TIMS
TB IN THE MINING SECTOR IN SOUTHERN AFRICA

Physical Toolkit
INTRODUCTION

This is a physical version of the video toolkit all about TB in the Mining Sector in Southern Africa. Miners in Southern Africa have some of the highest rates of TB in the world. However, access to health services for miners and ex-miners is often limited, or non-existent. For their spouses and families, accessing care can be even more difficult. Human rights and gender-related barriers are key factors which limit access to information and health services. To help civil society organizations and community groups address some of these issues related to TB in the Mining Sector, this toolkit provides an overview of common challenges and potential solutions. The toolkit is divided into 9 parts, called “Modules”:

- Module 1 - Introduction to TB and Silicosis
- Module 2 - The Right to Information
- Module 3 - The Right to Health and Workplace Policies
- Module 4 - The Right to Compensation
- Module 5 - Families and Spouses: Policies and Perspectives
- Module 6 - Gender and Gender Inequality
- Module 7 - Appropriate and Quality Service Delivery
- Module 8 - Sustaining Community Advocacy
- Module 9 – The Right to Good Nutrition

This toolkit has been brought to you by the ACHAP Consortium (ACHAP, EANNASO and Storkfort Health) in partnership with Wits Health Consortium. It is part of the TB in the mining sector (TIMS) regional program.

Ok – let’s get started!

MODULE 1: INTRODUCTION TO TB AND SILICOSIS

WHAT IS TB?

- TB is short for Tuberculosis;
- It is an infectious disease caused by a bacteria called Mycobacteria Tuberculosis;
- TB affects the lungs (pulmonary) and other parts of the body; and
- TB can be cured;

HOW CAN I GET TB?

- TB is spread through the air from an infected person to another; and
- You can get TB if you are in close contact with an infectious person when they cough, talk, laugh, spit, sing, or sneeze.

Symptoms of (pulmonary) TB

- Cough for more than two weeks;
- Chest Pains;
- Lack of Appetite;
- Unexplained Weight Loss;
- Fever and Night Sweats; and
- Fatigue;

What do I do if I have symptoms of TB?

- Visit your nearest health facility;
- Get screened for TB;
- The first test the health care worker will do is a sputum test;
- TB is curable, but you need to stay on TB medicines 6 months or 8 months if you have previously been treated for TB; and
- Never interrupt your treatment.
What can I do to minimize the risk of getting TB?

- Using a mask to protect from dust while working inside mines;
- Lead a healthy lifestyle by eating a balanced diet, reducing the use of alcohol and saying “no” to tobacco and addictive drugs; and
- Improving ventilation by keeping windows open in rooms and public transport; avoid overcrowded areas.

SILICOSIS

WHAT IS IT?

Silicosis is a disabling, nonreversible and sometimes fatal lung disease caused by overexposure to respirable crystalline silica.

WHAT ARE THE SYMPTOMS OF SILICOSIS?

Because silicosis affects the lungs the symptoms are similar:

- Shortness of breath following physical exertion;
- Severe cough;
- Fatigue;
- Loss of appetite;
- Chest pains; and
- Fever.
UNDERSTANDING AND DEFINING THE PROBLEM

- Start with research on TB related challenges within specific mining communities targeted;
- Understand the information gaps associated with the TB related challenges within specific mining communities targeted;

GAPS MAYBE ANALYSED AS FOLLOWS:

- Limited information about what is TB, ways of transmission and acquisition, symptoms, ways of prevention; processes of screening and accessing treatment;
- Lack of information about where and how to seek treatment;
- Lack of information about the support mechanisms that should be available when someone is enrolled onto treatment.
DEVELOPING APPROPRIATE AND SIMPLIFIED HEALTH INFORMATION FOR MINING COMMUNITIES (MINERS AND EX-MINERS AND THE GENERAL PUBLIC – SIMPLIFIED)

- Use gaps identified above to come up with information needs;
- Develop key messages for each of the gaps identified;
- Translate messages into different languages based on language competencies of relevant mining communities
- Pre-test messages with relevant mining communities

DISTRIBUTING HEALTH INFORMATION FOR MINING COMMUNITIES (MINERS AND EX-MINERS)

- Assess the key sources of information for mining communities;
- Adapt messages into key formats that are accessible to mining communities;
- Considerations for accessibility include language, literacy etc.;
- Formats include video clips, audio clips, brochures, pamphlets, and other channels
MODULE 3:
THE RIGHT TO HEALTH AND WORKPLACE POLICIES

OBJECTIVE OF THE TOOLKIT

• To illustrate the challenges related to the absence of adequate safety and occupational health services within mines;
• To provide information on how to access screening and treatment services; and
• To provide guidance on advocating for treatment support and occupational support post-employment.

KEY ISSUES

• Challenges with provision of adequate safety and occupational health services within mines;
• Overcrowded and inadequate accommodation for miners;
• Limited to no access to TB screening services;
• Absence of strong workplace policies that support miners;
• Lack of support programmes when miners are on treatment; and
• Absence of occupational health services post-employment.

PRIMARY TARGET AUDIENCE

• Miners and Ex-miners, migrant miners; and
• Spouses and Families of Miners and Ex-miners;

SECONDARY AUDIENCES

• Policy Makers;
• Occupational Safety and Health Officials in mining areas;
• Communities surrounding mining areas;
• Mine Workers’ Unions; and
• TB service providers.
STORYLINE

Tinashe has worked for different mines in the Midlands Province of Zimbabwe for the past 25 years. In all the 5 mines he has worked for there has not been adequate safety and occupational health systems to protect workers. The accommodation provided by the mines has always been inadequate and their spouses could not visit them. During all these years, he has seen a lot of colleagues falling sick and being diagnosed with TB. However, most of them are only diagnosed with TB once they have left work due to continuous illness and limited capacity to work. Even those who get treatment and try to come back to work often fail to cope with the rigours of work. Some are not even admitted back into work because the employers feel that they will be likely to fall sick again. Tinashe has been worried about his own welfare and is scared of what will happen to him if he falls sick. He really wants some information on how he can access treatment when he falls sick and how he can also access occupational health post employment.

NARRATION

- All mine workers have a right to health and safety;
- Miners need to identify and report practices that put them at risk and exposes their health;
- Employers are supposed to provide adequate health and safety services for miners and ex miners; and
- Miners and ex miners need to know how to ensure their health is protected through appropriate health and safety measures, accessible screening and treatment services and adequate occupational health support post employment.

CONTINUATION

During work break, Tinashe discusses with his colleagues about the dangers they face due to inadequate safety, screening, treatment and support. Some of his colleagues warn him that these were the issues that get them fired. One colleague highlighted there is need to utilize the workers union to raise this issue with Mine Management. They collected all safety and health concerns which they will share with Mine Management.

TAKE AWAY MESSAGES THROUGH NARRATION WITH EMPHASIS

- Mining companies have a responsibility to provide adequate health and safety services for employees;
- There should be workplace policies that articulate mining companies’ responsibilities towards mine employees;
- Miners need to engage employers to address practices that put them at risk and exposes their health;
- Employers are supposed to provide adequate health and safety services for miners and ex miners; and
- Miners and ex miners need to be provided with information on how to ensure their health is protected through appropriate health and safety measures, accessible screening and treatment services and adequate occupational health support post employment.
MODULE 4: THE RIGHT TO COMPENSATION

OBJECTIVE OF THE TOOLKIT

- To provide key information that allows miners, ex miners and their families to understand health and safety violations;
- To know available TB services; and
- To provide an understanding steps to follow when claiming compensation.

KEY ISSUES

- In most instances there is no information on the eligibility criteria for compensation;
- There are weak policy frameworks around the processes of accessing compensation and the need for Employers to put in place relevant mechanisms;
- Miners and Ex Miners do not know the circumstances in which they are eligible for compensation; and
- In some instances issues of compensation are not properly legislated which usually leave Miners and Ex Miners disadvantages.

PRIMARY TARGET AUDIENCE

- Miners, Ex-miners and their families;

SECONDARY AUDIENCES

- Occupational Safety and Health Officials in mining areas;
- Communities surrounding mining areas;
- Mine Workers’ Unions; and
- TB service providers.
Patrick is an ex mine worker who has worked in the mines who has worked for 15 years. During the years of his work they did not have protective clothing and no health insurance, meaning that they had to finance themselves whenever they wanted to access health services. There were also challenges with working conditions where it was difficult to get time off to travel to access health services when he was not feeling well. When he got sick he was forced to take unpaid leave and had to vacate the mine accommodation he was using. Patrick was finally diagnosed with TB and silicosis which meant that he could not continue working in the mines. Due to the fact that his health challenges were primarily results of limited protection within the work environment, he engaged the Mine so that he could be compensated. He got treatment with support of his family members and now he is unemployed as his health no longer allows him to work. When he went back to try and get his compensation he could not get assistance from the company. He was advised to seek support from the mine workers union but they indicated that they were not able to assist him since assistance could only be provided by the human resource department.

ASK THE FOLLOWING QUESTIONS

• What should Patrick do regarding his situation?
• What services should be available to ensure situations such as the one Patrick found himself in are avoided?
• How can Patrick claim his compensation from his former employers?

NARRATION BY PATRICK

When you work in the mines it is important to work through the mine worker’s union to ensure the following:

• That there are adequate safety measures for workers;
• There should be educational sessions focusing on signs and symptoms of TB, how to get screened and where to get screened.
• There should be health facilities on site or there should be referrals to health facilities;
• There should be health insurance to ensure workers can access services;
• There should be clarity on sick leave and clear processes for applying for it;
• All employees should be provided with clear information on how to claim compensation.

TAKE AWAY MESSAGES THROUGH NARRATION WITH EMPHASIS

• Mine workers and ex mine workers have a right to TB information and services;
• Mine workers and ex mine worker have a responsibility to seek services when they experience any signs and symptoms of TB;
• Mine workers have a right to compensation and employers need to provide information on how compensation claims can be made.
• Mine workers and ex mine workers need to ensure they have adequate information about procedure that have to be followed in order to access compensation.
MODULE 5:
FAMILIES AND SPOUSES: POLICIES AND PERSPECTIVES

OBJECTIVE OF THE TOOLKIT

- To provide key information that allows spouses and families of miners and ex miners to understand health rights and compensation procedures; and
- To provide information on available support services.

KEY ISSUES

- Spouses/families of miners are not aware of their rights when it comes to compensation;
- Spouses/families of miners lack information concerning compensation claim processes;
- Mining companies do not provide access to health centres in the mines to spouses/families of miners and spouses/families of migrant miners back home;
- High risk of exposure to contracting TB for spouses when miners return home and have limited access to health care services;
- Lack of knowledge on how to implement infection control measures by the spouses/families of miners;
- Overcrowding and poor ventilation of houses provided by mining companies increases chances of contracting TB;
- Inadequate housing for miners to be joined by the spouses/families (especially migrant miners);
- Spousal separation due to inadequate housing;
- Lack of clear information by spouses/families on claiming processes and existence of compensation legislation and policy; and
- Lack of access to health centres by spouses/families in the mines.

PRIMARY TARGET AUDIENCE

- Spouses and Families of Miners and Ex-miners; and
- Miners and Ex-miners.

SECONDARY AUDIENCES

- Occupational Safety and Health Officials in mining areas;
- Communities surrounding mining areas;
- Mine Workers’ Unions; and
- TB service providers.
STORYLINE
Constança is a 35 year old woman who lives in Xai Xai, Gaza Province Mozambique with her three children, mother-in-law and her husband’s four siblings. Constança’s husband Alfonso works in the mines in South Africa and he has been working there for the past 12 years. For three times in the past 2 years Alfonso has been sick, admitted into hospital, gotten better and returned to the mines. Even when Alfonso was clearly not well he has insisted that he goes back to work because he fears that he will lose his job. When Alfonso gets seriously ill Constança has to go to South Africa and she has to bring him back to Xai Xai as he cannot access treatment since he does not have adequate documentation. Even if she wanted to stay longer and look after her husband, the accommodation provided by the mine is overcrowded and comprises predominantly of men. When Alfonso fell sick for the third time and they took him to the hospital in Xai Xai he was screened for TB. He was diagnosed with TB and was started on treatment (DOTS); and The health worker told her that TB can be transferred through the air and there may be need for other members of the household to be screened since Alfonso had been coughing seriously.

NARRATION
It is important for miners, ex miners, their spouses and their families to understand the signs and symptoms of TB:
• TB is an infectious disease;
• When there is someone in the family who is coughing it is important to make sure you keep windows open and they should hold their mouth when they cough (infection control); and
• When miners or ex miners have TB symptoms that include persistent coughing you need to ensure that they get screened.

NARRATION BY PATRICK
After Alfonso started feeling better and getting stronger he started to talk about going back to his job in the mine because his contract will be terminated if he missed work for extended periods of time. His family insisted that instead of Alfonso going back to work, Constança need to travel and inform his Employers about his illness and explore ways of getting some of the money that her husband is entitled to. Upon arriving at his workplace in South Africa she was also informed that Alfonso was not a part of the workers union so she could not be assisted by the union. Constança had to travel back to Xai Xai with nothing and they are now struggling because Alfonso was the sole breadwinner. On top of everything else they do not have adequate food so Alfonso is not taking his medication as prescribed.

TAKE AWAY MESSAGES
• Spouses and families of miners and ex miners need to have information about TB including signs and symptoms;
• Miners and ex miners need to ensure their spouses and families know processes and procedures for claiming compensation;
• Mining companies need to provide support towards safe accommodation and easy access to compensation for workers;
• Mine workers unions need to provide support that makes it easy for spouses and families of mine workers and ex miners can access compensation in the event of incapacitation due to illness or death; and
• Governments need to work on policy frameworks that promote universal access to health including for undocumented migrant workers.
SECONDARY AUDIENCES

- Communities surrounding mining areas;
- Mining companies; and
- Government.

PRIMARY TARGET AUDIENCE

- Spouses of Miners and Ex-miners; and
- Miners and Ex-miners.

KEY ISSUES

- Spouses/families are not included/ covered in the mining company policies;
- Dependency of spouses on men for finances to access health services;
- Spouses have limited access to their husbands’ information, policies and procedures to claim compensation;
- Lack of interest by mining companies to invest in mechanisms that can trace spouses for compensation of their employees and former employees; and
- Undetected and untreated miners pose transmission risk to their spouses/families

OBJECTIVE OF THE TOOLKIT

- To encourage miners and ex-miners to be transparent to their partners to minimise the spreading TB to their families; and
- To provide key information that allows partners of miners and ex-miners to understand health rights and compensation procedures.
STORYLINE
Solomon is a 40-year-old Zimbabwean who is married to Maria and has two children. Solomon has been employed by Kamba mine in South Africa for the last 15 years. Three months ago Solomon started coughing and had to go back to Zimbabwe as he could not continue living within Mine provided accommodation while he was incapacitated due to illness. After visiting the health facility he was diagnosed with TB and was enrolled onto treatment. Due to loss of income because of illness and the need for care, Solomon returned home so that he could be supported by Maria. When he got home he vowed to himself never to disclose that he had TB because he was scared people would discriminate him and his family as this used to happen with other people who were diagnosed with TB in their community. Solomon told Maria about his cough but did not disclose that he had been diagnosed with TB and is on treatment. He went on to hide his medication. When Maria was unpacking Solomon’s clothes she came across the medication along with treatment cards and asked Solomon why he had not disclosed that he had TB. Solomon got angry about being questioned and threatened to return to South Africa before he got well. Maria was worried and scared since she did not know what else Solomon was hiding from her.

NARRATION
- It is important for miners, ex miners, their spouses and their families to understand the signs and symptoms of TB;
- Husbands have the obligation to protect their partners by being open about their health status for them not to get infected. Treatment adherence is highly dependent on family support and it is critical for miners and ex miners to be open with their spouses to ensure that they are properly supported; and
- When miners or ex miners have TB symptoms that include persistent coughing those close to them need to ensure they get screened. If they are found to be TB positive they need to be put on treatment and get tested for HIV

CONTINUATION
Maria spoke to Solomon’s parents who later counselled him and implored him to be open with his spouse so that he could be adequately supported. After Solomon got better he went back to the Mine and after two days of work he met the wife of James who was another Zimbabwean who worked at the mine but had to leave work after being diagnosed with TB. She informed him that James had died after he stopped taking his medication. James had not disclosed to her that he had been diagnosed with TB and he had continued smoking while he was sick. James had also not told her about where to go in order to claim compensation and she was turned away as she was told she had not brought enough documentation to prove she was the rightful wife entitled to compensation. As James’ wife was leaving she tearfully remarked that she wished her husband had been more open about his health and work. Solomon resolved to visit the Human Resources Department to ask for procedures followed in claiming compensation by spouses in the event of a Miner or Ex Miner’s death. Solomon was determined to make sure that his family knew the important things about his health while he was alive and that they knew the necessary procedures to follow while claiming compensation in case of his death.

TAKE AWAY MESSAGES THROUGH NARRATION WITH EMPHASIS
- Partners of miners and ex miners need to have information about TB including signs and symptoms;
- Miners and ex miners need to ensure their partners know processes and procedures for claiming compensation;
- Mine workers who are predominantly male need to ensure their partners are aware of their health status;
- Mine works need to ensure their partners are included in the mining company health policies; and
- Mining companies to put in place user-friendly compensation mechanisms for partners of miners and ex-miners.
MODULE 7: APPROPRIATE AND QUALITY SERVICE DELIVERY

OBJECTIVE OF THE TOOLKIT

- To advocate for the provision of adequate community health services; and
- To provide key information ways of seeking services if they are not available within communities.

KEY ISSUES

- Health facilities do not have appropriate equipment to be able to provide adequate services to miners, ex miners, along with their spouses/families and communities;
- Health workers do not have adequate capacities to provide quality services to miners, ex miners, along with their spouses/families and communities; and
- There are weak linkages between health facilities/health service providers and communities they serve which limits potential for community based TB care.

PRIMARY TARGET AUDIENCE

- Health Service providers;
- Spouses of Miners and Ex-miners; and
- Miners and Ex-miners.

SECONDARY AUDIENCES

- Government Departments of Health;
- Communities surrounding mining areas;
- Mining companies; and
- Government.
Chitapa Health Centre is located within mining communities in Kitwe, Zambia. The health facility was built in 1982 and predominantly serves miners, ex-miners, their spouses/families as well as communities surrounding the mines. TB is highly prevalent in the area and one in two patients assisted at the facility have TB related illnesses. Chileshe is the Nurse in Charge and has worked at the health facility for the past 17 years. Since she joined the hospital, they have always had inadequate equipment for TB screening and they always have to refer clients to the provincial hospital. Chileshe highlights that the prevalence of TB in the areas should have been enough justification for improved equipment at the facility. She has discussed with Senior Ministry of Health officials about the need to provide equipment to enhance provision of quality services, they have also tried to engage Mining companies. Miners and Ex Miners highlighted that the health facility was not useful and in their view it is better to go straight to the Provincial Hospital since going to Chipata will not assist. They also highlighted that health workers at the Provincial Hospital provide more information about TB as well as adherence but at Chipata no information is provided despite the area having high TB prevalence.

**NARRATION**

- It is important for Mining Companies and Health Departments to ensure that health facilities in areas with high TB prevalence have adequate equipment to ensure miners, ex miners, their spouses and their families receive quality services;
- Health workers need to be capacitated in order for them to be able to provide information about TB prevention, treatment adherence and support needs; and
- Miners, ex miners, their spouses and their families need to understand ways of engaging health service providers in order to ensure that they receive quality services.

**CONTINUATION**

Chileshe highlights that due to the absence of proper equipment some patients die before they can go to the Provincial Hospital. She outlines that the fact that the health facility is not well equipped has resulted in miners and ex miners feeling that health staff and not helpful. The fact that the health facility is also not equipped to provide services makes it difficult for health workers to conduct outreaches to provide information which is crucial for prevention as well as treatment adherence and support in relation to TB. The downward referral system is also not well developed and patients from that community who are enrolled on treatment by the Provincial hospital cannot be supported properly in the community. Chileshe concludes by outlining that there is great potential for the facility to adequately support the community if there are appropriate investments in equipment, training for health workers and social mobilisation as well as demand generation.

**TAKE AWAY MESSAGES**

- Health facilities in areas with high TB prevalence need to be equipped to provide adequate, quality support for miners, ex-miners, their spouses/families as well as communities surrounding the mines;
- Health service providers need to be capacitated in order for them to be able to provide quality services and support to miners, ex-miners, their spouses/families as well as communities surrounding the mines;
- Miners, ex-miners, their spouses/families as well as communities surrounding the mines need to cultivate positive relationships with health service providers in order to ensure they access quality services and receive support;
- Referral networks need to be strengthened to ensure that distance and geographical locations do not contribute towards compromised care and support for miners, ex-miners, their spouses/families as well as communities surrounding the mines.
OBJECTIVE OF THE TOOLKIT

The objectives of this module are as follows:

- To raise community awareness about issues on human rights, community livelihood, environment, gender and mining and youth and mining advocacy;
- To ultimately transform into a social movement this is well structured with resources and capacity to influence policies in favour of the marginalised mining communities; and
- To promote community owned policies and legislation on TB.

KEY ISSUES

- Perceived sense of helplessness by mining communities to hold mining companies and decision makers accountable;
- Irresponsible decision makers/ duty bearers inputting in policies that are all inclusive;
- Less engagement of communities in developing and implementation of policies (national and regional) that support TB control programmes in the mines;
- Mining companies hinder communities’ access to health care services;
- Communities’ lack the resources and facilities to deal with severe illness; and
- Growing human and environmental rights abuses committed by the mining companies in the mining communities.

PRIMARY TARGET AUDIENCE

- Spouses and Families of Miners and Ex-miners;
- Miners and Ex-miners; and
- Communities surrounding mining areas.

SECONDARY AUDIENCES

- Mine Workers’ Unions;
- TB service providers;
- Decision Makers and Duty Bearers; and
- Unions and Miners Associations.
STORYLINE
Kimandolu is mine located in Lilongwe operated by Granite Co. Ltd. The mining activities have polluted the nearby river, and causing soil infertility that make even the nearby community fail to do agricultural activities. Dust comes when they blast bombs; it goes up together with smoke and cause Air pollution that in turn cause silicosis as when the air inhaled. When the wind is blowing houses, water and vegetables are all covered in dust. The quality of life of communities living near the mine has deteriorated and several lives have been lost.

NARRATION
• It is important for the mining community to ensure the following things are implemented:
• Adequate safety measures for the mining community;
• Better legislation and regulations for environmental conservation.
• There should be educational sessions focusing on signs and symptoms of TB, how to get screened, where to get screened; and
• There should be health facilities on site or there is provision of referrals to health facilities.

CONTINUATION
As a result, communities including children, women and men organized themselves in order to resist this situation. Angelina, who is one of the women leaders of this resistance movement, has paid a high price for her participation in the barricade. Like 100 of her companions, she is now facing civil and criminal prosecution for impacting the company’s operations and diminishing its profits. After several investigations in to the matter, the mining company was fined and was closed till it meets the mining standards. It was also found out that some government officials have received bribes in favour of the mine.

TAKE AWAY MESSAGES
• Mining communities need to have information about TB including signs and symptoms;
• Mining companies need to provide support to the community towards easy access to health services, compensation and better environment;
• Governments need to work on policy frameworks that protect communities affected by mining activities;
• Governments should ensure continuous engagement of the community in development of policies and programmes;
• There should be deliberate efforts towards raising awareness on TB in the mines to the general public;
• There is need to empower mining communities so that that can hold decision makers and mining companies accountable for the damage they cause;
• Capacity building and Coordination of mining communities (including Unions and Miners Associations, Ex- Miners Associations) to develop and sustain an advocacy agenda; and
• It is fundamental to empower Unions and Miners Association, Ex- Miners Associations on the rights of Miners and Ex- Miners as relate to TB and Silicosis.
OBJECTIVE OF THE TOOLKIT
The objectives of this module are as follows:
• to help improve health outcomes for miners, ex-miners and their family members with or affected by TB, through improved nutritional care and support.
• to emphasize the integration of nutritional assessment, advice and treatment into clinical health care for people with or affected by TB.
• to improve awareness of locally available and affordable nutrition rich food-stuffs within the local vicinity.

KEY ISSUES
• Miners especially artisanal miners often do not have appropriate nutrition. Those that go underground can stay for more than 24 hours without proper meals;
• Malnutrition increases the risk of TB and TB increases the risk of malnutrition;
• Malnutrition can increase the risk of latent TB turning into an active TB as it lowers the body’s immunity, making it easier for the bacteria to attack an individual;
• Infants and children under the age of five, pregnant women and elderly are the most vulnerable to TB infection due to weak immune systems;
• TB increases risk of mortality for people on treatment who have low body mass index;
• Food insecurity and poverty may prevent people from seeking diagnosis and or initiating and adhering to treatment;
• TB affects individual nutrition status and treatment adherence and outcomes due to reduced appetite and ability to take food and the body to absorb nutrients;

PRIMARY TARGET AUDIENCE
• Miners and Ex-miners, migrant miners;
• Spouses and Families of Miners and Ex-miners;

SECONDARY AUDIENCES
• Health care services provider;
• Occupational Safety and Health Officials in mining areas;
• Mining companies;
• Mining Communities;
• Media Fraternity;
• Policy makers;
• Unions;
STORYLINE

Tom lives with his wife Esther and two children in small town of Elerai. The major economic activity in Elerai is gold mining with more than small mining sites which has attracted around 17,000 artisanal miners. After being treated he continued to work underground in the small mine pit going underground for about three days. Tom went consecutively underground for more than a day without meal and mine has no meal plan for its miners.

After being underground for four days, Tom returns home and continues with his smoking habits smokes and drinking alcohol. As Tom wakes up in the morning the next day, he feels weak, has no appetite to eat, he is having chest pain, and coughing. This goes on for two weeks without getting diagnosed and treatment. Thinking he may have been bewitched, Tom goes to the traditional healer seeking for treatment where he is given traditional herbs which he is instructed to take for 5 days. His health improves and he goes back to the mine as he is the sole bread winner for his family. After hours into the underground Tom feels week and collapses, he is rushed to the nearby health centre and diagnosed with TB and put on TB treatment.

Tom is discharged to continue with medication from home. Tom has lost his appetite to eat and continues to smoke. He continues to lose weight and his body lacks nutrients intake. His wife Esther doesn’t have any knowledge about what kind of food she can prepare for him. One day Esther had taken a child to attend a clinic at the health facility. On that day Counselling, Nutrition and Health Care (CONUHECA) which is a non-governmental organization providing nutrition counselling had visited the facility to provide nutrition counselling for expecting mothers and infants. Esther learned how nutrition can help prevent the body from being attacked by the different diseases and what kind of food people infants and people taking any medication can take to help them recover quickly. Esther returned home with knowledge on nutrition and how a healthy balanced diet can be achieved by having foods from various basic food types grown in Elerai. As a result of the knowledge Esther was able to prepare balanced diet for her husband without incurring addition costs as she used that same food staffs grown and available in their area. Tom got cured of TB and he currently doing volunteering work with CONUHECA’s new nutrition programme to educate miners and surrounding communities on issues on nutrition. Through sharing experiences, Tom has been able to save many lives have been saved in his community.

TAKE AWAY MESSAGES FROM THIS STORYLINE WITH EMPHASIS

• Miners and ex-miners with TB should avoid tobacco and tobacco products, alcohol in any form, as it increases the risk of TB drugs toxicity;
• Malnutrition, compounded by tobacco and alcohol use and diabetes can put people at heightened risk of TB and make it harder for them to access care.
• Diet of TB patients should be adequate with all essential nutrients. If a TB patient, continues to lose weight and/or has a poor appetite and/or has other accompanying issues, refer them to a specialist for re-assessment;
• Health care service providers should conduct nutrition assessment for people with TB as nutrition assessment and management are key components of TB treatment success;
• Family members needs to have proper knowledge about nutrition to support members of their families that are miners;
• Proper nutrition is one way of preventing TB
• Miners and their families have the right to access information on good nutrition.
• TB patients should be assessed for and then helped to deal with problems that would affect appetite and intake.
• Mining companies and/or mine owners should provide meal packages for miners that go underground for more than a day;
• If the miner/ex-miner is the sole bread winner and is not getting proper nutrition dies, it leaves their families in poverty;
• A person with TB should aim to have a healthy balanced diet. A healthy balanced diet can be achieved by having foods from the following basic food types;
<table>
<thead>
<tr>
<th>TYPES OF FOOD</th>
<th>MAJOR NUTRIENTS</th>
<th>FOODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENERGY RICH FOODS</td>
<td>Carbohydrates &amp; fats</td>
<td>Whole grain cereals, millets. Vegetable oils, ghee, butter. Nuts and oil seeds. Sugars</td>
</tr>
<tr>
<td>BODY BUILDING FOODS</td>
<td>Proteins</td>
<td>Pulses, nuts and some oilseeds. Milks &amp; milk products Meat, fish, poultry</td>
</tr>
<tr>
<td>PROTECTIVE FOODS</td>
<td>Vitamins &amp; minerals</td>
<td>Green leafy vegetables. Other vegetables &amp; fruits. Eggs, milk &amp; milk products and flesh</td>
</tr>
</tbody>
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