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these individuals were central to our study design, which included investigation of rates of violent crime when individuals were taking drugs compared with when they were not. In relation to multiple antipsychotic use, prevalence was low in our sample (0.92%) during the study duration. Other factors could mediate the associations that we report, and we agree that this fact warrants further investigation with different approaches. The type and phase of illness could be relevant in schizophrenia⁴ and, possibly, bipolar disorder.⁵ However, inclusion of sensitive markers and use of caregivers as additional informants do not lend themselves to population-based studies. These studies are necessary to investigate outcomes such as violent crime, suicide, and premature mortality because they need substantially larger sample sizes and longer follow up than have been possible in most randomised controlled trials so far.⁶

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Shortage of purified protein derivative for tuberculosis testing

We wish to highlight a crucial shortage of purified protein derivative (PPD), the test substance used for tuberculin skin testing, which is substantially affecting capabilities and practices for tuberculosis screening in several countries across Europe.

Screening to identify individuals with latent tuberculosis infection who might benefit from preventive therapy is a key strategy of tuberculosis control programmes in most countries with low tuberculosis prevalence.¹ Children are at particular risk if screening is not implemented, because of an increased rate of progression from latent tuberculosis infection to active tuberculosis without preventive therapy compared with adults.²

In June, 2014, a member of the Paediatric Tuberculosis Network European Trials Group (ptbnet, composed of clinicians and researchers with a special interest in paediatric tuberculosis), first highlighted issues with the supply of PPD in Austria to our network. Within 48 h, 12 other members from eight European countries reported similar problems, prompting us to collect more data across the network via a short questionnaire.

35 physicians from 23 European countries contributed data. 21 (60%) based in 14 different countries reported a shortage of PPD. Most (17) physicians reporting a shortage were using RT 23 (Statens Serum Institute Denmark); fewer reported shortages of Tubertest (Sanofi Pasteur, n=2), and PPD Tuberculin (BulBio, n=1; St Petersburg Institute of Vaccines and Sera, n=1). 13 (37%) physicians reported changes in practices resulting from the PPD shortage, such as restriction of remaining supplies to patients

at greatest risk, or replacement of tuberculin skin testing with interferon-gamma release assay testing, with substantial implications for costs and logistics and potentially inferior sensitivity in young children.³

Worldwide, only a small number of manufacturers produce PPD. No communication from PPD manufacturers alerted the community to this shortfall. We therefore believe that monitoring of PPD production by a supranational agency is needed to ensure that supplies meet clinical demand for a test reagent that remains crucial to public health.

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For the ptbnet see <http://www.tb-net.org/index.php/ptbnet>