

A Review on Medical Students' Research

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Abstract: Medical sciences are of the most growing sciences. Every day new methods, drugs, treatment options, diagnostic options and tools, preventions methods and etc are found. Many times, information used to treat a specific disease is out of date. Sometimes, a medical option that is being used is ruled out. During the past decades, accessing up-to-date information was more or less impossible. Also, much crucial information could not be published due to several limitations. The progress in computers, handheld devices and internet has made it very easy to access valuable information. Using them will result in an immediate improvement of general health and can decrease faults of medical staff. Medical student training centers must take into consideration these options and update their methods. They should find new methods that to help students to interest them in research. An overall review of current methods shows that only a mixture of early research encounter, peer to peer research education (a senior student who mentors a small group of younger students), good research funds, supporting them to participate in congresses in the country or even abroad and also implementing marketing techniques will result in physicians who will change the pace and generalize evidence based medicine implementation.

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1. Introduction

Medicine is an applied science that aims to improve and maintain the general health. A composition of disease characteristics, preventing and treating them and their diagnosis makes and defines medicine (1, 2).

This science is rapidly growing and keeping up with it with old methods is not possible (3, 4). Even though it is essential to make experienced physicians to go with the current flow, changing their approaches is much harder than training young doctors and medical students (4).

The progress of science has made it easier to transfer data and information. Developments in computers, internet, and electronics have led to an immediate transfer of science. Nowadays, even the farthest person interested in recent research can reach the most up to date information and science with a blink of an eye (4-6).

Before, many obstacles were present in the way of accessing science materials. Buying journals were very hard for physicians from developing countries. Some countries could not access to any of material published in top research centers at all. Also,

many had no chance of submitting their experiences, opinions and researches to journals. Reviewing the manuscripts was even harder (7-9).

Publishing in journals have also never been easier. Many online journals have been created and have made an environment for even the worst researches (10).

Thus, medical students who are being trained in this era should take advantage of the facilities and improve their knowledge. This will result in an overall health improvement (11). Although student research has improved, their research activities have few impacts on science and health improvement. On the other hand, academic centers should clearly recognize the situation and the change made in this matter and focus on training students who know how to use the best possible material. They should be able to identify researches that can be dependable and rely on which information that is provided. Also, learning research skills will help them become better teachers. This shows that an immediate change must take place and both academic centers and students must alter their approaches (12).

This study will review current methods of medical students' training to become scientists or researchers and focuses on the barriers of medical research education.

2. Student Research Committees

Every medical faculty should have a research committee. The goal of this committee should be to train the students and to teach them basic scientific methods. These committees must familiarize students with these skills and answer these questions (13):

- Why should they pursue research?
- What will they achieve by research?
- Basic computer and internet skills such as Microsoft office or etc.
- How to find a proper research subject
- What should they focus on their first research project
- How to search for the answers of their questions
- Academic search
- Proposal writing
- Statistics software
- Abstract writing
- Submitting an abstract to a congress
- Poster presentations
- Oral presentations
- Scientific writing
- Submitting a manuscript to a proper journal
- Basic communication skills when contacting a journal
- Evidence based medicine

Although limited, student research committee must have the power to independently determine the fund of projects. These committees have previously proven their benefits. Many articles have been published as a result of these committees (14-78).

Downsides: the independence of this committee may lead to abusing students by seniors or even professors. Thus, a careful supervision is necessary. However this supervision must not undermine the independence of the committee. Also, students be completely familiar with their rights at the beginning of their participation.

The role of this committee should be discussed in detail.

3. Early research encounters

Students must be exposed to research methods at early stages. This will lead to an early research engagement. The students must be handled by a committee such as the Student Research Committee.

Students must get familiar with research in their first term and should have a limited window for finishing research projects.

Downsides: if not guided carefully, using force may result in opposite results. Rules must be made for the students in order to protect students' rights.

4. Student mentorship program

Student mentorship program is based on a peer to peer education. A senior student (mentor) must pick three to five students (mentees) and teach them basic research knowledge. After a significant amount of time, the mentee must become skillful enough to play a mentor's role, and picks his/her own mentees. This will result in a network that passes research skills to other students (Figure 1) (79, 80).

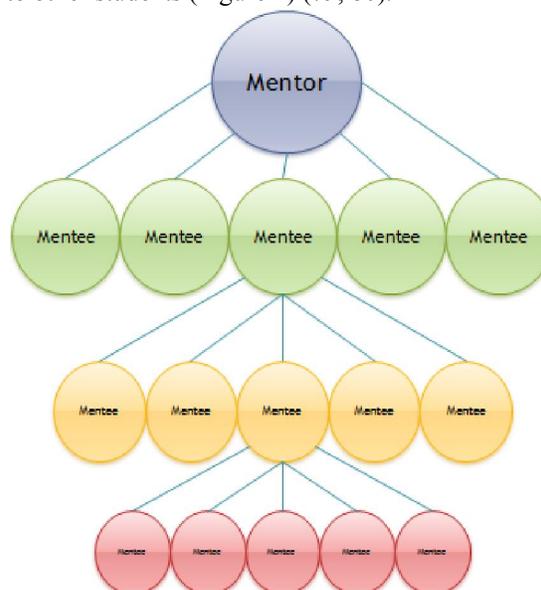


Figure -1: Networks made by Students mentorship program.

Downsides: if not mandatory, a decline may be seen in the number of mentors. Also, mentees who are supposed to become mentors might not fulfill their obligations and refuse to teach other students (81).

Student mentorship program must be discussed in detail in a separate article.

5. Student congresses

Congresses that are totally handled by students are a place where they can experience conducting a scientific community. Also, students will get familiar with other students, many whom are more advanced. They will meet new ideas and new rules and their creative engine will be turned on (82).

The most useful result of these congresses is that usually after a student attends an out of the city

congress, they will become more motivated and a three day congress will strongly drive a huge amount of students towards research (83).

Downsides: on the other hand, usually the group who handles and hosts the congress goes under a lot of stress. Despite the experience they gain, no short time achievements will be recognizable for them. Almost always, after a congress, many students of the hosting university will quit research and follow other activities.

It is crucial to make rules that increase the benefits of hosting a congress. Rules that result in a huge point for the visitors and few points for the hosts will damage the purpose and result in a short time increase in motivations and will lead to a reconstruction of their purposes.

6. Specialty congresses

Although student based congresses are necessary, nothing will make a student learn like a congress that is conducted by experienced scientists who have handled many congresses. They will observe, and take in every moment of such gatherings. Even participating as a passive participant will strongly motivate the students (84, 85).

Downside: few downsides can be considered for these events. However, they cannot be enough and can only help on a preliminary level. Still, they are vital and it should be arranged for students to attend such occasions.

7. Journals

Perhaps the most amazing achievement of a young scientist is to publish their work. As discussed earlier, since the resources were limited, it was impossible for students to publish their first works. Nowadays, with the progress made in digital technologies, a huge opportunity has been made which enables students to publish their work (86).

Editors of journals must empty a space for students so they can publish their work. On publishing student conducted studies, they must focus on the matter that they are motivating their students. However, the editors themselves are the result of people who sacrificed for them to learn, and ought to contribute to the improvement of medical students knowledge.

By the current approach, young scientists who have few resources will publish their articles in low level journal that only publish for money. Many of them need to publish their work for reasons that are not understandable by scientists who live in developed countries. We feel that those scientists should change their attitude and hear what is being said by young scientists who are willing to contribute to world

science from their own country and have decided not to emigrate.

8. Journals that focus on publishing students works

As mentioned in the previous section, journals publish students' research much harder. Even though the reason might be understandable in a situation with limited resources, nowadays this idea should be avoided.

We purpose that journals must be set to publish every article written by students. These articles should be carefully and publicly reviewed. All reviews should be available online for others to view and learn.

9. Conclusion

This article focused on different aspects that may increase the willingness of students, especially medical students, to pursue research. As mentioned above, creating student research committees and research centers is the most helpful method of achieving this goal.

These centers must be carefully supervised by employees who only focus on student research. Membership in these committees or centers should be completely mandatory. A significant amount of students' credit should be considered for this. The curriculum also must be designed in a way that involves the students in all aspects of research, from finding a title to submitting the manuscript. Even teaching other students (with supervision) is also beneficial and leads to higher knowledge.

Open access journals that are publish students' works, and focus on teaching research methods is crucial. The review process should be available online to all students and the credit should be similar to other articles published in scientific journals.

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11. References:

1. Li L, Tang J, Lv J, Jiang Y, Griffiths S. The need for integration in health sciences sets the future direction for public health education. *Public health*. 2011;125(1):20-4.

2. Frank L, Benkov K, Blaser M, Rhodes ME, Sperling R. The Human Microbiome. The Human Microbiome: Ethical, Legal and Social Concerns. 2013;16.
3. Qiang H, Zhang C, Shi Z-b, Yang H-q, Wang K-z. Protective effects and mechanism of Panax Notoginseng saponins on oxidative stress-induced damage and apoptosis of rabbit bone marrow stromal cells. Chinese journal of integrative medicine. 2010;16:525-30.
4. Uddin M, Gupta A, Maly K, Nadeem T, Godambe S, Zaritsky A, editors. Department of Computer Science Old Dominion University. Bioinformatics and Biomedicine (BIBM), 2013 IEEE International Conference on; 2013: IEEE.
5. White RL, Meindl JD. The impact of integrated electronics in medicine. Science. 1977 Mar 18;195(4283):1119-24.
6. Owens P. Electronics and emergency medicine: speeding help to the patient via telemetry and telephone. Biomed Commun. 1976 Jan;4(1):22-3, 37-40, 3.
7. Watson R, Cleary M, Jackson D, Hunt GE. Open access and online publishing: a new frontier in nursing? Journal of advanced nursing. 2012;68(9):1905-8.
8. Cooper L. Trends in Online Academic Publishing. Metaphilosophy. 2013;44(3):327-34.
9. Pettitt JP, Mckinley KE, Mcelreavy TS. Systems and Methods for Online Publishing and Content Syndication. Google Patents; 2013.
10. Lowrance JM. How To Avoid Negative Online Publishing Experiences: Cautiously Marketing Your Intellectual Property. 2011.
11. Grossman C, Powers B, Sanders J. Digital Data Improvement Priorities for Continuous Learning in Health and Health Care: Workshop Summary. National Academies Press; 2013.
12. Charnigo L, Barnett-Ellis P. Checking out Facebook. com: the impact of a digital trend on academic libraries. Information technology and libraries. 2013;26(1):23-34.
13. Ghasemzadeh I, Fallahi S, Ghafouri M, Rezaee Z, Alizade M, Shahrzad ME, et al. Research Skills Education: Student Satisfaction. Life science journal. 2012;9(2(s)):26-9.
14. Haghghi H, Alizadh M, Naghibi F, Namazi SS, Esmaeil M, Shahrzad MS, et al. A comparative study of religious attitudes and coping strategies among male smoker and non-smoker students in Hormozghan University. Life science journal. 2012;9(2s).
15. Arbabi N, Salami F, Forouzes F, Gharehbeqlou M, Riyahin AA, Shahrzad ME. Effects of stress and stressful events on Alopecia Areata. Life science journal. 2013;10(6s).
16. Yazdani R, Tabibzade A, Ghafouri HB, Lalehzari M, Shahrzad ME. Incidence of Delayed Pneumothorax in Patients with Penetrating Chest Trauma. Life science journal. 2013;10(6s).
17. Fakhr AA, Asadí HK, Shahrzad ME. FACILITATE IN ELDERLY WAKING AFTER SURGERY WITH DEPTH OF ANESTHESIA MONITORING. YAŞLILARDA CERRAHİ SONRASI ANESTEZİ DERİNLİĞİNİN ÖLÇÜLMESİ İLE UYANMANIN HIZLANDIRILMASI. [Article]. 2014;17(1):86-9.
18. Negahi A, Golmirzaei J, Hamed Y, Piraloo Z, Shahrzad ME, Shahri RZ, et al. Prevalence and Associated Factors of Depression in Patients with Multiple Sclerosis. Asian J Med Pharm Res. 2014;4(1):15-20.
19. Ghasemzadeh I, Mahmoodi F, Shahrzad ME, Shahri RZ, Namazi SA, Sadeghi P, et al. Infectious lesions of oral cavity in HIV patients: A Review. Life science journal. 2013;10(11s).
20. Golmirzaei J, Mahboobi H, Khorgoei T, Shahrzad ME. Tic and Obsessive Compulsive Disorder: Two Common ADHD Co-morbidities. Indian journal of psychological medicine. 2012;34(4):407.
21. Hashemi B, Addin SH, Khorgoei T, Mahboobi H, Shahrzad ME, Amirzadeh Shams S, et al. Knowledge and attitudes towards tuberculosis among secondary school students in rural areas in Hormozgan, Southern Iran. International Electronic Journal of Medicine. 2012;1(1):11-6.
22. Mahboobi H, Shahrzad ME. International Electronic Journal of Medicine. International Electronic Journal of Medicine. 2012;1(1):1-2.
23. Mahboobi H, Jahanshahi KA, Sharif N, Khorgoei T, Jahangiri Z, Shahrzad ME. Research utilization and attitudes towards research among nurses in Southern Iran in 2008. International Electronic Journal of Medicine. 2012;1(1):7-8.
24. Mahboobi H, Mahmoudi F, Shahrzad ME, Khorgoei T. Neurologists' role in antimicrobial resistance. Annals of Indian Academy of Neurology. 2012;15(1):68.
25. Shahryari E, Vahedian M, Adeli SH, Jangholi E, Gharehbeqlou M, Mesgaranzadeh M, et al. Attitudes of physicians to futile treatment at the end of life care. Life science journal. 2013;10(10(s)):289-92.
26. Ghasemzadeh I, Shahri RZ, Namazi SA, Sadeghi P, Shojaeddin S. Review of HIV risk factors in prison inmates in Iran. Life science journal. 2014;11(4s).

27. Ghasemzadeh A, Ghasemzadeh I, Shahri RZ, Namazi SS, Seyede, Namazi A. Prevalence of depression among patients with coronary artery disease and associated factors. *Life science journal*. 2014;11(4(s)):240-3.
28. Paydar S, Ghaffarpassand F, Foroughi M, Saberi A, Dehghankhalili M, Abbasi H, et al. Role of routine pelvic radiography in initial evaluation of stable, high-energy, blunt trauma patients. *Emergency Medicine Journal*. 2013;30(9):724-7.
29. Peymani P, Heydari ST, Hoseinzadeh A, Sarikhani Y, Hedjazi A, Zarenezhad M, et al. Epidemiological characteristics of fatal pedestrian accidents in Fars Province of Iran: a community-based. *Chinese Journal of Traumatology*. 2012;15(5):279-83.
30. Ghazanfarpour M, Kaviani M, Asadi N, Ghaffarpassand F, Ziyadlou S, Tabatabaee HR, et al. Hypericum perforatum for the treatment of premenstrual syndrome. *Int J Gynaecol Obstet*. 2011 Apr;113(1):84-5.
31. Heydari ST, Hoseinzadeh A, Ghaffarpassand F, Hedjazi A, Zarenezhad M, Moafian G, et al. Epidemiological characteristics of fatal traffic accidents in Fars province, Iran: a community-based survey. *Public Health*. 2013 Aug;127(8):704-9.
32. Kazerooni T, Ghaffarpassand F, Asadi N, Dehkhoda Z, Dehghankhalili M, Kazerooni Y. Correlation between thrombophilia and recurrent pregnancy loss in patients with polycystic ovary syndrome: a comparative study. *J Chin Med Assoc*. 2013 May;76(5):282-8.
33. Paydar S, Ghaffarpassand F, Foroughi M, Saberi A, Dehghankhalili M, Abbasi H, et al. Role of routine pelvic radiography in initial evaluation of stable, high-energy, blunt trauma patients. *Emerg Med J*. 2013 Sep;30(9):724-7.
34. Heydari ST, Maharlouei N, Foroutan A, Sarikhani Y, Ghaffarpassand F, Hedjazi A, et al. Fatal motorcycle accidents in Fars Province, Iran: a community-based survey. *Chin J Traumatol*. 2012;15(4):222-7.
35. Sarrafzadegan N, Sadeghi M, Ghaffarpassand F, Alisaeidi A, Sanei H, Zakeri H, et al. Interleukin-6 and E-selectin in acute coronary syndromes and stable angina pectoris. A comparative study. *Herz*. 2012 Dec;37(8):926-30.
36. Ghaffarieh A, Ghaffarpassand F, Dehghankhalili M, Honarparisheh N, Nirumandi S, Tanideh N. Effect of transcutaneous electrical stimulation on rabbit corneal epithelial cell migration. *Cornea*. 2012 May;31(5):559-63.
37. Khademi S, Ghaffarpassand F, Heiran HR, Yavari MJ, Motazedian S, Dehghankhalili M. Intravenous and peritonsillar infiltration of ketamine for postoperative pain after adenotonsillectomy: a randomized placebo-controlled clinical trial. *Med Princ Pract*. 2011;20(5):433-7.
38. Ghaffarpassand F, Paydar S, Foroughi M, Saberi A, Abbasi H, Karimi AA, et al. Role of cervical spine radiography in the initial evaluation of stable high-energy blunt trauma patients. *J Orthop Sci*. 2011 Sep;16(5):498-502.
39. Lankarani KB, Mahmoodi M, Honarvar B, Nematollahi P, Zamiri N, Ghaffarpassand F. Determinants of poor outcome in patients with hepatitis A infection: a four-year retrospective study in Shiraz, Southern Iran. *Arch Virol*. 2014 Feb 21.
40. Lankarani KB, Mahmoodi M, Lotfi M, Zamiri N, Heydari ST, Ghaffarpassand F, et al. Common carotid intima-media thickness in patients with non-alcoholic fatty liver disease: a population-based case-control study. *Korean J Gastroenterol*. 2013 Dec;62(6):344-51.
41. Joulaei H, Shahbazi M, Nazemzadegan B, Rastgar M, Hadibarhaghtalab M, Heydari M, et al. The diminishing trend of beta-thalassemia in Southern Iran from 1997 to 2011: the impact of preventive strategies. *Hemoglobin*. 2014;38(1):19-23.
42. Zolghadri J, Younesi M, Asadi N, Khosravi D, Behdin S, Tavana Z, et al. Double versus single cervical cerclage for patients with recurrent pregnancy loss: a randomized clinical trial. *J Obstet Gynaecol Res*. 2014 Feb;40(2):375-80.
43. Lankarani KB, Ghaffarpassand F, Mahmoodi M, Lotfi M, Zamiri N, Heydari ST, et al. Non alcoholic fatty liver disease in southern Iran: a population based study. *Hepat Mon*. 2013 May;13(5):e9248.
44. Haghpanah S, Nasirabadi S, Ghaffarpassand F, Karami R, Mahmoodi M, Parand S, et al. Quality of life among Iranian patients with beta-thalassemia major using the SF-36 questionnaire. *Sao Paulo Med J*. 2013;131(3):166-72.
45. Heydari ST, Hoseinzadeh A, Sarikhani Y, Hedjazi A, Zarenezhad M, Moafian G, et al. Time analysis of fatal traffic accidents in Fars Province of Iran. *Chin J Traumatol*. 2013;16(2):84-8.
46. Lankarani KB, Mahmoodi M, Gholami S, Mehravar S, Malekhosseini SA, Heydari ST, et al. Reducing Social Disparity in Liver Transplantation Utilization through Governmental Financial Support. *Hepat Mon*. 2012 Nov;12(11):e6463.

47. Lankarani KB, Mahmoodi M, Heydari ST, Joulaei H, Ghaffarpasand F, Maharlouei N, et al. The second international conference on reducing burden of traffic accidents, Shiraz, Iran. *J Inj Violence Res.* 2013 Jan;5(1):75-6.
48. Paydar S, Sharifian M, Parvaz SB, Abbasi HR, Moradian MJ, Roozbeh J, et al. Explosive attack: Lessons learned in Seyed Al Shohada mosque attack, April 2008, Shiraz, Iran. *J Emerg Trauma Shock.* 2012 Oct;5(4):296-8.
49. Peymani P, Heydari ST, Hoseinzadeh A, Sarikhani Y, Hedjazi A, Zarenezhad M, et al. Epidemiological characteristics of fatal pedestrian accidents in Fars Province of Iran: a community-based survey. *Chin J Traumatol.* 2012;15(5):279-83.
50. Honarvar B, Moghadami M, Moattari A, Emami A, Tabatabaee HR, Jahromi BN, et al. Titering of 2009 pandemic H1N1 influenza virus hemagglutinin inhibition antibody in nonvaccinated pregnant women in Shiraz, Southern Iran. *Hum Vaccin Immunother.* 2012 May;8(5):604-11.
51. Zarrabi K, Ghaffarpasand F, Zamiri N, Ostovan MA. Subclavian flap aortoplasty and preservation of left upper extremity circulation using an interposition graft. *J Card Surg.* 2012 May;27(3):381-3.
52. Esalatmanesh K, Jamshidi A, Shahram F, Davatchi F, Masoud SA, Soleimani Z, et al. Study of the correlation of serum selenium level with Behcet's disease. *Int J Rheum Dis.* 2011 Oct;14(4):375-8.
53. Mahjour SB, Ghaffarpasand F, Wang H. Hair follicle regeneration in skin grafts: current concepts and future perspectives. *Tissue Eng Part B Rev.* 2012 Feb;18(1):15-23.
54. Paydar S, Mousavi M, Akerdi AT, Ghaffarpasand F, Abbasi HR, Bolandparvaz S. Effect of concomitant medical conditions on trauma patients' outcomes. *J Am Coll Surg.* 2011 Sep;213(3):453-4.
55. Zeraatian S, Zakeri H, Boroojeny SB, Hourang MH, Ghaffarpasand F, Fard MM. Effect of oral clonidine on acute intraocular pressure rise after phacoemulsification: a prospective double-blind, randomized, clinical trial. *J Ocul Pharmacol Ther.* 2011 Jun;27(3):293-7.
56. Mahmoodi M, Peyvandi F, Afrasiabi A, Ghaffarpasand F, Karimi M. Bleeding symptoms in heterozygous carriers of inherited coagulation disorders in southern Iran. *Blood Coagul Fibrinolysis.* 2011 Jul;22(5):396-401.
57. Zolghadri J, Momtahan M, Aminian K, Ghaffarpasand F, Tavana Z. The value of hysteroscopy in diagnosis of chronic endometritis in patients with unexplained recurrent spontaneous abortion. *Eur J Obstet Gynecol Reprod Biol.* 2011 Apr;155(2):217-20.
58. Alyasin S, Hamidi M, Karimi AA, Amiri A, Ghaffarpasand F, Ehsaei MJ. Correlation between clinical findings and results of autologous serum skin test in patients with chronic idiopathic urticaria. *South Med J.* 2011 Feb;104(2):111-5.
59. Paydar S, Johari HG, Ghaffarpasand F, Shahidian D, Dehbozorgi A, Ziaeiian B, et al. The role of routine chest radiography in initial evaluation of stable blunt trauma patients. *Am J Emerg Med.* 2012 Jan;30(1):1-4.
60. Ghaffarpasand I, Moniri R, Kheradi E, Tehrani MD. Antibiotic resistance in fecal enterococci in hospitalized patients. *Indian J Pathol Microbiol.* 2010 Oct-Dec;53(4):898-9.
61. Kasraeian M, Asadi N, Ghaffarpasand F, Karimi AA. Value of transvaginal ultrasonography in endometrial evaluation of non-bleeding postmenopausal women. *Climacteric.* 2011 Feb;14(1):126-31.
62. Borhani Haghighi A, Karimi AA, Amiri A, Ghaffarpasand F. Knowledge and attitude towards stroke risk factors, warning symptoms and treatment in an Iranian population. *Med Princ Pract.* 2010;19(6):468-72.
63. Motazedian S, Ghaffarpasand F, Mojtahedi K, Asadi N. Terbutaline versus salbutamol for suppression of preterm labor: a randomized clinical trial. *Ann Saudi Med.* 2010 Sep-Oct;30(5):370-5.
64. Honarvar B, Asadi N, Ghaffarpasand F, Moghadami M, Kasraeian M. Pregnancy outcomes among patients infected with pandemic H1N1 influenza virus in Shiraz, Iran. *Int J Gynaecol Obstet.* 2010 Oct;111(1):86-7.
65. Jalali GR, Roozbeh J, Mohammadzadeh A, Sharifian M, Sagheb MM, Hamidian Jahromi A, et al. Impact of oral zinc therapy on the level of sex hormones in male patients on hemodialysis. *Ren Fail.* 2010 May;32(4):417-9.
66. Kazerooni T, Ghaffarpasand F, Mosalaei A, Kazerooni Y. The value of transvaginal ultrasonography in the endometrial evaluation of breast cancer patients using tamoxifen. *Med Princ Pract.* 2010;19(3):222-7.
67. Mahjour SB, Ghaffarpasand F, Fattahi MJ, Ghaderi A, Fotouhi Ghiam A, Karimi M. Seroprevalence of human herpes simplex, hepatitis B and epstein-barr viruses in children with acute lymphoblastic leukemia in southern iran. *Pathol Oncol Res.* 2010 Dec;16(4):579-82.
68. Nazarinia MA, Ghaffarpasand F, Seraj SR, Heiran HR, Khojasteh HN. Imatinib treatment of

- ankylosing spondylitis in a patient resistant to NSAIDs and infliximab. *J Clin Rheumatol*. 2010 Apr;16(3):140-2.
69. Kazerooni T, Shojaei-Baghini A, Dehbashi S, Asadi N, Ghaffarpassand F, Kazerooni Y. Effects of metformin plus simvastatin on polycystic ovary syndrome: a prospective, randomized, double-blind, placebo-controlled study. *Fertil Steril*. 2010 Nov;94(6):2208-13.
 70. Khademi S, Ghaffarpassand F, Heiran HR, Asefi A. Effects of preoperative gabapentin on postoperative nausea and vomiting after open cholecystectomy: a prospective randomized double-blind placebo-controlled study. *Med Princ Pract*. 2010;19(1):57-60.
 71. Kazerooni T, Asadi N, Jadid L, Kazerooni M, Ghanadi A, Ghaffarpassand F, et al. Evaluation of sperm's chromatin quality with acridine orange test, chromomycin A3 and aniline blue staining in couples with unexplained recurrent abortion. *J Assist Reprod Genet*. 2009 Nov-Dec;26(11-12):591-6.
 72. Kasraeian M, Asadi N, Ghaffarpassand F. Prevalence of asymptomatic bacteriuria among pregnant women in Shiraz, Iran. *Saudi Med J*. 2009 Jul;30(7):917-20.
 73. Kazerooni T, Ghaffarpassand F, Kazerooni Y, Kazerooni M, Setoodeh S. Short-term metformin treatment for clomiphene citrate-resistant women with polycystic ovary syndrome. *Int J Gynaecol Obstet*. 2009 Oct;107(1):50-3.
 74. Nazarinia MA, Ghaffarpassand F, Heiran HR, Habibagahi Z. Pattern of ankylosing spondylitis in an Iranian population of 98 patients. *Mod Rheumatol*. 2009;19(3):309-15.
 75. Ghaffarpassand F, Seraj SR, Heiran HR. Intralesional artemisinin for the treatment of cutaneous leishmaniasis. *Med Hypotheses*. 2009 Feb;72(2):233-4.
 76. Kazerooni T, Ghaffarpassand F, Rastegar N, Kazerooni Y. Effect of levonorgestrel implants on the periodontium. *Int J Gynaecol Obstet*. 2008 Dec;103(3):255-6.
 77. Ghaffarpassand F. At harm's length. *Can Fam Physician*. 2008 Aug;54(8):1152.
 78. Nazarinia MA, Ghaffarpassand F, Shamsdin A, Karimi AA, Abbasi N, Amiri A. Systemic lupus erythematosus in the Fars Province of Iran. *Lupus*. 2008 Mar;17(3):221-7.
 79. Mahboobi H, Shahrzad M, Seddigh S, Hamed Y, Sharma A, Khorgoei T. Designing a Research Mentorship Program (RMP) to enhance research productivity at Ebne-Sina psychiatric hospital. *Australasian Medical Journal*. 2010;1(2):180-2.
 80. Mahboobi H, Naziri GRP, Khorgoei T, Shahrzad ME, Mandegari Z. Mentorship in Medical Students researches. *Electronic Physician*. 2009;3.
 81. Afshar Z, Ebrahimzadeh Y, Seddigh SH, Golmirzaei J, Hamed Y, Mahboobi H, et al. Research Mentorship Program (RMP) to Enhance the Research Productivity in a Psychiatric Hospital: First Report. *Electronic Physician*. 2011;3(4):442-5.
 82. Iman Ghasemzadeh SF, Maryam Ghafouri, Seyed Shojaeddin Namazi. Research Skills Education: Student Satisfaction. *Life science journal*. 2012;9(2s):26-9.
 83. Khazaei S. Ongoing Dentistry Research Projects in Kermanshah, Iran. *Educational Research in Medical Sciences Journal*. 2014;2(3):1.
 84. Amabile TM. *How to kill creativity*: Harvard Business School Publishing; 1998.
 85. Gray M, Schubert L. Sustainable social work: Modelling knowledge production, transfer, and evidence - based practice. *International Journal of Social Welfare*. 2012;21(2):203-14.
 86. Medawar PB. *Advice to a young scientist*: Basic Books; 2008.

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