

## EDITORIAL

## Incorporation of Medical Research and Education in Asia Pacific Region

Reza Afshari<sup>1,2,\*</sup><sup>1</sup>Iranian Academy of Medical Sciences, Tehran, Iran<sup>2</sup>Addiction Research Centre, Mashhad University of Medical Sciences, Mashhad, Iran.<sup>\*</sup>Addiction Research Centre, Imam Reza Hospital, Ibn Sina Street, Mashhad, IRAN

Tel/Fax: +98 511 852 5315

E-mail:

afsharir@mums.ac.ir

Received: October 16, 2015

Accepted: December 1, 2015

The goal of medicine is to prevent harm as Hippocrates pointed out; "*primum non nocere*; first do no harm". Has this fact been taken into account in developing Medical Education curricula in Asia?

Frequency of diseases in Asia is different from high income countries (1, 2) and funds for research are lacking. It is therefore important to allocate available funds to the most applicable issues to make science socially responsive and maximize the research impact (3).

Despite the fact that Jawaharlal Nehru, the first prime minister of independent India, persuaded Asian nations to focus on developing a "scientific temper" more than half a century ago (4), science production in this region is still limited in the 21<sup>st</sup> century. Shouldn't the scientists from the developing world bear the responsibility for the shortcomings in their communities (5)?

Having said that, the rate of growth for scientific publications from Asia has disproportionately increased in comparison to European and North American regions in the past two decades (6). Although this trend is promising, it is not clear whether these publications have been directed or translated to prevent harm in this region.

Currently medical scientists are being evaluated via scintometric indices at best, which are focused on science production (7). This may in part justify the increased rate of publications in this region. Current ranking of researchers did not lead, however, to all-inclusive evaluation tools (8).

Another problem is the gap between the regional scientific findings and acceptable evidence for the local policy makers. As a result, local medical research are not being translated into action (9).

Medical curricula in developing world are subjected to the focuses of the high income countries, and distinctive pattern of diseases in Asia has not proportionately taken into account (10). The irony is that the most important resource for quality research in Asia seems not to be funding,

but applicable knowledge and attitude (11). The way forward for the dissemination of research in Asia needs local consideration and collaboration (12). We need to foster harmonization and alignment of research efforts (9) to be directed at recommendations and feedback to medical educators as well as policy makers (13).

To achieve this goal, medical scientists should be evaluated via a combination of quantitative and qualitative indices to shift the research trend towards local health problems (7). Research revealed that promotion of these types of regulations significantly affect the quality of medical educators and their scholarship activities (14).

To produce fit-for-purpose medical graduates (15), we need a standardized format to manage patients with low cost healthcare technologies in Asian countries (16). Teaching critical appraisal of the current research is important (17). Correcting the misperceptions and deviated knowledge and attitude of medical educators and policy makers in regard to the importance of more locally generated science and common diseases should be focused in developing medical and health curricula (18, 19). Frequent feedback improves the quality of medical education, especially when augmented by applying standards (20).

To bridge the gap with health policy makers, local culture and historic evidence, in which promoting scholarship behaviors in teaching has been endorsed, can be successfully used (21, 22) to highlight the importance of translational research by granting bodies in funding decisions (23).

Collaboration and integrating of research and medical education with social accountability and applying the most cost beneficial medical education technologies are essential to train fit-for-purpose medical students and prevent harm (5, 24-26).

**Conflict of Interest:** None

## REFERENCES

1. Monzavi S, Afshari R, Rehman N. Alcohol Related Disorders in Asia Pacific Region: Prevalence, Health Consequences and Impacts on the Nations. *Asia Pac J Med Toxicol* 2015;4:1-8. 2015;4(1).
2. Afshari R. Medical (Clinical) Toxicology Education in Asia Pacific Region. *Future Med Educ J* 2011; 1:2.
3. Afshari R, Bellinger D. Socially Responsive Toxicology; Looking outside the Windows of Medical Wards: A Tale of Lead Exposure. *Asia Pac J Med Toxicol*. 2015;4(3):95-6.
4. Alberts B. Science, Education and the World's Future; By Prof. Bruce
5. Alberts. *Future Med Educ J*. 2012;2(2):2-
6. Afshari R. What is the "Best Research" for low income countries? *Asia Pac J Med Toxicol*. 2013;2(1):1-
7. Afshari R. Scientometric Analysis of Toxicology in Asia Pacific Region: Signs of Growth. *Asia Pac J Med Toxicol*. 2014;3(3):92-6.
8. Afshari R, Monzavi SM. Qualitative versus Quantitative Evaluation of Scientists' Impact: A Medical Toxicology Tale. *Asia Pac J Med Toxicol*. 2014;3(4):134-40.
9. Khadem-Rezayian M, Dadgar-Moghadam M. Which Metric Is More
10. Appropriate to Evaluate Researchers? *Asia Pac J Med Toxicol* 2015;4(2).
11. Afshari R. Empowerment of Medical Toxicology in Asia Pacific Region. *Asia Pac J Med Toxicol*. 2013;2(2):36-.
12. Afshari R. A new horizon to medical toxicology in Asia Pacific region. *Asia Pac J Med Toxicol*. 2012;1(1):2-.
13. Hoffman RJ. Knowledge, Not Funding is the Most Important Research Resource. *Asia Pac J Med Toxicol*. 2013;2(2).
14. Afshari R. Dissemination of Research in Medical Toxicology; the Way Forward. *Asia Pac J Med Toxicol*. 2013;2(4):120-.
15. Braund R, Pan B, Sheffelbien L,

- Temple W. What Can We Learn from 21 Years of School Poisonings in New Zealand? *Asia Pac J Med Toxicol* 2012;1:10-13.
14. Afshari R, Beiraghi Toosi A, Azizi H. Process of Scholarship of Teaching Has Been Successful in Mashad University of Medial Sciences. *Future Med Educ J*. 2012;2(1):27-31.
15. Afshari R. Implementing Accountability in Medical Schools. *Future Med Educ J*. 2012;2(4):2.
16. Singh S. Research Priorities for Medical Toxicology in Low and Middle Income Countries. *Asia Pac J Med Toxicol*. 2013;2(2):78-.
17. Zarghi N, Mousavi SR, Moeentaghavi A, Taghizadeh A, Afshari R, Amirchaghmaghi M. Effects of Educational Training on Quality of Journal Clubs: a Quasi-Experimental Study. *Future Med Educ J*. 2014;4(3):35-8.
18. Zavar A, Afshari R, Alidoust M, Pourandi R, Dadpour B. Curriculum Development in regard to Illicit Drug Abuse. *Future Med Educ J*. 2012;2(2):31-6.
19. Khoshnevis MA, Aslane J, Panahi Y, Ebadi A, Afshari R. Disaster Triage System and Educational Strategies. *Future Med Educ J*. 2014;4(1):32-5.
20. Mousavi SR, Zeraati AA, Jafari M, Akhavan Rezayat K, Jokar MH, Allahyari A, et al. How to Improve the Quality of Morning Report; Department of Internal Medicine, An action research. *Future Med Educ J*. 2015;5(1):75-8.
21. Afshari R. Historic Perspective (Ferdowsi); Scholarship of Teaching. *Future Med Educ J*. 2012;2(3):2-.
22. Afshari R. Health Literacy in History: A Medical Glance at the Masterpieces of the Poet Physician of the Ancient Persia; Khaghani Shervani (1121-1190 CE). *Journal of Mashhad Medical Council*. 2015;19(1):2-5.
23. Dawson AH. Comment on Editorial; Best Research for Low Income Countries. *Asia Pac J Med Toxicol*. 2013;2(2):76-.
24. Afshari R. Integration of Medical Education and Health Services Meets Accountability Challenges and Excellence of Education? *Future Med Educ J*. 2012;2(1):2-.
25. Ghouskhanei H, Afshari R, Marouzi P. Knowledge of Social Accountability in Medical Education among Faculty Members at Medical Sciences of Mashhad University. *Future Med Educ J*. 2013;3(3):20-3.
26. Abedi F, M Lari S, Afshari R, Nouri Tarazkhaki S, Nemati Karimoi M, Talebi M. Evaluation of E-learning System to the Performance of Family Medicine MPH (Master of Public Health) Students. *Future Med Educ J*. 2015;5(2):38-41.