

EDUCATION

Implementation of Different Initiatives to Develop a Culture of Professionalism in the Medical School

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Different initiatives have been implemented in the Professionalism Program of the San Juan Bautista School of Medicine to develop in the students a culture of professionalism and to promote moral, ethical, altruistic, and humanistic values. The Program was incorporated into the curriculum with the fusion of medical ethics, public health, legal medicine, and the history of medicine. The principal objective of the present study is to evaluate the implemented initiatives of the Professionalism Program which begins during the first year with the White Coat Ceremony, and culminates at graduation with a Humana Award given to the graduate that develops the highest degree of professionalism. The implemented initiatives were evaluated with a final written exam, and an assessment using an anonymous questionnaire. The median course

grades for first and second year students were 92 and 94 percent respectively. In terms of the assessment, both groups in medical ethics demonstrated that they had acquired 92 percent of the competencies. The topics discussed in public health helped both groups to see the patients as a biopsychosocial entity; in legal medicine the first year group acquired 95% of competencies, while the second year achieved only 76 percent; regarding history of medicine both groups agreed that it is relevant in their career. Based on the results of the assessment, and grades obtained through written examination and other evaluation tools, it can be concluded that the initiatives of the Professionalism Program have been beneficial to the students in developing a culture of professionalism.

Key words: Professionalism, Culture, Curriculum

Professionalism involves attributes that characterize the medical doctor, which include being altruistic, knowledgeable, skillful and dutiful, behaviors which are applied in service to patients and community (1-3). There is an eminent threat to professionalism today due to the clash that has occurred between traditional values and the marketing of medical services. Increased patient awareness, changing expectations, increase in health care costs and empowerment of patients are factors involved in 21st century medicine. In 1999, the European Federation of Internal Medicine, the American College of Physicians and the American Society of Internal Medicine (ACP-ASIM) and the American Board of Internal Medicine (ABIM) combined efforts to launch the Medical Professionalism Project (4-5). In 2002, the American Association of Medical Colleges (AAMC) took a serious step in moving towards the concept of Professionalism, and recommended the inclusion in the medical curriculum of the attributes of a medical doctor described in the 1998 Medical School Objective Project (MSOP) (6). The medical doctor has

the professional responsibility of improving the quality of medical services; he/she should be trained to understand the new factors affecting the relationship between physicians and patients, and between the profession and the industry of medicine (7). Reflective writing from medical school graduates have demonstrated that physicians must regain their humanity after completion of their training (8). Ethics education varies among U.S. medical schools and it has been demonstrated that it is heterogeneous in both content and extensiveness. Although some ethics is included in courses at several medical schools (9-13), at other institutions a formal course has been established (14-15). The study of arts through seminars has been another approach to incorporate humanistic attitudes into the medical school. These seminars are important to encourage students to become more sensitive, effective, caring doctors, responsive to the needs of patients and community (16-21).

San Juan Bautista School of Medicine, conscious of its responsibility for professional competence, and due to the fact that is a Community Based Institution, expects to prepare medical students to better serve the community with high standards of Professionalism.

We evaluated professionalism and ethics in the medical curriculum. A Program of Professionalism, which includes ethics, was written, introduced and assessed in the curriculum of the Medical School with its corresponding

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educational objectives. The initiatives were introduced into the four year curriculum at the basic science level by designing formal courses, while in the clinical levels the initiatives were covered by lectures and conferences.

After the implementation of the Professionalism Program we wanted to evaluate whether the students changed their professionalism and ethical conduct. The reactions of students to the implemented initiatives were assessed by an anonymous voluntarily questionnaire, appraisal through the evaluation of students by faculty, and through written examination based on learning objectives of the course. All initiatives were evaluated and the grades obtained were part of the course final grade.

Methods

The Professionalism Program was designed for both basic and clinical sciences. The courses of the basic sciences assign a grade percentage to professionalism behavior. In clinical sciences, lectures on professionalism topics are included in the different clinical clerkships.

The Professionalism Program begins with the White Coat Ceremony. At this Ceremony, a lecture related to the importance of professionalism in the medical career is presented by a distinguished medical doctor of the community, titled "What does it mean to be a good doctor?". The lecture is followed by the investment of the new students with the white coat, and ends with the Student's Hippocratic Oath.

As part of the Professionalism Program, the first and second year students are exposed to different topics: medical ethics, public health, legal medicine, history of medicine and community medicine. Different educational strategies were used with both groups including small group discussions (5-7 students), interactive lectures, case analysis, written exercises, reflections on assigned readings, and Journal Clubs.

In the first year, another strategy used was to assign a group of 7-8 students to a professor of basic sciences who is responsible for the evaluation of the professional attitudes of the student in the academic environment throughout the year. The second year medical professionalism course concentrates on ethics and professionalism as well as relationship to patient care, community approach and regulations of medical practice in Puerto Rico.

In all of the Basic Sciences courses it is required to include in their evaluation a grade percentage for professional behavior. This evaluation is performed twice during the semester using a standardized institutional form; the first is a mid-term formative evaluation in which the professor offers feedback to the students, and includes a narrative description of professional behavior.

The percentages included are for the first year: Developmental and Clinical Anatomy 2%; Histology/Cell Biology 2.5%; Biochemistry 3%; Clinical Skills and Community Engagement 5%; Research 2.5%; Neurosciences 3%; Medical Physiology 6%; Immunology 5%; Professionalism I and II 15%; for the second year: Microbiology 2.5%; Human Behavior 5%; Psychiatry 5%; Clinical Skills and Community Engagement 10%; Professionalism III and IV 10%.

The final grade of each course includes a summative evaluation of professionalism conduct, which is obtained from written examination, small group discussions, oral presentations, written reports, reflective writings, and peer and self evaluations. Professionalism in the community service is appraised through a written evaluation made by the professors and the community. The information is gathered by course coordinator and included in the corresponding percentage assigned in the basic sciences courses.

An assessment of the different strategies implemented was performed utilizing an anonymous paper and pencil questionnaire. This was based on course objectives and the initiatives implemented, and administered to determine if the objectives of the professionalism program were accomplished. Twenty questions were included in the questionnaire in which the opinion of the students regarding their knowledge and appreciation of Professionalism was thoroughly considered. A total of 62 first and 22 second year students were surveyed. The first year cohort returned 36 surveys, giving a response rate of 58%. The second year cohort returned 21 surveys giving a response rate of 95%. Due to the difference in the number of students in the two cohorts and the number of surveys returned, 42 answered questionnaires were selected for this study, 21 from each cohort.

The data was summarized as mean \pm S.D., to statistically analyze the data, one analysis of variance performed was used, student t test was used to determine which mean were significantly different from mean of the control, we considered differences as significant at a $P < 0.05$ (Sigma Stat 3.1). In this article, we are reporting the findings two years after of the professionalism program has been started.

Results

The implementation of different initiatives to develop a culture of professionalism in medical school was analyzed in the present study. The learning objectives of the course were assessed through final written examination, small group discussions, oral presentations, written reports, reflective writing, peer and self evaluation, and professional behavior in the academic environment

determined by a faculty member assigned to each student. A 20 item questionnaire was used as the data recording instrument. The information collected was used for the analysis; male and female first and second year medical students participated without discrimination.

Professional growth of the students and integrity in the evaluation processes that the students apply to themselves or to peers, and faculty as role models for the students was addressed in the questionnaire.

The results are summarized and presented in two tables which include the questionnaire (Table 1) answered by students, and statistical analysis of the answers given by the students that were significantly different between the two groups (Table 2).

The final grades of the students in the course demonstrated mastery of the expected material. First and second year medical students obtained average grades of 92% and 94%, respectively. After the end of the first year of Program implementation, a paper and pencil questionnaire was performed (Table 1). According to the results of the questionnaire, both groups demonstrated acquisition of competence regarding the White Coat Ceremony and recognized the importance of this initiative implemented

at the Medical School. This Ceremony also provided motivation to become better health care professionals (Table 1). The students also had acquired the competencies related to academic integrity, honor code and medical ethics. The issue related to malpractice law in Puerto Rico is well understood by first and second year students according to the results of the questionnaire. In terms of communication skills with patients, the results of the questionnaire show improvement after the Professionalism Program. The History of Medicine and Public Health topics helped them to broaden their knowledge about the medical professional and to view the human being as a biopsychosocial entity. The results of the questionnaire have also shown that the Professionalism course helped them in the process of self and peer evaluation. The office management topic was evaluated adequately by both groups.

The following data is based on table 2, which represents the significant differences between answers given by first and second year students. The Humana Award mean responses were 2.47 and 1.57 for first and second year medical students, respectively (Table 2). The mean responses for professionalism commitments were 3.00 and 2.00 for first and second year students, respectively

Table 1. Questionnaire Responses to Initiatives

Items	MS I* Mean Response	MS II* Mean Response
1. Do you consider that the White Coat Ceremony motivated you to become a better health professional?	3.42	3.28
2. Were you aware of the purpose of the White Coat Ceremony?	3.71	3.33
3. Were you aware that a HUMANA Award is given to a distinguished Graduate for humanistic qualities during the medical studies?	2.47	1.57
4. Do you know what is academic integrity and the Code of Honor of the Medical School?	3.71	3.42
5. Are you aware of the importance of medical ethics when treating a patient?	3.90	3.85
6. Do you know the Ethical Code of the Medical Association of Puerto Rico?	3.19	3.23
7. Can you enumerate the commitments that, according to the Professionalism Project, were established in 1999 by ACP-ASIM, ABIM?	3.00	2.00
8. Do you know what are the implications of medical malpractice?	3.52	3.19
9. Have the presentation of clinical cases and journal clubs related to professionalism improved your communication skills?	3.19	2.33
10. Do you consider that your communication skills with patients have improved after taking the Professionalism course?	3.14	2.66
11. Do you consider that you can communicate better with your professors after taking the Professionalism course?	3.04	2.23
12. Do you consider you can communicate better with your peers after taking the professionalism course?	3.04	2.33
13. Do you consider that the History of Medicine has helped to broaden your knowledge in the origin of this profession?	2.47	2.76
14. Does the Public Health component in the Professionalism Course help you view the human being as a Biopsychosocial entity?	3.14	2.81
15. During your community work, have you practiced the skills learned at the Professionalism Course?	3.28	2.52
16. Has the process of self-evaluation made you grow as a professional?	3.42	2.76
17. Has the process of peer evaluation made you grow as a professional?	3.14	2.76
18. Has the evaluation submitted by the faculty regarding your attitude made you grow as a professional?	3.33	2.42
19. Have the skills learned during the Professionalism Course helped you adequately in the management of a medical office?	2.95	2.66
20. Have the coordinators of the courses demonstrated a professional attitude?	3.42	1.91

(*N = 21)

Table 2. Mean values of the answers to the assessment questionnaire comparing the first and second year medical students.

Initiatives Implemented in the Professionalism Program	1st Year Mean ± SD	2nd Year Mean ± SD	P value
1. Humana Award	2.47 ± 1.16	1.57 ± 0.97	< 0.016
2. Professionalism commitments	3.00 ± 0.94	2.00 ± 0.94	< 0.003
3. Communication skills after clinical cases and Journal Club	3.19 ± 0.68	2.33 ± 1.15	< 0.019
4. Communication skills with professors	3.04 ± 0.49	2.23 ± 1.16	< 0.016
5. Communication skills with peers	3.05 ± 0.67	2.33 ± 1.12	< 0.022
6. Professionalism shown at community intervention	3.28 ± 0.56	2.52 ± 1.12	< 0.032
7. Evaluations of the faculty	3.33 ± 0.65	2.42 ± 1.12	< 0.011
8. Professionalism demonstrated by Professors that coordinates the course	3.42 ± 0.59	1.91 ± 1.09	< 0.001

(Table 2). These data indicate that Professionalism commitments are significantly higher in the first year medical students compared to the second year. Communication skills after clinical cases and Journal Clubs show a difference with mean responses of 3.19 and 2.33 for first and second year students, respectively (Table 2). The mean responses regarding communication skills with professors were 3.04 and 2.23 for first and second year students, respectively (Table 2). In the topic of professionalism at community intervention, the mean responses were 3.28 and 2.52 for first and second year students, respectively (Table 2). According to these data the communication skills among peers must be reinforced showing mean responses of 3.05 and 2.33 for first and second year, respectively (Table 2).

Evaluations of the faculty mean responses were 3.33 and 2.42 for first and second year students, respectively (Table 2). The present data show that the faculty evaluation of students in different courses on topics of professionalism attitudes was significantly higher in first year medical students compared to second year students. The professional attitudes of the course coordinator were addressed in the questionnaire; the mean responses on this topic were 3.42 and 1.91 for first and second year students, respectively (Table 2).

Discussion

In 1999, a step to move towards the concept of Professionalism was taken by the ABIM, ACP-ASIM and AAMC, with the recommendation to include the attributes of a medical doctor described at the 1998 MSOP in the medical curriculum. As a serious and important topic to be included in medical education, the San Juan Bautista School of Medicine developed various academic strategies to create a culture of professionalism. The main goal of this Program was to teach students to treat patients with empathy, compassion and honesty. The courses assign a percentage to professionalism behavior. These include courses for the first year and second year.

In the present study, we examined reactions to the different initiatives implemented. We wanted to determine if these initiatives developed the culture of professionalism expected in the medical students, and whether the school is complying with the objectives of the program.

This article describes the Professionalism Program initiated at the San Juan Bautista School of Medicine. Taking into consideration that our medical school is Community-based, this program expects to prepare the students to better serve the community.

From the observations and data analysis it can be concluded that the White Coat Ceremony was recognized by students as an important initiative in the medical school. When compared to the first year medical students, a high percentage of the second year group was not aware of the prestigious Humana Award. Both groups demonstrated that they have acquired the competencies related to medical ethics, legal medicine, public health and history of medicine. The origins and purpose of the Professionalism Program must be focused aggressively, especially in the second year program. Effective communication skills among peers and toward the faculty must be reinforced in these courses. Professional growth of the students and integrity in the evaluation processes that the students apply to themselves or to peers was considered adequate by students. The item related to faculty as role models was not well evaluated by the second year medical students; this is an important issue to be reinforced in the Professionalism Program. First year students demonstrated higher knowledge and commitment with Professionalism attitudes than second year students, this may be due to the fact that second year students were exposed to a new program that needed fine tuning.

It is important to point out the evolution of the Professionalism Program, which recently added standardized patients along with new topics for the second year. These include in the first semester: end of life-palliative care, communication skills, cultural diversity, geriatric diseases, diseases of Bioterrorism, substance abuse, and impairment in health professionals;

and in second semester: human control of life, genetics: modifying human nature, resolving conflicts among principles, introduction to thanatology, and organ donation. Changes introduced in the program in terms of content have been shown to enforce the program and develop higher standards at this level of education. New educational strategies include student-centered learning objectives that emphasize knowledge, behavior and clinical skills. The oral participation of students has increased in the course through discussions of clinical cases in ethical issues, history of medicine, academic competence enhancement activities and how cultural diversity influences health in different countries around the world.

Most of the objectives of the program have been achieved and the professionalism and ethical conduct of medical students have changed after exposure to the Professionalism Program.

Resumen

Diferentes iniciativas se han implementado y agrupado en el Programa de Profesionalismo en la escuela de medicina para promover valores morales, éticos, humanistas y altruistas en los estudiantes. El Programa se incorporó en nuestro currículo con la fusión de los cursos de ética médica, salud pública, medicina legal e historia de la medicina. El objetivo principal del presente estudio es evaluar las iniciativas implementadas en el Programa de Profesionalismo. El programa comienza durante el primer año con la ceremonia de la investidura de la bata blanca y culmina en la graduación con la entrega del premio HUMANA, que se le otorga al graduando que se ha destacado por un alto sentido de profesionalismo. Las iniciativas implementadas fueron evaluadas con un examen final escrito, y un avalúo administrado a través de un cuestionario anónimo. El promedio de las notas finales para el primer y el segundo año fueron 92 y 94 por ciento, respectivamente. En cuanto al avalúo, ambos grupos demostraron que habían adquirido un 92 por ciento de las competencias. Los temas discutidos en ambos grupos relacionados con la salud pública les permitieron ver al paciente como una entidad biosicosocial. En medicina legal, el 95 por ciento de los estudiantes de primer año adquirieron las competencias, mientras que de los de segundo año, solamente el 76 por ciento las adquirió. En relación con la historia de la medicina, ambos grupos consideraron que esta materia fue relevante en sus carreras. Basándose en los resultados del avalúo y las notas que obtuvieron los estudiantes en los exámenes escritos y otras herramientas

de evaluación, se puede concluir que las iniciativas del Programa de Profesionalismo han sido beneficiosas para desarrollar una cultura de Profesionalismo.

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