access to health services:

In relation to facilities of access to health services, the table showed that, the majority of the participants represented neutral response (73.6%) related to the curricula we studied help create an creative graduate who is able to expand medical fields ,also in about the study at the college encourages students to make convoys to facilitate health service access to all citizens (86.2%),in addition ,more than half of the participants represented neutral response related to the study achieves the development of the mobile clinic concept among students(53.6%), and the study at the college helps in applying evidence-based medicine and primary care (51.3%),but near than half of the participants (48.7%) were disagree about that. The table also illustrated that, the majority of the participants represented neutral response (64.3%) about College of Medicine encourages building the concept of expanding palliative care among students ,also more than half of the studied students provided neutral response (53.4%) related to the College of Medicine assists in conducting training programs for students to develop their practical abilities in sorting out emergency cases.

Table 1: The distribution of medical internship students' attitude toward Facilities of access to health services:

Facilitate access to health services		% agreement	Mean	SD	Level	Chi-square	
						X^2	P-value
1	The curricula we studied help create an creative graduate who is able to expand medical fields	63.14	1.894	0.503	Average	894.9	<0.001
2	The study at the college encourages students to make convoys to facilitate health service access to all citizens	62.22	1.867	0.347	Average	1539.3	<0.001
3	The study achieves the development of the mobile clinic concept among students	51.31	1.539	0.502	weak	603.6	<0.001
4	The study at the college helps in applying evidence-based medicine and primary care	50.47	1.514	0.502	weak	598.2	<0.001

Facilitate access to health services		% agreement	Mean	SD	Level	Chi-square	
						X^2	P-value
5	The study at the College of Medicine encourages building the concept of expanding palliative care among students	54.75	1.643	0.479	weak	97.470	<0.001
6	he College of Medicine assists in conducting training programs for students to develop their practical abilities in sorting out emergency cases	51.53	1.546	0.510	weak	589.085	<0.001

Medical internship students' attitude toward Methods of Improving the quality and efficiency of health services

Regarding improving the efficiency and quality of health services, the table showed that majority of the studied intern students represented neutral response (82.3%) related to Studying at the College of Medicine helps teach students to make the most of the available resources ,also more than half of the studied intern students represented disagree related to the study at the College of Medicine increases students' awareness to reduce medical costs and burdens (50.7%).In addition to more than half of the studied students were agree related to the study at the College of Medicine encourages the development of interactive training for students (60.5%),also in studying at the College of Medicine helps increase students 'awareness of the culture of patient-centered care (58.2%). Furthermore, less than half of the studied intern students were agree related to studying at the College of Medicine helps support students' concept of governance in the health sector (48.4%). Also, the table showed that majority of the studied intern students represented neural response related to the study at the College of Medicine is working on graduating students capable of dealing with a comprehensive and effective health system (79.0%)

Table 2: The distribution of medical internship students' attitude toward the methods of improving the quality and efficiency of health services:

Improving the quality and efficiency of health service		% of agreement	Mean	SD	Level	Chi-square	
						X^2	P-value
1	Studying at the College of Medicine helps teach students to make the most of the available resources	70.33	2.110	0.406	Average	1318.320	<0.001
2	he study at the College of Medicine increases students' awareness to reduce medical costs and burdens	52.39	1.572	0.634	Weak	366.260	<0.001

Improving the quality and efficiency of health service		% of agreement	Mean	SD	Level	Chi-square	
						X^2	P-value
3	The study at the College of Medicine encourages the development of interactive training for students	85.36	2.561	0.579	High	567.815	<0.001
4	Studying at the College of Medicine helps increase students 'awareness of the culture of patient-centered care	85.00	2.550	0.558	High	559.860	<0.001
5	Studying at the College of Medicine helps support students' concept of governance in the health sector	54.92	1.648	0.701	Weak	237.615	<0.001
6	The study at the College of Medicine is working on graduating students capable of dealing with a comprehensive and effective health system	71.61	2.148	0.434	Average	1165.745	<0.001

Medical internship students' attitude toward the prevention of health risks:

Regarding prevention of health risks, more than half of the studied intern students provided neutral response (56.6%) related to Studying at the College of Medicine promotes preventive health, were agree about the study at the Faculty of Medicine teaches students to deal with infectious diseases (51.1%) and Studying at the College of Medicine helps students control non-communicable diseases (53.8%). Also, the table showed that the majority of the studied intern students represented neutral response (80.8%) related to the study at the College of Medicine teaches students to create complete databases to support preventive measures, (78.3%) about the study at the Faculty of Medicine teaches students to deal with natural disasters and (73.2%) related to Studying at the College of Medicine helps students identify the health needs and priorities of society.

Table 3: Distribution of medical internship student attitude toward prevention of health risks

Promote prevention of health risk		% of agreement	Mean	SD	Level	Chi-square	
						X^2	P-value
1	Studying at the College of Medicine promotes preventive health	79.47	2.384	0.536	High	557.555	<0.001
2	The study at the College of Medicine teaches students to create complete databases to support preventive measures	70.83	2.125	0.420	Average	1246.500	<0.001
3	The study at the Faculty of Medicine teaches students to deal with infectious diseases	82.78	2.483	0.552	High	509.435	<0.001

Promote prevention of health risk		% of agreement	Mean	SD	Level	Chi-square	
						X^2	P-value
4	The study at the Faculty of Medicine teaches students to deal with natural disasters	68.72	2.062	0.462	Average	1100.345	<0.001
5	Studying at the College of Medicine helps students control non-communicable diseases	83.64	2.509	0.555	High	519.755	<0.001
6	Studying at the College of Medicine helps students identify the health needs and priorities of society	74.78	2.243	0.457	Average	963.395	<0.001

medical internship student's attitude toward general goals:

Concerning General goals, the results revealed that, the majority of the studied students (80.8%) were agree and less than half of the studied students (43.4%) represented neutral response about the study helps me to know the standards of patient safety, also (79.8%) were agree that the study helps me to know the standards of patient safety, and (90.8%) agreed the study provides me with information on professional ethics and ethics, in addition, (93.2%) were agree that teaching strategies made them aware of what health insurance is and its goals.

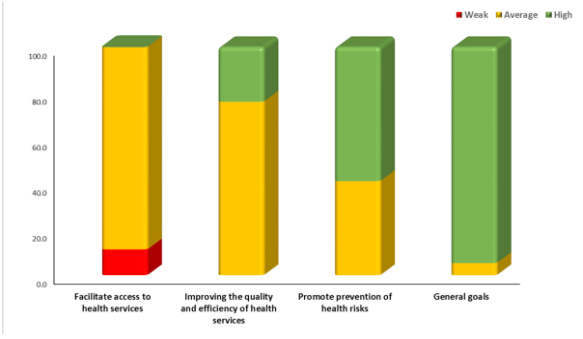
Table 4: Distribution of medical internship student's attitude toward General goals

General goals		% of agreement	Mean	SD	Level	Chi-square	
						X^2	P-value
1	The study helps me to know the standards of patient safety	96.25	2.888	0.339	High	1718.115	<0.001
2	The study provides me with information on health law	93.28	2.798	0.401	High	427.213	<0.001
3	The study provides me with information on professional ethics and ethics	96.61	2.898	0.331	High	1790.105	<0.001
4	he study made me aware of the new health work architecture	51.64	1.549	0.602	weak	420.755	<0.001
5	The study made me aware of what health insurance is and its goals	97.72	2.932	0.252	High	894.413	<0.001

Figure 1 illustrate the overall presentation of student attitude towards the compatibility of medical teaching strategies with Saudi version, it can be seen that the majority of the studied intern students provided average score in relation to facilitating access to health services (88.7%) and improving the quality and efficiency of health servic-

es (76.1%) with mean scores 10.002±1.22, 12.588±1.391, respectively. In addition, more than half of the studied intern students (58.8%) provided high score related to prevention of health risks and most of the studied students (94.7%) provided high score in relation to general goals with mean scores 13.807±1.291,13.065±0.970 respectively.

Figure 1: Overall presentation of student attitude toward compatibility of medical teaching strategies with Saudi version



Discussion:

The interest in medical education in Saudi Arabia has correspondingly increased 13. This interest increased especially after vision 2030. The questions was increased about the compatibility of medical education with this vision. So our study interested to assess the attitudes of the internship students to evaluate any defect and trying to change it.

The current study carried out on 1200 new medical graduates from different Saudi universities .Male represented a higher percentage (55.5%) than females (45.5%) .All participants were new internship students who were chosen to have studied all curricula and practiced practical life to be able to form a point of view towards aligning what they studied with the vision.

The results of this research show that more than half of the students participating in the internal clinic represented neutral responses in relation to the study (53.6 percent), this result represent that the medicine college is not interest in increasing student awareness with the mobile clinic and lack of student participation. Mobile medical clinics are valuable models for health promotion, education, and treatment according to Noah Kojima et al 2017, mobile clinics use fewer providers for broader catchment areas compared to conventional clinical models in limited resource areas, particularly appropriate in areas where health care providers are scarce and where patients have broad geographical distribution. [14]

Moreover, the table illustrated that, the majority of the studied intern students represented high score (64.3%) about College of Medicine encourages building the concept of expanding palliative care among students. This finding has returned to the essential aspect of palliative treatment and these findings have been reinforced by the results of a study evaluating the way palliative care has been administered in the United Kingdom between 2000-2013.

29% of medical schools offered palliative education as a separate course that reflected its significance [15]

More than half of the studied intern students represented disagree related to the study at the College of Medicine increases students' awareness to reduce medical costs and burdens. This result may be since most medical curricula focus on practical, scientific and treating patients more than administrative issues.

On the other hand, the findings of this study suggest that studying at the University of Medicine tends to make students more aware of patient-centered care culture. Frenk J et al 2010 endorsed this finding and reported that recently several medical school curricula have been redesigned to assist students in delivering personalized health care [16] Thomas W et al 2018 reported that 'our University has set up an Education Consultative Patient Advisory Board (EAC), which manages the participatory process and which invites patients from their networks [17]

Regarding prevention of health risks more than half of the studied intern students agree about the study at the Faculty of Medicine teaches students to deal with infectious diseases and studying at control non-communicable diseases. This result supports the nature of the College of Medicine in practical interaction and contact with patients. Therefore, at every level of the study in College of Medicine has a part that achieve this goal.

Almost (80.8%) of participant stated that the College of Medicine teaches students to create complete databases to support preventive measures. These findings indicate that students and graduate practitioners have the requisite knowledge and skills for real life practice as the key goals of medical education. Medical computer science is a central component of medical practice and education in the present and future. Ahmed endorsed this outcome. Another study conducted by Albarrak in 2010 stated that students are prepared to use IT resources to improve learning and practice [18].

Finally, the majority of the studied intern students provided average score in relation to facilitating reach to health services (88.7%), improving the quality and efficiency of health services (76.1%) and the general goal while only (58.8%) provided high score related to prevention of health risks. That means that the curricula of College of Medicine on all Saudi Arabia still need to modification to be compatible with vision 2030.

Based on the previous results, the following recommendations can be made. The Colleges of Medicine must increase the participant of the students in the mobile clinics and activate their role toward their

community, update the palliative care as the separate curriculum. Moreover, the College of Medicine must increase the interest with curriculum of medical administration. Finally, preparation a national project on a level of all Colleges of Medicine in Saudi Arabia to analysis all curriculums and measure separately each curriculum's compatibility to vision 2030 as a first step to national modification.

Limitation:

There is no study that has published literature regarding this issue, therefore having limited references in the discussion part.

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