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Perspectives on multisectoral accountability framework to end tuberculosis in the Eastern Europe and Central Asia region: a mixed-methods study

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Background Sectors beyond health are essential to combatting a social disease such as tuberculosis (TB). The engagement of the community and civil society sector in Eastern Europe and Central Asia was assessed as part of a broader baseline assessment of multisectoral engagement in national TB responses.

Methods This was a mixed-methods community-based study. Surveys, interviews, and focus groups were conducted online with TB-engaged community and civil society representatives in Belarus, Kazakhstan, Moldova, Tajikistan, and Ukraine from January to June 2021. Quantitative data, analyzed using descriptive statistics, were triangulated with thematic qualitative analysis. A multisectoral accountability framework and community, rights, and gender framework for TB were used to triangulate the findings and inform data interpretations.

Results Participants ($n = 160$) included leads, service providers from 74 organizations, and TB survivors. Of 53 survey respondents, most ($n = 41$, 77.4%) indicated strong/complete agreement to participating in TB service delivery and gender, stigma, and/or legal assessments ($n = 27$, 50.9%) and research processes ($n = 30$, 56.6%). However, few indicated inclusion in operational planning and budgeting ($n = 13$, 24.5%), or political and program impact of community-led monitoring ($n = 16$, 30.2%), and almost none ($n = 2$, 3.8%) confirmed dedicated budgets for their TB-related work. Inquiry into the dimensions and criteria for multisectoral actions and accountability revealed their key, yet limited, role in attending to social determinants, with wider engagement hindered by precarious funding. Several organizations balanced building partnerships with other sectors engaged in the TB response against advocacy activities. Inherent obligations toward TB-affected communities were at times overshadowed by obligations to donors and state actors. Coordinating bodies for donor funds, which were multisectoral by design, presented an opportunity to bolster accountability actions within the TB response.

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Conclusions Multisectoral engagement and accountability for TB are a laudable and necessary goal to end TB. Sustainable mechanisms to support the meaningful involvement of TB-affected communities and civil society are needed, particularly in the context of donor transitions.

Keywords Tuberculosis, Community perspectives, Civil society engagement, Accountability, Multisectoral collaboration, Donor relations, Qualitative methods, Survey, MAF-TB assessment

Background

Despite advancements in research and innovation, tuberculosis (TB) is one of the leading infectious killers [1]. Its social and economic drivers, such as poverty, malnutrition, occupational risks, stigma, financial hardship, and worsened living and work conditions, pose critical roadblocks to elimination [1, 2]. These gaps are often attributed to shrinking financial and social protection for people affected by TB and the limited engagement of nonhealth sectors. In 2018, growing recognition of these challenges came to the forefront with the first-ever United Nations High-Level Meeting (UNHLM) on TB. Among other political promises made at the meeting, which have since shaped global, national, and subnational efforts, was the commitment to accelerate multisectoral engagement and accountability to end TB, including the engagement of TB-affected communities and civil society.

The Eastern Europe and Central Asia (EECA) region, consisting of countries of the former Soviet Union, many of which are lower middle income, bears a disproportionately high TB burden compared with other parts of Europe. People living with HIV, in severe poverty, in prisons, who use drugs, have alcohol dependency, and/or are migrant workers are most affected [3, 4]. The rate of multidrug-resistant TB, which requires specialized diagnostics and second-line treatment and is associated with greater mortality and socioeconomic hardship, is among the highest in the world [1]. Akin to many low- and middle-income settings, allied services that address the social drivers of TB are often delivered by civil society and community-based organizations (CSOs/COs) that work with but function outside of the traditional health sector [5]. Most CSOs/COs rely on external nongovernmental funding. The rising gross domestic product of several EECA countries and changes in donor agencies' mandates and funding have, however, compromised their eligibility for international aid. Access to psychosocial TB support services, which is crucial for hard-to-reach key populations, and community mobilization and advocacy, which is crucial for civil society and community engagement, have come under threat. It is difficult for national budgets to sustain these important services [6].

In 2021, five EECA countries undertook a mixed-methods study to assess multisectoral engagement and

accountability from the perspective of CSOs/COs, specifically, to learn about their experiences, issues shaping their meaningful engagement, and opportunities to strengthened regional TB responses. The study was framed around the multisectoral accountability framework for TB (MAF-TB), which was developed by the World Health Organization (WHO), as well as Community, Rights, and Gender (CRG) resources that emphasize intervention by community and civil society actors, and human rights- and gender-centered approaches key to overcoming barriers to quality TB care [7, 8]. Undertaken prior to the Russo–Ukrainian war, the results are more pressing, with TB-affected communities facing heightened constraints.

Methods

Study design

The study was sanctioned and approved by the Ministries of Health and National TB programs (NTPs) in Belarus, Moldova, Kazakhstan, Tajikistan, and Ukraine as part of their program activities which covered national baseline assessments of multisectoral engagement and accountability. Technical support to capture the perspective of CSOs/COs was provided by the regional CSO TB Europe Coalition, the WHO Regional Office for Europe, and country coordination mechanisms (CCMs) overseeing Global Fund projects. Local CSOs/COs led fieldwork coordination.

The multisectoral accountability framework for TB (MAF-TB), which was developed by the WHO upon the request of member states after the first UNHLM on TB, served as a guiding framework for data collection and analysis. MAF-TB includes commitments, multisectoral actions, monitoring and reporting, and high-level review mechanisms to support ending TB by 2030 through the engagement of diverse stakeholders outside of health and with the leading role of the health sector [8]. The Stop TB Partnership's Community, Rights, and Gender (CRG) resources that emphasize intervention by community and civil society actors, and human rights- and gender-centered approaches key to overcoming barriers to quality TB care, provided additional guidance for study implementation and analysis [7]. A mixed-methods design [9] was applied; surveys were used to collect quantitative data, and interviews and focus-group discussions

(FGDs) were used to collect qualitative data. This helped to reveal the complexities and underlying dynamics shaping CSOs/COs engagement and partnerships which would have not been possible with reliance on survey data alone. The supplementary information supporting the qualitative analysis and illustrating a coding approach is available at the Additional file 1: Appendix 3.

Participants and data collection

CSOs/COs engaged in any TB-related advocacy and/or service provision were contacted via a regional listserv and country-specific CSOs/COs engagement coordinators. An online survey was shared with primary contacts and/or leads who were responsible for decision-making and management and who expressed interest, followed by invitations for private interviews. Program coordinators, frontline workers, and engaged TB survivors were later invited to participate in FGDs. Purposive sampling ensured the representation of organizations, including grassroots organizations, organizations working with various sectors, and organizations providing diverse prevention and psychosocial services.

The survey was administered through Google Sheets® and comprised 21 peak statements (Additional file 1: Appendix 1) adopted from the standardized WHO MAF-TB Checklist/Annex 2 on civil society and affected community engagement in the TB response [10]. A 3-item Likert scale was used, whereby survey respondents were presented with statements followed by response choices to indicate whether they “completely disagree or strongly disagree,” “somewhat or sometimes agree,” and “completely agree or strongly agree.” An additional response choice was “I don’t know,” in the event that a respondent had no access to information or did not understand the statement. Measures of central tendency and frequencies (percentages of responses to each statement) were used to analyze the survey data. The results of the survey are illustrated with a graph showing the distribution of responses. The results were used to describe the respondents’ perceptions of the statements and helped to navigate the qualitative analysis.

The interview and FGDs guides (Additional file 1: Appendix 2) were designed to capture more in depth, experiential information about organizations’ missions and understand multisectoral collaboration and accountability, approach to engaging sectors, challenges and successes encountered, sensitivity toward key populations affected by TB, partnership and accountability practices, and recommendations. TB survivors were asked about their illness experiences, barriers, resources or support needed and accessed, and care preferences.

Data were collected in Russian, the common regional language at the time. The interviews and FGDs were

conducted via professional Zoom and audio recorded by a trained multilingual researcher (Ukrainian, English, Russian) (I. L.), with translation support (Tajik, Romanian, Kazakh) from CSOs/COs engagement coordinators (M. A., L. P., O. I.). The voluntary, nonevaluative nature of the study and the aggregate approach to analysis and reporting were emphasized. FGDs participants were informed that privacy and confidentiality could not be guaranteed by the researcher because of the group nature of data collection.

Analysis

Survey data were descriptively analyzed in Microsoft Excel® via measures of central tendency and frequencies [11]. Qualitative data were analyzed in Microsoft Word® under a framework approach, entailing transcription, familiarization, open and iterative coding, development of a working analytic framework, theme building, charting the data into a framework matrix, and interpreting the data [12]. Some analyses and triangulations began with data capture with a view to saturation [13]. Coding was inductive (open) as well as deductive. The MAF-TB and CRG frameworks helped to situate emerging interpretations. Core categories within the coding framework evolved into key themes that became central to the research, including meaningful engagement; partnerships and multisectoral collaboration; accountability, sustainability, and capacity-building needs; and services and specific vulnerabilities (for example, gender, stigma, discrimination) experienced by people living with TB. Analyses were led by Y. C. and I. L. in close consultation with A. D. and Y. K. Team discussions and continuous critical reflexivity, drawing on COREQ, built analytic credibility and confirmability (Additional file 2) [14, 15].

Results

From January to June 2021, data were collected from 160 people from 74 (49.7%) of the 149 invited organizations. The quantitative data were sourced from surveys completed by 53 organization leads and/or contacts in Moldova, Kazakhstan, Tajikistan, and Ukraine. Qualitative data were sourced from interviews with 31 organization leads and/or contacts (17 of whom also participated in the survey) and 15 FGDs with 34 program coordinators, 34 frontline providers, and 25 TB survivors in Belarus, Moldova, Kazakhstan, Tajikistan, and Ukraine (Table 1). Reasons for nonresponse were not captured. Organizations were engaged in various TB-related activities: screening and referral; psychosocial support, including nutrition, counseling, home visits, peer navigation, and transport reimbursements; integrated support for people living with HIV, people who use drugs, and other priority groups; advocacy and awareness raising; capacity

building, including provider training; and/or operational research. Most organizations relied on funding from the Global Fund (87.8%). Approximately, one-quarter belonged to a network of organizations with shared goals (25.7%). The majority focused on HIV (58.1%); only 27% were TB focused, and only 6.8% were led by TB-affected communities (Table 2).

Survey results

The survey results demonstrated agreement with peak statements suggestive of organizations' positive engagement in TB responses. There were no significant inter-country differences (Fig. 1). Most participants strongly/ completely agreed that civil society and TB-affected communities deliver TB support services to TB-affected people/households (statement 6, $n = 41$, 77.3%), participate in research (statement 8, $n = 30$, 56.6%), and collaborate with other CSOs/COs (statement 9, $n = 30$, 56.6%). However, although CSOs/COs undertook gender, stigma, and/or legal assessments (statement 11, $n = 27$, 50.9%), their efforts seldom led to policy or program modifications (statement 12, $n = 9$, 17%). Comparatively few CSOs/COs participated in national operational planning and budgeting (statement 4, $n = 13$, 24.5%) or joint monitoring and review processes (statement 18, $n = 14$, 26.4%). Almost no participants confirmed having allocations within countries' operational budgets to support the work of civil society and TB-affected communities (statement 19, $n = 2$, 3.8%).

Qualitative results

Qualitative themes provided insights into the dimensions, desired criteria, challenges, and enablers of multi-sectoral engagement, monitoring, and accountability for national TB responses from the perspective of diverse CSOs/COs' representatives. Themes are detailed ahead with interview/FGDs excerpts and additional data derived from surveys. Quotes are labeled with the originating country alone to protect participants' confidentiality (Additional file 1: Appendix 3).

Dimensions of multisectoral engagement

Civil society and community organizations' primary motivation to engage with other sectors, including public health, private, and nonhealth, was to uncover and address the social and structural challenges facing their clients. Broadly, these challenges included food and housing insecurity due to poverty, at times worsened by hospitalization; poor access to health care and medicines owing to transportation costs and distances to facilities; poor access to social protection and health insurance owing to a lack of legal documentation and/or formal employment; gender inequity, expressed as poorer

decision-making ability, financial insecurity, and excess caregiving responsibilities for women in particular; TB stigma and discrimination, expressed as isolation at home and in communities, and expulsion from work, school, and/or the home; and poor quality of health care, owing to ancillary drug shortages, user fees for pre-TB tests, referral delays, nonintegrated care for comorbid conditions, and service disruption for mobile populations such as former inmates and migrant workers. Many of these issues were also uncovered through a limited number of monitoring initiatives led by select CSOs/COs [16].

The financial pressures experienced during TB treatment commonly overshadowed health concerns. Therefore, many patients had to prioritize work over medical recovery.

Some young men at the construction site worked casually, informally. They felt a little nausea in the morning but went to the construction site and dragged bags. Although this, of course, is unhealthy, people needed money, and so they earned extra money. Belarus

The direct material support, TB treatment information, counseling, and referrals provided by CSOs/COs were especially valuable to TB survivors.

If you need to do a CT [i.e., computer tomography] scan, then [organization] refers you to a hospital, where you can do it for free. Additionally, food vouchers are issued every month for the purchase of groceries in certain stores. There are certificates worth 400–500 hryvnias [~USD 10–15] ...They help. Ukraine

The biggest benefit of cooperation with nongovernmental organizations was that they provided detailed and accessible information and convinced me that TB is curable. They empowered me, and it was crucial for me. Tajikistan

Organizational efforts to support continuous access to TB care gained particular importance during the COVID-19 pandemic. At that time, countries encountered various levels of quarantine and/or lockdown restrictions, public transport interruptions, health system challenges related to infection control and overworked or sick medical staff, and community concerns about visits to health facilities. A few CSOs/COs utilized digital innovations to promote access.

Participation in video-controlled treatment has become very important under COVID-19 conditions...to allow the largest possible number of patients to continue treatment at the outpatient

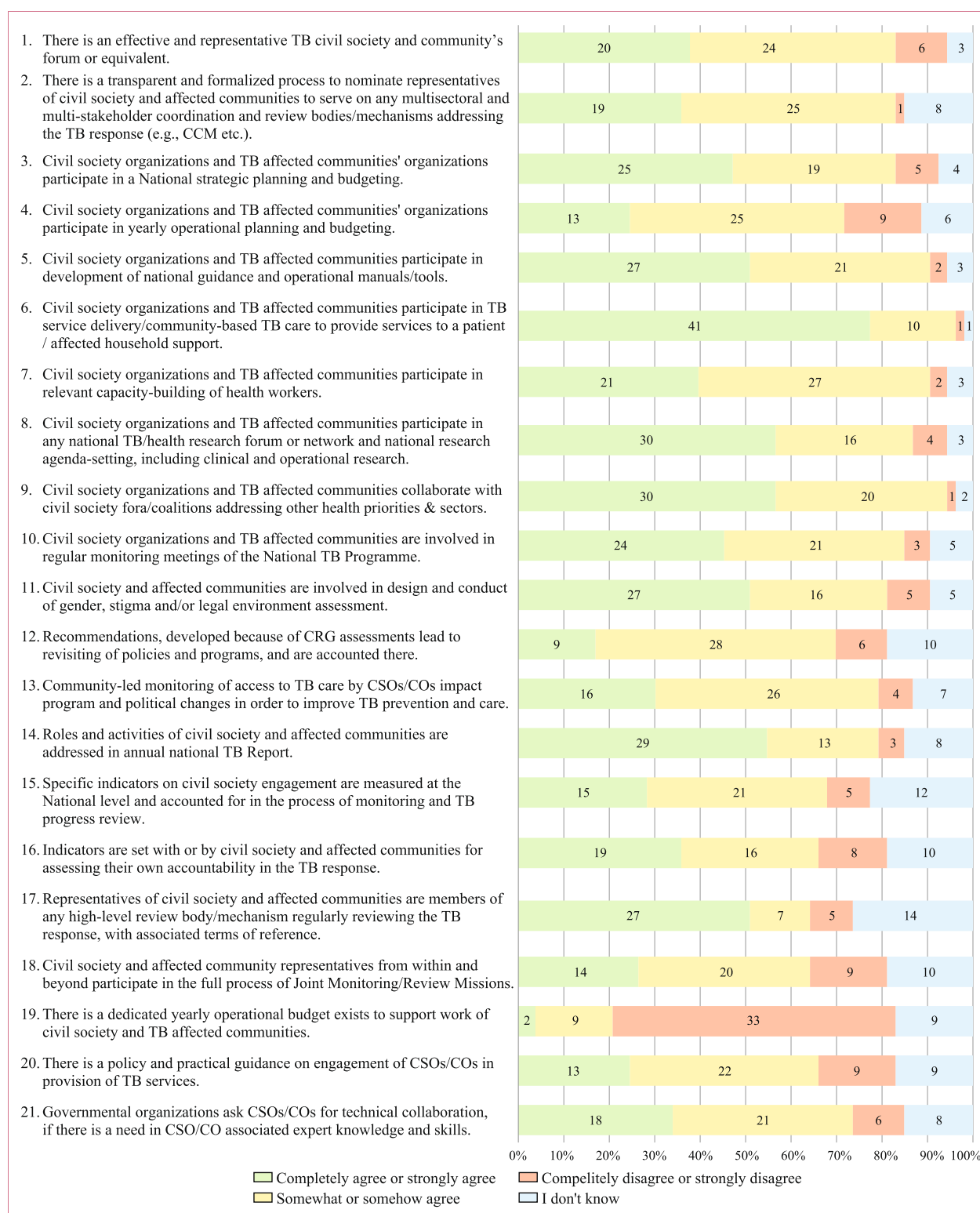


Fig. 1 Survey results from Moldova, Kazakhstan, Tajikistan, and Ukraine ($n = 53$)

Table 1 Participants of the Annex 2 MAF-TB baseline assessment

Country	Surveys	Interviews	Focus-group discussions		
			Program coordinators n = 34	Frontline service providers n = 34	TB survivors n = 25
Ukraine n = 36	16	7 (F = 3) (M = 4)	8 (F = 4) (M = 4)	6 (M = 2) (F = 4)	3 (F = 1) (M = 2)
Belarus n = 21	0	5 (F = 4) (M = 1)	5 (F = 5)	6 (F = 3) (M = 3)	5 (F = 3) (M = 2)
Tajikistan n = 38	12	6 (F = 4) (M = 2)	7 (F = 3) (M = 4)	9 (F = 4) (M = 5)	7 (F = 3) (M = 4)
Moldova n = 30	13	7 (F = 6) (M = 1)	6 (F = 4) (M = 2)	7 (F = 5) (M = 2)	2 (F = 1) (M = 1)
Kazakhstan n = 35	12	6 (F = 5) (M = 1)	8 (F = 6) (M = 2)	6 (F = 4) (M = 2)	8 (F = 6) (M = 2)

* Seventeen organization leads participated both in a survey and interview; therefore, a total number of participants is 160 (177 is a sum of all data sources — 17 = 160). *Female (F), *Male (M)

stage without visiting TB sites at clinics every day.
Belarus

CSOs/COs collaborate with diverse actors in the government. They worked with national, regional, and municipal legislative bodies and actors within the Ministry of Health, including the NTP and the Ministry of Social Policy or Social Welfare. Some national level government bodies had intersectoral structure, such as the Ministry of Health and Social Protection in Tajikistan and the Ministry of Health, Labour and Social Protection in Moldova. In addition to the health sector, CSOs/COs collaborate with a range of other actors depending on their organizational mission and client needs, such as the Ministry of Migration to address cross-border TB transmission and care for migrants in host countries and those returning to home countries, the Ministry of Education to organize school information campaigns, penal services to support inmates and former prisoners affected by TB, internal affairs to assist people with misplaced or precarious legal documentation, employment services to aid in training and employment, and women-focused government committees to channel gender-sensitive programming for people affected by TB.

Ongoing decentralization reforms in the region enabled many CSOs/COs to secure funding allocations from subnational and local government budgets to provide services that helped to fill gaps in regular TB care.

We have collaborated with local authorities, and for

the past two years, up to MDL, 50,000 [~USD 2800] has been allocated from the district budget for support and early detection of people with TB. Moldova

The Department of Social Protection of the City Council purchased from us services for supporting TB patients. These services were different from those funded by donors. They were a more comprehensive package of services needed by the client... In the context of our cooperation with local authorities, our organization purchased medications as prescribed by doctors to reduce side effects during TB treatment. Ukraine.

The Ministry of Finance was identified as a relevant sectoral actor. However, participants shared a need to gain technical skills to understand budget cycles and financial flows to sustainably engage with them. Likewise, participants also viewed the business sector as a promising avenue for material support.

In addition to the government, a few CSOs/COs had engaged with mass media and opinion leaders, including religious leaders and celebrities, to increase TB awareness and combat stigma. Support from celebrities was particularly solicited by organizations in Tajikistan.

I appreciate the work of a Goodwill Ambassador on TB in Tajikistan. She is not embarrassed to speak up about TB on her social media; she is a singer. Tajikistan

Table 2 Characteristics of 74 organizations participating in the Annex 2 of MAF-TB baseline assessment

Country (number of organizations)	Funds		Structure			Location			Health priority		
	Primary GF recipient	Sub-recipient	Did not receive GF funding	Network based	Stand-alone	Capital/big city	Smaller city/town	Rural	International	TB ^b	Other ^a
Ukraine (23)	2	21	0	13	10	11	12	0	0	1	22
Belarus (5)	0	5	0	1	4	4	1	0	0	1	4
Tajikistan (16)	0	15	1	1	15	6	8	2	0	10	6
Kazakhstan (16)	0	8	8	1	15	8	7	0	1	3	13
Moldova (14)	0	14	0	3	11	9	4	0	1	5	9
Total (74)	2	63	9	19	55	38	32	2	2	20	54

^a HIV/AIDS constituted the main health priority for 43 (58.1%) organizations

^b Five organizations (1 in each country) out of 20 which consider TB as health priority position itself as TB-community led

On occasion, organizations joined hands with CSOs/COs operating outside of the health sector to address social determinants such as housing.

If a person does not meet eligibility criteria to be housed in our adaptation center, we refer them to a Christian shelter. Sometimes even to another region or city, but this works. Ukraine

Those belonging to networks also pooled efforts (despite competitive funding, as described ahead) to bolster referral pathways, exchange knowledge, and strengthen capacity-building and advocacy efforts for the achievement of common goals. Considering the prevalence of TB/HIV coinfection, the most common collaboration tended to be with HIV-servicing organizations that had pioneered nongovernmental initiatives in the region and historically captured more funding from foreign donors. These organizations were able to provide direct TB screening, support, and cross-referral services.

Criteria for meaningful engagement

Organizations' ability to meaningfully engage with other stakeholders rested on key criteria. When these were met, multisectorality and partnership were bolstered. First, there was the opportunity of CSOs/COs to voice concerns to authorities, whereby TB could be prioritized and comprehensively addressed within their target communities. Establishing rapport with government, NTP officials, health and social service providers, and donor agencies was considered a crucial entry point for joint decision-making. Many CSOs/COs, however, struggled to reconcile these partnership-building activities that required a collaborative stance with advocacy activities that require a more critical, expository stance. Framing critiques as opportunities to implement solutions in partnership with other sectors, rather than calling out weaknesses, allowed some CSOs/COs to overcome this challenge. Such an approach helped to build meaningful dialogue and pool actions.

To be able to actively and boldly promote any issue, it must be [by] a representative of the community who is generally independent and not bound by any contracts, who perhaps does not receive a grant. To be just an activist...When we implemented some projects, it required [organization] to interact with officials, communities, with everyone. In addition, to advance some issues, sometimes it was necessary to make concessions. Kazakhstan

Everyone can make a difference. This is a function of society to make decision-makers aware of the problems and to enable changes for the better...However,

we also understand that it is not enough to simply channel a problem to decision makers. We change our tactic. We need to suggest solution options. It is not just about shedding light on the problem. Moldova

To help increase funding for certain priorities... this is where the role of nongovernmental partner is prominent. For example, to increase funding or the budget of your partner institution. It seems to me that achieving this positively impacts the level of partnership and the relationships between organizations and medical institutions. Ukraine

Second, it was CSOs/COs' desire to be included in all spheres of TB decision-making. Organizations that had participated in NTP strategic planning highly appreciated the opportunities granted and the recognition gained. However, most organizations were more narrowly engaged by governments in delivering services. The need for more involvement with conceptualization, planning, monitoring, or evaluating programs was mentioned.

Practically any activity in the field of tuberculosis in Moldova and all of us, all of our organizations, is coordinated with the National program. Moldova

This is a core principle in which we believed from the beginning: if you plan to do something for us, make sure we are a part of the initial planning. Not just implementation, but initial planning... This is about meaningful engagement. We believe that civil society should actively contribute to planning. Tajikistan

Once we get money from a governmental body, we become its contractor. [But] funding mechanisms for nongovernmental organizations should not change the nature [of their work] and the mission...We should not become just businesses when the provider is simply contracted to provide services. Ukraine

Third, it was access to sustained financing. Organizations flagged concerns about donor dependency, poor access to public funds, and — in relation to the previous point — restrictions on the types of activities they could undertake. Social contracts for service delivery remained their main route to secure internal budget allocation. In contrast, funding to advocate in alliance with other CSOs/COs or develop professional capacity to contribute to the TB response beyond service delivery was less accessible.

Currently, we have financing, but I wouldn't say it is sustainable. Therefore, if there is money, we are allocated money. When there will not be money, then

we will not be allocated, so this makes the success of such a practice uncertain. Moldova

Even if we plan, we cannot find money for advocacy. Tajikistan

Finally, many CSOs/COs reflected that their efforts toward multisectoral engagement tended to be reactive, relying on case-by-case negotiations with government authorities and other sectors to address the emerging situations facing their clients. While many organizations have developed robust practices of agreements and memoranda, several leads expressed an interest in establishing more systematic mechanisms and safeguards, which are tied to ideas about accountability that are discussed below.

We have signed memorandums of cooperation with the AIDS center, the drug addiction center, and seven primary health care organizations in Almaty. All the structures know about us. We work together with the center for the adaptation and resocialization of homeless people. We work with probation services to provide care to former prisoners; we work with migration services. Kazakhstan

Accountability of stakeholders and practices

Participants viewed accountability as their organization's obligation to report on financial spending and program activities to the key stakeholders they relied upon to stay engaged in the TB response: donors and state actors. This was viewed as an administrative task, and its linkage to prospects for funding and collaboration provoked a degree of pressure.

In the first place, [organizations] are accountable to the donors who fund them. Another point to be made, public health authorities ask us to report how much money was spent, how much testing was done, that is, how many people we covered with services. Ukraine

We have funding from the state budgets, so we are reporting on it. We report to all institutions that finance us. We also report to the structure in charge of registering patients...We report to medical and sanitation services, what activities we performed, what results we achieved. Moldova.

While many participants also felt responsible to their clients and board members, there was comparatively little pressure to answer them in practice.

Accountability is to the structures that finance organizations. Ideally, it should also be to the peo-

ple whom the organization serves. However, that's on paper. Tajikistan

Even so, CSOs/COs displayed an authentic commitment to caring for TB-affected communities. They strove to deliver services, record the outcomes of psychosocial support provided, and support TB surveillance by documenting data on people with TB who were missed by the public health system. A few CSOs/COs recognized that their commitment to these actions could bolster their credibility among government actors, particularly the NTP, and foster higher-level engagement in the TB response. Championing public reporting, by leveraging their position as service providers and/or liaisons to probe into national data on TB epidemiology, financing, and programming, also enabled them to advocate and strengthen their core missions.

Civil society must be accountable because we are implementing interventions that are part of the national programs to combat TB. All interventions are absolutely interconnected...each sector has its own part of responsibility. Therefore, it is important to discuss and communicate...to provide this continuum of care, to avoid gaps between services, prevention, diagnosis and treatment, and support. Moldova

We can send an inquiry to any organization to obtain data on their budget. We are members of the public council at the regional state administration, and through this engagement, we can push any heads of the departments to report on the work they have done. Ukraine

Organizations placed high value on their membership within coordinating bodies that galvanized national TB responses and tended to involve representatives from multiple sectors. Country coordinating mechanisms or CCMs, which were set up to oversee the implementation of projects set up by the Global Fund—the main funding source of international financing for TB—were among these leaders. CCMs are composed of government and nongovernment representatives, including representatives from funded COs/CSOs. CCM working groups tended to center on activities that aligned with CSOs/COs mandates, such as the development of joint (multi-sectoral) policies, strategies, and reporting schemes. In principle, therefore, CCMs are understood to facilitate organizations' work and serve as their ally.

The only structure where nongovernmental organizations can participate and make an impact is a country coordination council [aka, CCM]. It is linked with the Global Fund [grants]. Many coun-

tries have these structures. Belarus

We have a CCM in the country, and this is a very important platform [for accountability]. First, the deputy heads of all our ministries are members of the CCM. Additionally, there are representatives of civil society. Tajikistan

The low frequency of CCM meetings and the absence of high-ranking officials within many CCMs, however, left organizations wanting for more opportunities to contribute to high-level decision-making. Addressing this gap was seen as vital to building systems of accountability to TB-affected communities and the civil society and community organizations that served them.

Discussion

Multisectoral action is viewed as an effective approach for addressing the social determinants of health and a priority within the global End TB Strategy [2, 17]. The 2018 and 2023 UNHLM on TB have also advanced the need for multisectorality together with accountability in the TB response [18]. With the development of the WHO MAF-TB, which seeks to determine additional actions required to achieve the End TB Strategy, and the Stop TB Partnership Global Plan to End TB 2023–2030, these bold concepts are positioned to become mainstays within national and regional TB decision-making, financing, and program planning [8, 19, 17, 20]. This study offers one of the earliest regional assessments of multisectoral collaboration and accountability from the perspective of the TB-affected community and civil society actors in the EECA region. A notable strength is the use of coupled methods that are supported within operational guidance for MAF-TB assessments [17]. Survey data provided insights to support routine monitoring and review of progress toward multisectoral action and accountability within national TB responses. The interviews and FGDs revealed complexities and gaps in CSOs/COs' efforts, which are key to mounting responsive interventions.

The engagement of CSOs/COs in TB, as well as other areas of health, offers pragmatic gains for person (patient)-centered responses [21–23]. They have added value to TB program, research, and policy processes such as the design and development of trials, interventions, monitoring tools, and clinical guidelines [16, 24–26]. CSOs/COs engagement with government bodies has helped to fill gaps in public programming, especially in low- and middle-income settings [27]. The engagement of religious leaders and celebrities in response to TB is also believed to address TB stigma and poor health-seeking behavior [28, 29]. In the five countries included in this study, we found that CSOs/

COs engaged with health and nonhealth actors across different levels of the government and community to address a spectrum of social determinants. While engagement was primarily enacted through service provision, organizations leveraged the opportunity to strengthen other agendas and push forward their own missions. For example, several CSOs/COs contributed to the TB-CRG agenda (e.g., by participating in TB stigma and legal assessments), pandemic responses (e.g., by addressing health care access barriers during the COVID-19 crisis), and increased recognition (e.g., through presence within CCMs). The allied role of CSOs/COs in supporting broader public health efforts such as pandemic preparedness, prevention and recovery, and universal health coverage is increasingly recognized [27, 30].

Most CSOs/COs were supported by Global Fund grants. Several EECA countries are also eligible for novel funding schemes, such as the Stop TB Partnership's Challenge Facility for Civil Society. However, the perpetual uncertainty of donor funds, scarcity of domestic investments, and relative absence of CSOs/COs' voice in program planning loomed large in this study. Precarious donor relationships have been found to impede community engagement in other health sectors as well [27]. We found that advocacy and capacity-building activities for CSOs/COs are especially poorly funded, limiting sustainable organizational development and the advancement of a collective agenda.

Collaborations between state and nonstate actors can be fraught with tension. A recent systematic review revealed that such partnerships must contend with differences in goals and priorities; unequal autonomy and authority—often to the disadvantage of nonstate actors; undefined roles; poor transparency and accountability—on both sides; and, consequently, distrust and miscommunication [31]. The absence of an independent party to facilitate collaborative processes and hold both sides to account can be a key gap [31]. In this study, while CSOs/COs generally enjoyed positive relationships with state actors, they had less say in decisions related to planning and high-level monitoring and review of the TB response. They felt held accountable for spending and for implementing activities without receiving reciprocal answerability from other actors. Thus, while accountability was recognized and valued, it did not appear to be a bidirectional—much less central—factor guiding multisectoral processes. Future research documenting the government's own efforts at multisectoral engagement and perceptions about the limitations and opportunities faced by their civil society and community counterparts can contribute to the theory and practice of collaboration and accountability to end TB.

While approaches such as MAF-TB can help assess and build engagement and accountability systems between stakeholders, the impact on targets to end TB, upon which the global response rests, is not yet clear. Other models of accountability may lead to learning. Social accountability models, for example, consider answerability or the obligation of stakeholders to provide an account of their actions, as well as the right of citizens to garner a response through corrective action when accountability has failed [32]. Under a performance accountability model, targets or expectations for program performance may be set to inform answerability decisions and (non-punitive) remedial measures when those targets are not met [33]. The applicability of these frameworks in TB, in the EECA region, and in the context of state and nonstate stakeholders needs further research. Current approaches to monitoring and review tend not to focus on improvement measures, which may require actions beyond the health sector. In this study, many participants envisioned the CCM as a suitable mechanism of coordination and accountability among sectors. At the same time, they admitted that the promise of high-level progress review, as suggested by the MAF-TB approach, was difficult to fulfill. There is opportunity for CSOs/COs to bridge gaps and serve as agents of change in this regard, given their close connection and commitment to TB-affected communities and membership within CCMs. Indeed, the commitment that many CSOs/COs express toward their clients could be leveraged as an accountability measure. It can be linked with performance indicators and quality benchmarks that are commonly reflected in national TB programs and related TB strategic plans and policy documents.

This study has several limitations. Despite recruitment efforts, only half of the CSOs/COs serving people with TB were represented, with very few organizations working rurally or internationally. While organizations' values and preferences with respect to multisectorality and accountability were revealed, the most useful points of multisectoral linkage were not quantified. These data may be gleaned from ongoing national assessments as well as community-led monitoring activities that will become available through national reporting. Apart from the gender of those contributing qualitative insights, participant demographics were not collected in any detail; rather, focus was placed on the characteristics of the organizations they represented, including a source of funds, structure, location, and health priority. The political climate of the EECA region has also drastically shifted since the study ended, with the Russo-Ukrainian war and TB-affected communities consequently facing more complex barriers. This research nonetheless offers a regional community perspective that is unmatched in

terms of depth and number. One major strength of this study is that it represents an unprecedented collaborative regional research effort, connecting government and community partners from five countries, which may not be reproducible in the near future.

The findings were shared with CSOs/COs in the EECA region at a participatory workshop in late 2021, where recommendations for strengthening multisectoral responses were jointly developed and made publicly available [34]. CSOs/COs engagement coordinators also followed up with NTP representatives to integrate the findings into their broader national MAF-TB assessments. The spirit of enhanced accountability and engagement in the EECA region has been further demonstrated through regional leadership supporting global TB community accountability reports [35, 30].

Conclusions

Our findings make a valuable contribution to the understanding of multisectoral collaboration, highlighting the essential role of CSOs/COs in the TB response in the EECA region. Multisectoral engagement and accountability as an effective approach for addressing the social determinants of health and helping to end TB are a necessary and laudable goal. However, more inclusive and sustainable mechanisms are needed to support TB-affected community and civil society actors to be accountable and to be able to hold other state and nonstate actors accountable. This assessment has been a critical step toward recognizing barriers and building multisectoral stakeholder platforms to end TB in the EECA region.

Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s44263-025-00136-y>.

Additional file 1: Appendix 1. Survey statements (adopted from WHO MAF-TB Checklist/Annex2). Appendix 2. Domains of inquiry and analysis for a survey, interviews and focus groups. Appendix 3. Comprehensive list of quotes supporting the qualitative analysis

Additional file 2: COREQ check list.

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Authors' contributions

YC, IL, YK, AD, and SH designed the study. YK and JM led funding acquisition. IL performed data collection, supervised by YC, YK, and MC. YK, IL, AD, and YC led data analysis and interpretation. SH, MA, MA, OI, PJ, NK, OK, IK, LK, NK, LP, AS, YT, VW, HZ, DZ, and JM supported data collection and contributed to data review and interpretation. YC wrote the first draft of the manuscript in close consultation with AD. All views expressed are those of the authors alone. All authors read and approved the final manuscript.

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Data availability

Relevant study data are presented in the manuscript text and additional files. Due to its descriptive nature, raw survey or interview data will not be made available to protect participants' confidentiality and privacy. Access to specific deidentified data may be accessed from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate

This study was approved by the national ministries of health/NTPs in each country as part of routine program activities which covered assessments of multisectoral engagement and accountability, conducted in collaboration and partnership with CSOs/COs. Additional institutional ethics approvals were not required. The participants consented to participate in the research through shared informed consent forms and explanations of the process by an interviewer preceding interviews/FGDs. Verbal informed consent was obtained from all participants for the interviews and FGDs. Written informed consent was obtained from all participants for the online survey at the start of the survey. The research conformed to the principles of the Helsinki Declaration.

Consent for publication

Not applicable

Competing interests

The authors declare that they have no competing interests.

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References

- Global tuberculosis report 2022. Geneva: World Health Organization; 2022. Licence: CC BY-NC-SA 3.0 IGO. <https://iris.who.int/bitstream/handle/10665/363752/9789240061729-eng.pdf?sequence=1>.
- Lönnroth K, Jaramillo E, Williams BG, Dye C, Ravigliione M. Drivers of tuberculosis epidemics: the role of risk factors and social determinants. *Soc Sci Med*. 2009;68(12):2240–6.
- de Colombani P, Hovhannesian A. Social determinants and risk factors for tuberculosis in national surveillance systems in Europe. *Public Health Action*. 2015;5(3):194–201.
- Aibana O, Bachmaha M, Krasniuk V, et al. Risk factors for poor multidrug-resistant tuberculosis treatment outcomes in Kyiv Oblast, Ukraine. *BMC Infect Dis*. 2017;17:129. <https://doi.org/10.1186/s12879-017-2230-2>.
- Priedeman Skiles M, Curtis SL, Angeles G, Mullen S, Senik T. Evaluating the impact of social support services on tuberculosis treatment default in Ukraine. *PLoS ONE*. 2018;13(8):e0199513.
- McDonough A, Rodríguez DC. How donors support civil society as government accountability advocates: a review of strategies and implications for transition of donor funding in global health. *Glob Health*. 2020;16:110. <https://doi.org/10.1186/s12992-020-00628-6>.
- Citro B, Soltan V, Malar J, Katlholo T, Smyth C, Sari AH, Klymenko O, Lunga M. Building the Evidence for a Rights-Based, People-Centered, Gender-Transformative Tuberculosis Response: An Analysis of the Stop TB Partnership Community, Rights, and Gender Tuberculosis Assessment. *Health Human Rights*. 2021;23(2):253–67.
- WHO. Multisectoral accountability framework to accelerate progress to end tuberculosis by 2030. CC BY-NC-SA 3.0 IGO. Geneva: World Health Organization, 2019.
- Palinkas LA, Aarons GA, Horwitz S, Chamberlain P, Hurlburt M, Landsverk J. Mixed method designs in implementation research. *Adm Policy Ment Health*. 2011;38(1):44–53.
- WHO. WHO MAF-TB Baseline Assessment Checklist. 2020. [https://www.who.int/publications/m/item/who-multisectoral-accountability-framework-for-tb-\(maf-tb\)-baseline-assessment-checklist-for-country-use-in-pursuing-a-national-maf-tb](https://www.who.int/publications/m/item/who-multisectoral-accountability-framework-for-tb-(maf-tb)-baseline-assessment-checklist-for-country-use-in-pursuing-a-national-maf-tb).
- Sullivan GM, Artino AR Jr. Analyzing and interpreting data from Likert-type scales. *J Grad Med Educ*. 2013;5(4):541–2.
- Gale NK, Heath G, Cameron E, Rashid S, Redwood S. Using the framework method for the analysis of qualitative data in multi-disciplinary health research. *BMC Med Res Methodol*. 2013;13(1):117.
- LaDonna KA, Artino AR Jr, Balmer DF. Beyond the guise of saturation: rigor and qualitative interview data. *J Grad Med Educ*. 2021;13(5):607–11.
- Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. 2007;19(6):349–57. Sainsbury P.
- Nowell LS, Norris JM, White DE, Moules NJ. Thematic analysis: striving to meet the trustworthiness criteria. *Int J Qual Methods*. 2017;16(1):1609406917733847.
- STP. Onelmpact. Community-led monitoring digital platform. <https://www.stoptb.org/digital-health-technology-hub/community-led-monitoring-tools#:~:text=Onelmpact%20is%20a%20TB%20community,rights%20based%20and%20gender%20transformative>.
- WHO. The End TB Strategy. Geneva: World Health Organization; 2015.
- UNHQ. Political Declaration UNHLM on TB 2018. New York: UNHQ; 2018. https://cdn.who.int/media/docs/default-source/documents/tuberculosis/political-declaration-un-general-assembly-tb-tuberculosis77c_d7a27-7e8d-4fbb-9729-a5dbd505798f.pdf?sfvrsn=4f4090dc_1&download=true.
- WHO. Adaptation and implementation of WHO's multisectoral accountability framework to end TB (MAF-TB): operational guidance. Geneva: World Health Organization; 2023. Licence: CC BY-NC-SA 3.0 IGO. https://cdn.who.int/media/docs/default-source/hq-tuberculosis/high-level-meeting-on-ending-tb/operational-guidance-adaptation-and-implementation-of-the-who-multisectoral-accountability-framework-to-end-tb_maf-tb.pdf?sfvrsn=cfc2277_6&download=true.
- STP. Global plan to end TB 2023–2030. 2022. <https://omnibook.com/api/export/1.0/dc664b3a-14b4-4cc0-8042-ea8f27e902a6/-/1.0/pdf>.
- Lagarde M, Palmer N. The impact of contracting out on health outcomes and use of health services in low and middle-income countries. *Cochrane Database Syst Rev*. 2009(4):CD008133. <https://doi.org/10.1002/14651858.CD008133>.
- Kelly JA, Somlai AM, Benotsch EG, et al. Programmes, resources, and needs of HIV-prevention nongovernmental organizations (NGOs) in Africa, Central/Eastern Europe and Central Asia, Latin America and the Caribbean. *AIDS Care*. 2006;18(1):12–21.
- Maher D, Hausler HP, Ravigliione MC, et al. Tuberculosis care in community care organizations in sub-Saharan Africa: practice and potential. *Int J Tuberc Lung Dis*. 1997;1(3):276–83.
- Boulanger RF, Seidel S, Lessem E, et al. Engaging communities in tuberculosis research. *Lancet Infect Dis*. 2013;13(6):540–5.

25. Mirzayev F, Viney K, Nhat Linh N, Gonzalez-Angulo L, Gegia M, Jaramillo E, Zignol M, Kasaeva T. World Health Organization recommendations on the treatment of drug-resistant tuberculosis, 2020 update. *Eur Respir J*. 2021;57(6):2003300.
26. WHO. WHO Civil Society Task Force on TB: engagement with civil society as the driver for change. 2020. <https://www.who.int/publications/i/item/9789240005877>.
27. Sanadgol A, Doshmangir L, Majdzadeh R, et al. Engagement of non-governmental organisations in moving towards universal health coverage: a scoping review. *Glob Health*. 2021;17:129. <https://doi.org/10.1186/s12992-021-00778-1>.
28. Sabin LL, Thulasigam M, Carwile M, Babu SP, Knudsen S, Dong L, Stephens J, Fernandes P, Cintron C, Horsburgh CR, Salgame P, Ellner JJ, Sarkar S, Hochberg NS. People listen more to what actors say': a qualitative study of tuberculosis-related knowledge, behaviours, stigma, and potential interventions in Puducherry. *India Glob Public Health*. 2022;17(11):2898–910.
29. Dobler CC, Batbayar O, Wright CM. Practical challenges and solutions to TB control in a lower-middle-income country: experiences from Mongolia. *Breathe (Sheff)*. 2018;14(3):180–3.
30. STP. The accountability report of TB-affected communities & civil society: priorities to close the Deadly Divide. Geneva: Developing Country NGO Delegation, Developed Country NGO Delegation, and Community Delegation of the Stop TB Partnership; 2023. https://www.stoptb.org/sites/default/files/imported/document/deadly_divide_2023_full_report_rus.pdf.
31. Rajabi M, Ebrahimi P, Aryankhesal A. Collaboration between the government and nongovernmental organizations in providing health-care services: a systematic review of challenges. *J Educ Health Promot*. 2021;10:242.
32. UNDP. Fostering social accountability: from principle to practice. Guidance note. Oslo: United Nations Development Programme; 2010. https://www.un-redd.org/sites/default/files/2021-10/Fostering%20Social%20Accountability%20_%20Guidance%20Note%202010.pdf.
33. Brinkerhoff DW. Accountability and health systems: toward conceptual clarity and policy relevance. *Health Policy Plan*. 2004;19(6):371–9.
34. Chorna Y, Lukash I, Kamenska N, Daftary A. Regional summary on the key findings of the baseline assessment with the use of the Annex 2 of the multisectoral accountability framework to accelerate progress to end TB (MAF-TB) in Belarus, Kazakhstan, Moldova, Tajikistan, and Ukraine. TB Europe Coalition; 2021. <https://tbcoalition.eu/resource/files/2022/10/final-regional-summary-tbec.pdf>.
35. STP. A Deadly Divide: TB commitments vs TB realities. 2020. https://pancap.org/pw/pcc/media/pancap_document/The-Deadly-Divide_TB-Commitments-vs-TB-Realities-FINAL-HLM-Report.pdf.

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