

EVALUATION OF

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THE SCHOOLS-BASED COMPONENT OF  
MSF'S TUBERCULOSIS PROGRAMME

ESHOWE, SOUTH AFRICA 2019-2021

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This publication was produced at the request of Médecins Sans Frontières (MSF) - Operational Centre Brussels (OCB) under the management of the Stockholm Evaluation Unit (SEU).

It was prepared independently by Rebecca Pursell-Gotz and Agnes Shabalala.

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The views of the authors expressed in this publication do not necessarily reflect the views of Médecins Sans Frontières and the Stockholm Evaluation Unit.

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## ACRONYMS

AGYW	Adolescent Girls and Young Women
DBE	Department of Basic Education
DOH	Department of Health
HIV	Human Immunodeficiency Virus
KZN	Kwa-Zulu Natal
LSA	Learner Support Agent
LO	Life Orientation
MDR TB	Multidrug- Resistant TB
MIS	Management Information System
SBCC	Social Behaviour Change Communication
TB	Tuberculosis
TP	Teenage Pregnancy
TPT	TB Preventive Therapy
VMMC	Voluntary Medical Male Circumcision

# INTRODUCTION

## BACKGROUND

MSF began working in Eshowe in 2011. In 2013, a population-based survey was undertaken to establish the prevalence of HIV and TB in the King Cetshwayo district of Kwa-Zulu Natal (KZN). This informed the development of the Bending the Curves Programme, a combined programme with a focus on HIV and TB. This included community-based, facility-based, and school-based activities.

In 2018, a follow-up survey was undertaken by MSF within the target communities that had participated in the population-based survey, and it was established that the UNAIDS 90:90:90 goals, of which 90% of people with HIV will be tested, 90% of these initiated on ART, 90% stable on ART and virally suppressed had been achieved. Though the initial programme design had included both HIV and TB, the initial years of the programme had been focused on HIV. In 2017 the project started to change focus towards TB and once it was established that the 90:90:90 goals for HIV had been achieved, the programmes switch to TB was accelerated. This was followed by the introduction of a school-based TB programme in 2019.

This evaluation focuses specifically on the school-based component of the TB programme initiated in 2019 and concluded in 2021 in line with the end of the Memorandum of Understanding that MSF had with the provincial DoH. The schools visited as part of the evaluation participated in the programme in 2021.

The schools-based component of the Eshowe TB Programme was implemented with a view to improving case detection and prevention within schools through a knowledge intervention, followed up by practical activities to be undertaken by learners, with the support of Learner Support Agents in participating schools. The programme documents note that the intention was to introduce an advanced curriculum to the Life Orientation subject to get pupils to understand the disease better. The programme was set up in a way that it ended with a TB campaign within the community. Here the learners were encouraged to educate people from the community on TB and bring them for TB screening. The hypothesis is that the knowledge imparted as part of school-based activities would have a cascading effect as it would be passed onto the family and thus improve TB case detection and prevention.

This schools-based component is focused on the delivery of five information modules in high schools, followed by practical action by learners. The practical action takes the form of campaigns and awareness-raising within the school and the broader community to act against TB. It is implemented by MSF facilitators, with the intention that Educators, Learner Support Agents and, employees of the school, take ownership of the project activities and continue beyond the presence of the MSF-funded facilitators. The hypothesis by the MSF Eshowe team was that information received by students would be cascaded to families and communities to improve case detection and prevention.

*While the primary focus of this evaluation is the schools-based TB programme, the Eshowe team requested that some information be gathered from learners that had participated in the HIV programme and were still attending the same schools. On this basis, focus group discussions were held with a small group of learners. This is outside of the revised scope of the evaluation.*

## OBJECTIVES OF THE EVALUATION

This evaluation has a specific focus on lessons learned about the design and implementation of the school-based component of the Eshowe TB programme, conditions for success, enablers and challenges to identify considerations for replicability should MSF decide to implement a similar programme elsewhere in South Africa, or internationally.

The evaluation had six overarching questions, aligned with the OECD DAC Evaluation Criteria.

- How was the school programme component of the TB project *relevant* in meeting the needs of the population, organization, and expectations of various stakeholders?
- How was the school programme component of the TB project appropriate and tailored to the context?
- How *effective* was the school programme component of the project in meeting the project objectives, results and outcomes looking at a wide range of stakeholders, including the students and their communities?
- What is the *impact* (intended and unintended) of the TB school programme on the students' behaviour and attitudes?
- How *efficiently* were resources (human and financial) utilized in the project planning, implementation, and follow-up of the TB school programme?
- How did the schools program ensure interconnectedness with key stakeholders during design, implementation and closure of the schools' programme for the future continuation/alternatively replicability of all or parts of the schools programme by other key stakeholders? What are key lessons learned for all parties involved?

## APPROACH AND METHODOLOGY

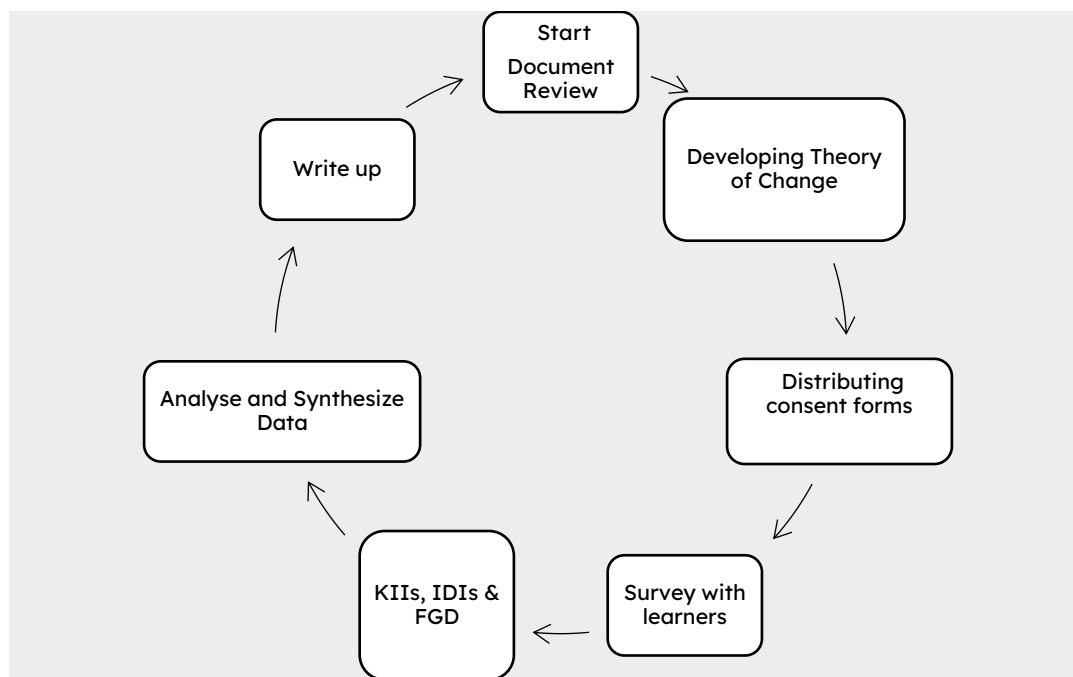


Figure 1. Methodology

The evaluation adopted a theory-based approach.<sup>1</sup> This entails articulating the underlying theory and assumptions about how change happens, with a view to testing the extent to which the programme theory and associated assumptions have held, where there have been gaps and what needs to happen in order for a programme to achieve the desired outcomes. It takes a specific approach of looking at the gaps between activities and long-term desired changes, to articulate what needs to happen to successfully achieve the desired outcomes, and the feasibility of achieving these based on the programme design and implementation.

As part of this, a draft Theory of Change was developed and workshopped with the local Eshowe team, with a view to come to a consensus about how the team believe change happens and to identify the underlying assumptions about how the programme will achieve its articulated objectives. This Theory of Change was used as the basis for developing data collection instruments and has been revised further. It is included in this report as Annex 1: Theory of Change.

The evaluation used mixed methods. This included collecting a combination of quantitative and qualitative data, with a view to develop a comprehensive picture of the implementation of the schools-based programme.

<sup>1</sup> Rogers, P. (2014). Theory of Change, Methodological Briefs: Impact Evaluation 2, UNICEF Office of Research, Florence.

## EVALUATION CRITERIA

The evaluation framework, data collection instruments and analysis process are structured around the OECD Development Assistance Criteria ([OECD.org](http://OECD.org)) These are defined below:

**Table 1. Definition of DAC evaluation criteria**

CRITERIA	DESCRIPTION
Relevance	The extent to which the intervention objectives and design respond to beneficiaries, global, country, and partner/institution needs, policies, and priorities, and continue to do so if circumstances change.
Efficiency	The extent to which the intervention delivers, or is likely to deliver, results in an economic and timely way.
Effectiveness	The extent to which the intervention achieved, or is expected to achieve, its objectives, and its results, including any differential results across groups.
Sustainability	The extent to which the net benefits of the intervention continue, or are likely to continue.
Impact	The extent to which the intervention has generated or is expected to generate significant positive or negative, intended or unintended, higher-level effects.

In addition to the above, the criteria of appropriateness was added to describe the findings related to the suitability of the programme model.

## DATA COLLECTION

### DOCUMENT REVIEW

MSF provided the evaluators with a range of documents about the Eshowe Programme. This information included some planning documents, published work, analysis, the TB Manual and the MSF School Health Programme Implementation Toolkit. The majority of the information provided was for the HIV programme, and so the references available for the TB programme are limited. Additional evaluation literature informed the evaluation design.

### DEVELOPING THEORY OF CHANGE

A draft Theory of Change was developed as part of the Inception Report and presented to the Eshowe team for discussion. Further inputs were received during a face-to-face meeting and the ToC was elaborated based on these inputs.



## SURVEY WITH LEARNERS

Quantitative data included data from a self-administered survey for learners who had participated in the schools-based component of the TB programme in 2021. This survey was circulated in advance of the field visits and focused specifically on understanding the extent to which knowledge had been retained, and what activities they had participated in after completion of the classroom-based activities. The number of responses is considerably lower than the total number of learners who completed the post-test administered by MSF as the survey was circulated to classes that had not participated in the programme.

The content differs from that included in the pre and post tests administered with learners participating in the classroom-based modules. It is thus not a matched survey, and the results of the surveys collected as pre and post-tests cannot be easily compared to the survey undertaken as part of the evaluation, and the specific multiple-choice questions and true/false statements are not the same. The evaluation survey also gathered specific questions about the practical activities and the extent to which they had been implemented in the school.

Gender is not a significant variable in the programme, and no comparison was done according to the gender of learners. The modules were also delivered with both male and female learners together.

Table 2. Sample size for pre, post-tests and evaluation survey

SCHOOL NAME	PRE-TEST	POST-TEST	EVALUATION SURVEY
School 1	77	74	36
School 2	111	87	0 <sup>2</sup>
School 3	280	185	0*
School 4	134	114	38
School 5	215	154	16
Total	817	614	92

Based on Table 2, it can be seen that the total number of learners that completed the evaluation survey is considerably lower than those who had completed the post test. This may in part be due to the fact that those learners were not given the surveys to complete.

The table below provides details on the total numbers of learners that participated in the modules, and the total that wrote the pre and post-tests.

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<sup>2</sup> \*=surveys collected are for grades that did not receive the programme

**Table 3. Numbers of learners participating in the school-based modules in 5 participating schools (2021)**

SCHOOL	PRE	MOD1	MOD2	MOD3	MOD4	MOD5	POST
School 1	77	63	80	78	75	4	74
School 2	111	101	38	98	87	39	87
School 3	280	278	168	215	158	146	185
School 4	134	66	97	108	103	98	114
School 5	215	214	214	211	68	110	154
Total	1,079	977	679	733	491	397	614

The highest attrition is in school 3, and the lowest in school 1, which also has an overall decline in knowledge between the pre and post-tests as outlined in the section on Impact.

As TB knowledge and information does not have a gendered dimension, and all the modules were facilitated with both male and female learners together, a decision was taken to undertake the focus group discussions together.

## **INTERVIEWS AND GROUP DISCUSSIONS**

Qualitative data included a range of key informant interviews and focus group discussions as indicated below. A range of key informant interviews were undertaken with MSF staff and an official from the district department of education. In-depth interviews were undertaken with Life Orientation educators and Learner Support Agents when visiting the schools. Focus Groups were undertaken with learners who had participated in the programme during 2021.

Subsequent to completing school visits, two FGD were undertaken with learners who had participated in the HIV programme which ended in 2018. These group discussions were undertaken based on the request of the Eshowe team, and that the learners were easily accessible as the schools participating in both the HIV and TB school-based activities are the same. These group discussions generated a limited amount of information that is reflected further on in the report. This information is not sufficient to reach any kind of conclusions related to the impact of the HIV programme five years later.

## SAMPLING

**Table 4. Sample size for key informants**

RESPONDENT GROUP	DATA COLLECTION METHOD	NUMBER OF RESPONDENTS
MSF	Group interviews	6
District Official from Department of Education	Key Informant Interview	1
MSF School Facilitators	Key Informant Interviews	2

**Table 5. Sample size for school-based data collection**

SCHOOL	FOCUS GROUP DISCUSSIONS	GRADES	IN-DEPTH INTERVIEWS
School 1	X1 mixed, 5 girls & 5 boys	9, 10, 11	1 LO educator (school too small to qualify for LSA)
School 2	X2 boys	9 only	1 LO Educator
School 3	X1 mixed, 5 girls & 5 boys	9, 10, 11	
School 4	X1 mixed, 6 girls & 4 boys	9, 10, 11	1 LO educator, LSA
School 5	X1 mixed, 6 girls & 4 boys	9 only	
School 6	n/a		1 LO educator, LSA

A combination of focus group discussions and participatory methods were adopted with matriculants who had participated in the HIV programme in 2018. Matriculants convened over the weekend at the MSF offices.

### DATA ANALYSIS AND SYNTHESIS

Both quantitative and qualitative data were analysed using Excel. For the learner survey, each question was analysed per school and a comparison across schools completed.

Qualitative analysis was undertaken according to the analysis framework, mapped against each of the evaluation questions and data collection method.

## REPORT WRITING

A draft report was written for submission to SEU, which was shared with the Eshowe team for input prior to finalisation.

## ETHICAL CONSIDERATIONS

This evaluation referenced the Ethical processes developed by the Stockholm Evaluation Unit. As part of this, evaluators developed an informed consent form to be distributed to parents and guardians. This form was translated into isiZulu and requested written consent from parents for learners to participate in the evaluation, to be recorded and for photographs. Parents could select the extent and nature of consent they were willing to provide. No photographs were taken of the children as part of the evaluation.

An assent form was also developed and given to learners for signature, by those who had already received consent from their parents. The individuals selected for the survey and subsequent group discussions was based on those who had returned consent forms to the school. The MSF team took responsibility for distributing, administering and collecting the signed consent forms from schools in advance of field visits. Learners that had attended the modules across the grades were asked to self-select to participate in the focus group discussions.

The surveys are anonymous and have been coded according to the unique identifier of the school. Learners did not indicate their names on the survey and where attendance registers were taken of group discussions, these have been kept by the evaluation team. Qualitative data and quantitative data collected through the survey is stored on a password protected laptop.

All other respondents were provided with an information sheet explaining the purpose of the study and a consent form before beginning the interview. These consent forms were in English, a medium of communication used by all respondents, with the exception of one telephonic interview that was conducted in isiZulu.

The information sheet provided background as to the purpose of the study, how information would be collected, potential risks to the participants (deemed to be none), that only unique identifiers would be used, and the contact information of the lead evaluator was included for any follow-up queries.

## LIMITATIONS

- Implementation of the programme ended in 2021 and there has been little engagement with schools since then, making setting up data collection more difficult as the Schools Facilitators that had worked with the schools were no longer employed. It is possible that if these facilitators had been involved in coordinating the evaluation that data collection would have been smoother and the correct learners engaged in qualitative and quantitative data collection, providing more information on the outcomes of the programme for learners. This has come to mean that a

significant part of the evaluation has focused on implementation processes and gaps, which became particularly evident when undertaking the evaluation.

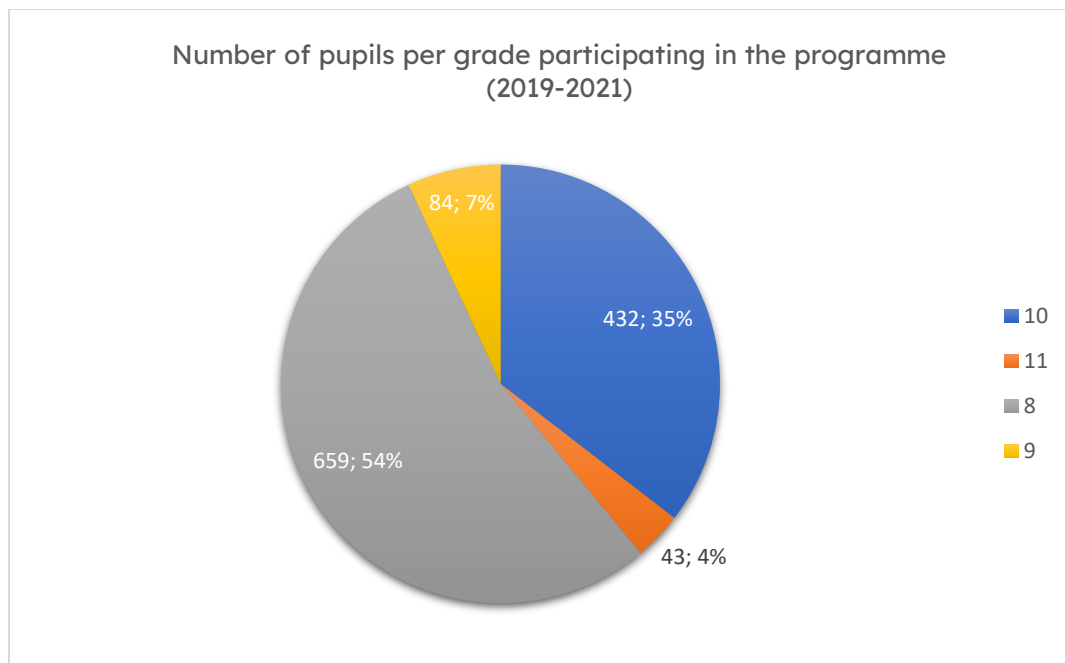
- MSF visited the schools to drop off the surveys for completion. In two of the five schools, surveys were given to learners who had not participated in the programme. In another, all the surveys that were collected were completed by students who had not completed the programme, leaving no surveys for analysis. This makes it more difficult to definitively establish the difference in results between schools that participated in modules and activities, as compared to those that only benefitted from the information modules.
- Despite the Eshowe team engaging with the schools in advance of the visits, logistics and planning did not proceed smoothly in one school, where 11 learners were convened for a focus group, when only two had participated in the programme. This is also one of the two schools where surveys were completed by the wrong classes that had not participated in the programme.
- LO educators and LSAs were not available at two of the five schools visited while in the field. One of these schools is also the school that has been most active, making it difficult to get an overall sense of what the role of the educator and LSA may have been in ensuring its success.

# FINDINGS

*The Eshowe TB Programme was implemented in 22 schools between 2019 and 2021, with varying levels of engagement and exposure to the programme. The evaluation focuses on six of seven schools that participated during 2021.*

*Five of these schools received all of the classroom-based modules, one of the five undertook extra-curricular awareness activities, and the sixth school withdrew from the programme. The data below provides further detail about the extent of implementation, as compiled by the Eshowe team.*

*The total number of pupils that participated in the programme between 2019-2021 are indicated in the chart below.*



**Figure 2: Grade distribution of learners participating in the schools-based programme (2019-2021)**

There was a relatively even split between male (51%) and female (49%) learners.

## RELEVANCE

Tuberculosis and HIV remain the two largest public health challenges in South Africa over the past ten years, and the District Health Barometer finds that TB and HIV have the highest years of life lost in the province between 2007 and 2017, affirming the relevance of the HIV and TB programme overall.<sup>3</sup>

Based on the District Health Barometer, a publicly available data source published by the Health Systems Trust, the years of life lost for TB in KZN is 10.7% of the total years of life lost, higher than the national average of 9.6% in 2017. This is in comparison to 2010, where the years of life lost to TB was 17.5% of all years of life lost<sup>4</sup>. At a district level, the proportion of years of life lost to TB in King Cetshwayo District, where the programme is being implemented was 27.7% for HIV & TB<sup>5</sup>

The statistics which disaggregate TB deaths at various age cohorts do not demonstrate that TB is an issue that is significantly affecting younger people, and, in particular, those in secondary school. However, MSF continued with the TB programme in schools due to the double burden of disease which exists, where people with HIV are more susceptible to contracting TB, and to ensure improved knowledge and reduce stigma about TB in targeted schools.

The Stats SA release Mortality and causes of death in South Africa: Findings from death notification<sup>6</sup> documents the causes of both natural and unnatural deaths and disaggregates these according to communicable, non-communicable diseases and external causes of death (accidents, homicide etc). This statistical release affirms that TB and HIV remain the leading causes of death for communicable diseases. The death rate for TB in South Africa has shown a steady decline between 2011 (41,6%) and 2018 (28,8%) as compared to deaths due to non-communicable diseases which have seen an increase from 49,3% to 59,3%. Even with the decline in death due to communicable diseases, TB remains the overall leading cause of death in South Africa between 2016-2018. For the age group 15–44 years, the overall leading underlying cause of death was tuberculosis, constituting 10,9% deaths, followed by human immunodeficiency virus [HIV] diseases, accounting for 10,7% deaths.<sup>7</sup>

The number of young people in targeted schools (located in Eshowe and Mbongolwane sub-districts) identified through TB screening, and sputum positive cases among the age cohort are low.

This programme is the only schools-based programme that focusses explicitly on TB in Eshowe, confirming the unique contribution of the programme to participating schools. The learners and LSA reported that they had learned information that they would have otherwise not been exposed to.

<sup>3</sup> Ian Neethling, Pam Groenewald, Debbie Bradshaw, Candy Day and Ria Laubscher (2019-2020) District Health Barometer. Chapter 7: Burden of Disease, Health Systems Trust

<sup>4</sup> Ibid

<sup>5</sup> These figures combine both HIV& TB.

<sup>6</sup> Released in 2022, with data until 2018.

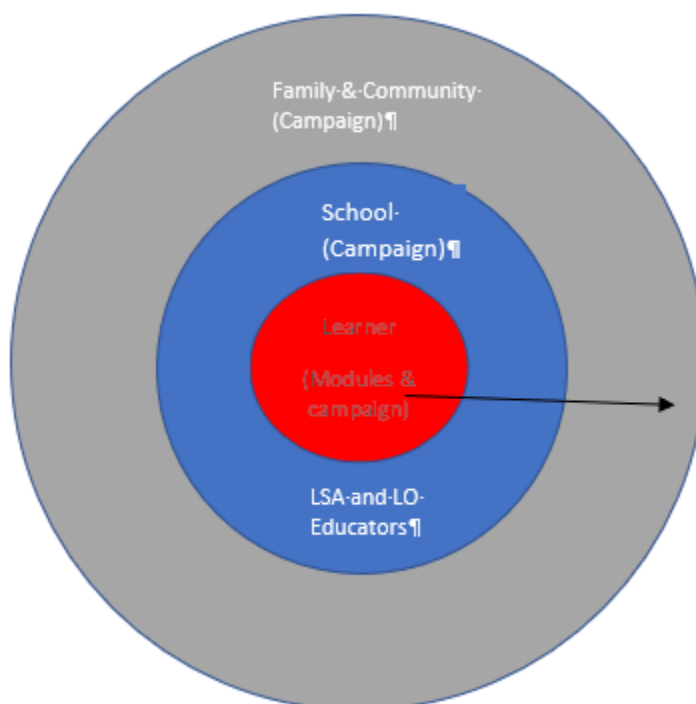
<sup>7</sup> All of these figures refer to the total overall cause of death, irrespective of whether communicable/non-communicable or accidental.

## APPROPRIATENESS

The schools-based programme is informed by a TB Manual and MSF Schools Programme Implementation Toolkit. Both the manual and the toolkit are in English. The use of English may have negatively affected the way the content was mediated and the detailed implementation of the modules, where some of the content is bio-medical in nature and may explain some of the weaker scores on questions requiring more complex knowledge.

The Toolkit was written for both HIV and TB as part of one comprehensive programme, both of which have a prevention and educator engagement component. The Implementation Toolkit focusses predominantly on the HIV component of the School Health Programme. The articulated rationale for the shift to TB was that schools-based programmes offer an opportunity to address stigma at a young age, that diagnosing TB in children is difficult, and that adolescents need to understand the importance of completing treatment correctly and without disruption (adherence).

The TB Manual addresses stigma and adherence but does not address questions related to diagnosing TB in children or prevalence of TB among children.



**Figure 3: Sphere of influence for school-based TB Programme<sup>8</sup>**

The figure above demonstrates the articulated understanding of how the programme will achieve impact, and the methods used to achieve so. You will see that the centre circle for the learner, should, if implemented as designed, receive the greatest amount of exposure to the programme, and the

<sup>8</sup> Developed by evaluators as part of report-writing process.



assumption is that this intense dosage/exposure will be cascaded to the school, family and community, in the order in which it is presented, both through structured activities and campaigns, and through informal knowledge-sharing. The arrow indicates how the assumption is that the most intense engagement (highest dosage) will spread outwards to the family level. The yearly campaigns provide an opportunity to create awareness within the community, while this is also the time people can get screened for TB, without having to go to a health facility.

The programme comprises five modules directed at learners which cover basic information about TB, stigma and myths and include a final module about how learners can effectively run a community-based advocacy and awareness campaign that is focused on TB. These community-based campaigns and advocacy activities are designed to engage the community in raising awareness of TB, the importance of screening, how to protect oneself from contracting TB and what to do if you suspect you or someone you know has TB. In practice, with the exception of one school (School 3), the sphere of influence has been restricted to the learners engaging with the modules as only one school has implemented the advocacy and campaigns, beyond the presence of MSF. The evaluation identified some anecdotal evidence that information was shared beyond the classroom with family members and friends. While educators in four schools report they would be able to continue the programme on their own, none had observed the programme in the classroom, and only two had a copy of the manual. This suggests that while there may be some capability, the absence of participation in schools-based implementation is a major risk to the continued implementation of the programme beyond the exit of MSF.

The Manual that was developed has a range of instructions and guides as to how the content can be mediated which includes to be aware of language, stigma and context. It includes community mapping and identifying community resources that can be identified for community-oriented TB activities. The Manual is user-friendly, understandable and could be easily mediated by a person who had suitable interpersonal skills to be able to engage young people with content that can otherwise be thought of as boring and unimportant. Learners that participated in the focus groups noted that the activities and the way that the information was shared was interesting, and that they enjoyed the use of experiential learning. This is one of the major strengths of the school-based activities. It has taken TB from something that may have initially appeared as mundane and boring into a space that is exciting and interesting for learners, and different to what the typical lesson within the school-based curriculum may be structured.

The underlying approach of the manual is to make the modules different to the typical school lesson, and for the facilitator to foster an open relationship and that learners are able to ask questions and participate without fear or judgement. The model positions the facilitator as a mobiliser. The underlying assumption is that it is possible to separate the role of an educator or LSA in the classroom, from their role as Facilitator or Coordinator of the TB programme beyond the exit of MSF. Consideration will need to be given to how that approach could be maintained if the modules were to be taught by educators or LSA that are familiar with the content, but less comfortable with the facilitation methods and activities outlined in the Manual.

The activities are also experiential in nature and use a range of games to illustrate key concepts which contribute to ensuring that information is communicated in a fun and interesting way, and on this basis, it is assumed that learners will be more open and more likely to retain the information that has been covered in the modules. The games and activities were identified by learners during focus groups as one of the things that had made the programme most interesting and that this was a style that should be adopted more in other classes.

“They (school facilitators) are open, they motivated us.”

Male learner, School 4

“We like the way they taught us about TB. We played games.”

Female learner, School 4

“We used drama about TB that would be acted out by the learners. That made it easy for them. I would select a section and choose characters for the drama. The information in the manual is easy with games prepared.”

School Facilitator

MSF has engaged Life Orientation (LO) educators as the basis for entering each school, and the primary liaison point for coordinating the programme. This person typically tended to be the Head of Department who had a number of competing priorities and so was not invested in the successful implementation of the programme, and though they had been trained, three of the five LO educators in their positions at the time of the evaluation had not observed the modules being facilitated by MSF at school and how they were to be facilitated. In the case of a Head of Department, the role carries a number of administrative and teaching responsibilities. Teaching responsibilities may also cover more than one grade, leaving very little time to complete the necessary administrative tasks, contributing to a situation where an HoD may take the gap to do these tasks if there is an option for external facilitation. This practice is not isolated to the TB programme and exists in many other in-school programmes.

“No, I have not observed the lessons, the MSF people come and do it. I am busy with other things and we do not have an LSA. They (MSF) come many times in a year but I am not sure what they do.”

LO Educator, School 1

“I don't know what has been taught or how lessons are conducted.”

Lo Educator, School 2

The modules have been accommodated within LO lessons, and the second liaison person that could oversee the campaign and advocacy activities are Learner Support Agents, a role that exists in schools

with a large enough enrolment and is responsible for learner wellness and support, and engagement of external organisations in schools.

During the period of implementation, Schools Facilitators, sub-contracted to MSF, were responsible for engaging schools and delivering the modules, then supporting with the initiation of awareness raising and campaign activities. The school-based TB Programme was designed that MSF would withdraw from a school after completing the modules and providing some support to undertake community engagement activities. Post-tests were administered to test knowledge at a later point, and MSF moved into new schools to implement the programme.

After completing implementation in 2021, MSF continued to support the district department of education by implementing the programme as part of a Peer Education Programme. This approach entailed exposing the learners to the modules over a weekend with a view that the learners go back and share their knowledge within schools. This was undertaken in June 2022 and thus does not form part of the evaluation.

## **INTEGRATION WITH ESHOWE TB PROGRAMME**

The schools-based training and activities form part of the larger Eshowe TB programme that also has a biomedical component and is related to capacity-building for health facilities, training of health care workers and the establishment of Luyanda outreach sites, staffed by community health workers supported by MSF. These community-based sites are intended to bring healthcare closer to the community and remove the barrier of distance to healthcare facilities for many people.

There is an indication that the biomedical component of the MSF Eshowe Programme has been taken up well and that MSF has credibility with these health facilities, as evidenced by the regular feedback and engagement between MSF staff and health facilities.

The current structure of the schools-based TB programme is that once screening is done, followed by sputum testing in clinics, cases that are positive are handled by the Department of Health. This is in line with National Health protocols for notifiable diseases. MSF does have access to the health MIS data to see the test results but is not actively involved in managing cases identified within schools, in line with the mandate to undertake TB prevention activities. MSF reports that there is an informal practice by MSF of linking TB positive cases to community-based sites included in the biomedical component of the Eshowe Programme. These sites had been set up to do contact tracing but this has not happened for learners as very few cases have been identified through schools-based screening activities.

Despite both aspects of the Eshowe programme being directed at TB prevention and treatment, there is no explicit link that is made between the two programmes, and the students are not aware of the outreach sites where treatment could be accessed after patients have tested positive for TB. This is a missed opportunity both in terms of maintaining people on treatment but also in terms of referring people for care if needed. Establishing a clear link between the school-based programme and the community-based support would have contributed to an understanding that the bio-medical and schools-based programming are all working towards a common goal and are not considered as two distinct interventions. This is especially the case where cost is a barrier to attending clinics, and Luyanda sites are closer to communities that may be some distance away from government health clinics.

## EFFECTIVENESS

This section looks at how effective the project was at achieving its objectives results and outcomes looking at a wide range of stakeholders, including learners and communities. It considers the key elements that influence the likelihood that a programme will achieve its desired objectives and results.

Alongside the programme being relevant to the school, successful schools-based programmes require a context where there is a sufficient capacity and commitment to the effective implementation of the programme, based on its initial design. This commitment needs a collaborative relationship between the school and an implementing organisation, clear roles and responsibilities, regular communication and presence and a clear gatekeeper or liaison person.

### SCHOOL SELECTION

During three years of implementation, 22 schools were identified in collaboration with the Department of Education based on the prevalence of TB in the surrounding area and the socio-economic conditions in the surrounding communities. Applying this approach suggests that the programme is highly relevant given that these districts have a high incidence of TB.



Five of seven schools successfully concluded the five modules in 2021, though only one went on to undertake community-based activities. The sixth school visited as part of the evaluation that had not completed the programme is highly dysfunctional, with high levels of loitering, truancy, and teenage pregnancy. This school had also only recently appointed a Learner Support Agent in 2022, and MSF was working with this school in 2022 as part of the peer education programme led by the district department of education.

Clear programme planning and consideration at the outset could have indicated that this school would not see benefit from the programme, and alternative decisions considered as to where the programme could be implemented effectively given its proximity to one of the Multi-Drug Resistant (MDR) TB hospitals in the district. This is particularly important considering that schools were selected based on the incidence of TB in the district.

With the close proximity to an MDR facility, the school dropping out of the programme is an obvious missed opportunity to develop awareness and information with potential to cascade information to families and communities that would enable referral and investigation, based on the knowledge that learners should have gained through the schools-based modules.

In another instance, one of the schools is too small to qualify for a Learner Support Agent. With LSAs identified as the cornerstone for sustainability, the programme was never likely to be sustainable. In this instance, if the desired outcome is longer-term advocacy and campaigns that act against TB, for which

LSAs would become responsible for leading, then it would have been more appropriate to identify an alternative school with greater prospect for sustainability.

## MODE OF DELIVERY

The schools-based programme has been set up such that the programme can be facilitated by trained Facilitators, or, ideally by educators or Learner Support Agents (LSAs) in the schools themselves.

The short-term nature of the programme means that there is limited ongoing engagement between the school and the organisation after the modules are completed, and in the context of 2021, this would have been shorter as advocacy and awareness raising activities did not happen in all schools. The LSA would be the ongoing anchor point in the school and would ensure the ongoing implementation of activities to increase knowledge and reduce stigma in the school and community. Two of the five schools that participated in 2021 have never had an LSA in place since inception of the TB programme.

In addition to the schools-based modules, MSF has provided incentives to learners in the form of stationery and bags when events have been held and students have been able to provide the correct information based on what is included in the modules. These stationery and bags are greatly valued by the learners and were mentioned repeatedly in the focus group discussions.



Momentum was created in one of the five schools and the learners had been successful in developing a board with information about TB on the property and had active peer educators involved in sharing information about TB.

The absence of school-based advocacy campaigns and awareness activities in the other four schools has meant that the programme has not been fully implemented in all schools and that there is limited basis for sustainability in these schools beyond the delivery of the modules by educators or Learner Support Agents. In one of the four schools that had not done any awareness and advocacy activities, there had been a limited number of activities among learners within the property. This was attributed to the fact that the school had restricted access to their property due to the risk of Covid infection. In this instance, there had been some activities among the learners themselves.

The challenges created by Covid mean that while the manual contains standard content, it has been delivered differently across schools, and some information has been prioritised over other information. In some instances, learners received more than one module at the same time, and in others, the modules were shortened as the school would only make a limited time available to engage with the students. MSF does recognise that this has presented challenges, and that there would be scope to review the mode of delivery in the future.

## RELATIONSHIPS WITH PARTICIPATING SCHOOLS

The period in which the programme was implemented (2019-2021) has been characterized by high levels of uncertainty and disruptions in teaching and learning, which has also made implementing schools-based

programmes more difficult. These constraints include being unable to access the schools for some time, children attending classes at different times, making it difficult to establish continuity in relationships and pressure to complete an already compressed curriculum.

With the schools identified having participated in the HIV programme, there were reportedly less barriers to entry. The district official from the DBE convened a meeting with (MSF), LSAs, and LO Educators for introductions. This was followed by meetings with the school principals.

The nature of the programme being short-term in nature means that it is much more difficult to establish continuity in relationships in a way that would allow for a reciprocal mutually beneficial relationship. The ability to develop ownership and buy-in by schools has also been negatively affected by staff turnover in the period since the training, and that some schools did not have an identified Learner Support Agent in place.

These constraints have contributed to a picture of the programme being an external time-bound intervention without continuity beyond some campaign and advocacy activities. In one of the five schools, there was strong evidence of a high level of commitment and energy by the School Facilitators and the learners which has been sustained and is depicted in the photograph above.

With MSF providing training, manuals and visiting the schools, the schools did not need to contribute to the programme, which would have provided the basis for investing in the successful implementation of the programme. All human and physical resources were externally provided, requiring no effort on the part of the participating schools, other than to make some time available which in some schools has been welcomed as educators have had other tasks to complete. The initial expectation had been that while MSF would do the initial work, LO educators and LSA would have been involved in the delivery of the modules and campaigns, and so could continue with the programme beyond the involvement of MSF. The evaluation found that this had only happened in one of the five schools. Possible reasons for this include curriculum demands that have emerged since Covid, and the perception that MSF was taking responsibility for the programme, and so little input was needed from the school. This is not atypical to many external programmes where there may not have been extensive engagement in the early stages. This is the distinguishing factor from the HIV programme, where much more structured engagement was expected from educators in the TB programme.

It is likely that implementation would have been considerably strengthened if the schools had opted in to the programme and were required to make some kind of commitment and contribution to implementation. This contribution would not need to be financial but could have been in providing learners with opportunities to share knowledge and information in a structured way, using the information posters shared by MSF or supporting the creation of posters or activities in the school. The successful implementation of the programme would have been influenced by the extent to which educators and LSA were invested in the effective implementation of the programme.

In three of the five schools visited, educators had never observed the programme or engaged learners about the programme, and in the absence of any community advocacy and awareness campaigns, there was limited evidence that the programme had become embedded in schools in order to achieve sustainability.

The pressure on teaching time has negatively affected the ability of the programme to be implemented as designed. Educators are also under enormous pressure to catch up on curriculum. At the same time, educators are being required to attend a range of workshops, such that those attending workshops are



not consistent, or necessarily the intended audience. Though these are circumstances beyond the control of MSF, they have negatively impacted implementation and will lessen the likelihood of sustainability. As the introduction of the peer educator programme is beyond the scope of this evaluation, it is difficult to establish whether the peer education programme will have greater prospect for sustainability. That being said, the LSA role leading the programme from within the school is an embedded resource, which means they are already internal, and it is likely that there may be greater openness to the programme with it being internally driven, increasing the likelihood of ongoing implementation.

## **EXTERNAL PARTNERSHIPS AND COLLABORATION**

The Department of Education is the custodian of all schools-based programming, and is the liaison point for all organisations working in schools. MSF had an established relationship with the district department at the point of shifting its focus from HIV to TB and continued to work in the same schools.

The department was not involved in the development of the TB Manual but has received training in the Manual and has observed the programme in the schools. There is a high level of support for MSF activities, and an aspiration that the schools-based programme could be taken across the province. More recently, MSF has also trained peer educators in identified schools in the TB programme on the request of the district department of education.

MSF participates in the Stakeholder Engagement Forum that is convened by the King Cetshwayo District Department of Education. This Forum includes all organisations that are working in schools in the district and the intention is to avoid overlap in programme activities and geographies. The Forum is also attended by the Department of Health School Health Services which are based in local health facilities.

MSF reports that they have endeavoured to work with the School Health Teams from the Department of Health and invite these teams to participate in school-based advocacy and campaign activities with limited success. The teams are mandated to focus on primary schools, whereas the TB programme is targeting secondary schools, and so the experience is that the School Health Teams prioritise their own activities and are seldom available to participate in TB screening activities within participating schools.

The official from the District Department of Education reports that the Stakeholder Engagement Forum functions well, and that relationships with the Department of Health are positive and productive, which is contrary to the information received during interviews with MSF.

Since 2016, PEPFAR has been funding programmes that are directed at adolescent girls and young women (AGYW) between the ages of 15-24 years focused on HIV prevention, retention in education and livelihoods. These activities fall under the DREAMS Programme. One of the seven schools engaged in 2021 is also receiving the DREAMS programme.

## **MONITORING AND EVALUATION**

There are no clear metrics for monitoring the outcomes of the school-based activities, though the programme does document how many learners have completed the pre- and post-tests at the beginning and end of the modules and their results. The period between the pre and post test varies per school.

The rationale provided for the absence of metrics in this programme component is that MSF is 'patient-centric' and applying indicators to measure the programme may not be true to considering patient needs. The limited duration of school engagement and lack of future engagement has made the possibility of

measuring outcomes very difficult, both in being able to collect any kind of data or to identify how the programme may have contributed to these changes.

It is possible that the absence of clear metrics in the school-based programme may have been one of the reasons that there was limited follow-up of advocacy or campaign activities in four of the schools and the limited time spent on programme activities given that some modules have been truncated despite the facilitators being employed on a full-time basis. This may have been an oversight in the design of the programme, making establishing outcomes more difficult.

## **IMPACT OF COVID-19**

Covid-19 has had profound impacts on the education system with the closure of schools, rotational timetables and pressures to address learning backlogs. This has resulted in some schools halting all extra-curricular activities, and in the height of Covid, many did not allow any external agencies on to the school property.

With limited time available in the curriculum, schools need to find a space to slot in the modules into scheduled teaching time. This means that the time available is either too short, or in three of the schools, educators are taking the opportunity to complete other tasks rather than observe the programme to understand how to implement the programme, the key issues raised by learners and the process of planning and implementing a campaign.

Subsequent to the return to school, some of the schools benefited from visits by the Department of Health providing further information about Covid. The group discussions with learners revealed that some learners had confused facts about TB and Covid-19 and the means of infection. There was also confusion about what had happened as part of the TB programme, and what had been implemented as a Covid response (extra cleaning and water tanks).

“People who cough blood have Covid.”

Learner FGD, School 2

“People with Covid have a painful chest.”

Learner FGD, School 3

## **EFFICIENCY**

The school-based component of the TB programme engaged two staff in a supervisory and management roles, and four School Facilitators who visit the schools to deliver the five modules included in the TB Manual and had responsibility for undertaking awareness and advocacy campaigns. These School Facilitators were employed full-time with each working with two - three schools per year.

The Schools Facilitators are contracted through a local NGO, SHINE, and paid at the level of a community health worker, which is a generally low-paid position that has been created by the South African Government for health care workers that may have a generally low of formal training and lack



qualifications. This sub-contracting mechanism was used as the equivalent local wage is below the MSF pay scales, and MSF reports that this decision was also driven by sustainability so that people could transition into a similar role at a future point without significant salary discrepancy. While this may seem to be carefully considered, it has meant that the resources that have the greatest role in the schools-based programme and are client-facing are earning the least, a considerable inequity as compared to the larger number of staff responsible for managing the Schools Facilitators. This is an equity issue that needs further consideration, and further attention as a higher wage may have contributed to improved programme quality at school and community level.

Assuming that Schools Facilitators visited each school 15 times, the facilitators would have been engaged in programme activities for approximately 60 working days per annum, with some additional time spent on refresher training, team meetings, capturing pre and post-tests, marking module assessments and reporting. Even with time spent on other activities, the maximum time engaged in gainful project activities is likely approximately 100-120 days<sup>9</sup>, meaning that these facilitators were considerably under-utilized, and it is likely that they would have visited these schools on a much more limited basis due to pressure on teaching time, and the practical awareness-raising and advocacy activities not taking place. Schools were also closed for a large part of 2020, and subsequent to return, external agencies were not allowed on the property.

## SUSTAINABILITY

The Eshowe school-based TB programme ended implementation at the end of 2021, after starting implementation in 2019.

The programme is coordinated through the Department of Education at district level, and it is clear that a positive relationship has been established between the MSF team and the District Official, with the official indicating that she would like to propose that the modules be integrated into the LO curriculum. The design of curriculum is done at national level and is a process that takes a number of years. At the time of evaluating the programme, these efforts are still to begin.

MSF designed and developed the manual with the input of an external organisation. The district department of education were not involved in the design of the programme or the selection of content, though TB is reportedly covered to a very limited extent in the Natural Sciences curriculum.

The second potential means to ensure sustainability of the programme was by engaging the Learner Support Agents in the programme implementation and training the LSA to be able to implement the programme in schools. LSA are employed by the Department of Education and paid a small stipend which contributes to a high level of turnover, and in some instances are also funded by DREAMS, a large PEPFAR programme and so priority is given to HIV related activities.

The programme will be presented at the 2023 Stakeholders Day convened by MSF as part of its close-out activities. This is attended by government and other implementing organisations in the respective districts. MSF has indicated that they are willing for partners to adopt and implement the modules, or to take and implement a part of the programme. Currently, none of the other organisations working in the

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<sup>9</sup> The statutory working year in South Africa is 221 days.

schools are focusing on TB, and so this is a possibility of ensuring that the programme continues beyond MSF funding.

MSF provided training to Learner Support Agents and LO educators as part of its exit plan. This included inviting LSA's from schools where the TB modules had not been delivered. Attendees were also provided with a copy of the manual at the training. Unfortunately, some of the schools that had participated in the programme did not have an LSA appointed in their school. This has come to mean that the ongoing implementation of the training would have been difficult, and there would have been no one to oversee the awareness campaigns within their own school, limiting potential for sustainability.

The design of the programme was that MSF enters new schools each year, and their relationship with participating schools ends at the end of the year, to engage with new schools in the following academic year. The schools included in the evaluation that had participated in 2021 were not aware that MSF would no longer be implementing the TB programme going forward. The overall knowledge of the structure of the programme by schools was limited, as the key gatekeeper has tended to be one person per school and engagement has tended to be limited to the period in which the modules are completed with some support in implementing awareness and advocacy campaigns. This is consistent with where a liaison point (LO educator) may not be directly involved in the implementation of the programme, and where no training had been observed. This includes that some of the modules needed to be truncated due to limited time in the curriculum, but educators were not aware what changes had been made.

“The other teachers do not know about the programme, the principal does not know - it has not been mainstreamed.”

LO Educator, School 2

The short-term design of the schools-based TB programme makes it difficult to establish enduring relationships between MSF and the identified schools, further compromised by the school closures due to Covid. The experience in the 6 schools was that MSF would visit in order to get the programme completed, with limited further engagement.

The School Facilitator interviewed as part of the evaluation indicated that where post test scores were weak in particular areas, they would return to the school to cover the content again. It is not clear the extent to which this happened.

The ongoing successful implementation or replicability of such a programme will be influenced by the nature of the relationship and the expectations that are established between schools and programme facilitators/trainers. This requires ensuring that schools understand why they have been identified for the programme, what will be required of them, and, that there is consistency in MSF staff that are engaging with schools so that a relationship can be built, and momentum established around the awareness raising and campaign element of the programme.

“There is no consistency in the people who come. The teaching is done by different people as compared to other people who come to organise things. I don't know what has been taught or how the lesson was conducted.”

Life Orientation Educator, School 2

This is also significant because schools-based programmes provide an exciting opportunity to engage young people in pro-social behaviours while also practicing teamwork, negotiation and planning skills. The light touch nature of the intervention and staff turnover are both key challenges to sustainability.

Educators and LSA have changed in the period since 2021 in two of the five schools, and there was limited handover. This is a common challenge in school-based programming but is further exacerbated where the engagement between external partners and schools has been very limited in duration, and light touch in engagement. Of the educators and LSA that attended and recollected the training, all had said they felt confident to facilitate the modules, but only three had observed the School Facilitators, and with the impact of Covid on teaching and learning, it is highly unlikely that this would be prioritised in the absence of School Facilitators provided as external resources to schools. There are elements of the programme with potential for sustainability through training peer educators in the programme, provided that they also receive the support and opportunity to use the information and skills they have learned across the school.

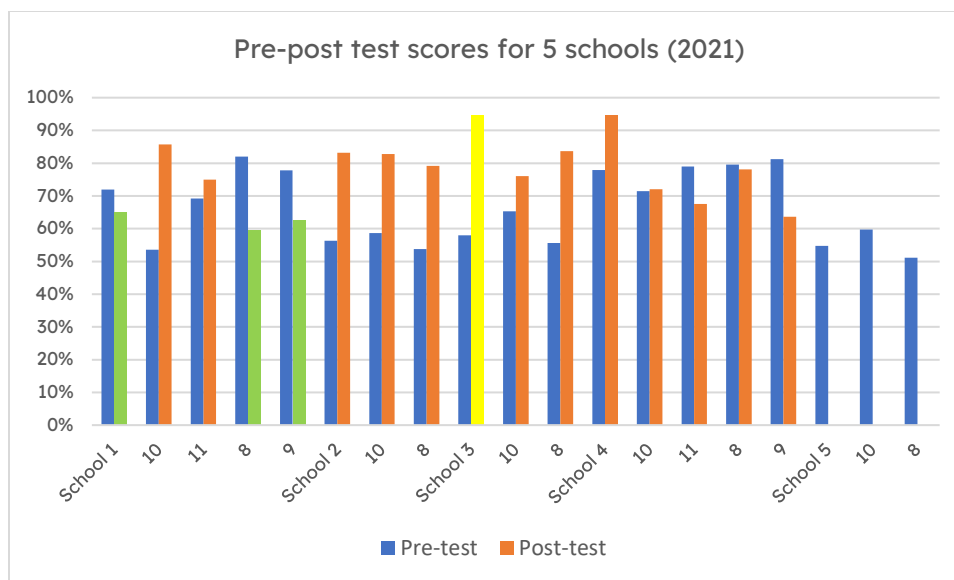
With very few of these activities underway, there is a strong possibility that these were identified in the later stages of the programme and were not put in place at the outset, resulting in inconsistent implementation across schools and schools being selected that do not meet the conditions required for there to be any potential for sustainability.

## IMPACT

This evaluation considered impact from the perspective of the learners within the schools who participated in the modules, the school environment and impact on the surrounding community. This specifically considers how the programme may have influenced learners behaviours and attitudes, and how this may have cascaded to families and communities, in line with the objectives of the programme.

### IMPACT ON LEARNERS DIRECTLY REACHED BY THE PROGRAMME

As part of understanding changes in knowledge, learners were required to respond to a knowledge-based pre and post test at the beginning and end of the modules. The results are indicated in the bar graphs below.



**Figure 4: Changes in pre and post test scores of learners that participated in the schools-based component of the TB Programme (no disaggregated post-test data available for school 5).**

With the exception of school 1, there is an increase in knowledge between the pre and the post test in schools 2, 3 and 4 with the greatest increase being in school 4, and an overall decrease in knowledge in school 1. School 1 has very limited resources, is deeply rural and isolated and it is possible that the learners did not understand the content being taught due to a language barrier.

The green bars highlight where there has been an overall decline in knowledge in the post-tests in school 1. School 1 is also characterised by the lowest annual pass rate for learners in exit examinations (8% pass rate in 2020). School 3 has the highest overall knowledge based on the post-tests completed by learners. This is also the only school that moved forward with undertaking awareness activities in the school.

The programme was designed on the assumption that improving levels of knowledge and undertaking community-based activities would challenge beliefs about TB, through encouraging people to seek screening, complete treatment, address stigma and share information. The learners were asked about myths in relation to TB during focus groups, and the extent to which they were true, and some questions to establish if they could discern between TB and HIV.

“It helped me to understand that the Western and African cultures can be interrelated. In the African culture, we believe that when you cough blood you are bewitched, when you can go to the clinic and check for diseases.”

Male learner, School 2

Learners in focus groups did mention that the windows are open in their school, and that since attending the programme, they now know to cough into their elbow to reduce the possibility of infection. Learners reported telling their families about TB, and some people going to clinics – but there was no indication of any impact at community level – likely due to the absence of planned advocacy and awareness campaigns.

In general, learners thought that getting information helps to overcome stigma and beliefs that persist such as that people who have TB have been cursed/bewitched, rather than understanding TB as having a clinical basis. Together with survey results, there is some evidence that the programme has been successful at demystifying TB through improving basic levels of knowledge and countering some traditional beliefs.

TB screening in the participating schools has not generated many sputum-positive cases, and evidence as to what young people have done or what has happened in their families is largely anecdotal. With TB being a notifiable disease, sputum positive cases are handled by the Department of Health which may have also contributed to the lack of information about what has transpired, though the design of the programme is that an LSA would be involved in supporting students if need be.

### **IMPACT WITHIN SCHOOLS**

Awareness-raising and advocacy activities had been initiated in one school where the learners were very passionate about the programme and had continued to meet among themselves and organise ongoing activities beyond the exit of MSF. This group had attended an intensive camp and had a copy of the Manual that they were able to use to inform activities. The programme was driven by peer educators in the school, an established group of learners who would be known by other learners and already have an important role in the school. This group of learners were meeting weekly after the exit of MSF.

While the programme has not been implemented as designed, there is clear evidence that there is some understanding of key messages that relate to knowledge and behaviours. These include beliefs about what causes TB, what can be done about it, if or how HIV relates to TB and traditional beliefs.

“If I learnt someone had TB... I will tell them that TB is curable they can get pills from the clinic. They must find money for the taxi and go test at the clinic.”

Male learner, School 2

“I will tell them that you can care for a TB patient and still protect yourself from getting TB.”

Male learner, School 3

Unlike HIV which forms part of the school curriculum, TB is not covered in detail or from the socio-ecological perspective which considers context and the environment, and stigma is not addressed in relation to TB. This is a clear gap that the MSF schools-based programme has done well to address, albeit light touch and for a short duration.

While TB is stigmatised within communities, it is often not considered a priority in the context where clinics are far from home, and there are financial costs to accessing health care. Together with complacency, the prospect of seeking out TB screening is limited – and so impact on behaviour would be related to quite tangible actions that people can begin to do without significant effort, such as opening windows to let in light and fresh air, washing hands and coughing in one's elbow.

There is still some confusion about how one contracts TB, and a pervasive belief across four of the five schools is that mosquitoes carry TB (Table 6). Despite the majority of learners knowing that not everyone who has TB also has HIV, confusion also persists about how you contract HIV and/or TB (touching blood will give you TB).

“You can get TB when I share a candy mouth to mouth with you because we will be sharing saliva. We are not supposed to share saliva.”

Male learner, School 1

“Also when you give your person (lover) a deep kiss, that is sharing saliva, that can give you TB.”

Male learner, School 1

More complex concepts and information were not recalled by learners such as latent TB and the difference between and reason for first line and second line treatment. It is not clear whether learners may not have learnt this information as a result of some of the modules being adapted due to limitations in the time available to facilitate the modules, or whether the concepts are too complex to explain in isiZulu. Though learners had completed module five which provides detail on how to run a campaign, there was not an opportunity to apply this knowledge after the completion of the modules.

The Peer Education programme provides an opportunity to adopt aspects of the programme, where there is sufficient buy-in and support of the school.

As part of testing knowledge related to attitudes and behaviours of learners that had participated in the modules, a short survey was administered at schools with learners that participated in the programme. The results of key variables are below, disaggregated per school. The sample of learners is considerably lower than those who had completed the post-test.

**Table 6: Results from survey completed by learners as part of evaluation**

SURVEY FEEDBACK <sup>10</sup>	SCHOOL 1 (%)		SCHOOL 4 (%)		SCHOOL 5 (%)	
	Agree	Disagree	Agree	Disagree	Agree	Disagree
Sample size	n=37		N=38		n=16	
Grades that completed the survey	9,10,11		9,10,11		10	
Grades that participated in 2021	8,9,10,11 <sup>11</sup>		8,9,10,11		8,10	
Besides the lungs, TB can affect other parts of the body (skeleton, brain, heart)	40	60	57	43	29	71
I felt comfortable asking questions during the TB programme	95	5	89	11	87	13
Mosquitoes carry TB	43	57	63	37	43	57
People who have TB are bewitched	8	92	3	97	0	100
Getting correct information helps to overcome stigma	81	19	81	19	75	25
All people with HIV will get TB	19	81	13	87	7	93
Attitudes towards people with TB have improved in my school since the programme	94	6	81	19	57	43
I know what to do if I suspect I have TB	92	8	86	14	87	13

<sup>10</sup> Results are included for three of five schools, as the surveys were administered with grades who had not received the programmes in the other two schools, rendering these surveys meaningless.

<sup>11</sup> Learners that were in Grade 11 in 2021 were no longer attending classes at the time of the evaluation as they were already preparing for exit exams, and so would not have been available to complete the survey.

Table 6 includes a selection of statements that were included in the survey, distributed in advance of the school visits. In a third school, some of the surveys received were completed by students that had not completed the classroom modules and could not be used as part of the analysis. This has contributed to a very small sample in this school.

There are some trends in the data that are worth noting. These include that more than 85% of all learners agreed that they know what to do (seek screening or visit the clinic) if they suspect they have TB and that they felt comfortable asking questions during the TB programme. Learners across all three schools strongly agreed that information assists with overcoming stigma. Access to information that would otherwise not be available came up as the main strength of the programme in focus groups, demonstrating consistency between focus groups and surveys. It is encouraging to see that more than 85% of learners know what to do if they suspect they have TB.

“If I learnt someone had TB... I will tell them that TB is curable they can get pills from the clinic. They must find money for the taxi and go test at the clinic.”

Male learner, School 2

“I will tell them that you can care for a TB patient and still protect yourself from getting TB.”

Male learner, School 3

Two other important areas for attention are the more medical aspects of the programme – such as what happens to your body if you have TB and how you can get TB. The statement related to the parts of the body that TB can affect shows very little difference in scores in two of the three schools. This is more complex knowledge which may be less easy to recall or recognise. It is also possible that if the modules were truncated based on the time available, that this content may not have been equally covered across the schools.

It is unfortunate that the school that has done additional activities outside the classroom is also one of the schools where the surveys were distributed to learners who had not participated in the programme. This is also the school with active enthusiastic peer educators, who would have been well placed to oversee the administration of the surveys to the correct learners. This, again, raises the question of the nature and depth of the relationship with the school, which is more active than others, but the participants cannot be easily identified or the instructions provided to the school were not well understood.

“The three of us are peer educators with certificates on teen pregnancy and TB. We give talks on these topics at the assembly, but only when we are given a chance, usually small time.”

Female learner, School 4



## FEEDBACK AND FINDINGS RELATED TO THE HIV PROGRAMME

MSF implemented the schools-based component of the HIV programme from 2013 until 2018. This programme included a focus on the delivery of services and demand generation. Unlike the TB programme, the HIV programme did not follow a structured manual with instructions for mediating content. The schools-based component of the HIV programme was also initiated at a time when there was no clear policy guidance on how to handle HIV/AIDS in schools, access to services and supplies, and the information to be shared with learners. With the approval of the policy for HIV/AIDS in Schools, there was ripe opportunity to support a schools-based HIV programme, including a health education component.

The HIV component included an information component, focus on condom distribution and linking young boys with Voluntary Male Medical Circumcision (VMMC). These linkages entailed obtaining consent, taking learners for the procedure and following up if there were any complications.

The school-based component of the HIV programme was less systematic as compared to the TB programme. There was no formal manual, and information was shared through talks. The HIV activities were implemented over five years in the same schools, which may have contributed to familiarity among learners and credibility of the programme.

The learners who participated in the focus groups could recall the VMMC activities and the visits to the schools but could not recall anything further likely due to the time that has elapsed since the end of the programme. Of concern is the general view of four young people that “HIV is something old, it is long gone, no one talks about it anymore”, when alongside TB it is one of the two largest causes of death in KZN<sup>12</sup>. While HIV is stigmatised and recognised as serious, there persist attitudes among male learners that suggest HIV is no longer a major concern of theirs. The textbox below contains quotes from both male and female learners.

“HIV is something old.”

“This game in youth is no more a problem.”

Male learners, Focus Group, School 6

“HIV is called “at the sea” meaning “you had sex with too many people. Everyone gets into the sea.”

“You are a tracker” (like the car tracker).”

“You are trending” meaning “you are all over, sleeping around.”

Community attitudes as reported during Focus Group,  
School 6

<sup>12</sup> Health Systems Trust, South African Health Review

No educators were formally trained in content as part of the HIV programme but they were involved in advocacy activities for prevention. MSF recognises that while the aspiration was that the HIV programme would lead to behaviour change, this was not feasible given the duration of the programme, and so the substantive focus of the programme was on improved knowledge about HIV and ensuring young people went for an HIV test regularly.

## CONCLUSIONS

Schools-based programmes have enormous potential to reach an often-vulnerable group of young people in a controlled environment, and with the correct processes in place, demonstrate enormous potential for change.

The schools-based component of the Eshowe TB Programme was designed without an understanding that knowledge alone does not result in behaviour change. Behaviour is influenced by a range of factors, and that these extend to the context in which people live, their own priorities, their belief systems, incentives and influences on behaviour change. To be able to change behaviour in relation to TB, it was imperative that the programme be designed with the input of a Social Behavior Change Communication (SBCC) Specialist, so that content included in the manual could have been scaffolded to ensure that it is communicated in a way that responds to the particular circumstances of the people (learners) receiving it.

While MSF has established relationships with relevant district officials in the Department of Education, the buy-in within schools has been limited and there is limited evidence of the schools taking ownership of the programme in three of the five schools. This reduces the likelihood of sustainability beyond MSF, and unless given the choice as to whether the schools could participate, when there are already a number of pressures on teaching time, there is less inclination to prioritise this programme for implementation, negatively affecting the likelihood of the programme achieving its intended objectives.

The absence of school-based campaigns or community activities means that the circle of influence is limited, and that the knowledge will remain with those learners who attended the modules, and is unlikely to be shared with others, unless there is a structured means of doing so through convened talks or activities within the school.

The departure point that the schools-based component of the HIV programme was successful because it had taken place at the same time that the 90-90-90 targets was achieved, and that consequently a schools-based TB programme would be successful is not evidence-based. While both had school-based components, MSF worked with the same schools over a period of time as part of the HIV programme as compared to the TB programme which interacted with different schools each year for a short period. The HIV programme was also much more directive and biomedical in nature (referrals for VMMC, HIV testing and condom distribution) in line with the core focus of MSF. This is in comparison to implementing schools-based programmes, which require a specific set of skills and context, with a health promotion or advocacy emphasis.

The evaluation finds that the schools-based component of the programme has not been implemented according to its initial design, and this makes it more difficult to establish the true extent of outcomes for learners, to ensure sustainability of the programme, or to ensure its replicability and implementation in alternative contexts. The inconsistency in quality and gaps in processes suggest that MSF is better positioned to focus on its core strengths in the area of biomedical programmes and technical assistance. All future programmes would be strengthened by considering the theory of change behind any intervention at design phase, to both ensure that the activities are likely to contribute to the overall desired impact, and that there is sufficient need for, and expertise, to implement such programmes effectively.

## LESSONS LEARNED

**Lesson 1:** Developing a Theory of Change at the point of designing the programme would have assisted with understanding that change is not linear, what needs to happen to achieve the desired outcomes (action against TB), the feasibility of achieving the desired objectives, and what other assumptions may influence how change happens. The process of developing a Theory of Change would have also assisted with identifying indicators (metrics) for monitoring implementation and progress towards desired results.

**Lesson 2:** The programme was premised on the idea that the modules would mobilise young people to act against TB, and that the modules would sufficiently prepare young people to change their own behaviours through raising awareness and developing knowledge. This is a tenuous assumption and with the incidence of TB among school-going learners being so low, the likelihood of impact on TB within communities is marginal.

**Lesson 3:** The success of school-based programmes requires both clear content and materials, and that the implementing context is functional. While using TB data as the basis for identifying schools may confirm relevance, the programme will not be effective if the school itself is dysfunctional and lacking in leadership, organisation, characterized by low learner motivation and poor infrastructure. The selection of schools or implementing sites needs to be more nuanced and carefully considered.

**Lesson 4:** Communities are not static. Needs and priorities change and this has a direct influence on behaviour. While TB continues to be a major problem in KZN, there would have been enormous value in undertaking a needs analysis at the time of shifting away from HIV, as to whether a schools-based TB programme was the best use of resources, and whether it was likely to achieve the desired changes. In comparison to HIV, where youth are the most vulnerable, the incidence of TB among school-going learners is so low that it is likely resources could have been better used on alternative programme activities such as accelerating the uptake of TB Preventive Therapy (TPT) as compared to a light touch schools-based intervention.

**Lesson 5:** The assumption that knowledge alone leads to behaviour change is heavily flawed, and both design and implementation would have been strengthened through the development of a Social and Behaviour Change Communication strategy.

**Lesson 6:** The advent of Covid-19 and the subsequent national lockdown provided an opportunity for MSF to review the programme, and to consider how Covid-19 could have been incorporated into the schools-based programme. This would have assisted with addressing misinformation and confusion between the two and may have also meant that the programme received more priority from schools. In addition to this, it is possible that addressing this could have overcome the challenge where TB was being masked by Covid, and some health facilities were treating respiratory symptoms as Covid, rather than considering TB.

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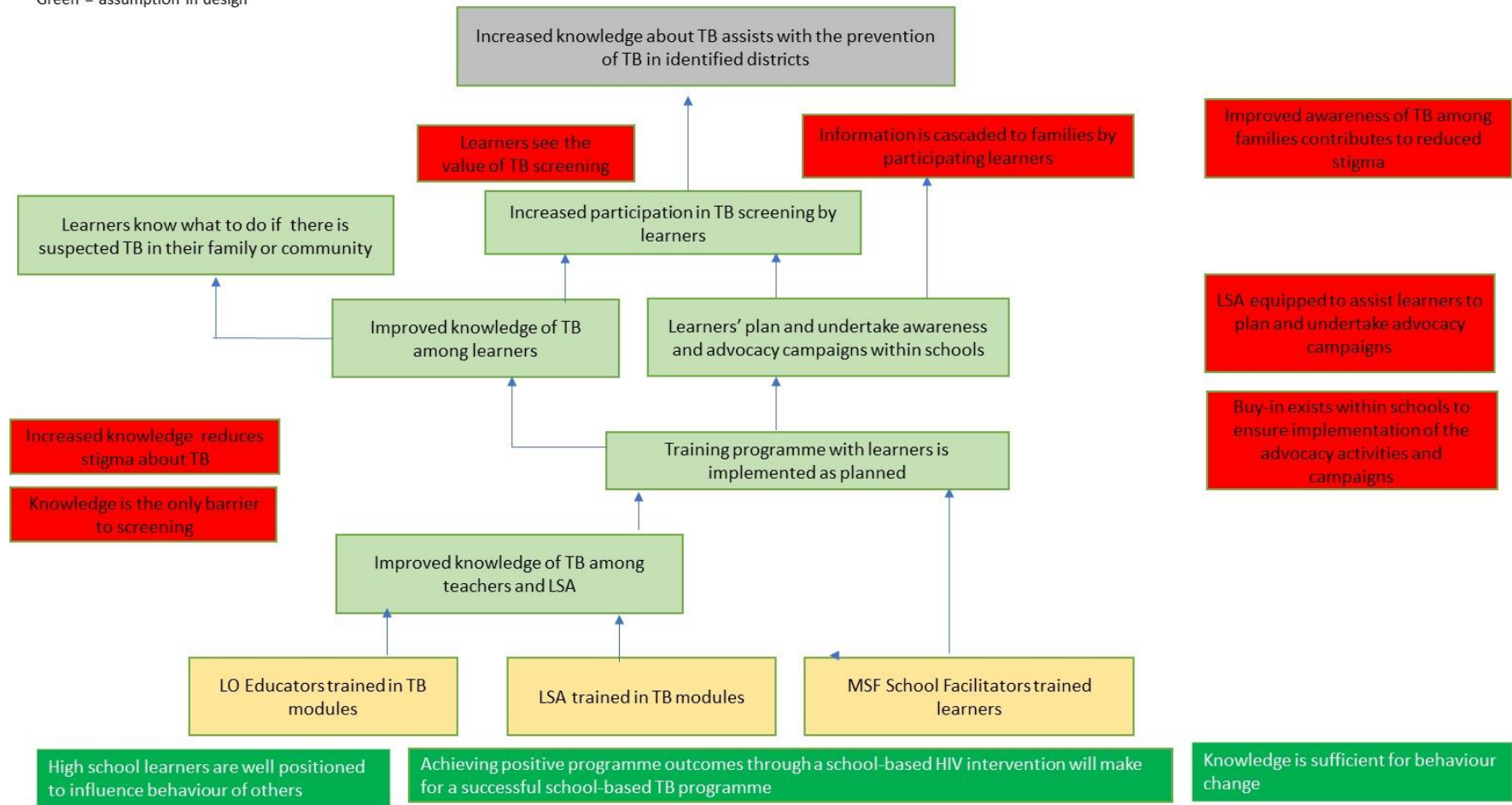
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# Annex 1: Theory of Change

Red = major assumption  
Green = assumption in design



## Narrative

A Theory of Change (ToC) is a process of articulating how a programme intends to achieve its desired objectives, and the conditions which need to be in place to be able to reach the desired impact (Rogers, 2014). It is different to a Logical Framework as it is not linear in nature, and it focusses on what comes between activities and results, and what needs to be in place to achieve the desired results (assumptions). This ToC is for the school-based component of the Eshowe TB programme (the main focus of the evaluation), though similar assumptions and outcomes exist for both the school-based TB and HIV programmes.

The ToC outlines a set of activities and results for those that have benefited from the modules on TB. The current TB programme does not directly engage with community stakeholders or authorities, meaning that the sphere of influence is restricted to the school, and the learners specifically. The schools have been selected based on the prevalence of TB, and secondary schools specifically. This suggests an assumption that high schools are in particular need of such a programme as compared to programmes focusing on pre-school or early primary school. Given that individuals with HIV are particularly vulnerable to TB infection, and on the basis that the schools had participated in the HIV programme, an assumption was made that there was a need for a schools-based TB programme in the selected schools.

The ToC is underpinned by a behaviour change framework that recognises there are multiple factors which influence behaviour, and that knowledge itself is not a sufficient influence for behaviour change to take place, but that there will need to be sufficient motivation to change behaviour, or to act based on the knowledge that has been received.

The current Theory of Change proposes that the programme has been designed on the assumption that addressing a knowledge gap will result in people screening for TB, and will address stigma towards people with TB. The programme has also been designed on the assumption that high school learners are well positioned to influence others to adopt hygiene practices which will reduce the risk of HIV transmission and that information received by learners will be communicated to family members and the broader community.

The design of the programme to include campaign and advocacy activities as a means to disseminate information and to raise awareness provides an opportunity to share knowledge and to apply skills that have been developed by learners. It provides an opportunity to practice experiential learning and to embed knowledge, which should provide the basis for continuing the programme, if implemented correctly.

With the learners being the direct participants in the TB modules, there is an assumption that the information will cascade beyond initial participants to other learners, and that campaigns will provide the basis for sharing information within the school, and to families in the surrounding communities. This rests on the assumption that the level of exposure to the programme is sufficient to impact the broader school environment and learners and lead to adopting health promotion and hygiene practices that reduce risk of contracting TB, participating in campaigns or visiting clinics. This also assumes that the clinics are accessible to the learners in the schools where the programme is being implemented.

It is important to note that there are multiple other intervening variables which may influence the extent to which outcomes (both negative and positive) can be attributed to the MSF TB programme. On this basis, the main focus of the evaluation is understanding the contribution of the programme to knowledge

and behaviour in relation to TB prevention and treatment, and the emergent learnings to strengthen future implementation or scale-up.



**Stockholm Evaluation Unit**  
<http://evaluation.msf.org/>  
**Médecins Sans Frontières**

Independently written by  
Rebecca Pursell-Gotz and Agnes Shabalala February  
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