# New Delhi, India. Author for correspondence: Sharath Burugina Nagaraja e-mail: sharathbn@yahoo.com

#### References

- 1. India Tuberculosis-Diabetes Study Group. Screening of patients with tuberculosis for diabetes mellitus in India. *Trop Med Int Health*. 2013;18:636–45.
- India Diabetes Mellitus-Tuberculosis Study Group. Screening of patients with diabetes mellitus for tuberculosis in India. *Trop Med Int Health*. 2013;18:646–54.
- 3. Indian Council of Medical Research. *Ethical guidelines for biomedical research on human participants* [Internet]. New Delhi: Indian Council of Medical Research; 2008 [cited 2012 Mar 26]. Available from: http://icmr. nic.in/ethical\_guidelines.pdf
- Mudur G. Indian MPs criticise HPV vaccination project for ethical violations [Internet]. *BMJ*. 2013 [cited 2015 Apr 7];347:f5492. Available from: http://www.bmj.com/content/347/bmj.f5492 (published on September 06, 2013).

## Phlebotomy consent: ethical concerns

Phlebotomy is one of the common invasive procedures carried out all round the globe (1). The practice of phlebotomy varies widely. In terms of the technique, the procedure may involve the use of a syringe or a vacutainer, and as for the technicians, some are not specifically trained to perform the procedure and others are qualified phlebotomists. Finally, some may receive training on the job, while others undergo formal, focused training. However, the underlying ethical principles of respect for autonomy and informed consent do not change (2). This commentary, which is supported by data collected during training in phlebotomy, reflects on the ethical issue of obtaining consent for the procedure.

#### The programme

In a tertiary hospital, a training programme was conducted on best practices in phlebotomy for nursing staff and laboratory technicians. The programme, which was spread over three sessions, included a pre-test and post-test to assess the efficacy of the programme. The technical questions were in the form of multiple-choice questions. The questions on ethical practices, such as obtaining consent and ensuring patients' safety, were in the form of true or false statements, e.g., "Consent is not required to collect samples – True / False." In all three sessions, both the pre-test and post-test included questions on ethical practices. The responses were evaluated to understand the awareness of the ethical issues related to consent for phlebotomy.

A total of 95 staff members participated in the training. These were 76 staff nurses, 15 technicians, and four phlebotomists . Forty-two (45%) of all the staff members had marked the correct responses both in the pre- and post-test. This

percentage increased to 65 in the post-test administered after the training. Twenty-six (28%) of the staff members selected wrong responses both in the pre- and post-test. Two did not respond to the questions. One of these was a technician and the other, a phlebotomist. Seven of them marked the correct responses in the pre-test and incorrect responses in the post-test.

### Commentary

The WHO guidelines emphasise that verbal consent be obtained from the patient. They stress that patients have a right to refuse the test at any point before the blood sampling and it is important to ensure that they have understood the procedure (2). If a person presents his/her hand or arm to the phlebotomist, it indicates an implied consent to phlebotomy. Implied consent is acceptable. Many of the participants were not aware of this and hence, felt that consent is not required. The fact that more than 25% of the participants selected wrong responses is reflective of the lacunae in ethics training. The increase in the percentage of people who selected the correct answers following the practical training underscored the need for ethics programmes.

Much emphasis is laid on medical ethics in the curriculum of undergraduate medical students (3). However, the same cannot be said of the training of nurses (4). Also, in the case of paramedical staff, there is no regulatory body similar to those for the medical or nursing cadres. All organisations which impart training to paramedical staff/nurses should make sure that the training includes the basic concepts of ethics, as this will enhance the development of the individual and ultimately lead to an improvement in the care of patients.

Karuna Rameshkumar, Professor, Department of Pathology, Justice KS Hegde Hospital, Nitte University, Deralakatte, Mangalore, 575 018, INDIA e-mail: karunark@yahoo.com Chandrika Rao, Assistant Professor and Blood bank officer, Department of Pathology, Justice KS Hegde Hospital, Nitte University, Deralakatte, Mangalore 575 018, Karnataka, INDIA

#### References

- World Health Organization. Guidelines on drawing blood: the best practices in phlebotomy [Internet]. Geneva: WHO; 2008 [cited 2015 Mar 10]. Available from: http://www.who.int/injection\_safety/sign/ drawing\_blood\_best/en/
- 2. World Medical Association Ethics Unit. Declaration of Helsinki [Internet]. Geneva: WMA; 2003[cited 2015 Mar 10]. Available from: http://www. wma.net/e/ethicsunit.
- 3. The Indian Medical Council regulations, 2002, amended up to 2010 published in Part II section 4 of the Gazette of India. *Issues in medical ethics* 2002;10:66–70.
- 4. Indian Nursing Council. Curriculum [Internet]. Date unknown [cited 2015 Apr 3]. Available from: http:// www.indiannursing council.org/.