

Survey of the Attitudes of Residents of Guilan University of Medical Sciences toward Medical Professionalism, and Their Professional Behaviors

Nemati Shademan¹, Saberi Alia^{2*}, Heidarzadeh Abtin³, Fakhrieh Asl Saba⁴, Fahimi Ali⁵

¹ Associate professor, ENT-HNS Department, Faculty of Medicine, Guilan University of Medical Sciences, Rasht, Iran.

² Assistant professor, Neurology Department, Faculty of Medicine, Guilan University of Medical Sciences, Rasht, Iran.

³ Associated professor, Social Medicine Department, Faculty of Medicine, Guilan University of Medical Sciences, Rasht, Iran.

⁴ Assistant professor, Internal Medicine Department, Faculty of Medicine, Guilan University of Medical Sciences, Rasht, Iran.

⁵ General physician, Guilan University of Medical Sciences, Rasht, Iran.

* Corresponding author: Poursina Hospital, Rasht, Iran.

Tel: +989111302487-
Email: a_saberi@gums.ac.ir

Background: Medical professionalism is a set of attitudes and behaviors that cause the physicians to prioritize the patients' benefits over him/her owns. The primary objective of this study was to assess the attitudes and behaviors of medical professionalism among residents of Guilan University of Medical Sciences during the educational year of 2011-2012.

Methods: This descriptive study was conducted on all residents of Guilan University of Medical Sciences based on a questionnaire adjusted by the culture and ethical considerations of Iran. The reliability and validity of the questionnaire were confirmed by some experts. Data was analyzed by T-student test and Stata software.

Results: A total of 140 residents from 14 fields with the mean age of 32.2 ± 4.49 years old participated in this study.

In the attitude part more than 80% of residents agreed highly to moderately with nearly all of parameters and more than 75.5% of them declared that they applied professionalism principles in their daily practices. Less than 50% of residents used computer software for medical decision making and participated in social services. More than 50% of them had used online journals, had readiness for being assessed about their new clinical knowledge, used the other physicians' notes for improving their function quality in the past three years and considered the principles of professionalism during health care production. 11% of residents had changed their clinical decisions because of receiving gifts from commercial departments.

Conclusion: The residents had highly positive attitudes toward the principles of professionalism but didn't use them in their behavior.

Key words: Medical Professionalism, Medical Residents, Attitude, Behavior

بررسی نگرش دستیاران دانشگاه علوم پزشکی گیلان به موضوع حرفه ای گری پزشکی و رفتار حرفه ای آنان

زمینه و هدف: حرفه ای گری پزشکی مجموعه ای از دیدگاه ها و رفتارها در پزشک است که باعث می شود فرد همواره منافع بیمار را ما فوق منافع شخصی خود بداند. هدف این مطالعه ارزیابی اولیه ای از نگرش و رفتارهای حرفه ای گری در میان دستیاران دانشگاه علوم پزشکی گیلان در سال تحصیلی ۱۳۹۰-۱۳۹۱ بود.

روش: این مطالعه توصیفی به وسیله پرسشنامه ای که روائی و پایایی آن تأیید و براساس مسائل فرهنگی-اخلاقی خاص کشورمان تعدیل شد در بین دستیاران کلیه رشته های تخصصی دانشکده پزشکی دانشگاه علم پزشکی گیلان انجام گرفت. آنالیز اطلاعات با استفاده از آزمون T-student و نرم افزار Stata انجام شد.

یافته ها: در این مطالعه ۱۴۰ دستیار از ۱۴ رشته تخصصی با میانگین سنی 32.2 ± 4.49 سال شرکت و پرسشنامه ها را تکمیل کردند. در بخش نگرش بیش از ۸۰٪ دستیاران در اکثر زمینه ها موافقت متوسط تا خیلی زیاد با اصول حرفه ای گری پزشکی داشتند. ۷۵/۵٪ از دستیاران به نظر خودشان اصول حرفه ای گری پزشکی را در هنگام ارائه خدمات درمانی و سایر وظایف محوله در اغلب یا همیشه اوقات رعایت میکنند. کمتر از ۵۰٪ دستیاران از روشهای آموزشی پزشکی بصورت آنلاین و نرم افزارهای کامپیوتری برای تصمیم سازی های پزشکی استفاده کرده و در سرویس های اجتماعی شرکت کرده اند. بیش از ۵۰٪ آنان از ژورنالهای online استفاده کرده، آمادگی ارزیابی دانش بالینی جدید را داشته، ظرف سه سال گذشته از یادداشتهای دیگر پزشکان برای بهبود کیفیت عملکرد خود استفاده کرده اند. ۱۱٪ دستیاران در طول طبابت بخاطر دریافت جایزه، از بخش های بازرگانی تصمیم بالینی خود را تغییر داده اند.

نتیجه گیری: دستیاران نسبت به اصول حرفه ای گری نگرش بسیار مثبتی دارند، اما میتوانند به میزانهای بالاتری این اصول را در رفتارهای روزانه و بهنگام انجام وظایف محوله به کار برند.

واژه های کلیدی: حرفه ای گری پزشکی، دستیاران پزشکی، نگرش، رفتار

درابه رویه طلاب تخصص فی جامعه گیلان الطبه فی موضوع الأصول الحرفیه الطبه و تعاملهم الحرفی.

التمهید و الهدف: إن اصول الحرفیه الطبه مجموعه من النظریات والافعال عند الطیب تبجله یقدم مصلحه المریض علی مصالحه الخاصه.

الهدف: من هذه الدراره هو تقییم اولی عن رویه الاصول الحرفیه الطبه عند طلاب التخصص فی جامعه گیلان الطبه فی عام ۱۳۹۰-۱۳۹۱ هـ. ش.

الطوب: تمت هذه الدراره عبر استمارات مؤیده علی اساس الثقافه الخاصه بالشعب الایرانی تم توزیعها علی طلاب التخصص فی جمع التخصصات فی کلیه الطب فی جامعه گیلان الطبه. و تم استخدام T-student.

النتائج: ائتراك ۱۴۰ طالب من ۱۴ تخصص فی هذه الدراره كان معدل اعمارهم 32.2 ± 4.4 سنه.

الاستنتاج: كان هناك رویه ايجابية من قبل الطلاب تجاه الاصول الحرفیه الطبه و لكن يمكن ان یستخدموا هذه الرویه بمستوى اعلى فی تعاملهم الحرفی و الأمور المحوله الحرفی.

الكلمات الرئسیه: أصول الحرفیه الطبه. طلاب التخصص فی الطب. الرویه. اسلوب التعامل.

گیلان میڈیکل یونیورسٹی میں اسسٹنٹ عملے کی پیشہ ورانہ کارکردگی کے بارے میں ان کے نظریات کا جائزہ.

بیک گراؤنڈ: میڈیکل پیشہ ورانہ سرگرمیاں ایسا مجموعہ ہے جس سے ڈاکٹر یا میڈیکل عملے کا فرد بیمار کے مفادات کو اپنے مفادات پر ہمیشہ ترجیح دیتا ہے۔ اس تحقیق کا هدف گیلان میڈیکل یونیورسٹی میں اسٹنٹ عملے کی پیشہ ورانہ کارکردگی کے بارے میں ان کے نظریات کا جائزہ لینا ہے۔

روش: یہ تحقیق ثقافتی اور اخلاقی مسائل کے مطابق ترتیب دئے گئے سوالناموں سے انجام دی گئی۔ یہ سوالنامے اسسٹنٹ عملے کو دئے گئے۔ جوابوں کا جائزہ ٹی اسٹوڈنٹ اور اسٹینا سافٹ ویئر سے کیا گیا۔

نتیجے: اس تحقیق میں ایک سو چالیس اسسٹنٹ کارکنوں نے شرکت کی جن کی اوسط عمر بتیس سے انچاس برس تھی۔ ان جوابوں سے معلوم ہوتا ہے کہ اسسٹنٹ عملے کے پچہتر فیصد افراد نے ہر موقع پر اپنی پیشہ ورانہ ذمہ داریوں کو مد نظر رکھا ہے۔ پچاس فیصد شرکاء نے انٹرنیٹ اور سافٹ ویئر پروگراموں سے پیشہ ورانہ ذمہ داریوں کے بارے میں سیکھا ہے اور سماجی سروسز میں بھی شرکت کی ہے۔ پچاس فیصد سے زائد شرکاء نے آن لائن رسالوں سے بھی استفادہ کیا ہے جنہیں ماڈرن کلینیکل پریکٹس سے بھی آگہی تھی۔ گیارہ فیصد شرکاء نے انعامات حاصل کرنے کی غرض سے اپنی کلینیکل پریکٹس میں کچھ تبدیلیاں کی ہیں۔

سفارشات: اسسٹنٹ طبی عملے اپنی پیشہ ورانہ ذمہ داریوں سے اچھی طرح واقف ہے اور وہ کام کے وقت ان پر عمل بھی کرتا ہے۔ یہی رویہ ان کی ترقی کا ضامن ہے۔

کلیدی الفاظ: طبی پیشہ ورانہ ذمہ داریاں، اسسٹنٹ عملہ۔

INTRODUCTION

Medical professionalism is a group of attitudes and behaviors which causes the physician to prioritize the patients' benefits over his/hers. Professionalism can be studied from two points of views: from the point of professional advantages and the point of responsibilities and tasks (1). A real professional has to be qualified with all supposed criteria in his field such as doing the job with a high quality in different fields (such as field of creativity, production, human services and basic and advanced researches) and also should have high standards of professionalism codes and loyalty while doing the job. A professional does a special task for the society which is not expected from the its other members and in exchange gets specific advantages as well which the society does not give to other professions (for example being qualified enough to know the confidential points of patients' lives and etc.) (2-4).

In 2002 American Board of Internal Medicine (ABIM), the American College of Physicians and American Society of Internal Medicine (ACP-ASIM), and European Federation of Internal Medicine (EFIM) codify medical professionalism charter according to three basic principles which were: primacy of patients' welfare and caring about the patient's values, respecting the patients' autonomy and not taking their right to make decisions, and promotion of social justice especially in treatment-health fields. This charter was assigned by hundreds of physicians and medical organizations all over the world. (6-4). These three principles can be put into practice by professionals' being loyal to the ten orders below:

1. Having competency and the essential qualifications for medical work and maintaining, improving and updating these qualifications,
2. honesty with patients,
3. Patient confidentiality,
4. Making appropriate relationship with the patients,
5. Developing and improving the quality of the given services,
6. Improving the society's accessibility to medical care and helping develop publicizing health care services,
7. Just distribution of limited health resources,
8. Maintaining the society's trust by continuous and proper management of interest conflict,
9. Having scientific knowledge and commitment to lifelong learning and
10. Being professionally responsible (2, 8-6).

Evidences show that professionalism is becoming less important and considerable, and new physicians are facing problems which threaten professional values and decreased social trust (9). Also a review of medical journals and diversity of articles and studies in the case of professionalism expresses that medical education experts have paid a lot of attention to this matter in recent years and are trying to overcome the threats.

According to the novelty of this topic in medical education in our country, and especially as no study has been done in this topic among residents in Guilan University of Medical Sciences (GUMS), we decided to study the attitudes of the residents of this university toward medical professionalism and their behavior.

METHODS

This descriptive cross sectional study was done in Guilan University of Medical Sciences (GUMS) in the educational year of 2011-2012. In the first step, the researchers designed a questionnaire by using articles and questionnaires which were used for studying professionalism in other countries (10, 11), which then was adjusted according to the basics of professionalism, the purpose of the study, and ethical-cultural issues of our country.

The questionnaire included two parts: attitude with 24 questions, and behavior with 14 questions. The answers to the questions were qualitative, which varied from none to very much in the first part and in the second part answers were decided appropriately with the questions.

The mentioned questionnaire was given to a number of experts of GUMS for determining its reliability. In the next step its validity was determined by Pilot test on 15 residents, and its Cronbach' Alpha was calculated as 0.854. According to the limited number of residents of medical school of GUMS sampling was not done and census was used.

The questionnaire was distributed among 189 residents (from total of 214 residents in all fields and all levels). The researchers returned among participants for three times for collecting the answers with the interval of 1-2 weeks. The residents' participation was optional and they were free not to mention their name or field of specialty.

Data was analyzed by T-student Test and Stata software.

RESULTS

From 189 residents who had received the questionnaire, 140 residents (45% male, 42.1% female and 12.9% was not mentioned) with mean age of 32.2 ± 4.49 (26- 46) years old filled and gave it back. The mean duration from graduation of general physician period was 6.5 ± 4.18 years. A total of 29.3% of the participants were studying in the first year, 27.90% in the second year, 25.70% in the third, and 13.6% in the fourth year of residency.

The importance of each principle of professionalism from the viewpoint of residents is shown in table 1.

The residents' opinion about achieving the most reliable information and applying it in their daily routine and knowing evidence-based medicine ($p=0.005$), considering importance of the smoking control ($p=0.023$), drug abuse by younger cases ($p=0.005$) based on gender, considering importance of nutrition and obesity ($p=0.036$), air pollution ($p=0.039$) and respecting social justice ($p=0.028$) based on the field of specialty, and considering the patient as a human and avoiding calling him with medical disorders instead of his name ($p=0.043$ based on gender and $p=0.021$ based on level of residency) were meaningfully different. So that female residents in comparison to males agreed with using evidence-based medicine more than men; also respecting social justice in major specialties (internal medicine, general surgery, gynecology, and pediatric) was more than minor fields (like neurology, otolaryngology, etc.).

Table 1. The Importance of the principle of professionalism from the Viewpoint of Residents in GUMS, 2012.

	none	Very little	moderate	A lot	Very much
Tendency to take up recertification courses	6 4.3%	12 7.9%	54 39.6%	46 33.6%	18 12.9%
Reporting their general medical errors	7 5%	26 18.6%	65 46.0%	36 25%	6 5%
Reporting about unqualified coworkers to the related organizations	29 20.7%	36 25.7%	44 31.4%	24 17.1%	6 4.3%
Not considering gender and racial differences in patients' medical care	11 7.9%	6 4.3%	19 13.1%	45 32.1%	58 41.9%
Taking care of patients without considering their financial potential to pay for the services	1 1.4%	9 6.4%	31 22.1%	52 37.1%	45 32.4%
Lifelong learning and having updated knowledge	1 0.7%	2 2.9%	22 15%	50 35.4%	64 46%
Knowing and applying evidence-based medicine	1 0.7%	6 5%	34 24.1%	66 47.1%	32 23.1%
Feeling socially responsibility	0 0%	3 2.5%	12 8.5%	58 41.1%	67 47.9%
Respecting social justice	0 0%	0 0%	24 17.1%	52 37.1%	63 45.8%
Being informed of one's history of profession and specialty	2 1.4%	19 13.1%	53 38.6%	39 28.1%	24 17.4%
Being updated in technical skills	0 0%	2 1.2%	26 18.3%	46 33.2%	64 46.1%
Adjustability and adaptability	0 0%	7 5%	31 22.1%	62 44.3%	40 28.6%
Feeling satisfied with disciplinary supervision of one's activities	3 2.9%	8 5.5%	36 25%	59 42.1%	33 23.6%
The ability to manage the contrast of interests	0 0%	12 7.1%	43 31.45	57 40.7%	22 16.4%
Interaction with the members of the health team (team-work)	0 0%	1 2.1%	27 19.3%	48 34.3%	62 43.6%
Consideration the patient as a human and avoiding calling him with a medical disorder names instead of his name	0 0%	2 1.4%	30 21.4%	59 42.1%	49 35%
The importance of Nutrition and obesity?	0 0%	8 5.6%	53 15.37%	70 50%	9 35.6%
The importance of getting education?	0 0%	1 0.7%	12 8.5%	62 41.44%	65 47.46%
The importance of immunization and vaccination?	0 0%	0 0%	11 7.2%	64 27.46%	64 63.46%
The importance of smoking control?	1 0.7%	4 8.2%	17 12.1%	50 33.35%	68 80.48%
The importance of drug abuse especially among youngsters?	0 0%	1 0.7%	13 3.9%	56 40%	70 50%
The importance of wearing seat belt?	0 0%	2 1.4%	5 6.3%	56 34.40%	76 54.16%
The importance of air pollution?	0 0%	1 0.7%	3 12.2%	63 40.45%	71 50.9%
The importance of medical insurances for people who don't have them?	2 2.1%	1 0.7%	7 5%	60 42.9%	69 49.2%

Women more than men and residents in the level of 3 and 4 more than residents in the level of 1 and 2 considered patients as a human. In major specialties such as internal medicine and gynecology, residents considered importance of nutrition and obesity more than the other specialties. Female residents considered importance of the control of smoking more than males and the residents of major fields considered importance of air pollution more than other fields.

The frequencies of performance of professional behaviors according to residents' answers are shown in table 2.

The number of weekly studied articles, based on field ($p=0.035$), the record of having made medical errors without doing anything after (such as reporting it) based on gender ($p=0.032$), and participation in doing social services; city/regional, in the past few years, based on gender and age ($p=0.04$, $p=0.035$) were meaningfully different. The residents of major fields read more articles than residents of other majors in week. Not reporting big medical errors were more common among males than females and males and residents of 30-34 years old cooperated more in doing social services in the past few years.

Table 2. The frequency of performance of professional behaviors based on residents' answers in GUMS, 2012.

	Often	seldom	Never		
Sending Emails to patients	7	23	110		
	5%	16.4%	78.6%		
Using online medical education methods	60	65	15		
	42.9%	46.4%	10.7%		
Using computer software for medical decision making	40	77	23		
	28.6%	55%	16.4%		
Using online journals	91	46	3		
	65%	32.6%	2.4%		
How many new medical articles do read each week?	none	1-4	4>		
	41	98	1		
	29.3%	70%	0.7%		
Are you ready to be assessed from the point of recent clinical knowledge?	completely	To some extent	No		
	36	87	17		
	25.4%	62.4%	12.2%		
Have you ever used other physicians' notes for the improvement of your job in the past three years?	Yes	No			
	82	57			
	57.9%	41.4%			
Have you ever changed your clinical decision because of receiving a gift during practicing medicine?	Yes Several times	Yes-one or two times	No		
	7	8	125		
	5.2%	5.7%	89.1%		
Have you ever cooperated in social services?	Yes	No			
	57	78			
City/regional	40.7%	55.7%			
Country/ national	19	109			
	13.1%	77.6%			
To what extent do you use medical professionalism principles in your practice?	Never	seldom	Sometimes	Often	Always
	0	1	24	87	19
	0%	1.4%	17.4%	62.4%	13.1%

DISCUSSION

In the present study the attitudes of residents of Guilan University of Medical Sciences (GUMS) toward medical professionalism and professional behavior were examined. Moreover a need survey also was done alongside.

The assessment of the importance level of parameters in the attitude part showed that more than 80% and even more than 90% of the residents had paid moderate to very high attention to cases such as tendency to spend the courses and recertification tests, not considering gender and racial differences in the health care of patients, taking the essential medical care of the patients without considering their financial status, knowing the methods of lifelong learning and updating their knowledge, getting the most reliable information and applying it in their daily job, knowing the principles of evidence-based medicine, being socially responsible and commitment to social justice, being aware of the history of one's profession and specialty, being pleased to be supervised, having updated technical skills and adaptability and adjustability, the ability to manage the conflict of interests, interaction with the members of the healthcare team, interaction and knowing the principles of teamwork, and considering the patient as a human being and avoiding calling him/her with a medical disorder name instead of his name. 76% of the residents paid moderate to very high attention to reporting their medical errors and reporting their unqualified colleagues has been popular among 53% of them.

Less than 6% of the residents had paid little attention to nutrition and obesity, education, control of smoking and drug abuse, wearing a seat belt, air pollution and supporting medical insurances for the people not having them.

Less than 50% of the residents had sent E-mails to patients, used online medical education methods and computer software for medical decision making and participated in social services of the city, area or country. 70% of the residents read one to four articles in a week. More than 50% had used online journals, could evaluate the new clinical science, had used other physicians' notes in order to improve the quality of their function in the past three years and apply the principles of medical professionalism while practicing medicine and doing other responsibilities as much as possible. 11% of the residents had changed their clinical decision during their professional life because of getting a reward from commercial departments.

A study conducted by Dr. Byron (2003) in Washington

University in the case of if defining and teaching professionalism to residents and faculties can improve professional behaviors. According to its results, training interns and residents had a considerable effect on the improvement of their professional behaviors (12).

In the comparison of the attitudes of the residents of first and second levels with the residents of third and fourth levels toward various principles of medical professionalism, the only difference in their attitudes was considering the patient as a human being and avoiding calling him by medical terms, the results showed that the residents of third and fourth levels paid more attention to this matter whereas these groups had not spent the educational course before residency. This difference can be explained by the residents' professional perfection and spending more time with patients and role-model instructors.

In the present study besides studying the attitudes and behaviors of the residents in professionalism, a kind of need survey was also done and the vast majority of residents' Strengths and weaknesses were determined. By having such data a better professionalism curriculum can be planned in which the strong points of the future specialists can become stronger and the weak points can become strong while their beliefs and insight perfection are also being respected.

CONCLUSION

The residents had a very positive attitude toward the principles of professionalism, but they did not apply them in their behavior to this extent and professionalism curriculum should be planned in a way to change their strong points to stronger and weak points to strong.

ACKNOWLEDGEMENT

The authors would like to express their gratitude to Research in Education Unit of the Education Development Office of the Faculty of Medicine and the Education Development Center of the Education Deputy of Guilan University of Medical Sciences which supported us in conducting this study.

Financial Support: This study was conducted by the financial support of the Research Deputy of Guilan University of Medical Sciences.

Conflict of Interests: This study does not include the official codes of interest conflicts.

Legal Confirmation: This study has been confirmed by the Research Committee of Guilan University of Medical Sciences.

REFERENCES

- Sethuraman KR. Professionalism in medicine. *Regional Health Forum*; 2006: 1-10.
- Professional; the free encyclopedia. [cited Dec 2009]. Available from: <http://en.wikipedia.org/wiki>.
- Thistlethwaite J, Spencer J. Professionalism in medicine. Oxford, UK: Radcliffe; 2008: 1-50, 156-82.
- Brennan T, Blank L, Cohen J, Kimball H, Smelser N. Medical professionalism in the new millennium: A physician charter. *Ann Intern Med* 2002; 136(3): 243-6.
- Kirk LM. Professionalism in medicine: Definitions and considerations for teaching. *Proc (Bayl Univ Med Cent)* 2007; 20(1): 13-16.
- McKenzie CR. Professionalism and medicine. *HSS J* 2007; 3(2): 222-7.
- Swick HM, Szenas P, Danoff D, Whitcomb ME. Teaching professionalism for surgery residents. *J Surg Educ* 2009; 66(3): 158-62.
- Iramaneerat C. Instruction and assessment of professionalism for surgery residents. *J Surg Educ* 2009; 66(3): 158-62.
- Yamani N, Changiz T, Adibi P. Professionalism and hidden curriculum in medical education. 1st ed. Isfahan: Isfahan University of Medical Sciences. [Persian].
- Hendelman W, Byszewski A. A National Survey: Medical professionalism in Canadian undergraduate programs. Available from: http://www.afmc.ca/pages/sa_

Attitudes of Residents toward Medical Professionalism

professionalism.html

11. Campbell EG, Regan S, Gruen RL, Ferris TG, Rao SR, Cleary PD, et al. Professionalism among physicians: Results of a National Survey of Physicians. *Ann Intern Med* 2007; 147(11): 795-802.
12. Joyner BD, Vemulakonda VM. Improving professionalism: Making the implicit more explicit. *J Urol* 2007; 177(6): 2287-90.