

## Correspondence

### The need for cessation of tobacco use among patients with tuberculosis in Kerala

Among the 22 high-burden tuberculosis (TB) countries worldwide, India ranks first in the number of new TB cases, with 1.8 million cases occurring annually. A growing body of epidemiological evidence indicates that tobacco is one of the most important risk factors for TB morbidity, mortality and relapse.<sup>1-5</sup> In India, 37.2% of TB deaths among men between the ages of 35 and 69 years was attributed to smoking.<sup>6</sup> However, little data are available on the use of tobacco among patients with TB. Hence, we conducted a study among 163 males, of  $\geq 15$  years of age, who had TB and had completed at least 6 weeks of treatment. They were registered at one of the 6 government TB treatment units (TU) in Thiruvananthapuram, Kerala. We used a survey and focus group discussions (4,  $n=25$ ), from March 2004 to June 2005 to ascertain the prevalence of tobacco use among male patients with TB, and whether they had received cessation messages from their doctors. We also investigated how far the patients were aware of the risk of tobacco use vis-a-vis TB.

We found that 79% of the 163 patients with TB had used some form of tobacco before the diagnosis of TB. Of these, 97% were smokers. Among the 125 smokers, 87.2% were daily smokers and the mean daily consumption of cigarettes/*bidis* was 18. The prevalence of current smoking decreased from 76.7% before the diagnosis of TB to 34.4% during the treatment period of 6–24 weeks. This was statistically significant ( $p < 0.001$ ; Table I). Following the diagnosis of TB, 81% of smokers attempted to quit, many of them successfully, although some relapsed.

TABLE I. Prevalence of current smoking among patients with tuberculosis (TB) before diagnosis and during treatment ( $n=163$ )

Time point	Prevalence of current smoking			
	<i>n</i>	%	95% CI	<i>p</i> value
Prior to diagnosis of TB	125	76.7	70.2–83.2	<0.001
During treatment (6–24 weeks)	56	34.4	27.0–41.6	

Physicians treating patients with TB have a central role to play in motivating these patients to stop smoking. In our survey, 82% of the tobacco users reported that they were asked whether they smoked and advised against smoking by their physicians at the time of diagnosis. Unfortunately, most patients interpreted the cessation messages they received as either general advice not to smoke or not to smoke when ill. In the focus groups, former patients stated that more 'serious' and specific advice on the links between smoking and TB and relapse of TB would have motivated them to quit smoking and refrain from resuming smoking. Failure to provide such messages is an opportunity missed to promote cessation of tobacco use among a highly receptive patient group.

We also asked whether smoking in the presence of TB aggravated the disease. Twenty-eight per cent of the smokers reported a lot of aggravation, 61% a little aggravation and the remaining reported that smoking had no effect.

Tobacco use among TB patients in Kerala was more than two times higher than that among the general population. Even during the 6–24 weeks of treatment for TB, 34% of patients in our study continued to smoke, indicating the need for integration of consistent advice to quit smoking in TB management programmes. The advice

given by physicians on cessation needs to be tailored to describe the specific adverse effects of smoking on TB, both during and following successful completion of therapy. Advice on cessation must be reinforced during all stages of treatment and at the completion of treatment, and patients should be given a strong warning about relapse. It might be useful to involve DOTS (directly observed treatment short-course) providers in conveying this message as a routine part of their supportive activities for patients with TB.

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#### Emerging infections in Kerala: A case of scrub typhus

A 57-year-old man was referred to our hospital with a history of fever of 2 weeks' duration. The initial history and clinical examination were unremarkable. He had received ceftriaxone and levofloxacin for 3 days before coming to us. He was evaluated as a patient with fever of unknown origin. The patient resided about 30 km from our hospital, a rural area not far from the western face of the Western Ghats. The entire area could be described as the midlands of Kerala and is endemic for leptospirosis.<sup>1,2</sup> Hence, he was also evaluated for

leptospirosis. Other common infections endemic to our area, such as typhoid and viral hepatitis, were also ruled out. On the basis of clinical suspicion and the endemicity of enteric fever, he was continued on ceftriaxone even though the blood culture and Widal test were negative. The patient continued to be febrile. At this point, a review of his clinical history revealed that he had developed a rash during the initial phase of fever. A Weil–Felix test was ordered. This showed antibodies to OX-K antigen—OX-K: agglutination (1:80); OX-2 and OX-19: no agglutination.

The patient was started on doxycycline and defervescence was noted within 12 hours. The diagnosis was confirmed at the Department of Clinical Microbiology, Christian Medical College, Vellore, where the IgM antibodies to scrub typhus were found to be positive by ELISA (Commercial Kit from Panbio diagnostics). A week after discharge, the patient had recovered completely.

This case highlights the presence of a hitherto unknown infection in the region. A search of the literature on PubMed revealed that other rickettsial infections have been reported from Kerala.<sup>3,4</sup> However, none of the patients had antibodies to *Orientia tsutsugamushi* (scrub typhus).

Thus, rickettsial diseases, including scrub typhus, should also be considered when evaluating patients with fever and rash in the region. A similarity in the clinical presentations of these diseases and those of the already endemic infections, such as leptospirosis, viral fevers and enteric fever, may lead to a wrong diagnosis.

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## β-thalassaemia among the Sindhi community in Delhi

It has been estimated that there are 45 million carriers of β-thalassaemia in India and every year, about 15 000 infants with homozygous β-thalassaemia are born. This constitutes 10% of all persons with thalassaemia born in the world.<sup>1</sup> It is well recognized that even in various geographical regions of India where β-thalassaemia is common, not all ethnic groups are at the same risk of having the β-thalassaemia gene.<sup>2</sup> However, a majority of studies from India on the incidence of β-thalassaemia carriers are either hospital-based or are specific to a geographical region, thereby providing a grim scenario of β-thalassaemia among various communities in India. Though it is important to detect and screen populations to provide information on high risk communities, it is equally important to screen individuals belonging to high risk communities and increase awareness so as to

TABLE I. Mutational analysis of β-thalassaemia carriers by Arms PCR

Samples screened for β-thalassaemia carriers	210
Nestroft positive (%) <sup>*</sup>	65 (30.9)
HbA2 level >3.8% (%) <sup>†</sup>	18 (8.6)
<i>Mutations</i>	<i>n</i>
619 bp del	14
IVS 1–5 (G–C)	0
IVS 1–1 (G–T)	0
Codon 41/42 (–TCTT)	1
Codon 8/9	1
Total	16

<sup>\*</sup>42 Nestroft positives could only be assessed for A2 level quantification

<sup>†</sup>Two persons with high A2 level did not have any of the 5 common Indian mutations

curtail the birth of children with β-thalassaemia major. Earlier studies by Verawalla,<sup>3,4</sup> Garewal,<sup>5</sup> Verma,<sup>6</sup> Vaz,<sup>7</sup> Chakrabarti<sup>8</sup> and Nadkarni<sup>9</sup> were based on the available hospital data on reported thalassaemia patients or from individuals belonging to different regions of India. Even though the mutations in all these studies were sorted on the basis of communities, they neither provide a true picture of the prevalence of the trait nor of the type of mutations specific to various communities.

We studied the Sindhi community—a substantial number of them are migrants from Baluchistan, Pakistan and are settled in various parts of Delhi. On the basis of the haemoglobin A2 level, we found a high frequency of the β-thalassaemia trait (8.6%); higher than the average frequency (3.3%) reported in India.<sup>3</sup> Of the 18 β-thalassaemia carriers, mutational analysis revealed that the highest prevalence was of 619 bp del (*n*=14, 77.7%; Table I). The high prevalence of 619 bp del is in concordance with previously published reports on the Sindhi community.<sup>1,7</sup> However, IVS 1–5 G–C, which is the most common Indian mutation and has a high prevalence in northern India and among migrants from Pakistan, was not seen. The treatment of a β-thalassaemia child poses a huge burden in India and to have a cost-effective prenatal diagnosis programme, 619 bp del can be used as a diagnostic marker for the detection of β-thalassaemia carriers among the Indian Sindhi community.

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### Humanism in healthcare

Illness and recovery, living and dying are a part of the entire human experience. Every individual within the healthcare system, whether the caregiver or the patient, is first and foremost a human being.

I would like to share my recent experience as a relative of a patient. My mother was to undergo an intraocular lens (IOL) implant for cataract, a procedure expected to last about 15–20 minutes. She had multiple medical problems such as coronary artery disease, bronchial asthma and interstitial lung disease. Severe periartthritis and fibrositis in both shoulders makes it difficult for her to lie flat with both shoulders touching the bed for a long time. Though the surgery could be a day-care procedure, I preferred to get her admitted because of her medical problems and to facilitate the follow up scheduled for the next morning. An evening before the surgery, a resident spent about 10–15 minutes working her up and writing her case sheet. She was advised regarding her morning drugs and light tea.

Next morning, as she lay in the hospital bed waiting to be called for surgery, I noticed she was anxious. No resident had visited her in the morning. She was transferred to the operation theatre at about 9.15 a.m. where she was made to lie down in a bed in the waiting room which had about 20–25 other patients. Resident doctors in their operating greens rushed in and out, mechanically calling out names, taking their patients in along with the material (the IOL and accessories) and then transferring them out after surgery every 20 minutes or so.

When my mother went in for surgery, I requested an anaesthetist colleague to monitor her during the procedure in view of her underlying medical problems and past history of arrhythmia. I was told her blood pressure (BP) was 96/60 mmHg most of the time during the procedure,

though she was comfortable and an intravenous cannula was placed in case she required fluids. On enquiry from her, we found that she had taken her usual morning dose of antihypertensive drugs. The BP before the medicines were taken was not known as it had not been checked. She came out of the theatre in about half an hour and after an observation of about 15–20 minutes was transferred to the room. Though she was comfortable, the BP continued to be about 90/60 mmHg. I advised her to skip her later doses of diltiazem that day and only gave her next dose after checking the BP.

The following morning, for the follow up examination, in the outpatient, she and another patient were called by their room numbers (not by name). I watched as the residents examined their eyes, first under the slit lamp and then checked their distant vision using the Snellen chart. My mother when told to read the Snellen chart was able to read clearly till the last line but another young woman was not able to read beyond the second line from the top. She had been operated for cataract and as I discovered later while talking to her that she had uveitis in both eyes along with the cataract and her vision before surgery had been impaired. Now expecting some improvement after the surgery, anxiety was writ large on her and her husband's faces as she was unable to read the Snellen chart. However, the resident just told her to sit down without providing any explanation for her condition or even talking to her. The anxiety of the patient went unanswered without any words of empathy or concern from the residents.

Humanistic health professionals need to care about their patients. They need to understand that compassion can be a powerful catalyst for healing. Not once, were both women addressed by their names. They were just two numbers. The residents then prepared discharge slips for them and handed them over to the nurse without providing any explanation or advice to the patients or giving them any opportunity to ask questions or clarifying any doubts they may have had. The all so necessary humane touch was missing.

All this while, the residents kept talking among themselves, oblivious to the patients' feelings. It all seemed so mechanical. As I left the room with my mother, I wondered whether we were training doctors or technicians?

It needs to be emphasized to aspiring health professionals that to be successful, it needs more than skills, a sharp mind and a steady hand. The best health professionals have a heart, not just a brain. They have the 'human touch'.

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