



Research Article

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Future Professionals: Student Satisfaction with the General Medicine Degree Curriculum at University of Prishtina

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Abstract

Our objective is to assess the level of satisfaction of the students of the Faculty of Medicine majoring in General Medicine, in relation to the curriculum. For this study, a questionnaire with 25 questions with 5-point Likert scale answers was conducted. The face validity of the instrument was established through a focus group and expert review. No identifying information was included in the study, using implied consent. A total of 150 General Medicine students were involved in the research. Students are generally satisfied with the General Medicine program, the presentation, and implementation of the syllabus, criteria, and methods for assessment, engaging students actively, group work, developing theoretical competencies, and assistants supervising clinical practice. Students were less satisfied with the levels of training for workplaces, the inclusion of modern teaching methods, the empowerment of creativity in students, the inclusion of scientific research, and the provision of contemporary and adequate literature. There were no significant differences in responses based on grade point average, but there were some differences based on gender. The study findings provide student input into important decisions at multiple levels of governance, starting within the faculty but with implications for broader national policy. As a critical indicator of quality, these student satisfaction measures provide administrators with a basis of evidence to conduct quality improvement, including implications for academic staff development, curricular reform, and future educational research studies.

Keywords: Student satisfaction, Curriculum, Medical Faculty, Higher-education, General Medicine

1. Introduction

Higher education is considered one of the most important issues for a nation's economic, social and individual development. (Dhaqane and Afrah, 2016; Weerasinghe and Lalitha, 2017) One of the primary aims of higher education is to encourage critical thinking, foster innovation, and prepare students to meet new challenges. (Weerasinghe and Lalitha, 2017). As a result, higher education institutions are increasingly striving to fulfill their students' and future employers' expectations and needs (Lindén, and Coate, 2017). Universities are poised to meet the growing social demand for knowledgeable, flexible, and capable specialists who can adapt their professional fields to the needs of the competitive global market. (Razinkina et al., 2018)

1.1 Background

The higher education system in Kosovo has gone through a long process of transition as the nation recovers from an extended period of war and occupation. (Rexhaj 2016) Until 1999, education in [country] operated under the oppressive regime of Serbia, and for a decade, education was banned for the majority of the Kosovo population. In these circumstances, the provision of education was merely a means of subsistence, and issues such as curriculum development and reforms were not even considered, so they were not on the agenda. (Saqipi, 2019) From a destroyed and deeply politicized system in the late nineties, higher education has evolved into a system that strives to provide quality teaching for students and integrate them into the European Higher Education Area. After the war ended in 1999, private and public universities increased access to students, leading to higher enrollments across the board. (Rexhaj, 2016) In 2014, a significant institutional and academic reform initiative was started at the country's flagship institution, the University of Prishtina, (Rexhaj, 2016) has focused on meeting (or exceeding) international educational standards and identifying and learning from evidence based practices and models. (Saqipi, 2019) As the country transitions to a thriving democracy, its institutions of higher education have also come to embrace the value of listening to the voices of students as part of their decision-making processes.

1.2 Student Satisfaction

For the past thirty years, student satisfaction has served as a leading quality indicator for European higher education institutions (Razinkina et al., 2018). In Kosovo, student satisfaction, defined as the extent to which students find their educational experience both pleasing and effective, has taken on increasing priority in the post-war period. (Douglas et al., 2015) The reasons for this priority are two-fold. Sustained curriculum assessment and, by extension, quality control relies on direct measures, such as the evaluation of student artifacts, and indirect measures, such as student satisfaction. (Dhaqane and Afrah, 2016) (Tessema, and Yu, 2012) Secondly, universities in Kosovo vie for students with universities in other countries, which has resulted in increased competition between institutions, linking student satisfaction to customer satisfaction (Weerasinghe and Lalitha, 2017).

Although satisfaction measures have been the subject of criticism among researchers interested in student learning, many international researchers argue that student satisfaction is important in quality improvement efforts. (Razinkina et al., 2018) Research suggests that factors related to curriculum design, active learning, and student-faculty relationships are the strongest predictor of global student satisfaction (Weerasinghe and Lalitha, 2017) (Lo, 2010) (Huynh et al., 2011) Student satisfaction varies by demographic factors, such as age, gender, and employment; academic factors, such as teaching style and goal orientation; and institutional attributes, such as responsiveness and belonging. There is also evidence that student satisfaction varies by national context. (Weerasinghe and Lalitha, 2017) In Finland, for example, students associate satisfaction with research and teaching spaces (Kärnä and Julin, 2015) while in the UK, with lectures and teaching issues. (Douglas and

Barnes, 2006) Perhaps because of these variations, there is no universal standard model for assessing student satisfaction. (Noaman et al., 2017)

1.3 Health professions education

Unlike many other disciplines, the health professions have adapted highly standardized curricula models to maintain consistency in education and patient care. These curricula are subject to internal and external evaluations and are updated regularly to reflect evolving changes and emerging challenges in health care standards (Ahmed and Alneel, 2017). While there are multiple accrediting bodies for health curricula, the World Federation of Medical Education (WFME) has established global standards that inform the work of national and multinational accrediting bodies, and the World Health Organization (WHO) sets similar standards for research and professional development of health care workers. These bodies set standards for all stages of health education and the training of health care professionals, which is a complex task. The inclusion of vast amounts of information in the health sector, the growing complexity of the health system, changing disease patterns and an aging population, globalization, technology, and the rising cost of health care have made it necessary for health educators to be especially adaptive and responsive. (Emadzadeh et al., 2016)

Evidence-based teaching practices support curricular content. Researchers in health and medical education have identified a number of signature pedagogies for the field. perhaps most notably, as problem-based teaching (PBL) which mirrors health care practice. After being introduced at McMaster University in Canada in 1960, PBL (and related practices, such as the case method) have been adapted by many schools of medicine and/or health around the world. The approach is effective across in-class/face-to-face, online, and clinic-based instructional modalities. For similar reasons, health care fields have also been at the forefront of the development of simulation-based learning, including the implementation of innovative technologies to support virtual simulations, a focus that was accelerated with the transition to remote learning and drastically limited opportunities for direct clinical engagement, in the spring of 2020.(Tabatabai, 2020)

1.4 Student satisfaction in health professions education

Studies show that the attention given to curriculum design and development, learning experiences planning, and student learning assessment all significantly impact students' satisfaction. The potential benefits of curriculum renewal are well-prepared students meeting the needs of their patients and society in an increasingly complex health system. (Kulasegaram et al., 2018) (Williamson, 2019). Designing a new curriculum, developing new teaching tools, and training faculty staff to develop new teaching skills is an expensive and time-consuming activity. (Barrows, 1996) Recent trends in curricular reform have emphasized strengthening the link between pedagogical theory and practice to strengthen the value equation of curricular reform. (Brauer and Ferguson, 2015) Conducting a high-level analysis of communication gaps between key curriculum components such as learning activities - technical material, and assessment methods can support critical decisions regarding quality improvement in medical education.(Komenda et al., 2015). Indeed, in multiple national contexts, measures of student satisfaction have served to integrate student voice into the strategic process of curricular redesign. Drawing on this research literature, we posit a link between measures of student satisfaction and improvements in teaching, learning, and student success, as well as potential long-term societal benefits as these students enter the health care workforce.

Kosovo is not the only place where attracting, retaining, and training the national health care workforce is a matter of strategic priority. A 1999 Korean study, for example, encompassed students from 33 of the country's medical schools. (Kim et al., 1970) Their findings indicated relatively low levels of satisfaction overall and included strong recommendations for significant reforms. Other studies of student satisfaction with medical and/or health professions education, especially at the post-baccalaureate level, have emphasized the connections between changes in teaching practice and

satisfaction. In a survey-based study of three medical schools in Turkey, for example, (Gurpinar *et al.*, 2013) demonstrate that satisfaction and deeper learning, especially as practiced through problem-based learning (PBL) are strongly correlated. A 2016 Romanian study further correlated medical student satisfaction not only with learning, but also to wellness factors, such as depression, stress and burnout, all persistent workforce issues in the health care sector. (Zugun-Eloae *et al.*, 2016)

1.5 Student satisfaction in Kosovo

In the past two decades, Kosovo has undergone two major curriculum reforms. In 1999, after the establishment of Kosovo-run institutions under international administration led by the United Nations, Kosovo began to place education reform on its list of priorities. A new curriculum policy was formally introduced in Kosovo in 2001. This curriculum framework aimed to shift the focus from a teacher-centred approach to a student-centred approach. However, the core curriculum remained focused on learning objectives that were content-based. In order to move towards student-centred learning, the Ministry of Education revised the 2001 curriculum by adopting a new competency-based curriculum in 2011. Various faculties were required to revise their curriculum to reflect competency-based outcomes aligned with standards used across the European Union. Historically, these reform movements were supported largely by external bodies (including international donors) and were not driven by in-house professionals. More recently, that locus has shifted towards a practitioner-driven model that focuses on achieving predetermined skills, overshadowing a broader perspective of curriculum goals in terms of the values and attributes that educators aspire to pass on to the next generations of health care professionals in the country---namely, their students. (Saqipi, 2019)

1.6 Objective

The purpose of this study is to assess the level of satisfaction with the curriculum among students of the Faculty of Medicine who are enrolled in the General Medicine degree program at the University of Prishtina. The study seeks to identify sources of student satisfaction and dissatisfaction so that the former can be strengthened and the latter ameliorated going forward.

1.7 Methods

This cross-sectional study is, survey-based research. The survey (see appendix 1) consisted of 25 questions, four demographic questions (age, gender, socio-economic status, and year of study) and 21 5-point Likert scale items. The face validity of the instrument was established through a focus group (n=6 students) and expert review. After making revisions based on the validity process, the survey was sent electronically to all fourth and fifth year students enrolled in the General Medicine program in the Faculty of Medicine for the academic year 2020. No identifying information was included in the study, which was administered using an implied consent process that was approved by the Medical Faculty Council at the University of Prishtina.

Survey data was recorded, checked for logical errors, processed, and analyzed in Microsoft Office Excel software and Statistical Package for the Social Sciences-SPSS. Survey items have been translated from Albanian into English for publication.

Descriptive statistics such as arithmetic mean, standard deviation and proportions were calculated for each survey item. These descriptive statistics are represented in tabular form below. Pearson's chi-square goodness-of-fit test was used in order to analyze the proportions for question; correlation is represented by the Pearson correlation coefficient. Finally, tests of significant difference (t-tests) were calculated between student populations by grade point average (high and low) and gender.

1.8 Participants

The survey had a 100% response rate, meaning that all eligible members of the population (students enrolled in general medicine program at University of Prishtina) participated. An ideal sample size for a population this size (150) is 108, so the results reflect a confidence level of 100% and a margin of error of less than 1%.

2. Results

Of the 150 participating students, 101 (67.33%) were female and 49 (32.66%) were male. In terms of class standing, 75 (50.0%) were fourth year students and 75 (50.0%) were fifth year students. The average grade point average of the total student respondent was 8.5, while for females, it was 8.6, and for males, 8.4 on a five to ten-point scale. High socio-economic status reported 87 (58%) of the respondents, 63 (42%) had average socio-economic status, and none had low socio-economic status. (Table 1).

Table 1: Demographic attributes of Survey Respondents

Modality		Female		Male		Total	
		N	%	N	%	N	%
		101	100.0	49	100.0	150	100.0
Year	4	49	48.51	26	53.06	75	50.00
	5	52	51.49	23	46.94	75	50.00
Average grade	7.0-7.9	11	10.89	10	20.41	21	14.00
	8.0-8.9	57	56.44	29	59.18	86	57.33
	9.0-10	33	32.67	10	20.41	43	28.67
Socio-economic Status	Good	60	59.41	27	55.10	87	58.00
	Average	41	40.59	22	44.90	63	42.00

2.1 Students' satisfaction with the curriculum

Student satisfaction was measured by a scale indicating the extent of their agreement or disagreement with a series of statements regarding the curriculum of the General Medicine branch of the Medical Faculty of University of Prishtina. (Table 2)

Table 2: Student satisfaction with curricular components, General Medicine Degree

Statements	Modalities	N	%
		150	100.00
Your general opinion about this study program is positive	I disagree	15	10.00
	Neutral	57	38.0
	I agree	78	52.0
		$X^2=41.16, p=0.000$	
Course content is presented the beginning of the semester	I disagree	17	11.33
	Neutral	16	10.7
	I agree	117	78.0
		$X^2=134.68, p=0.000$	
The teaching is done in accordance with the syllabus given at the beginning of the module	I disagree	11	7.33
	Neutral	30	20.0
	I agree	109	72.7
		$X^2=108.04, p=0.000$	
The curriculum introduces methods and criteria for student assessment	I disagree	35	23.33
	Neutral	47	31.3
	I agree	68	45.3
		$X^2=11.16, p=0.003$	

Statements	Modalities	N	%
		150	100.00
The curriculum stimulates students to use different sources of information	I disagree	31	20.67
	Neutral	40	26.7
	I agree	79.0	52.7
		$X^2=26.04, p=0.000$	
The given literature is contemporary and adequate	I disagree	57	38.00
	Neutral	43	28.67
	I agree	50	33.33
		$X^2=1.96, p=0.375$	
The curriculum fits the needs of students in the development of theoretical competencies (theoretical knowledge)	I disagree	38	25.33
	Neutral	42	28.00
	I agree	70	46.67
		$X^2=12.16, p=0.002$	
The curriculum fits the needs of students in the development of practical competencies (practical skills)	I disagree	70	46.67
	Neutral	44	29.33
	I agree	36	24.00
		$X^2=12.64, p=0.001$	
The curriculum is designed that exopt technical competencies to prepare students for the job market	I disagree	74	49.33
	Neutral	51	34.00
	I agree	25	16.67
		$X^2=24.04, p=0.000$	
The curriculum has a balance between theory and practice	I disagree	54	36.00
	Neutral	63	42.00
	I agree	33	22.00
		$X^2=9.48, p=0.008$	
The curriculum strengthens students for critical thinking	I disagree	48	32.00
	Neutral	61	40.67
	I agree	41	27.33
		$X^2=4.12, p=0.127$	
The curriculum strengthens students' creativity	I disagree	64	42.67
	Neutral	55	36.67
	I agree	31	20.67
		$X^2=11.64, p=0.002$	
The curriculum is implemented based on what has been published and presented	I disagree	19	12.67
	Neutral	62	41.33
	I agree	69	46.00
		$X^2=29.32, p=0.000$	
The curriculum includes cooperation, communication between students (group work)	I disagree	37	24.67
	Neutral	52	34.67
	I agree	61	40.67
		$X^2=5.88, p=0.052$	
The curriculum includes scientific research work	I disagree	70	46.67
	Neutral	48	32.00
	I agree	32	21.33
		$X^2=14.56, p=0.000$	
The curriculum is achievable within the assigned time of the module	I disagree	19	12.67
	Neutral	61	40.67
	I agree	70	46.67
		$X^2=29.64, p=0.000$	
The curriculum includes the best contemporary teaching methods	I disagree	68	45.33
	Neutral	56	37.33
	I agree	26	17.33
		$X^2=18.72, p=0.000$	
The curriculum includes student-centered teaching methods	I disagree	50	33.33
	Neutral	57	38.00
	I agree	43	28.67
		$X^2=1.96, p=0.38$	

Students indicated satisfaction with the following elements of the General Medicine program: presentation of the syllabus at the beginning of the semester, with the implementation of teaching in accordance with the syllabus presented at the beginning of the module and within the allotted time, presentation of methods and criteria for student assessment, stimulating students to use different sources of information, adapting the curriculum to the needs of students for the development of

theoretical competencies, encouraging active participation and supervising students in clinical practice by assistants. Students indicated satisfaction with collaboration between students (group work) but without significant difference.

Students stated that they were not satisfied with the following survey items: adapting the needs of students in the development of practical skills, training students for the job market, strengthening the creativity of students, the inclusion of scientific research, and the best methods of contemporary teaching. The students expressed dissatisfaction with the currency of literature provided in their course, but without significant differences. Students indicated a neutral attitude towards the following statements: the curriculum has a balance between theory and practice, the strengthening of critical thinking in students, and the inclusion of student-centred teaching methods (without a significant difference).

2.2 Student satisfaction and success

The researchers hypothesized that student satisfaction would be positively correlated with their academic success (as measured by grade point average). The correlation between student success and the evaluation of the questions was weak and negative for the vast majority, while the correlation was weak but positive for the following survey items:

- The teaching is done in accordance with the syllabus given at the beginning of the module
- The curriculum presents topics in weeks
- The curriculum stimulates students to use different sources of information
- Assistants oversee students' clinical practice and
- The curriculum is achievable within the allotted time of the module

The linear correlation coefficient (Pearson coefficient) between students' success, defined as average grade (minimum 5.0-10.0 maximum) and their evaluation for the posed statements (minimum 1-5 maximum), is presented in Table 3. The correlation has been negative and weak for most statements; only three had answers that correlated positively with the respective student's average grade.

As the table reflects, a weak negative correlation was found for fifteen questions and a weak positive correlation for three statements. Secondary analysis indicated that these correlations did not vary significantly by gender. In summary, the data collected did not support the hypothesis of a connection between academic success and satisfaction with teaching methods.

Table 3: Student satisfaction and success, as correlated with survey responses

Statements	Average mark		T-test, DF=148 P-value	Pearson Coefficient (r)	
	Male 49	Female 101			
Your general opinion about this study program is positive	3.57	3.49	0.582	-0.054	
Course content is presented at the beginning of the semester	3.92	4.07	0.423	-0.037	
The teaching is done in accordance with the syllabus	3.71	3.97	0.109	0.071	
The curriculum	introduces methods and criteria for student assessment	3.22	3.34	0.578	-0.009
	stimulates students to use different sources of information	3.39	3.43	0.846	0.007
	The given literature is contemporary and adequate	2.65	3.00	0.091	-0.006
	fits the needs of students in the development of theoretical competencies	3.10	3.30	0.303	-0.036
	fits the needs in the development of practical competencies of students in the development of practical competencies (practical skills)	2.47	2.78	0.097	-.209 [†]
	is designed that except technical competencies to prepare students for the job market	2.51	2.60	0.603	-.169 [†]
	has a balance between theory and practice	2.82	2.79	0.890	-.187 [†]
	strengthens students for critical thinking	2.86	2.94	0.639	-0.124
	strengthens students' creativity	2.71	2.65	0.744	-.174 [†]
	is implemented based on what has been published and presented	3.20	3.46	0.136	-0.020

Statements	Average mark		T-test, DF=148 P-value	Pearson Coefficient (r)
	Male	Female		
	49	101		
includes cooperation, communication between students (group work)	2.98	3.31	0.073	-0.099
includes scientific research work	2.35	2.71	0.053	-0.090
is achievable within the assigned time of the module	3.35	3.41	0.718	0.103
includes the best contemporary teaching methods	2.53	2.69	0.376	-0.054
includes student-centered teaching methods	2.80	3.02	0.226	-0.026

2.3 Student Satisfaction and Gender

Student satisfaction was not correlated with academic achievement, but there were some areas of the survey that registered differences by gender. T-tests of significant difference resulted in p-values that were slightly higher than the standard .05 in some areas, but when effect sizes for these differences were calculated, these registered as medium. A two group t-test with a 5% two-sided significance level will have 80% power to detect a medium effect size (Cohen’s d) of 0,491 when the sample sizes in the two groups are 49 and 101, respectively. (Sullivan and Feinn, 2012)

[Table1]

Overall, students who identified as female were slightly more satisfied than males overall, but especially in areas of the curriculum that emphasized the use of contemporary literature, the integration of practical knowledge, and the use of cooperative learning, such as group work.

3. Discussion

Student satisfaction has been demonstrated to be a key quality indicator for curriculum in the health professions. Based on research conducted at our Medical Faculty of Medicine, the average student satisfaction with the study program turned out to be 3.53 on a five point likert scale. While exact benchmarks for this score do not exist, similar research conducted by the Korean University of Medicine showed the overall satisfaction, and the overall student satisfaction score (n=267) was, on average, 2.69. (Kwon, 2012). It is evident that student satisfaction with the General Medicine program varied, with most students feeling somewhat satisfied with many of the curricular components, but room for improvement remains.

The survey results indicate that the student respondents highly value transparency. Based on our results, 78.0% of the students responded favorably to having the curriculum presented at the beginning of the semester. By comparison, a 2016 study by the Faculty of Medicine in Jordan reported that 44.9% of the students (n=164) had a positive opinion on this issue. (Park et al., 2018) The students at the University of Kosovo reported relatively low satisfaction with assessment practices, with only 45% expressing positive views of the criteria for student evaluation presented in the curriculum. This dissatisfaction does not seem to be specific to Kosovo. The same 2016 study indicated that Jordanian students reported a satisfaction rate of 42.35 % (n=267). (Jaradeen et al., 2012) Our results suggest that instructional practices that facilitate greater transparency, such as assessment rubrics, learning portfolios, and competency-based grading could be constructively integrated into the curriculum.

Medical education is a highly applied discipline with strong connections to national and international labor markets for health care professions. In this study, the responding students expressed broad dissatisfaction with the immediate relevance of the curriculum. Slightly under half of the respondents (49.33%) expressed dissatisfaction with the degree to which the current competency-based curriculum prepares them for the market. This lack of responsiveness was compounded by perceptions of a lack of currency in the subject matter, including limited access to recent research, which is an important factor in student satisfaction in other national contexts (Kärnä and Julin, 2015). In this study, only a small percentage of the students (21.3%) stated that scientific research is

included sufficiently in the curriculum. These findings suggest the need to further strengthen connections between the university curriculum and the nation's health care industry, perhaps under the auspices of the National Institute of Health, in which many of the professors in the Faculty of Medicine have joint appointments.

It is perhaps not surprising to learn that the student responses reflected a weak correlation between effective teaching practices and student satisfaction. That correlation could be negative, as only 17.3% of the student respondents agreed that their curriculum incorporates contemporary teaching methods. It is possible, however, that this survey item may be subject to issues in construct validity, as the phrase "contemporary teaching methods" was not defined, so it is unclear exactly which teaching practices this refers to or how the students might have variously interpreted this phrase. The lack of consensus on pedagogical terms may also explain the significant number of neutral responses to these questions. Satisfaction with student-centred teaching overall was clearer, with 33% of respondents expressing dissatisfaction with this measure. Because of construct validity issues, the implications to be drawn from these findings are somewhat ambiguous. From how the question is phrased, it is unclear if students are expressing dissatisfaction with a lack of integration of these teaching practices or with contemporary teaching practices themselves. This finding suggests the need for future research on the pedagogical literacy of students and instructors in the Faculty of Medicine.

These results also provide indirect support for the need to adopt student-centred teaching and provide opportunities for students to become more directly engaged in decisions about their education. The relatively high dissatisfaction with and/or indifference to higher order learning outcomes, such as critical and creative thinking provided by the current competency-focused curriculum, provides space for constructive dialogues between students and faculty. If sustained, these conversations could even contribute to the development of co-created curriculum and student-staff instructional partnerships.

These partnerships may be facilitated by shifting gender roles, both within the student body and in health professions more broadly in Kosovo.

It should be noted that over half (67%) of the students enrolled in the General Medicine degree program identified as female. This is noteworthy because after the war, it is noticeable an increase in the ratio of females in the medicine profession. (Fisher, M. L., & VanRooyen, M. J., 2004). The findings of this study suggest that students who identify as female may have different criteria for satisfaction that differs both from their male contemporaries and from historical (and male-dominant) precedent.

Previously, prolonged conditions of war and occupation had shifted the country's demographic profile towards a female majority, but that majority, and the population levels overall, have been eroded by persistent levels of external migration. For these reasons, it has become a matter of national importance to attract and, perhaps most importantly, retain young people, of both genders, in key economic sectors such as health care. In other words, student satisfaction with effective instruction, as measured in this survey, may play a critical role in the country's future.

4. Conclusion

For over fifty years, the Faculty of Medicine at the University of Prishtina has graduated health professionals who serve in Kosovo and around the world. As such, the faculty serves as a strategic bridge between the university and the health and well-being of the country's citizens.

The findings of this study are intended to provide student input into important decisions that are made at multiple levels of governance, starting within the Faculty but with implications for broader national policy. As a critical indicator of quality, these student satisfaction measures provide administrators with a basis of evidence to conduct quality improvement, including implications for academic staff development, curricular reform, and future educational research studies.

Our findings indicate that students in the General Medicine program are generally satisfied

with the structure and transparency of the curriculum, with some differences by gender. Both males and females indicated that they would like to see changes made to increase the relevance of both the pedagogy and content of that curriculum. Contemporary health care is a complex and dynamic field, making the task of aligning educational achievement with current practice a constant work in progress, but our study suggests that the process can be enhanced through the inclusion of the voices of future health care professionals, i.e., the students, as critical stakeholders in their own education.

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