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Research Article

Evaluation of Professional Behavior in Medical Students: Our Experience at a Medical Institute in the Kingdom of Saudi Arabia

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Abstract

Purpose: To evaluate the implications of imparting professionalism to medical students through a structured, credit-bearing course on professional behavior within the medical curriculum.

Methods: This retrospective study focuses on the academic cohort of medical students from the 2018-2019 academic year. At the outset of their university experience, students are introduced to the foundational philosophical concepts of professionalism in healthcare, accompanied by clear guidelines for adhering to rigorous standards of professional behavior. This emphasis on professionalism is systematically reinforced throughout the medical program, with pre-designed grading criteria applied consistently across all years of study. Tutors are informed about these grading standards and receive training through faculty development sessions. Each tutor grades a group of students with whom they have direct contact during the block, cluster, or rotation.

Result: We observed that the grades for professional behavior tend to improve with each successive academic year in the medical program. Statistical analysis indicated that there is a significant difference in professional behavior between the first year and the fifth year, with a p-value of 0.008 and 0.007 for the male and female respectively. This suggests that the students have shown meaningful improvement in their professional behavior. However, the highest number of critical incidents related to professional behaviour was noted in male students. Nevertheless, the overall performance of students did not show any significant findings.

Conclusion: The effectiveness of teaching professional behavior through a structured course has been observed at Sulaiman Al Rajhi University in the faculty of medicine. We strongly advocate for this approach to instil and achieve high standards of professionalism in medical graduates.

Keywords: Professional Behaviour; Medical Study; Professionalism; Education; Saudi Arabia

Introduction

The Humanism project, launched by the AIBM in the early 1980s, paved the way for Project Professionalism in the 1990s within the realm of medical education [1-3]. As a result, professionalism has garnered increasing attention in both undergraduate and postgraduate training programs [4-7].

In 1999, the Accreditation Council for Graduate Medical Education (ACGME) established a set of general competencies to be integrated into residency and fellowship training programs. Among these six competencies is professionalism. Concurrently, the American Board of Internal Medicine Foundation (ABIMF), the American College of Physicians Foundation (ACPF), and the European Federation of Internal Medicine (EFIM) initiated the Medical Professionalism Project (MPP) [8]. Professionalism is also recognized as a fundamental competency for undergraduate medical education in the CANMEDS framework, which has since been adopted by Saudi-MED [9].

Competence in the workplace entails the deliberate use of communication skills, knowledge, technical skills, clinical judgment, emotions, values, and self–reflection with the purpose of improving the life of an individual or the community at large. Epstein and Hundert [10] made an effort to provide some definition of the meaning of the concept of professionalism with an emphasis on the responsibility to display the professional demeanor expected of physicians and medical instructors. Professionalism is rooted in the medical model, defining a set of knowledge and ethical standards, regulation by the profession, and agreement with society. The professionalism charter identifies three key principles: The components for the foundation are the welfare of patients, patient self-determination, and social justice [10].

Definitions of Professional Behavior (PB), both empirically and prospectively derived, are abundant. Various methodologies have produced empirical definitions of professionalism, as evidenced in the literature. For instance, a survey conducted with over 1,500 participants identified 87 positive and 29 negative qualities associated with physicians, many of which pertain to professionalism. Consequently, recognizing unprofessional behavior in medical education can be complex and multifaceted, thereby requiring careful consideration of appropriate standards of professionalism [11]. Furthermore, the application of critical incident techniques has highlighted five non-cognitive skills integral to professionalism. A process of normative consensus has delineated 13 traits associated with professional conduct [12-14].

The Saudi-MED framework delineates the essential competencies (Learning Outcomes) required of physicians within medical education and practice in Saudi Arabia. All undergraduate, postgraduate, and continuous professional development programs are expected to meet these outcomes [15]. PB, like other competencies, must be acquired through various methods, including role modeling. One of the most effective ways to teach any behavior is through the process of feedback. If a student does not receive feedback regarding their performance, they remain unaware of potential shortcomings and lack the opportunity for improvement. Simultaneously, if trainers do not recognize the importance of providing feedback, they are unlikely to offer it [15].

In this study, professionalism in medical students is regarded as a critical competency sought after in numerous graduate training programs. This emphasis occurs due to increasing cases of misbehavior amongst the students of medicine as well as other healthcare professionals [16]. For this problem, some of the many possible causes may be noted, however, there is no comprehensive, systematically developed course on the professional education of students. Inadequate working standards from the side of health care providers is one of the most severe threats to the effective provision of health care services. Indeed, this implies that even in a situation where adult patients need care they receive neglect, and disrespect from the healthcare workers and this is rather worrying. This necessitates the need to find ways of enriching professionalism training in order to boost the communication experiences that patients get within clinical contexts [17].

While students entering a medical institution may have an informal understanding of what constitutes professional and unprofessional behavior, it is essential to emphasize the growing significance of PB within the medical field [18,19]. Furthermore, as students are assessed, graded, and awarded credits for the PB program, they should be formally introduced to and taught the concepts and principles of PB starting in their first year of medical education. This early exposure will facilitate a deeper integration of these principles throughout their studies [20,21].

A course with credits requires formal and organized assessments, which can be challenging when it comes to assessing professionalism. PB is about actions and attitudes, and while it can be evaluated qualitatively (like through observations), turning that behavior into numbers (quantifying) is complicated. The main goal of teaching professionalism is to spot mistakes and help students improve [21]. Therefore, the focus should be on formative assessments, which allow for ongoing feedback and improvement, rather than just final assessments that don't offer chances for students to learn from their mistakes.

The PB course teaching centers around a system of regular individual feedback throughout academic year and periodic evaluations and grading as we strongly believe in the "Assessment drives learning" idiom. We are convinced that this rigorous combination of formative and summative assessment over a period of 5 years of the MBBS program functions in a spiral way sequentially reinforcing concepts, attitudes and behavior patterns that contribute to a high standard of professionalism as health care professional after graduation. Professioanlism is considered as one of the corner stone competency identified by national and international stake holders.

The aim of this study was to perform a retrospective evaluation of the cohort to assess the effectiveness of the teaching and assessment methods used for cultivating professionalism among medical students at Sulaiman Al Rajhi University's College of Medicine through an organized PB course. Additionally, the study sought to identify areas for improvement within the PB course. Accordingly, the null hypothesis (H_0) states that there is no difference in PB course grades between last-year and first-year students.

Literature Review/Related Work

Professionalism is now considered as one of the defining features of the medical graduate making it important to develop a curriculum to impart the values. This should include topics to be delivered in all the years of training, including internships, teaching hours, methods, and assessment modes for the curriculum. However, since professionalism largely involves changes in attitude, therefore formal knowledge has to be taught in parallel with informal knowledge [22].

Sarraf-Yazdi., *et al*. [23] discussed that professional identity (PI) consists of the qualities, beliefs, values, and ideals that individuals consider important. While some aspects of identity remain constant, it is continually evolving, with different elements gaining or losing significance over time. PI is understood as the comprehensive knowledge that individuals in the medical field have regarding appropriate behavior for their profession. The process of PI, as defined by Holden., *et al*. [24], describes the transformation from a layperson to a physician. This study indicates that PI is influenced by the attitudes adopted by medical students toward their assigned roles and responsibilities in various contexts and experiences. The developmental journey encompasses multiple factors, including sociocultural, familial, academic, moral, religious, and gender-related values and responsibilities. Such complexity highlights the challenges faced by medical schools in designing and improving their strategies for promoting PI [21].

This means that the professionalism of the doctors is very crucial if quality health care is to be provided. Interestingly, for physicians, not only is it desirable to act professionally, but it is an extreme necessity in order to deliver safe treatment and improve care results [25]. Medical schools have a major task of preparing the students for their future roles and in those roles, they are not only expected to guard their professionalism but also maintain the integrity of everyone else in the profession.

Mak-van der Vossen., *et al*. [26] important research explains that unprofessional behaviour during medical training correlates with similar behaviour in physicians hence allowing unprofessionalism in the education field is intolerable. Current educational models include professionalism in their teaching and evaluation forms yet educators continue to witness students' lack of professionalism [27]. As the attempts to introduce professionalism as an assessment criterion in medical education continue, teachers note unprofessional actions in approximately one-fifth of students but inform only three to five percent [24,27].

Undergraduate medical students' misconduct can be personal, social, or external and may be directed toward peer counterparts, academic staff members, inter-professional teams, and/or patients. Since lapses in professionalism are part of the learning process, educators should be ready to address them properly. Allegorically the hidden curriculum has always proven to be

far more comprehensive in teaching professionalism than the planned curriculum. If educators allow unprofessional behavior to go unchallenged, they reinforce it by giving a green light to such conduct. Furthermore, if a student fails to meet professional standards and receives a low grade for unprofessional behavior, it remains unclear how to help the student improve their performance, which can be time-consuming for the faculty [28].

To become professional, medical students need to earn the trust of fellow students, professors, tutors, and, patients. Professional identity formation involves getting the knowledge, skills, and judgment, and developing unprofessional behaviors may suggest the need for direction in this process [29]. Respectively, professionalism standards vary from medical school to medical school and must be defined to be changed before graduation. PB is usually evaluated through performance checks, observational checks, critical incidents, and routine checks. Serious unprofessional behaviors, like harassment or plagiarism, require immediate punitive action [30].

In 2017, Sternszus., *et al*. [31] conducted 16 semi-structured interviews with clinical teachers from eight specialties at McGill University, facilitated by a research assistant. The purpose of this research was to learn about the ways in which clinical teachers gauge their contribution to the construction of a student's professional self. The interviews took place in 2017 with 16 clinical teachers from 8 specialties at McGill University by a research assistant. Respondents claimed they could not help thinking about the professional identity of students who pass through their classes without thinking about their professional identity. When made aware, clinical teachers realized that professional and personal dimensions are intertwined, and they believed that caring for patients was essential in shaping their professional identity. They identified specific ways to influence students, including modeling, challenging, facilitative, endorsing, and probing. To the authors' knowledge, this is the first study to explore professional identity formation from a clinical teacher's point of view [31].

Medical Professional behaviour refers to the values, behaviour, and attitudes of medical professionals that relate to the formation of professional-client relationships, public credibility, and patient care. As a result, there is no specific route that can be adopted, since the teaching of MPB varies from one culture to the other as well as from one context to the other. Another study by Guraya., *et al*. carried out in Ireland [32] was focused on assessing undergraduate medical students' knowledge of MPB using e-TBL. Establishing the studies based on sociocultural learning the researchers participated in three e-TBL sessions on the topic of cross-cultural communication, health inequality, and professional conduct. They collected and analyzed qualitative data from team discussions, resulting in four key themes: first attributable professional conceptions, paradigm-shifting experiences, more specifically social visions of professional practice, and the process of generating a new professional identity**.** This research expands knowledge about the perception of medical students regarding the theme of professionalism and identifies themes that can aid in developing teaching approaches for medical professionalism, preparing students to face various socioeconomic and cultural challenges as future doctors [32].

To address the issue of teaching professionalism in medical education, there needs to be a well-structured curriculum focused on this important topic. Currently, medical students learn about professionalism primarily through role modeling, and observing how their teachers interact with patients. While this method can be somewhat effective, it is insufficient on its own, as it is often vague and lacks a clear way to assess how well students are grasping these principles, ultimately undermining the objective of teaching professionalism.

However, to achieve a qualitative improvement in medical training, there is a need to develop an integrated curriculum. This curriculum should integrate professionalism training throughout all years of medical education, ensuring that it is not just a one-time lesson but a continuous part of the learning process. This includes professionalism, which is a useful component in internship practices since learners may practice what they have been taught [3-5].

Methods

This study employed a retrospective design to evaluate the effectiveness of the Professionalism and Behavior (PB) course among a cohort of medical students from the 2018-2019 academic year.

A total of 98 (male = 35, female = 63) students were enrolled in the first year of their medical study, which has decreased to 89

(male = 27, female = 62); 82 (male = 26, female = 56); 77 (male = 24, female = 53), and 74 (male = 22, female = 52) in the second, third, fourth, and final years of their medical study, respectively. This study followed single academic generation/cohort, failing students from the previous year/cohort were excluded from this study.

At the time of their university admission, students were introduced comprehensively to the philosophy and concepts of professionalism in healthcare practice. They also learned about the PB course, which was implemented throughout years 1-5 of the medical program. Students received direction and guidance to ensure compliance with the standards established by the PB course, including its assessment methods, grading criteria, and the impact on their GPA as they progressed through the academic program.

The teaching and assessment of professionalism were primarily conducted through the introduction of "ground rules" at the beginning of each course, the provision of periodic feedback on PB during academic sessions, and the arrangement of fixed individual meetings with each student and their tutor twice per course, referred to as "Preliminary and Final Meetings." In these meetings, three principal domains of PB were addressed: (A) work management, (B) interpersonal relations, and (C) self-management. Each domain was further itemized with a set of relevant questions. Students were prompted and encouraged to engage in self-reflection regarding their PB across the three main domains, commenting on their strengths and weaknesses.

During these meetings, qualitative feedback was provided by tutors, and scores were assigned to students based on each item within the three main domains of their behavior. The criteria for these meetings and feedback were specifically designed for assessment purposes and remained consistent for medical students in years one through three. Minor amendments were made for medical students in years four and five, reflecting their clinical rotations. Designated "PB assessment forms" were utilized for each course taken by the students, encompassing both regular and longitudinal courses held throughout the academic year. After the academic year, the final grade for the PB course was calculated based on the aggregation of all PB course grades. Figure 1, illustrates the overall assessment method and execution plan of PB assessment.

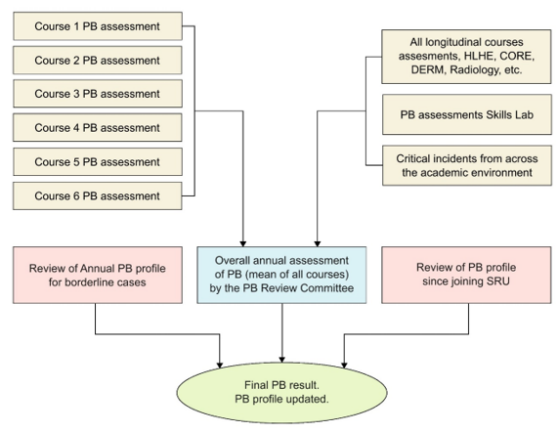

Figure 1: Flowchart, illustrating the complete method of PB assessment in SRU.

For the study purpose, all students from a single academic generation were included in this cohort. Furthermore, after every two blocks, groups were shuffled, and they were assigned to the other tutor. Moreover, the indicators used were very clear and concise, preventing unwanted overlaps. The simple model of the study also reduced any possibility of bias.

The final assessment of PB for each course is graded using a rubric comprising up to 15 items, with scores ranging from 1 to 3. A score of 1 is assigned if there are two or more minor lapses in behavior, while a score of 2 is given for a single minor lapse. A score of 3 indicates the absence of any negative observations regarding behavior. With a total of 15 items, the maximum score attainable is 45. In the clinical years, the total score increases to 48 to accommodate additional aspects of professionalism expected in years four and five. The PB grade is then calculated based on following specific arbitrarily cutoff values.

Grade A+: Score in between 43-45,

Grade B+: Score in between 40-42,

Grade C+: Score in between 37-49,

Grade D+: Score in between 34-36,

Grade Fail: Score ≤ 33.

The calculated percentages of grades and the total number of students were entered into a standard Excel spreadsheet for the

purpose of analyzing graphs and summarizing the data. A t-test is conducted to analyze the differences in grades between genders over multiple years. This test will determine whether there are statistically significant differences in PB between male and female students across various periods. By comparing the mean grades for each gender, the t-test will help identify whether gender consistently impacts grades over the years suggesting their overall performance in the medical study.

Result

In this retrospective study, the academic cohort of 2018-2019 was evaluated for their assessment of PB in medical education. The overall percentage of grade distributions was analyzed and presented in Figure 2. In the first year, the percentage of "A+" grades stood at 78%, steadily increasing 97% by the end of their medical education. The occurrences of grades B+, C+, and D+ significantly declined during the first three years, with very few instances of B+ and a couple of D+ observed in the fourth year. Notably, the percentage of failing students decreased to zero in the clinical years. Figure 2 clearly illustrates that the overall integration of the PB course with their medical studies contributed to a marked improvement in students' professionalism and behavior as they progressed through their education. The blue color rectangle shows the overall average grade of the cohort 2018-2019.

Statistical analysis; Table 1, of the data presented in figure 2 underscore the effectiveness of the PB course in fostering professionalism among medical students. Analysis of 1st year and 5th year data suggested significant improvement in their professionalism from the start of their medical study by the time they finish their study. The average score increased from 3.48 in the first year to 3.96 in the fifth year, for male and for female 3.56 to 4.00. The SPSS measurement reflects a statistically significant improvement with a *p*-value of 0.008 for male and 0.007 for female. This suggests that the cohort have shown meaningful growth in their PB over this period of their medical education. Thus, both groups showed positive changes in their PB, and it indicates a clear trend of development in professionalism, which is likely to carry over into their future careers. Hence forth bases on this result we reject our null hypothesis (H_0).

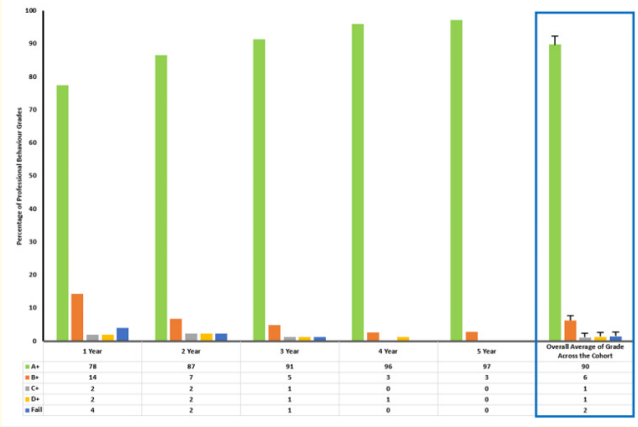

Figure 2: The percentage of PB grade across the cohort in each year.

Group	Mean (1 Year)	Mean (5 Year)	Difference (1 Year - 5 Year)	*P*-Value	Significance (α = 0.05)
Males	3.48	3.96	-0.48	0.008	Statistically Significant
Females	3.56	4.00	-0.44	0.007	Statistically Significant

Table 1: Comparison of First-Year and Fifth-Year Performance.

In Figure 3, the cohort was evaluated, comparing male and female students in terms of the percentage of grades achieved in this course across all medical years. A significant number of students received A+ grades throughout their academic studies, with 180 males (92%) and 197 females (86%) achieving this distinction. The percentages of both males and females receiving B+, C+, and D+ grades were notably reduced within the cohort, and the incidence of failing students diminished as the university program progressed.

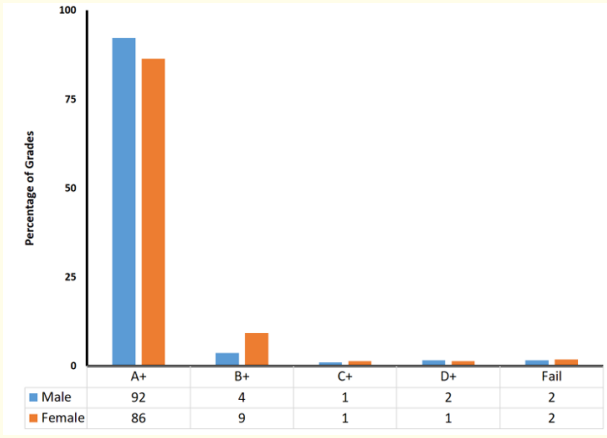

Figure 3: The percentage of PB grades across the cohort in comparison to male and female students.

The following Table 2, represents a statistical analysis of the data in figure 3. In comparison of PB scores between male and female across different grades over five years. Each grade (A+, B+, C+, D+, Fail) lists the total scores achieved by male and female, along with their respective mean scores and standard deviations, which reflect the variability of scores within each group. The pooled standard deviation combines the variability of both groups. The p-values, calculated for each grade, indicate the probability of observing the data under the null hypothesis of no real difference. In this case, all p-values exceed 0.05, suggesting that the observed differences in PB scores between male and female are not statistically significant. Therefore, we can conclude that overall performance of the cohort gives no strong evidence of a meaningful difference in PB between the two groups across the observed grades.

Grade	Male Total	Female Total	Male Mean	Female Mean	Male SD	Female SD	*P*-Value	Significance (α = 0.05)
A+	180	197	36	39.4	10	12	0.634	Not Significant
B+	6	20	1.2	4	1	3	0.071	Not Significant
C+	2	3	0.4	0.6	1	1	0.757	Not Significant
D+	2	3	0.4	0.6	1	1	0.757	Not Significant
Fail	3	4	0.8	0.8	1	1	1.000	Not Significant

Table 2: T-Test Results for Male and Female Across Grade Categories (Years 1-5).

One of the key parameters in the professionalism and PB course is the reporting of "critical incidents." These incidents are documented by individual faculty members for any academic activity and denote significant lapses in behavior during the medical program. In this cohort, a total of 22 such incidents were reported, with 19 attributed to male students and 3 to female students, as shown in Figure 4. A year-wise analysis revealed that the majority of incidents occurred in the first year, with 8 incidents reported for males and 3 for females (Figure 4). However, the overall number of incidents decreased as students advanced through their medical studies. Notably, no incidents were reported during the academic year 2021, likely due to the impact of the COVID-19 pandemic. It can be conclusively stated that there is an increase in student awareness, and they have become more vigilant in adhering to high standards of professionalism as their medical education progresses. This enhanced awareness will undoubtedly be reflected in their future professional conduct.

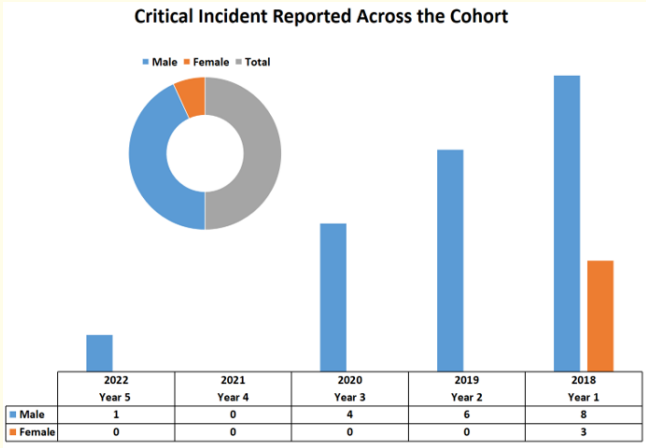

Figure 4: The histogram showing the number of critical incidents reported each year in the cohort.

Discussion

Professionalism in traditional medical education primarily relied on "role modeling," whereby values and behaviors were "transferred" from educator to student. This approach rendered the concept of professionalism somewhat nebulous for many medical students. The lack of a structured methodology for imparting this essential competency resulted in considerable variability in the understanding and practice of professionalism among medical graduates. By the turn of the 20th century, numerous medical institutions recognized this deficiency and sought to address it. A survey of U.S. medical schools conducted for the academic year 1998-1999 revealed that, although 89.7% of institutions provided some form of instruction on professionalism, only 55% implemented any formal assessment of this critical competency [33,34].

Medical literature has unequivocally demonstrated a strong correlation between students' unprofessional behavior during their university education and the subsequent likelihood of similar conduct in their healthcare practice [35]. Consequently, the instruction of Professionalism has become a vital component of the medical curriculum, with relevant concepts and teachings integrated to uphold professionalism among medical students [15,36].

National frameworks guiding medical curricula globally have recognized Professionalism as a fundamental competency. Within the Saudi MED framework, professionalism is identified as one of six essential domains of competencies for healthcare practitioners, and it has been embraced by various institutions throughout the Kingdom [37].

We performed statistical calculations and found that for male, there is a statistically significant difference in professional behavior between the first and fifth years, with a p-value of 0.008, leading to the rejection of the null hypothesis. In contrast, for female, the difference is not statistically significant, as indicated by a p-value of 0.154, resulting in a failure to reject the null hypothesis. These findings align with existing literature emphasizing the influence of environmental factors, teaching methodologies, and personal motivation over gender in shaping professional behaviour. For instance, a study by Alshammari., *et al*. [38] found that effective mentorship and access to resources significantly enhance medical students' PB regardless of gender. Moreover, research by Hendelman., *et al*. [39] suggests that PB in medical students is impacted by a supportive learning environment, which is crucial for fostering competencies and academic success. Another study conducted by McGurgan., *et al*. [40] aimed to understand how preclinical and clinical students in Australia and New Zealand perceive professionalism through a secure web-based survey. The findings revealed that students encountered various professionalism challenges and had differing views on acceptable behaviors, which remained consistent regardless of seniority or the type of healthcare personnel involved. However, the study identified significant effects based on gender and stage of study, with male students and those in their final year being more likely to have different professional attitudes. Therefore, this analysis underscores the importance of creating equitable opportunities for all students, as the factors contributing to PB and academic outcomes in medical training are multifaceted and not solely dependent on gender. Addressing these elements can improve medical students' professional development and competencies.

The instruction and acquisition of Professionalism present significant challenges, but the assessment of PB is even more complex, with relatively few institutions incorporating a formal

evaluation of Professionalism into their curricula. Stern emphasized the necessity of measuring any competency, asserting, "If it can't be measured, it can't be improved," and "They don't respect what you expect; they respect what you inspect" [41]. Consequently, tutors undergo extensive training in teaching and assessing PB. They recognize the importance of fostering Professionalism through "role modeling" and mentoring throughout the educational process. Stern in the study identified that for competencies to be enhanced, they have to be quantifiable. The role of assessment in education is also underlined in the study. Also, it stated that tutors are well trained in the teaching and evaluation of PB and also recognized the importance of good role models and mentors in the promotion of Professionalism among the students.

According to Murphy., *et al*. [42], when assessed qualitatively by trained evaluators, Insightful Practice (IP) effectively captures medical students' professionalism and appropriately guides their training. This assessment emphasizes accountability among students, as it is based on evidence of their demonstrated performance. Both students and teachers support this system due to its positive impact on professional development and the quality of feedback from the medical school. The findings of this study also suggest that this framework may enhance educational support, professionalism, quality, and the necessary assistance for patient safety. Making a healthcare career is challenging and there are certain issues mostly work-related and some with personal and health concerns. Instead of just focusing on those who are not performing well, it's important to create a system that helps support professionalism during training and practice. Since healthcare is a special job, it's important to keep monitoring progress during training and throughout careers to ensure that practitioners feel professional and valued. The study presents a simple Feedback Improvement Tool (FIT) to help students think about the feedback they receive, showing it is useful during training. The findings confirm the usefulness of developing a support and tracking system for students' professionalism deficits and decent feedback and the necessity to improve feedback arrangements during training. A system that relies on vague or limited feedback can be easily challenged by students who are considered underachievers. Incorporating independent feedback into a single data set allows for a qualitative evaluation of the information provided and helps focus on correcting mistakes based on students' responses. The study also emphasizes the importance of properly training assessors, as an accurate assessment system is crucial for effective evaluation [42].

At Sulaiman Al Rajhi University in the Faculty of Medicine, we have integrated PB instruction into the medical curriculum, spanning from the first to the fifth year of the program. A total of four credit hours are allocated for the first three years, while two credit hours are designated for the fourth and fifth years, thereby making a substantial contribution to the overall GPA. This instruction is delivered through a combination of foundational concepts presented in regular interactive lectures and ongoing qualitative and quantitative individual feedback provided throughout the academic year and the entirety of the five-year medical program.

The course is not only delivered in a well-organized and structured manner, seamlessly integrating with each academic module, but it also features a comprehensive assessment plan that incorporates extensive feedback and grading based on clearly defined rubrics. Assessments are conducted multiple times throughout the academic year for each course, and students are required to complete an annual formative quiz on PB. The numerous assessment opportunities provided by various tutors enhance the objectivity, validity, and reliability of the evaluation process. Nonetheless, there have been documented controversies regarding its assessment [43]. However, in certain instances, regular evaluation is recommended [44].

Over the years, we have observed the efficacy of this approach, as students have demonstrated a solid understanding of professionalism and its standards [45]. Notably, students have exhibited marked improvement across all domains of professionalism as they progress through the medical program. The assessment format reinforces the principle that "assessment drives learning," as students receive qualitative feedback and grades at multiple assessment points. Consequently, the notion that assessment drives learning has become an indisputable reality. Furthermore, PB has been identified as an educational strategy necessitating ongoing evaluation and enhancement [46].

Conclusion

The practice of modern medicine is rigorously regulated and requires exceptionally high standards of conduct. It is essential

that students, as future healthcare professionals, receive early training in professionalism throughout their medical education. A structured and organized course is an effective means to cultivate this essential competency. Furthermore, the current teaching and training methods for PB are often insufficient; thus, it is critical that students be evaluated on their professionalism. As the adage goes, "They do not respect what you expect; they respect what you inspect." Additionally, it is widely acknowledged that "assessment drives learning." Our approach, which employs a combination of summative and formative assessment tools to evaluate professionalism, integrates observation, feedback, and grading based on clearly defined rubrics. This method has proven to be effective, contributing significantly to the learning process.

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