

7. Anderson M S, Horn AS, Risbey KR, Ronning EA, De Vries R, Martinson BC. What do mentoring and training in the responsible conduct of research have to do with scientists' misbehavior? Findings from a national survey of NIH-funded scientists. *Academic Medicine*. 2007 Sep;82(9):853-60.
8. Chalmers I. Role of systematic reviews in detecting plagiarism: case of Asim Kurjak. *BMJ*. 2006 Sep 16;333(7568):594-6.
9. Bhattacharjee Y. Misconduct. *Science*(Newsmakers). 2007 Mar 16;315(5818):1475.
10. Yilmaz I. Plagiarism? No, we're just borrowing better English. *Nature*. 2007 Oct 11;449(7163):658.
11. Fighting plagiarism. *The Lancet* (Editorial). 2008 Jun 28;371(9631):2146.
12. Brumfiel G. Turkish physicists face accusations of plagiarism. *Nature*. 2007 Sep 6;449(7158):8.
13. Nolan J. Expression of concern: Plagiarism in a case report. *Resuscitation*. 2008 Oct;79(1):4.
14. Park C, Prabhala A. First attempt to dent a compromised patent system. *The Hindu*[Internet]. 2007 Feb 12. [cited 2010 Mar 13]. Available from: <http://www.hindu.com/2007/02/12/stories/2007021203681100.htm>
15. Mitta M. Mashelkar takes back report after plagiarism row. *The Times of India*[Internet]. 2007 Feb 22 [cited 2010 Mar 12]. Available from: <http://timesofindia.indiatimes.com/india/Mashelkar-takes-back-report-after-plagiarism-row/articleshow/1653926.cms>
16. Bagla P. Plagiarism in his panel's report, Mashelkar tells Govt to withdraw it. *Indian Express*[Internet]. 2007 Feb 22 [cited 2010 Mar 13]. Available from: <http://www.indianexpress.com/news/plagiarism-in-his-panels-report-mashelkar-tells-govt-to-withdraw-it/23941/>
17. Padma TV. Plagiarized report on patent laws shames Indian scientists. *Nat Med*. 2007 Apr;13(4):392.
18. Redman B K, Merz J F. Sociology. Scientific misconduct: do the punishments fit the crime? *Science*. 2008 Aug 8;321(5890):775.
19. COPE Committee on Publication Ethics. What to do if you suspect plagiarism [Internet]. Committee on Publication Ethics; c2008[cited 2010 Mar 13]. Available from: http://publicationethics.org/files/u2/02B_Plagiarism_Published.pdf
20. Daroff RB, Griggs RC. Scientific misconduct and breach of publication ethics. *Neurology*. 2004;62:352-3.
21. Wager E, Fiack S, Graf C, Robinson A, Rowlands I. Science journal editors' views on publication ethics: results of an international survey. *J Med Ethics*. 2009 Jun;35(6):348-53.
22. Centre for Enquiry into Health and Allied Themes, Ethics in social sciences and health research: a draft code of conduct. *Issues Med Ethics*. 2000 Apr-Jun;8(2):53-7.
23. Brockington L. Suicide in women. *Int Clin Psychopharmacol*. 2001 Mar;16 Suppl 2:S7-19.
24. Bhugra D. Suicide and gender: cultural factors. *Harv Health Policy Rev*. 2006 Fall;7(2):166-80.
25. Chakraborty R, Chatterjee A. Predictors of suicide attempt among those with depression in an Indian sample: a brief report. *The Internet Journal of Mental Health*. 2007;4(2).
26. Chowdhury A, Brahma A, Banerjee S, Biswas M K. Pattern of domestic violence amongst non-fatal deliberate self-harm attempters: a study from primary care of West Bengal. *Indian J Psychiatry*. 2009;51(2):96-100.
27. Note. *Harv Health Policy Rev* [Internet]. 2006 Fall [cited 2010 Mar 15]. Available from: <http://www.hhpr.org/currentissue/fall2006/>
28. Long TC, Errami M, George AC, Sun Z, Garner HR. Scientific integrity: responding to possible plagiarism. *Science*. 2009 Mar 6;323(5919):1293-4.
29. Steneck NH. ORI introduction to the responsible conduct of research. Washington, DC; US Government Printing Office: 2007 Aug. 22-23.
30. Rhodes R, Strain JJ. Whistleblowing in academic medicine. *J Med Ethics*. 2004 Feb;30(1):35-9.
31. Policies and procedures for handling allegations of misconduct in science. In: Responsible Science, Volume II. Ensuring the integrity of the research process. National Academy of Sciences. National Academy of Engineering, Institute of Medicine: Washington, DC: National Academy Press; 1993. 231-75.
32. Jia H. Ethics at issue in China. *Science*. 2007 Mar 2;315(5816):1207b.

Tackling disinterest towards blood donation: need for urgent action

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Abstract

The shortage of voluntary blood donors is a problem in many countries including India. Myths regarding the ill effects of blood donation are common and many precious lives are lost for lack of replacement donations. Urgent measures are warranted to eliminate myths in the community regarding blood donation in order to encourage voluntary donation.

The woman was in great distress. She had been brought to the medical emergency department by her husband. The mother of five, she had been ill for months. Today when her husband found that she could no longer continue to do the household chores, he thought it fit to bring her to the hospital. She was pale and breathless. She needed emergent red cell transfusion.

In most government-run hospitals, blood for transfusion to a patient is made available against the donation of blood by a relative. Of course there is a provision for life-saving transfusion

when no donors are available. However, the residents who work in the emergency department are under pressure to release as few units for life saving purposes as possible, and are often asked to justify ordering life saving transfusions. To make matters worse, myths regarding the ill effects of blood donation are so common amongst the general public that making a relative agree to donate blood is no less than a herculean task.

I told the patient's husband that his wife was in desperate need of blood and that he would need to donate for her sake. However, he was not inclined to agree. "How can I donate, sir? I have five children to look after. Who will care for them if something happens to me?" he asked. I explained to him that donation was safe for a healthy person and that he should go ahead to save the life of his wife. He tried to bargain with me: "Can't we buy it? I will pay for it." I lost my temper and asked: "We need human blood; is it available in the market?" He realised that there was no way out. Then he suddenly vanished.

Even the woman asked me how her husband could donate blood when he was weak and had recently completed treatment for tuberculosis.

I had no option but to order a life-saving release of red cell concentrate for the woman, my fifth such release for the day.

I was planning to leave the hospital the next morning after slogging for 24 hours when I realised that the patient's husband was standing in front of me. He was most apologetic. He thanked me for issuing the release order and told me that he would go and donate blood to replace the transfused red cell concentrate.

This was not the first time that I faced a situation in which a relative has refused to donate blood. Severely anaemic patients, usually women, present in advanced stages of complications of anaemia, with nobody ready to donate blood. The attending physicians or surgeons must often resort to threats that they will postpone therapy or procedures, in order to ensure replacement donations. While one may debate the ethics of such pressure tactics in ensuring donation, this is also a practical problem.

What surprised me in this case was that the woman's husband returned and offered to donate blood. I do not know what changed his mind. Perhaps his love for his wife conquered his false beliefs. But many are not able to overcome their fears and doubts.

Problems in ensuring voluntary donation

Studies have documented that most blood donations are done to save the lives of relatives. Despite this, the rates of voluntary blood donation remain woefully inadequate. Illiteracy, employment status and socioeconomic status are believed to affect people's attitudes regarding blood donation (1). Fear of illness, dizziness, weight loss, hypertension, seizures and sexual dysfunction also contribute to a negative attitude towards donation (2, 3). There is a need to address the lack of adequate knowledge about this essentially safe practice. Studies have also shown that a positive attitude regarding blood donation may not actually result in individuals donating blood voluntarily (4). This gap between knowledge, attitude and practice needs to be handled. However, the lack of political will and the disinterest of governmental agencies hamper this process. The brunt is often borne by the doctors who have to

ensure replacement donors.

Recommendations

In the current scenario with AIDS, high voluntary blood donation rates are very desirable. To achieve this there is an urgent need to educate people on blood donation and convince them that it is a noble practice. Campaigns regarding blood donation need to stress that it is a safe practice and there is also a screening programme in place which rejects ineligible donors. There is also a need to convince those who have a positive attitude regarding donation to actually donate blood. This will require the participation of community leaders, non-governmental organisations and the general public. For instance, the role of student organisations and unions in organising blood donation camps must be encouraged. Incentives like certificates and the promise of free blood to the donor or his family at a time of need can increase voluntary donations (1, 3, 5). Indeed, currently donors are issued donor cards for this purpose, which are valid for six months from the date of donation. Some would label such incentives as a form of payment, although these are accepted practices (6). A voluntary donor pool must be maintained and incentives provided to encourage people to donate regularly. Such a system is not yet in place. However, unless illiteracy and the myths rampant in the community are tackled, the shortage of blood and of voluntary donors will continue. All efforts should be made to tackle this through education involving the media and local the community leaders. Until that time, many lives will be lost for lack of blood.

References

1. Shenga N, Pal R, Sengupta S. Behavior disparities towards blood donation in Sikkim, India. *Asian J Transfus Sci.* 2008 Jul;2:56-60.
2. Juarez-Ocapa S, Pizapa-Venegas JL, Farfan-Canto JM, Espinosa-Acevedo FJ, Fajardo-Gutierrez A. Factors that influence non donation of blood in relatives of patients at a pediatric hospital. *Gac Med Mex.* 2001;137:315-22.
3. Olaiya MA, Alakija W, Ajala A, Olatunji RO. Knowledge, attitudes, beliefs and motivations towards blood donations among blood donors in Lagos, Nigeria. *Transfusion Med.* 2004 Feb;14(1):13-7.
4. Wiwanitkit V. Knowledge about blood donation among a sample of Thai university students. *Vox Sang.* 2002 Aug;83(2):97-9.
5. Burnett JJ. Examining the profiles of the donor and non donor through a multiple discriminant approach. *Transfusion.* 1982 Mar-Apr;22(2):138-42.
6. Woodfield G. Road blocks in achieving a 100% voluntary blood donation rate in the South Asian region. *Asian J Transfus Sci.* 2007 Jan;1(1):33-8.