STOCKHOLM EVALUATION UNIT

SUMMARY REPORT

EVALUATION OF DRUG RESISTANT TUBERCULOSIS (DRTB) INTERVENTION IN BAGHDAD, IRAQ

JULY 2022

This summary was prepared independently by Amjad Idries and Falokun Victor. The major evaluation report included lengthy and detailed summary of the project and evaluation conclusions. This summary report offers a brief discussion of the evaluation's main findings, conclusions, and lessons learned. Please see the main evaluation report for further information and data.

INTRODUCTION

Iraq witnessed a period of major instability for nearly two decades, resulting in phases of a complex humanitarian emergency. Due to central government challenges and slow recovery and growth, millions of Iraqis remain in need of humanitarian assistance to address the lack access to basic amenities such as health care and clean water. MSF has been working in Iraq since 1991 and until 2012 was supporting general and specialised healthcare. The first exploratory mission to Iraq to reintroduce MSF support took place in 2016 to explore needs and potential solutions, interventions, and projects. Potentials projects emerged including the need for intervene in Sadr City in Baghdad (e.g., Drug Resistance Tuberculosis (DRTB), support reconstructive surgery, etc.), and in Mosul city. MSF decided to support an intervention focusing on DRTB in Baghdad. MSF aimed to support building the capacity of government entities responsible for delivering DRTB services. The project objectives were: (1) improving quality of DRTB case detection in MSF supported clinics in Sadr City in Baghdad, Iraq, and (2) improving the DRTB clinical care and management with quality assurance in Sadr City in Baghdad, Iraq.

The following pillars remained essential and core components of the project through its life cycle:

- **Laboratory**: support DRTB diagnostic capacity and quality.
- **Support DRTB case detection**: enhance contact screening (household contacts) and support sputum collection activities.
- **Clinical management**: Support DRTB clinical management at defined health facilities.
- **Patient support and improvement of adherence**: supporting health promotion and building capacity for patient care.
- **Operational research**: generation of local evidence to support adoption of shorter treatment regimens for DRTB.
- **Infection prevention and control (IPC)**: enhance IPC practices in health facilities supported through the project.
- **Capacity building**: this was crosscutting component in different project areas.

The project was focusing on Sadr City and targeting three locations: (1) Medical City (MC) where the National TB institute (NTI) is based, that runs the National TB Program (NTP), The Chest and Respiratory Clinic (CRC), and (3) the Tuberculosis Medical Unit (TBMU) responsible for Sadr City district.

This evaluation was commissioned by MSF OCB and managed by MSF-SEU. It aimed to assess the relevance, appropriateness, effectiveness, and connectedness of MSF DRTB intervention in Baghdad (2018-2021); and identify the key lessons learnt. The evaluation aimed primarily at contributing to MSF-OCB conversations about strategic and programmatic approaches and practices most appropriate in Iraq, in general, and concerning TB. MSF will use the evaluation findings and report to reflect on and learn about MSF policies, strategy, and service delivery related to MSF DRTB Intervention. For MSF, working in Iraq was not new; however, the formulation of entry points, development of engagement strategy and adoption of the right approach for projects (such as MSF DRTB intervention) might require an informed approach. The evaluation was an opportunity to create awareness around the evaluation of such a project through a collaborative evaluation design.

SUMMARY OF EVALUATION FINDINGS

1. RELEVANCE: the project was highly relevant

The evaluation found that MSF DRTB project components were highly relevant (highly satisfactory) to the needs and gaps identified by MSF in the context and implementation geography in Sadr City, Baghdad. The relevance of the project derived from its emphasis on addressing gaps in quality of care for DRTB patients while focusing on changing relevant policies to achieve this goal.

2. APPROPRIATENESS: the project was moderately appropriate to needs

The evaluation established that MSF DRTB project (design and strategy) were moderately appropriate (moderately satisfactory) to the TB needs and the local context in Sadr City, Baghdad. The appropriateness of the project was significantly related to its high relevance to the context. However, the project would have benefited from a better design and adoption of more fitting implementation strategy. The strategy adopted by MSF could have been better if the project team spent more time in conducting assessments, identification and prioritization of the needs, and development of clear strategy with clear targets. The stakeholders' feedback om the approperiatness of the project was very positive. The agility in decision making was important to maintain the relevenace of the project.

3. CONNECTEDNESS: the project was connected to its context

The evaluation findings indicating that the project was connected (satisfactory) to its context. The project has demonstrated clear values of effective partnership, interactions, interconnections, complementarity, and coherence in how the project was designed and implemented. The project was successful and active in alignment and coherence with relevant DRTB interventions (or TB in general) implemented by other actors in the context. This resulted in good opportunities to embed and well-integrate the project within the local health system. However, there were missed opportunities to establish better alignment with local stakeholder in Iraq context. For example, the project was not very successful in leveraging all of the potential local resources.

4. EFFECTIVENESS: the project was partially effective

The evaluation findings indicated that the DRTB project was moderately effective in achieving its objectives. The project was successful in delivery of targeted services, achievement of targeted outputs and influence on patients expected outcomes. However, the lack of pre-set measurable objectives targeted before the initiation of the project made it impossible to measure the actual effects of the project in an objective manner. In addition, the evaluation identfied some important performance influencing factors; such factors must have been part of the assumptions when designing such kind of projects.

5. EFFICIENCY: the project implementation was efficient

The evaluation findings showed that the human, material and financial resources invested in the project (human resources, thematic capacity strengthening interventions) were adequate and mostly sufficient for reaching the initially planned results.

CONCLUSIONS

While the project was highly relevant to its context in Iraq, the evaluation results highlight the importance of conducting a comprehensive needs assessment prior to the start of the advocacy-focused project. Articulating the outcomes of the assessments into clear objectives and measurable expected outcomes is crucial for successful projects.

This evaluation helped establish different influencing factors that hindered or supported the DRTB project implementation (mainly on how the project will be implemented and received by the stakeholders). During the planning stage, such factors should have been considered key assumptions behind MSF's strategy. MSF project teams should continuously monitor these factors and assess their impact on the project.

A challenging partnership environment characterizes Iraq's context. It is not easy for non-governmental organizations to operate and intervene efficiently without well-planned relationships building efforts to build trust. The evaluation results of DRTB project indicates the importance of early engagement of MSF mission leadership to support the introduction and initiation of projects. The initiation phase should be considered an opportunity for MSF leadership to communicate a clear vision of what and how MSF consider changing the problems.

Catalytic projects are different in design and implementation approaches compared to service delivery projects. MSF needs to establish clear distinction strategies for designing and delivering both types appropriately. Building a clear change strategy to achieve the project objectives is essential. The approach adopted to implement the DRTB project in Iraq assumed that the project should be delivered with a service provision mindset; however, as it was catalytic, that required a different implementation strategy (including a well-informed advocacy strategy).

Iraq has fragile governance systems and structure, which requires great flexibility to manage and deliver projects. The agile project management approach adopted by MSF for the DRTB project was appropriate and helped maintain the project's relevance and engagement with partners. The evaluation established a mixed dynamic in terms of who makes the decisions about changes in the project (objectives, scope and strategy). While the engagement of MSF central units was very crucial for the success of the DRTB project, it was essential that the project team be empowered to make autonomous decisions to adopt the changes they see appropriate to the country's context. On other hand, it is important to ensure assigning project coordinators with the adequate profilefor such kinds of sensitive projects.

MSF's HR sourcing approach was one of the main factors contributing to the DRTB project implementation process and outcomes. The evaluation of the DRTB project revealed the importance of recruiting staff who can understand and deal with the context and apply an appropriate approach to manage change and deal with resistance. Adopting a good and fit-for-purpose human resource matching is critical in a country like Iraq.

LESSONS LEARNED

⇒ LESSON LEARNED 1:

The success of the projects will be highly determined by good identification of contextual issues, the right stakeholders to approach during the implementation, and which change pathway to follow to achieve the objectives.

⇒ LESSON LEARNED 2:

With support from central units, the MSF mission should devote more attention to new catalytic projects during its initial stage. This stage is critical as it is usually affected by multiple factors that the implementation trajectory.

⇒ LESSON LEARNED 3:

The early engagement of MSF mission leadership to support the introduction and initiation of projects is inevitable. This engagement needs to occur through the chain of command in the government counterpart, including the engagement of high-level officials, and it should include politically appointed people, those in management positions, and those with technical authority.

⇒ LESSON LEARNED 4:

For projects that focus on tuberculosis specifically, the project team needs to start with more comprehensive support to TB/ DRTB in a new catalyst project; for buy-in and ensuring the efforts from the medical staff employed with MSF are well integrated into the program to achieve clear results.

⇒ LESSON LEARNED 5:

Project success towards its objectives is measured through accumulated achievements; however, the results should be measured against clear and measurable outcomes. The effectiveness of the project could be demonstrated at different levels of the results chain. This results chain should consider both short- and long-term targets, which are essential to measuring the project performance.

EVALUATION METHODOLOGY

The evaluation period covered the project from its initiation in 2018 until the end of 2021. The project was extended until June 2022; however, the evaluation does not cover the period between January to June 2022 (extension period). The evaluation scope focused on the direct project activities and results. The project geography was highly focused on implementing the interventions in Baghdad, Iraq, specifically the Sadr City. The evaluation focused on five overarching questions (which will be discussed in the findings section).

The evaluation of the MSF DRTB project was designed to adopt a theory-based evaluation approach, driven by a good understanding of which the Theory of Change (ToC) was adopted by MSF to implement the project. As part of the ToC development, the evaluators initiated a comprehensive desk review that aimed at developing a better understanding of the project. The output of the desk review fed into the development of the project ToC. In addition to the theory-based evaluation approach, the evaluators adopted a resource tracking approach to evaluate the efficiency of the project. The ToC has unfolded through a facilitated process of open inquiry and dialogue facilitated by the evaluators.

DATA COLLECTION

Project's documents review

A repository with available resources and data sets was compiled, with inputs from MSF and stakeholders. A total of 46 documents were reviewed during this evaluation.

Routinely collected medical data

Data on patients' demography, diagnosis history, type of diagnostics and confirmation tests used, TB categorization and site, treatment initiation history, type and length, and the treatment outcomes. Other data included retention in care and treatment and relevant data on patient support.

Key Informants interviews

A total of 23 individuals (representing 12 unit or entity) have participated in this evaluation.

- Eight experts from MSF Central and regional stakeholders.
- Seven experts from MSF Mission in Iraq.
- Five experts from NTP in Iraq.
- One expert from development partners in Iraq.
- Two experts from civil society organizations in Iraq.

FINDINGS

1. RELEVANCE

1.1. NEEDS IDENTIFIED, SELECTED, AND ADDRESSED

In 2015, a comprehensive review of the DRTB surveillance system was conducted, and detection and early detection data were being gathered. The program used the traditional, personalized therapy protocol which was centralized. Then NTP started a decentralized approach[1]; however, after the upheaval caused by ISIS in Iraq, the program returned to the centralized approach. Lost to follow up was quite prevalent and NTP's staff's experience was poor[2].

TB is a major public health issue in Iraq, according to MOH and WHO. By 2018, Iraq was one of seven Eastern Mediterranean nations with high TB prevalence, accounting for 3% of cases. In 2018, case detection rates for DSTB and DRTB were low, with considerable treatment gaps, especially for resistant forms. The evaluation documented the project's clinical efforts in addrsseing the gaps in the programmatic management of drug resistance TB and care models. Early diagnosis, effective treatment, infection control, psychological support, and palliative and end-of-life care were included in WHO guidelines for programmatic management of DRTB. MSF's operations were relevant since they were in line with these guidelines.

Besides the programmatic needs, working in Iraq had some strategic appeal for MSF and the possibility to alleviate certain medical problems while building strong relationships with MOH and undoubtedly addressing the gap. The gaps were enormous, both in terms of detection management and rules. MSF identified a chance to operate without a large project, as Baghdad project was minor compared to other MSF operations, and there was some interest from the national TB programme to engage in changing the treatment policy.

1.2. MSF RESPONSE TO THE NEEDS

The evaluators consider MSF DRTB project as not a typical stereotype of a service delivery project, as it has an important element of policy changes. In addition, the project was also perceived by MSF internal stakeholders as a 'catalytic project'. In addition, the evaluators consider the project has different targeted groups: (i) the community, including TB patients and their support systems, and (ii) the policymakers and service providers.

MSF response relevant to community needs

The main community needs, and how MSF responded to these needs, were summarized below.

[1] As opposed to centralized care which has been provided solely by specialist centres for the treatment of DRTB, either in the treatment centre as an inpatient and/or outpatient.

[2] Interview with NTP program management staff.

Suspected cases of DRTB	Needs: Identify them through appropriate means, offering them the screening and testing services, and provide them appropriate care and services. How needs were addressed: MSF established plans for community engagement, contact tracing and supporting sputum transportation system.
Patients	Needs: Receive quality diagnosis, providing them with information and counselling about their condition, access to quality and safe treatment options, support them through the treatment period, address their psychological, financial and other needs, monitor treatment response and support them to complete the treatment successfully. Extend the support to their families to achieve quality care. How needs were addressed: In brief, most of the MSF service delivery were around these areas.

MSF response relevant to policymakers' and service providers' needs

The evaluators consider the following stakeholders were part of the targeted beneficiary groups and summarize how MSF responded to their needs:

MOH senior leadership - beyond NTP management	Needs: (1) services are delivered to population in need, (2) confidence about safety and quality of the services. How needs were addressed: (1) respecting national ownership to decide on whether the new regimen will be implemented or not. (2) Donating GeneXpert machine and cartridges, MSF had been recognized as an important partner by the NTP, MoH and partners like IOM, (3) continuous clinical mentoring and technical guidance to draft the national DR TB protocol. Despite these efforts, networking/ advocacy, trust building and ensuring MSF visibility should have been priority strategies to address the needs of this group, especially in a context like Iraq.
NTP management	Needs: (1) NTP strategy and plans are achieving targets, (2) services provision to patients diagnosed with DRTB. How needs were addressed: (1) capacity budling opportunities and workshops, (2) involving the stakeholders NTP/MoH to identify priorities of intervention in relation to TB and understanding what other partners are doing and learning from their experience. A gap identified in MSF response was the lack of attention to assess the willingness of the main counterpart in project planning, especially NTP management, prior to commencing the project.
DRTB physicians	Needs: (1) addressing the deep routed fear and misconception related to BDQ, (2) gaps in knowledge, (3) desire to feel protected against negative consequences of prescribing new drugs with potential toxicity. How needs were addressed: (1) familiarize them with BDQ and to remove the fear and misconception and enhance knowledge, (2) support the clinical decision making through consultations with project MDs, especially in making the transition to the new regimen, (3) capacity budling opportunities and workshops in-country and abroad (mainly in South Africa).

1.3. OTHER NEEDS IDENTIFIED

Important parts of the intervention were relevant to the needs and context as established in previous sections. However, there were gaps in the design of the intervention at the initial phase of the project. While addressing DRTB needs and gaps was important in the project area, however; it is not easy (programmatically) to address these needs in isolation from other needs related to TB programming. The project would have benefited from addressing the DRTB and drug-senstive TB needs in a more comprehensive and integrated manner.

One of the gaps in the project design was to link better with patients and to understand their access barriers. That includes the involvement of the communities in the identification of the needs and the design of the care model.

2. APPROPRIATENESS

2.1. APPROPRIATENESS OF PROJECT OBJECTIVES

The evaluation confirmed the general objectives of the project were highly appropriate to the needs of the patients at the time, based on MSF's thorough review and understanding of the DRTB context within Sadr City, Baghdad at the time the project was planned. The two objectives highlighted in the introduction remain the core objective areas for the project. However, the ToC workshop confirmed that the project's objectives have changed during the project life cycle in response to changes in the context. Changes were attributed partially to lack of clarity about the scope of the project as well as the changes in the context in which MSF team was trying to maintain the relevance of the project to the needs.

In addition, it is important to take into account the lack of clarity about the project scope and identify, as elaborated in the previous section, while assessing the appropriateness of the project.

2.2. APPROPRIATENESS OF PROJECT STRATEGY

Building on the documents review and series of interviews with the stakeholders, the evaluators consider the following were the key determinants of MSF DRTB project which has shaped its implementation strategy:

- MSF planned to conduct operational research to support the introduction of WHO recommendations on the new full oral regimens. The operational research was important from a scientific perspective and would encourage local authorities to adopt the recommendations faster.
- MSF was providing hands-on approach for its technical support to build capacity at NTP, MoH authorities, and MoH health workers. That would also help in addressing the fears associated with the possible adverse reactions when using the new drugs.
- There was a need to create motivations to change policymakers' perceptions in the national authorities about the programmatic benefits on introducing the new DRTB treatment. Tapping this determinant was essential to ensure some levels of policy changes were achieved.
- MSF needed to continue donating drugs and equipment to the national centre for chest and respiratory diseases in the medical city and the TB sector in Sadr City.
- MSF considered enhancing the capacity to diagnose DRTB cases as an objective by its own, but also an opportunity to enhance the enrolment on the new treatment regimen. The support for the Lab rehabilitation as well as technical support in the national reference lab in the medical city were essential to achieve the objectives of the project.
- MSF focused on enhancing the role of nursing in providing patient-centred care through provision of education and counselling to patients and their families. This has been central to desired changes in patient care model and quality of care.

2.3. STAKEHOLDERS FEEDBACK ON APPROPRIATENESS

The project suffered from lack of clarity about the strategy at the initial phase. This was mainly felt by the project implementors.

> "When I joined …. I put it in the way that the questions on the strategy was mainly like what MSF wants to do? the other partner, what are their interests? what Ministry of Health wants to do? what national TB programme wants to do? They were not heard of, and these were not clear from the beginning. So it is like MSF, we want to promote this DRTB, and we want to implement this in the country. This is what we want, and this is the offer that we have. This is a package that we have. What are the interests of the other side? I think these were not considered or they were not understood properly at the time of defining the strategy. And sometimes as MSF, we push our own one-sided agenda all the time. I would say that although there was an assessment, there was team who went there, did the assessment of different areas and different places…… So, I had discussion with the [MSF] Cell where I clearly asked a question this is the need from the mission and the country, or this is something that South Africa unit wants, or could be the cell wanted … you we need to clarify this."
>
> MSF mission staff

On the other hand, it was not clear for the evaluators or the stakeholders 'why the project was not initiated as a pilot?'. Stakeholders considered that it was more appropriate to adopt such approach in the strategy design phase of the project. On the other hand, the evaluators did not find any indication for this piloting approach as strategy.

Given the nature of the project, advocacy was an essential component of the project's strategy. Advocacy efforts were less appropriate than other project actions. A clear advocacy strategy, however, was non-existent in the project, or it was not based on a situational assessment or the perceived requirements of the MSF targeted groups.

MSF internal stakeholders raised a doubt of whether the changes in the DR treatment guidelines could be attributed to MFS intervention or not and what other factors contributed to the change. Concern was raised by MSF internal stakeholder on whether the MSF project team was focusing more on fieldwork and services and not enough interactions with stakeholders at the central levels, and to what extent that has contributed to outcomes of the project.

2.4. STRATEGY ADAPTATION

Given the resistance faced by the project team to implement the operational research component, the project leadership decided to adopt different approach to implement the project. That has contributed to maintain the relevance and appropriateness of the project to its context.

The modifications and changes adopted by MSF through the implementation life cycle were partially appropriate to support the project. The proactive management by MSF of its plans and adopting different strategies have contributed to maintain relevance of the intervention. However, many of the project assumptions turned to be not correct or accurate within the context of the intervention.

2.5. AGILE PROJECT MANAGEMENT

The project evolved throughout time to suit the needs of patients on the ground and the changing context, but these changes were made on the impulse of the momentum rather than in advanced and planned manner. While the initial project plan clearly stated the goal of changing major policies in these areas, there was no specific indications of how the project team should manage the change process if policy or other key changes to the context occurred during implementation. Despite this, adjustments were plainly made. These modifications assured the project's continued relevance, but they looked to be organic rather than the result of any deliberate adaptive strategy described in the Project plan or elsewhere.

3. CONNECTEDNESS

3.1. LEVERAGING LOCAL RESOURCES

The project succeeded to establish a good working relationship with governmental entities in Iraq, to a varying degree. For instance, there was no evidence that the project attempted to build a partnership with the local government entities in Sadr City. While there was an assigned TB Officer, there was no documentation of connections with the health authority in the governorate or district levels. On the other hand, and given the proximity to NTP offices, there was more interaction with the NTP (i.e., national level stakeholder).

There were not many local non-governmental organisations working on TB-related programming in Iraq. That extends to local civil society organizations as well. As a results, the project was not connected to any local organizations except the IATA (Iraqi Anti TB association). Although, there were limited interactions between MSF and the association; no tangible outputs resulted from this relationship.

The TB program review report indicated a significant role of the private medical sector in Iraq[3]. Despite the significance of the private sector in the diagnosis and referral of TB cases, there were no attempts by the project to connect with the private sector providers. This could be attributed partially to the limited scope/ focus of the project rather than considered a gap in strategy or as a limitation.

3.2. PARTNERSHIP STRATEGY

All the stakeholders interviewed as part of this evaluation agreed that MSF has been an important and significant partner who supported the TB program in Iraq. The level of support and way of engagement has been one of the strengths identified.

[3] NTP (2019). TB program review.

The DRTB project has different component and pillars. The change model reflects general activities which were translated into a set of concrete, orgnized and implementable activities and tasks and day-to-day work plans that were fully integrated into the local health system. Please refer to the full evaluation report from more details.

> "The project in Baghdad was not a vertical project from MSF, we are supportive of the national TB program. We are not running the program as the program is run by NTP. What we are doing, we are following the guidelines they have made, according to WHO guidelines, and these guidelines were also supported by MSF."
>
> MSF mission staff

3.3. CONTINUITY OF SUPPORT

The focus on strengthening the capacities and capabilities of the lab was proven to be a good strategy, which was crucial for the project to achieve its objective. The support provided by MSF to build NRL's capacity is one of the areas in which the project has demonstrated the ability to sustain the gains.

Since the beginning, one of the main strategies targeted by the project has been decentralizing the DRTB service provision to lower levels of the health system (i.e., primary care). The project has successfully focused on supporting NTP in this area during the exit phase, and according to NTP officials, this will be the policy for the next period. However, one of the challenges that NTP will face is the level of effort and associated resources needed to achieve this in the country. While the project was meant to focus on Baghdad only, this policy change cannot happen only in limited geography and needs to be introduced in other governorates.

4. EFFECTIVENESS

4.1. PROJECT ACHIEVEMENTS

The project objectives were broad, and vaguely articulated with gaps in outlining how the desired outcomes of the intervention would be achieved.

There was a consensus from the project staff that the decentralization approach for a patient-centered care initiated by MSF for the DRTB treatment and management lacks clarity and coordination and hence might result in improper replicability across the governorates.

There was not enough evidence to substantiate that the MSF intervention had an unintended effect in the given context.

The MSF intervention directly influenced a national policy change in the treatment of DRTB in Iraq through the provision of technical advice and support to NTP in the transition of injectable-free WHO-recommended oral DRTB treatment. The project meant to be designed a catalytic project; however, the gaps identified in the project appropriateness and design have contributed to gaps on how the project shall approach the targeted policy changes.

Project achievements against objectives, outcomes

The overall objective for the intervention had two elements: improving DRTB diagnosis and clinical management in Baghdad, Iraq. Both components of the objective were achieved to some extent during the intervention period. The MSF clinic over the period of 2019-2021 recorded higher number of bacteriological confirmed DRTB cases with few DRTB cases being clinically confirmed. Based on these results, MSF demonstrated and have been able to achieve the goal of improving clinical diagnosis of DRTB cases and this can be seen as successful and contributing to policy change regarding using GeneXpert as first line of diagnosis in Baghdad.

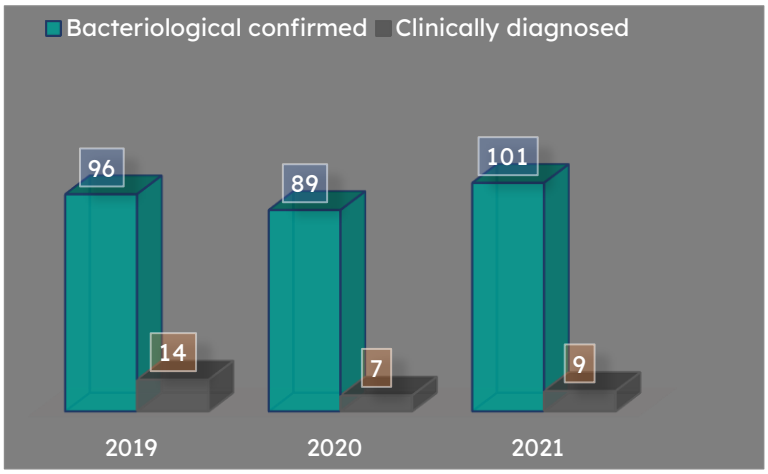

Figure 1. MSF DRTB patient case confirmations

Treatment outcomes for patients were considered good with few loss-to-follow up (LTFU) recorded. By 2021, out of the cohort of 110 patients, 83 have been successfully initiated on the WHO recommended oral DRTB regimen. Preliminary analysis by the MSF team in 2021 showed that the LTFU rates for patients was the new oral regimen of bedaquiline was 2.9% compared to 12.3% on the injectables[4].

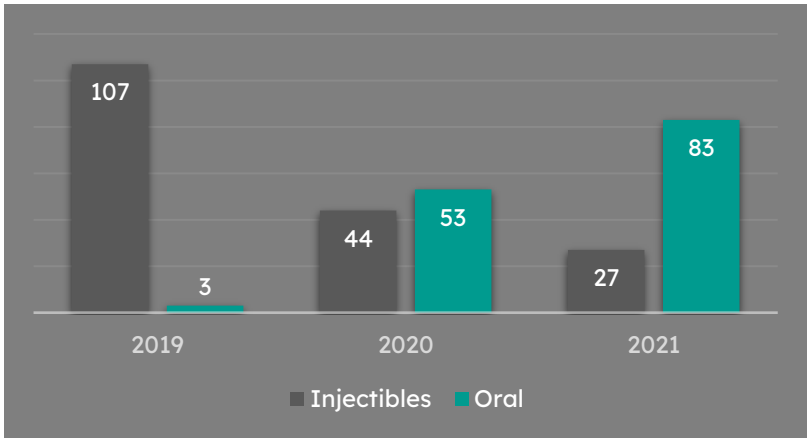

Figure 4. DRTB Treatment by type of regimen

[4] H. Tesfahun, et al (2021). Introduction of new drugs for drug-resistant TB in Iraq. The International Journal of Tuberculosis and Lung Disease. 5(12):1041–1044.

Data collected reflects 317 (61% Male and 6% children) DRTB patients were treated in Iraq between 2019 and 2021. In 2020, 97 (30.6%) were treated compared to 110 (34.7%) treated in 2021. From this cohort, data indicated 124 (40%; n=317) to be cases of primary DRTB infection interpreted as patients who were not previously exposed to First Line Drug (FLD) for Drug Susceptible TB (DSTB) for a month or less before developing DRTB. This figure was significantly high and may imply non-existing or ineffective infection prevention and control practice which needs further intervention. Patients with previous exposure to FLD for DSTB forms 54% (174) while there were no records for 19 (6%) patients. Only 3 of these cohort (2 in 2019 and 1 in 2020) were classified as Lost-To-Follow-Up (LTFU). Of the 317, we found 29 patients with previous exposure to Second Line Drugs (SLD) while 95 had missing data.

The evaluators were able to retrieve data for 189 patients with specific diagnostic and treatment start dates to ascertain the turnaround time (TAT) for treatment initiation. The remaining 128 (40%) either had inappropriate dates recorded (commonly treatment initiation dates earlier than diagnostic date), or no record of either or both dates spreading across the 3 years of implementation but worse in 2019. Treatment outcome may only be obtained from the entire 2019 cohort and to an extent 2020 but not 2021 as at the time of this assessment. From the 2019 cohort, 72 of 110 were treated successfully with 37 (51%, n=72) being cured, 21 (19%, n=110) LTFU, 1 patient not evaluated and 9 (8%) died. The available report for 2020, which is expectedly incomplete with 53 missing data, shows out of 28 of 44 patients were successfully treated with 24 (86%, n=28) cured, 4 (9%, n=44) LTFU and 8 (18%, n=44) died. This as earlier stated may not represent the final picture for 2020 but a proxy to show an improved proportion of cured patients, reduction in LTFU and increased mortality when compared to 2019 cohort. Factors accounting for these findings need to be assessed to inform program quality improvement initiatives.

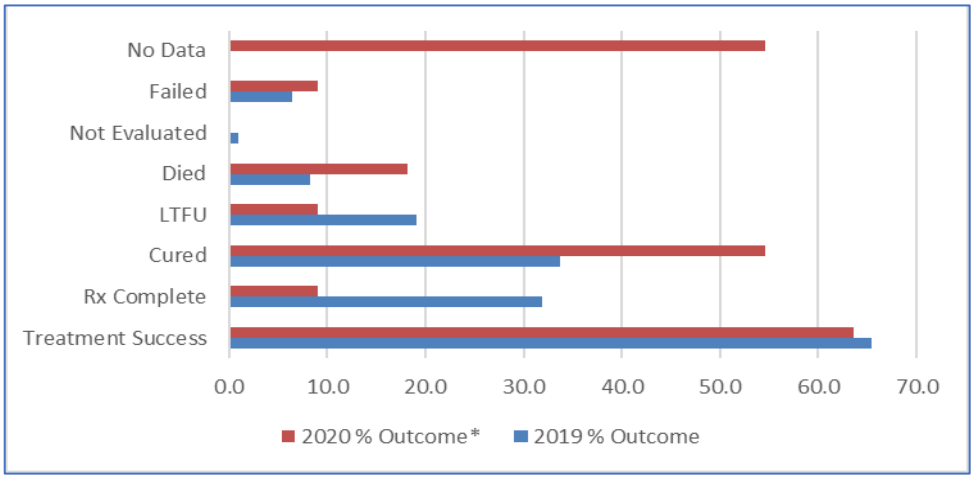

Figure 2. Treatment outcomes 2019 vs 2020

Project catalytic effects:

The project strategy did not appear to explicitly consider established knowledge about how to affect TB policy change, but it did provide valuable evidence about two factors that were widely considered to be critical for this to happen: evidence of the scope of the problem (DRTB in Sadr City, Baghdad); and evidence of successful policy interventions that could address the problem. While the policy gaps highlighted were important and appropriate, the Project did not aim to influence policy in all areas

related to the TB program, instead of focusing on specific DRTB treatment regimens through advocacy and operational research. The reason for focusing on DRTB therapy rather than the Project's other clinical or community initiatives was unclear, and several stakeholders believed that opportunities to prioritise which specific policy gaps advocacy actions should be affecting had been lost.

4.2. PERFORMANCE INFLUENCING FACTORS

The evaluators identified the following factors which have influenced the project's achievements:

- Capacity building of healthcare staff and team.
- Provision of lab supplies and drugs to support NTP.
- Provision of personal support to address socio-economic burden of DRTB on patients.
- Lack of a comprehensive situational analysis at the initial stage of the project.
- Perceived non-receptiveness and mistrust of project intentions from key stakeholders in Iraq.
- Limited human resources at NTP level.
- Disruption and subsequent cancellation of some DRTB intervention activities i.e., contact tracing due to the COVID-19 pandemic.
- Poor reporting systems and undefined monitoring indicators.

4.3. OPPORTUNITIES AND LESSONS LEARNED:

- Improved advocacy and engagement with local stakeholders and NGOs working in the DRTB program to ensure project outcomes sustainability after MSF ends the project
- Development of a replicable decentralized model of care to be utilized by each governorate during the decentralization process
- Redefinition of target population to include certain groups of individuals i.e., prisoners who were not included during project implementation
- Effective and proper communication channels between MSF HQ team and staff in Iraq.

5. EFFICIENCY

5.1. HUMAN RESOURCES ALLOCATION

Given the nature of this project, the human resources management (HRM) was one of the essential management functions under this project.

- The HR matrix of the project was not planned initially. That included the timing and duration of the lab expat which doesn't correlate with the level of support that would have been provided.
- One of the key issues that became apparent during the desk review and the interviews was the high turnover of the staff (mainly the project implementers in leading roles.
- Findings indicated that the project staff has not received an adequate level of orientation on skills related to handling resistance and applying change management skills, which was one of the key profound competencies needed to manage projects such as MSF DRTB project. While engagement of international senior MSF experts (from different MSF global units) was clear and evident, the support provided to project staff did not include hands-on guidance to apply techniques and strategies required to handle challenges encountered during the project's inception phase. For

such kind of projects, it is important to support the project change agents (like MD in this project) with appropriate change management skills and competencies and to work closely with them to ensure that they manage relationships in a successful manner.

- It was clear that the Medical Coordinator (MedCo) played an essential role of presenting the project to stakeholders. Their role was also essential for coordinating the medical operations related to the project, including the aspects related to ensuring availability of drugs and other commodities.

5.2. FINANCIAL RESOURCES OPTIMIZATION

MSF OCB Cell decided to increase the efficiency of project's spending through adoption of a shared management structure with the ER project. The DRTB project did not has a separate budget or management line, and until late in 2020; the project has not been separated from the ER project. This approach might have contributed to some challenges faced by the Medical Coordinator in providing more targeted support.

The scope of the DRTB project there was no complex components or interventions more than the clinically oriented interventions. This also contributed to low level of resources required for the project.

5.3. IMPLEMENTATION EFFICIENCY

Despite some severe deficiencies found by the evaluation, MSF's methodology enabled the project to offer services. If the project had contemplated establishing parallel structures/a vertical strategy, it would have taken significantly longer to achieve its goals, and MSF may not have been able to implement it due to its short-term engagement in the implementation. One of the main advantages in the project was the fact that MSF did not establish a separate clinic, but rather it has provided support to exciting MoH DRTB clinic.

The findings of this evaluation around the approach and process to achieve the intended policy changes indicate a mixed picture from an efficiency perspective. While the intended policy changes were achieved during the maturity phase of the project, the process to achieve these changes was inefficient as the project team could have better adapted different pathways. That highlights the importance of adopting a coherent project design aligned with the needs, good identification of aspects targeted for change, and adoption of the right change strategy.

According to examination of project records and input from key informants, data showed that, despite the early delays, the project was completed on schedule. The main obstacles to timely delivery were delays in granting the permission by the Iraqi ethical review board, which led to the operational research being halted. Towards the end of the inception phase (end of 2019), MSF project team has focused more on activities that help reset the project and keep it on track.

Another issue noticed by the project team was the time it took to get the medications and equipment. Furthermore, the COVID-19 pandemic impacted many of the operations scheduled at the start of the project.