

## Views of expatriate Pakistani doctors about quality of medical education in Pakistan

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### Author's Contribution

<sup>1</sup>, <sup>2</sup> Manuscript writing, compiling data and analysis

### Article Info.

Conflict of interest: Nil

Funding Sources: Nil

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### A B S T R A C T

**Introduction and objective:** Road Survey to evaluate and analyze the views of Pakistani doctors working in various developed countries about the quality of undergraduate and postgraduate medical education they received in Pakistan and how well it prepared them for their role as senior physicians in a multicultural healthcare workforce in many countries and in terms of parity to the medical education in their current country of work.

**Methodology:** A web-based survey consisting of twenty item questions with graded answer choices, was prepared by the authors to include a multidimensional comprehensive questionnaire to collect the views of the target participants. The survey was completed anonymously on a mobile device or a computer with internet access and took 5 to 10 minutes to complete.

**Results:** The results of this qualitative survey indicate that there is generally a broad convergence of opinion regarding the quality of Pakistani medical education, with primary medical education, more consistently considered higher quality, amongst the Pakistani physicians currently working in UK, USA and Middle Eastern countries.

**Conclusion:** Overall the Pakistani education seems to be of a satisfactory level, but cannot be considered to be superior to the counterpart education from these countries, based on this survey results. Areas such as research methodology appear to be particularly weak and there was a divergence of opinion regarding what the top priority should be to address within Pakistani medical education and training environment. Many of these physicians would like to work in Pakistan again, provided that the working conditions are favorable.

**Keywords:** Medical education, qualitative survey, education quality

**Cite this article as:** Wali AR, Akbar TM. Views of expatriate Pakistani doctors about quality of medical education in Pakistan. JSTMU. 2020; 3(1):27-33.

## Introduction

There has been much debate recently about several issues related to the migration of physicians from developing to developed countries. However, few studies have been conducted to address these issues in a systematic fashion.<sup>1</sup>

There is little published information about the views of Pakistani physicians regarding medical education in Pakistan. The quality of medical education needs to be examined and compared with the standards of the developed nations. The number of medical colleges

doubled from 1997 to 2005 despite a dearth of teachers, facilities, and teacher training institutions for medical colleges.<sup>2</sup> Many of the Pakistani doctors argue that, Medical Education needs to change in Pakistan.<sup>3</sup> It has been identified by various authors that the medical education in Pakistan may have suffered a decline in some areas. Doctor's profession has long been among one of the most attractive professions in Pakistani society, but doctors are increasingly getting dissatisfied with their jobs.<sup>4</sup>

There is a large number of Pakistani physicians who work abroad which may be linked to the poor quality of job satisfaction and quality of medical education including postgraduate (PG) training. It is reported that 68% of the doctors working in the teaching Hospitals of Karachi are not satisfied with their jobs and female doctors are less satisfied as compared to their male counterparts.<sup>5</sup> As a result, many doctors choose to leave the country and work abroad. International medical graduates constitute between 23 and 28 percent of physicians in the United States, the United Kingdom, Canada, and Australia, and lower-income countries supply between 40 and 75 percent of these international medical graduates. India, Philippines, and Pakistan are the leading sources of international medical graduates.<sup>6</sup>

In order to successfully practice medicine and pursue a rewarding career in any field of medicine, it is essential that the graduates from Pakistan receive a high standard of medical undergraduate and PG education and training. The medical training standards internationally have recently been highlighting in medical literature. The discourse of the universal global physician calls for a curriculum that is standardized and portable.<sup>7</sup> The purpose of this survey was to evaluate the quality of the medical education, in terms of how the past graduates find it helped them prepare for their medical careers abroad, where they must demonstrate a minimum level of competence, not only in comparison to the local graduates of that country but also an international body of doctors who would compete for the same positions in the healthcare market.

Sara Bano of Michigan State University, in her chapter "Reverse Brain Drain"<sup>8</sup> argues that based on statistics, cultural and social reports, there appears to be a trend of many highly skilled Pakistani professionals returning back to their homeland from USA, "Most of them motivated by the idea of making a difference back home, by contributing positively to the society".<sup>7</sup> To further explore this hypothesis as related to the medical workforce, we also included a question in our survey, about the intention of the participant physicians to return back to Pakistan and if not, the reasons behind their decision. It can be argued that new ideas from these developed countries, about the method and content of medical training can add a fresh perspective with potential for improvement in the

Pakistani medical education environment. Our survey also explores certain areas such as role of research and role of mentors, academic and governing bodies etc. and how this may contribute to improve standard of Pakistani medical education and training.

It seems logical to think that the physicians who have gained experience abroad would be equipped with additional insight that may improve the medical education standards if they return back.<sup>9</sup> This survey is an attempt to add to the insight and knowledge about the views of the Pakistani physicians who have been living and working in many different parts of the world outside Pakistan, in regards to how they view the Pakistani medical education that they received and how do they compare it to the international standards.

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## Methodology

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### **Ethical approval:**

The study was submitted to Tawam Hospital Research Ethics approval committee for ethical approval and was approved before the commencement of the survey.

### **Survey Participants:**

The participants included are physicians of Pakistani origin, working in various countries across the world. All of the participants are currently employed in various specialties and have completed their PG medical training either from Pakistan or from abroad.

### **Questionnaire development and distribution:**

After a thorough literature research in the relevant online available Pakistani and international journals, 20 question items were prepared by the authors to conduct a qualitative survey. To facilitate anonymity, accuracy and ease of participant use, a web-based software was employed; paid version [surveymonkeys.com](https://www.surveymonkeys.com) ©2019. An internet link of the survey was sent to the participants which enabled them to complete the survey on a personal computer or internet enabled smart phone. The authors chose to use the built-in, anonymous response option to ensure the privacy as per the local ethical committee guidelines and the international medical research norms. The survey could be completed between 05 to 10 minutes. The responses were sent directly to the password protected cloud-based program with access

available only to the authors on a single work lap top shared between the authors exclusively.

**Data handling and analysis:**

The responses were collected through the software paid version surveymonkeys.com® 2019. Given the qualitative nature of this survey the authors studied the individual responses in depth to be able to comprehend and present accurate analysis in qualitative terms, which was more suitable to the nature of this research.

**Results**

**Response rate:**

95 physicians agreed to participate and responded to the survey.

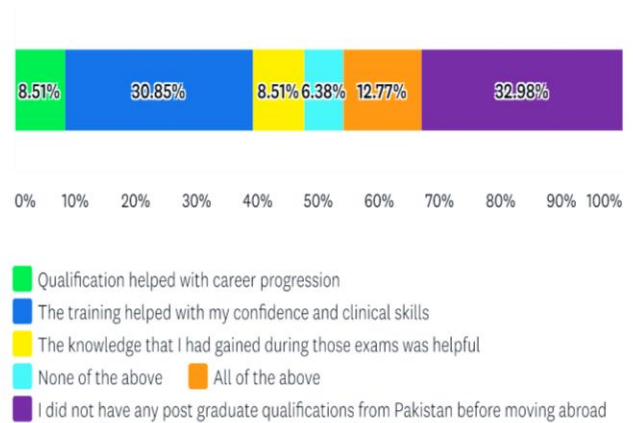
**Outcomes:**

The participants worked in 7 different regions of the world, mainly in United Kingdom (40%), Middle East (45.26%), United States of America (9.47%). A single participant each worked in Brunei, East Africa, Australia and Canada with One participant now moved back to Pakistan (making up 5.26%). The participants worked in various specialties with majority working in acute specialties such as anesthesia (17.8%), medicine (25%) and surgical (22%). Other groups included emergency medicine (6.3%), general practice (21%), psychiatry, radiology and pathology. Majority of the participants had finished basic medical education 20-30 years ago (48.4%), or longer (12.6%), whereas graduates from recent years represented a tiny proportion of the survey participants.

Majority 71% of the participants worked in consultant positions and 3 (3.16%) participants worked as professors in their respective fields. Others worked in service posts and one participant was in a training post. Out of the 95 participants 48.38% had completed some form of postgraduate qualification from Pakistan with majority (32.63%) having FCPS. Just over 51% had not reported to have finished a postgraduate qualification before starting a career abroad. It should be noted that many of participants (but not all) who achieved PG qualification from Pakistan, also achieved further qualification from the country they moved to. 62% of the participants had gained a qualification from their current country of work,

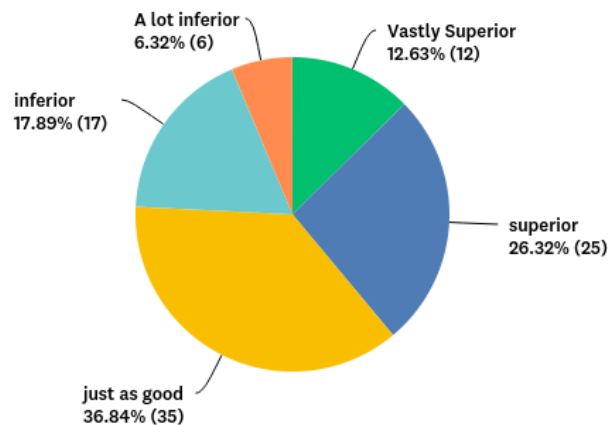
whereas 38% were employed based on their postgraduate qualification from Pakistan. 100% of participants working in USA gained PG qualification from USA (despite some having Pakistani qualification) and 97% of UK participants reported PG qualification from UK. From Middle East region 55% had qualification from Pakistan, 45% reported qualification from abroad but not necessarily from the country they work in with most having UK qualifications such as FRCA, MRCP etc.

When asked the question about, how well did basic medical education prepared these participants for their new role abroad, the majority answered very effective (37.8%), 17.89% replied extremely effective and 29.47 saying it was somewhat effective, with only 12.63% saying it was not so effective and 2.1% saying it was not effective at all. This seems to reflect a high level of confidence and satisfaction amongst the participants in the basic medical education received in Pakistan by them.



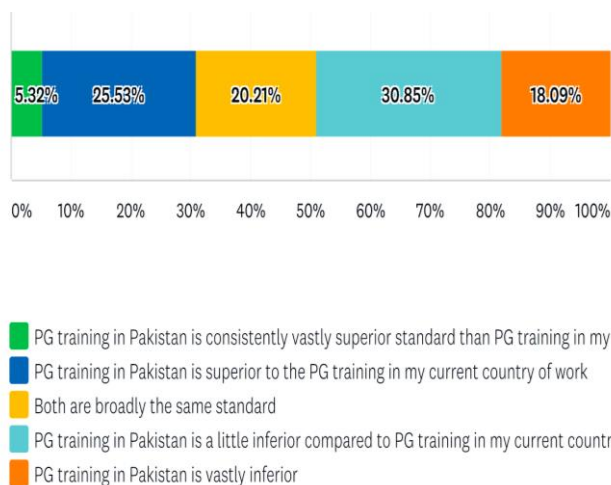
**Figure 1: Did the postgraduate training help?**

When asked about the participant’s views about how the Pakistani medical education compared with the medical education from their current country of worked, overall response was in favor of Pakistan medical education as shown in figure 2, but it varied depending upon location of the responders. Subgroup analysis showed that amongst the UK candidates 43% rated Pakistani basic medical education they received as inferior or a lot inferior to the counterpart UK basic medical education in their view. 16% rated as superior in this group and 41% rated it as just as good. Response of the participants that if postgraduate training helped them at all and in what way (figure 2).



**Figure 2: Comparison of Pakistani medical education compared with abroad**

Amongst US participants 45% rated it as superior (0% for vastly superior) or just as good (11% and 34% respectively) whereas 55% rated Pakistani basic medical education they received as inferior, but no one rated it as a lot inferior. The group from Middle East region rated as, 18.6% saying vastly superior, 41.8% reported as superior, 34.8% as just as good and only 4.6% reporting Pakistani basic medical education to be inferior quality compared with that of Middle Eastern countries. No one reported it as a lot inferior.



**Figure 3: Comparison of Pakistani PG training with abroad**

A subgroup analysis was done of the views from the three main groups of participants about their view of the quality of Pakistani PG training and exams. Amongst the UK candidates, 15.79 % reported it to be superior (0% for vastly superior), 18.42% as broadly the same, 42.11% as a little inferior and 23.68% as vastly inferior compared to counterpart training in UK. Amongst the US group. Pakistani PG training was thought to be 25% as same standard, 50% as little inferior compared to US and 25% vastly inferior. No one thought that it was superior or consistently vastly superior to PG training in USA.

The group from middle eastern countries rated Pakistani PG training and exams, as 9.3% reporting consistently vastly superior to the counterpart standards of their current country of work, 41.8% as superior, 20.93% as same standard, 13.9% as inferior to the counterpart postgraduate training, and 13.9% as vastly inferior.

Views of the participants about the quality of Pakistani postgraduate training as compared to the same in other developed countries. When asked about how satisfied the participants were with the quality of education in research methodology during the under graduate medical education in general in Pakistan. 3.1% replied excellent, 4.2% as good and 17.85 as adequate, which makes an overall one fourth (25%) response of some degree of approval of the standard of research methodology that was taught in Pakistani medical colleges at the time when these participants attended medical colleges.

36.8% reported almost nil in reply to this question reporting a total lack of education received in this area and 37.8% reported very poor standard of medical education in the area of research. A further question about standard of research methodology teaching at postgraduate level was asked with a similar pattern of reply as of basic medical education research methodology teaching. 2.13% reported excellent, 9.57% as good, 21.28% as adequate. 52.13% as poor and 14.89% as almost nil. An item question included in the survey asked the participants about their view of the clinical skills achieved after finishing basic medical education. 15.79% replied "excellent for that level", 28.42% as "good", 38.9% reported "acceptable for that level", 12.63% thought that the clinical skills after finishing their basic medical education should be described as "unsatisfactory", 3.16%

chose the response “very poor” and one participant chose the response NA (Not applicable) for unknown reasons.

**Table 1: Area in Pakistani medical education needing to be addressed as the top priority**

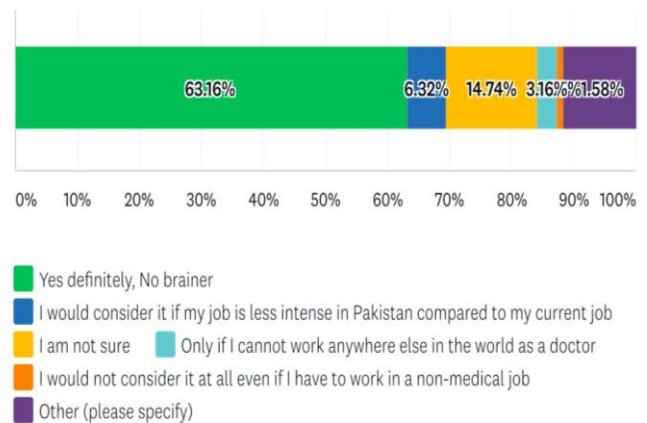
Answer Choices	Responses	
Basic medical education teaching as a whole (1)	24.47%	23
Post graduate training as a whole (2)	21.28%	20
Clinical skills teaching (3)	8.51%	8
Research training (4)	13.83%	13
Training in medical education (5)	4.26%	4
Training in non-clinical skills i.e., ethics, team work, communication (6)	23.40%	22
Other (please specify) (7)	4.26%	4
<b>Total</b>		<b>94</b>

Basic medical sciences and academic teaching was considered the top priority by 24.27%, followed by PG training. Research training and clinical skills teaching were also considerably highlighted by the participants, training in non-clinical skills such as communication, team work and ethics was selected by 23.4%.

When asked if the basic medical education received by the participants reflected good value for money. 91.53% responded yes (including one participant from a private medical college), whereas 7.8% stated it was not good value for money with a 50/50 split between high expenditure and poor quality of education that they received as the reason for them this choice of reply “not good value for money”. In order to estimate the value placed by these Pakistani physicians working abroad, to the importance of basic medical sciences, we asked if in their opinion, understanding of the basic sciences was an asset that helped them pass the PG exams. 80% thought that it was true, and 17.8% disagreed. We were interested to find out, if the participants were inspired by some of their senior clinicians in Pakistan during their training period and looked up to them as role models, 76.8% replied positively selecting the answer “yes”, but 23.16% disagreed.

In order to explore, if there are any regional differences amongst the Pakistani physicians working abroad, regarding their desire or ambition to return back to their home country we performed a subgroup analysis of the participant’s reply to our final question addressing

this area. Following results were yielded. The question asks, “if you were offered the same amount of salary/income as you currently earn, would you consider moving to Pakistan? Everything else like working conditions, country’s political and socio-economic situation unchanged. Majority of the physicians working in Middle East replied in favor of returning back to homeland if conditions are favorable, followed by US and UK groups. Small proportion of physicians was not sure or didn’t show interest to return back.



**Figure 4: Desire to repatriate**

## Discussion

As can be seen by the demographic information about the participants of this survey, the participants were distributed in three main regions of the world, United Kingdom, USA and Middle Eastern countries. These are also the developed regions of the world where there is a high demand for highly skilled foreign professionals and the salaries are significantly better with career prospects that may not exist in Pakistan due to lack of investment by successive governments in health care infrastructure, leading to lack of job satisfaction.<sup>5</sup> The participants were mostly working at senior level in their respective fields, which implies that these participants were all very well qualified to comment on the education system and comparison of the medical education and training provided to them in Pakistan to that of the country of their current residence where most senior doctors are involved in teaching and training of medical students, trainee doctors, nurses and other healthcare workers as well as being involved in research and publication. The participants represented many medical specialties

including the acute medical and surgical specialties as well as general practice, psychiatry and radiology etc.

Most doctors thought that the Pakistani basic medical education had prepared them well to be working at international level. Response of participants about Pakistani medical education compared with the medical education from their current country of worked highlights the possible difference in the quality of basic medical education that our participants observed between the western countries such as UK and USA compared to the standard in Middle East. If one uses these views as a yard stick then it may be concluded based on these responses that the quality of Pakistani medical education lies somewhere between that imparted in USA and UK and that in Middle East countries such as KSA, UAE etc.

Regarding Postgraduate medical education, again most respondents thought that it was helpful in various ways, such as career progression, clinical skills and confidence and adding to clinical knowledge. A subgroup analysis of Pakistani PG training and exams showed that, amongst the UK and US groups, majority labelled it as equal or inferior standards as compared to their countries of residence, whereas majority of the group from Middle eastern countries rated Pakistani PG training and exams as superior or equal to the counterpart standard of their current country of work.

These results are interesting and show the regional differences between the countries where Pakistani physicians are mostly employed outside of the home country. There was a vast agreement between the participants that the knowledge of basic sciences helped them in passing the PG exams, which highlights the importance of emphasis that should be placed on the basic sciences teaching in the curriculum in Pakistani universities and medical colleges. A faculty with a very high professional standing and qualifications should be hired by the medical colleges if the standard of Pakistani medical education has to be brought up to parity level with the developed nations of the world. At the end of basic medical qualification in Pakistan, the medical students are expected to be competent to perform basic medical tasks and must have acquired competencies in the area of clinical skills to be working as a junior doctor. The level of self-satisfaction was explored in this survey through one of the itemized questions and the vast majority responded

favorably that at the end of their training they were either competent at an acceptable level of at a good or excellent level with 16% reporting an unsatisfactory or poor level of competence at the end of their basic medical education.

The rapid changes in medical science compel physicians to keep abreast with the latest developments by gaining an understanding and using scientific principles and methods.<sup>10</sup> It was found through this survey that the quality of medical research within Pakistani basic and PG medical training is not of a high quality. Less than a quarter of the participants placed the teaching of research methodology in Pakistan at an acceptable standard. A strong, therapeutic, and effective relationship is the sine qua non of physician—patient communication<sup>11</sup> and many modern medical education systems are geared towards providing teaching in this area, however there may still be a need to improve the standards in this area within Pakistani medical education. The survey explored the views of the participants about what areas needed to be addressed as the top priority and interestingly these seemed to be a higher emphasis on basic science education (24%) and education in non-clinical skills such as effective communication (23%). Others suggested to target PG training as the top priority (21%) and research methodology (13%).

#### **Strengths and limitations:**

The strength of this study lies in the target group of participants who have experience and qualification to comment on the research focus. These individuals represent different regions of the world where the medical education is well developed and the traditions of innovation and research are traditionally strong. The participants also represent a heterogeneous group of doctors who work in various fields of medicine and are involved actively in the teaching and training of junior doctors and medical students.

The target participants were the willing individuals from two professional internet-based forums with an exclusive Pakistani Physician membership. This method of identifying and requesting consent to participate in the survey means that the response rate may not be accurately calculable because, the true number of people who would have received the invitation to participate in the survey cannot be known, hence the denominator

needed to calculate the response rate cannot be the whole membership of those forums.

Another potential weakness in this study is that the significant majority of respondents are those doctors who have graduated more than 10-20 years and hence there may be a lack of perspective from the graduates from more recent years.

## Conclusion

Medical student's observations of behaviors, specifically those of their role models, are believed to affect learning more than formal teaching.<sup>12, 13</sup> Research shows that, indeed, as many as 90% of medical graduates remember role models who shaped their professional attitudes.<sup>14</sup> It was explored if the participants were fortunate enough to benefit from the presence of role models within their time in Pakistani medical education system, and 77% of the respondents agreed that they had encountered at least one senior clinician or faculty member who was able to provide a role model for them to derive inspiration from.

Finally, the survey explored if some of these respondents would want to return back to Pakistan if they had a similar level of income and working conditions. Most respondents replied in affirmative however there were regional differences with the highest number from Middle East willing to return back. The regional differences may in part be due to the fact that most of the western countries offer a citizenship to the foreign doctors after a number of years residency and employment in their country, which is not the case in middle eastern countries.

## Acknowledgement

We are grateful to the participants who took time out from their valuable time and busy schedules and consented to participate in the survey.

## References

1. Thomas C, Morris SM, Clark D. Place of death: preferences among cancer patients and their carers. *Soci Sci Med*. 2004; 58(12):2431-44.  
DOI: <https://doi.org/10.1016/j.socscimed.2003.09.005>
2. Jamsheer T, Pappas, G. Migration, Medical Education, and Health Care: A View from Pakistan. *Acad Med*. 2007; 81(12):55-62.  
DOI: <https://doi.org/10.1097/01.ACM.0000243543.99794.07>
3. Nasim M. Medical education need to change in Pakistan. *J Pak Med Assoc*. 2011; 61(8):808-11.
4. Ghazali SS, Shah IA, Zaidi SAA, Tahir MH. Job satisfaction among doctors working at teaching hospital of Bahawalpur, Pakistan. *J Ayub Med Coll Abbottabad*. 2007; 19(3):42-45.
5. Khuwaja AK, Qureshi R, Andrades M, Fatmi Z, Khuwaja NK. Comparison of job satisfaction and stress among male and female doctors in teaching hospitals of Karachi. *J Ayub Med Coll Abbottabad*. 2004; 16(1):23-27.
6. Mullan F. The Metrics of the Physician Brian drain. *New Eng J Med*. 2005; 353(17):1810-18.  
DOI: <https://doi.org/10.1056/NEJMsa050004>
7. Martimianakis MA, Hafferty FW. The world as the new local clinic: A critical analysis of three discourses of global medical competency. *J Soci Sci Med*. 2013; 87:31-8.  
DOI: <https://doi.org/10.1016/j.socscimed.2013.03.008>
8. Bano S. From brain drain to reverse brain drain: Implications for South Asia and the United States of America. *Int Stu Mon Opport Growth Glob Marketplace 2018* (pp. 64-79). IGI Global.  
DOI: <https://doi.org/10.4018/978-1-5225-3451-8.ch005>
9. Aly Z, Taj F. Why Pakistani medical graduates must remain free to emigrate. *PLoS Med*. 2008; 5(1):e2.  
DOI: <https://doi.org/10.1371/journal.pmed.0050002>
10. Aslam F, Qayyum MA, Mahmud H, Qasim R, Haque IU. Attitudes and practices of postgraduate medical trainees toward research a snapshot from Faisalabad. *J Pak Med Asso*. 2004; 54:534-6.
11. Safran DG, Taira DA, Rogers WH, Kosinski M, Ware JE, Tarlov AR. Linking primary care performance to outcomes of care. *J Fam Prac*. 1998; 47:213-20.
12. Coulehan J, Williams PC. Vanquishing virtue: The impact of medical education. *Acad Med*. 2001; 76(6):598-605.  
DOI: <https://doi.org/10.1097/00001888-200106000-00008>
13. Glicken AD, Merenstein GB. Addressing the hidden curriculum: Understanding educator professionalism. *Med Teach*. 2007; 29(1):54-7.  
DOI: <https://doi.org/10.1080/01421590601182602>
14. Wright S, Wong A, Newill C. The impact of role models on medical students. *J Gen Intern Med*. 1997; 12(1):53-6.  
DOI: <https://doi.org/10.1046/j.1525-1497.1997.12109.x>