Background

Of around 36 million people infected with HIV globally, one in three has a TB co-infection. It is estimated that a HIV-positive person has 50–60% lifetime risk of developing TB, whereas for HIV-negative persons this risk is only 10%. In India, around 40% of over five million HIV-positive people present a TB co-infection. In this context, the present study was undertaken to understand local issues in collaborative activities under the National AIDS Control Programme (NACP) and the Revised National Tuberculosis Control Programme (RNTCP) in Alwar district of Rajasthan. The study objectives were: (1) to assess
co-ordination mechanism between NACP and RNTCP at district level; (2) to understand status of services available under TB-HIV collaborative efforts at district level; (3) to assess involvement of NGOs in TB-HIV collaborative activities; and (4) to understand perceived hurdles and their probable solutions for programme managers regarding TB-HIV collaborative activities.

**Methods** A cross-sectional study was conducted in Alwar district, Rajasthan. Quantitative and qualitative data were collected. Records and reports from District AIDS Prevention and Control Units (DAPCU, under NACP) and District TB Officers (DTO, under RNTCP) were reviewed to gather information to assess programmatic interventions happening at district level. In-depth interviews were conducted with programme managers of both programmes, and other stakeholders such as NGOs, to understand issues regarding TB-HIV collaborative activities.

**Findings** In Alwar district, one in four of HIV-positive persons are co-infected with TB. The district has poor implementation of TB-HIV collaborative activities, especially so in rural settings. Though basic services (screening, diagnosis and treatment) are available in both programmes, supervised cross-referral services demand for improvement. Awareness among patients of HIV or TB also hampers cross-referral; particularly TB patients hesitate for HIV screening. Counselling of TB patients along with HIV cases in relation to rationale of cross referral is utmost needed. The district is having very little integration of NGOs for TB-HIV. Local operational issues have to be tackled with clear guidelines and an action plan is needed for integration and collaborative activities along with determination of senior programme officers. Vacant posts of all cadre are having a negative impact on both programmes and collaborative activities, whereas capacity and staff attitude is another concern. Issues related to human resources along with conflict of interest among stakeholders involved are key hurdles in TB-HIV collaboration.

**Discussion** TB-HIV collaboration in the district calls for improvements that can only be achieved addressing issues of availability of dedicated, skilled and permanently available human resources, plus supportive supervision with commitment of integration of administration and all stakeholders involved in the process. Involvement of NGOs in collaborative efforts will help to ensure service delivery. An action plan has to be prepared locally that considers local context and the complex interests of all stakeholders involved.

*No competing interest.*