STATEMENT OF INTEREST
None declared.

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XDR-TB: Indian perspective

To the Editors:

I read with interest the recent article by MIGLIORI *et al.* [1] in the March issue of the *European Respiratory Journal* on the new extensively drug-resistant tuberculosis (XDR-TB) threat, wherein the authors have comprehensively covered the topic and tried to alert the medical fraternity of the need to unite in order to fight this global threat.

There is no doubt that the development of multidrug-resistant (MDR)-TB and XDR-TB reveals weaknesses in primary care diagnostic services and a failure to adhere to the World Health Organization's directly observed treatment, short course (DOTS) strategy.

Although XDR-TB has not been reported from India, I would like to share certain facts pertinent to India. First, TB has been a major public health problem in India. Today, India accounts for nearly one third of the global TB burden. A population of 14 million is estimated to be suffering from TB, of which 3–3.5 million are highly infectious. The incidence rate of the disease is very high, with an estimate of >2 million new cases of TB occurring every year [2].

Secondly, most TB patients first seek help from one of India's 10 million private practitioners. It is estimated that for most of these patients it is up to 4–6 weeks before they are diagnosed as having TB. In addition to this, the TB cure rates for patients who remain with private practitioners are low [3].

Thirdly, community awareness and attitudes towards the symptoms of TB and knowledge about the cause of the disease are very low, especially among the needy, and the ''TB stigma'' continues [4].

Fourthly, there are, at present, only three quality-assured laboratories for culture and drug susceptibility testing in the entire nation. In the absence of the readily available culture and sensitivity services, even clinicians at medical schools are making the diagnosis of MDR-TB based on clinical and radiological grounds and are empirically treating the patients with nonstandardised regimens, thus increasing the prevalence of MDR- and XDR-TB. The worst part is that we do not have access to the culture and sensitivity services to warn the global community about the latest epidemic of XDR-TB.

Fifth, most of the second-line anti-tubercular drugs like fluoroquinolones and aminoglycosides are routinely available over the counter and are misused to treat trivial illnesses, including upper respiratory tract infections, which will increase the overall level of resistance in the community [5].

Finally, the efficacy of the DOTS strategy has been proven beyond doubt; then why are the nations not sticking to this strategy, allowing hundreds of brands and combinations of antitubercular drugs to be freely available over the counter?

A. Singh
Christian Medical College and Hospital Ludhiana, Ludhiana, India.

STATEMENT OF INTEREST
None declared.

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Tracheostomy tubes are not needed for Duchenne muscular dystrophy

To the Editors:

Respiratory failure is the main cause of death in patients with Duchenne muscular dystrophy (DMD). Some respiratory management paradigms recommend tracheostomy for ventilator-dependent DMD patients. Prolongation of survival by years and, in many cases, decades using continuous mechanical noninvasive ventilation (NIV) without tracheostomy has been reported [1].

TOUSSAINT *et al.* [2] reported their experience on the use of NIV along with assisted coughing to prolong life and avoid tracheostomy for patients with DMD. However, the commentary by LOFASO *et al.* [3] on this outstanding work was uninformed. The commentators failed to present the outcomes of continuous NIV from other centres [4–6] and they have, apparently, no experience in continuous long-term NIV. These authors seem to be unaware that more than 250 long-term (mostly 24-h dependent) NIV users whose main interface was a simple mouthpiece during the day and a mouthpiece with a plastic phalange during sleep have been described [7]. Together, we currently have more than 1,000 continuous NIV users in our centres, some aged >50 yrs and most using a simple mouthpiece during daytime hours. LOFASO *et al.* [3] are correct to state that there are ''no controlled studies that demonstrate that NIV prolongs life.'' The evidence to date suggests that there is no clinical equipoise regarding the use of NIV. As such, withholding such support would be unethical. LOFASO *et al.* [3] quote a conservative consensus statement which suggested that when NIV is inadequate ''tracheostomy may be considered'', but they have never reported using continuous NIV for their own patients. The recent American Thoracic Society consensus panel endorsed NIV as the therapy of choice in supporting breathing in DMD, while allowing for the possibility of tracheostomy in cases in which bulbar weakness precluded its use or expert support for NIV was unavailable locally [8]. LOFASO *et al.* [3] also seem to be unaware that there were signicantly fewer hospitalisations and pulmonary complications in the NIV group as compared with the tracheostomy group [9].

In reality, NIV has never been ineffective for continuous ventilatory support in competent hands unless the ventilator settings or interfaces are inadequate, patients are too mentally impaired to cooperate with it, or bulbar-innervated musculature is too impaired to protect the airway from continuous saliva aspiration that results in oxyhaemoglobin desaturation [10]. This has not occurred in the 200 or more DMD patients managed by continuous NIV in our centres. LOFASO *et al.* [3] note that tracheostomy ventilation is ''more effective'' than NIV without ever having permitted their own patients to use long-term continuous NIV or equipped and trained them in how to avoid serious chest infections by using manually and mechanically assisted coughing when needed [5]. LOFASO *et al.* [3] confirmed that respiratory failure is not completely eliminated by 24-h NIV without ever discussing the cough aids that prevent it [11].

LOFASO *et al.* [3] state that ''tracheostomy may also reduce the number of hours of ventilatory support needed per day'', without understanding that DMD patients who were not using ventilators at all but are tracheotomised for acute respiratory failure often become and remain continuously ventilator dependent, whereas continuously ventilator-dependent DMD patients who are decannulated can be weaned to nocturnal-only NIV [1]. LOFASO *et al.* [3] would be well advised to learn why patients with tubes require more ventilatory support than NIV-managed patients [12]. They should know that patients who have used both tracheostomy and NIV ventilatory support for ⩾1 month and who are decannulated to continuous NIV unanimously prefer NIV for safety, comfort, speech, swallowing, appearance and in general [13]. Such patients often refuse to undergo tracheostomy a second time unless bulbar-innervated musculature deteriorates to the point that this becomes necessary for survival (motor neuron disease patients only) [10].

Our centres consider tracheostomy as a last resort and have been able to successfully avoid this procedure in all but a few patients, in some centres virtually never resorting to it. We would recommend that LOFASO *et al.* [3] try the approach for themselves before they conclude that this is neither possible nor desirable.

We disagree with the contentions that ''daytime noninvasive ventilation *via* a mouthpiece should not be viewed as an alternative to tracheostomy'' and ''determining the best date for tracheostomy in patients with Duchenne muscular dystrophy remains a challenge.'' Indeed, instead of the latter, the challenge should be to remove tracheostomy tubes for continuous Duchenne muscular dystrophy ventilator users if the patient so desires, if there have been complications of tracheostomy, or if tube removal can facilitate social functioning like deinstitutionalisation [14].