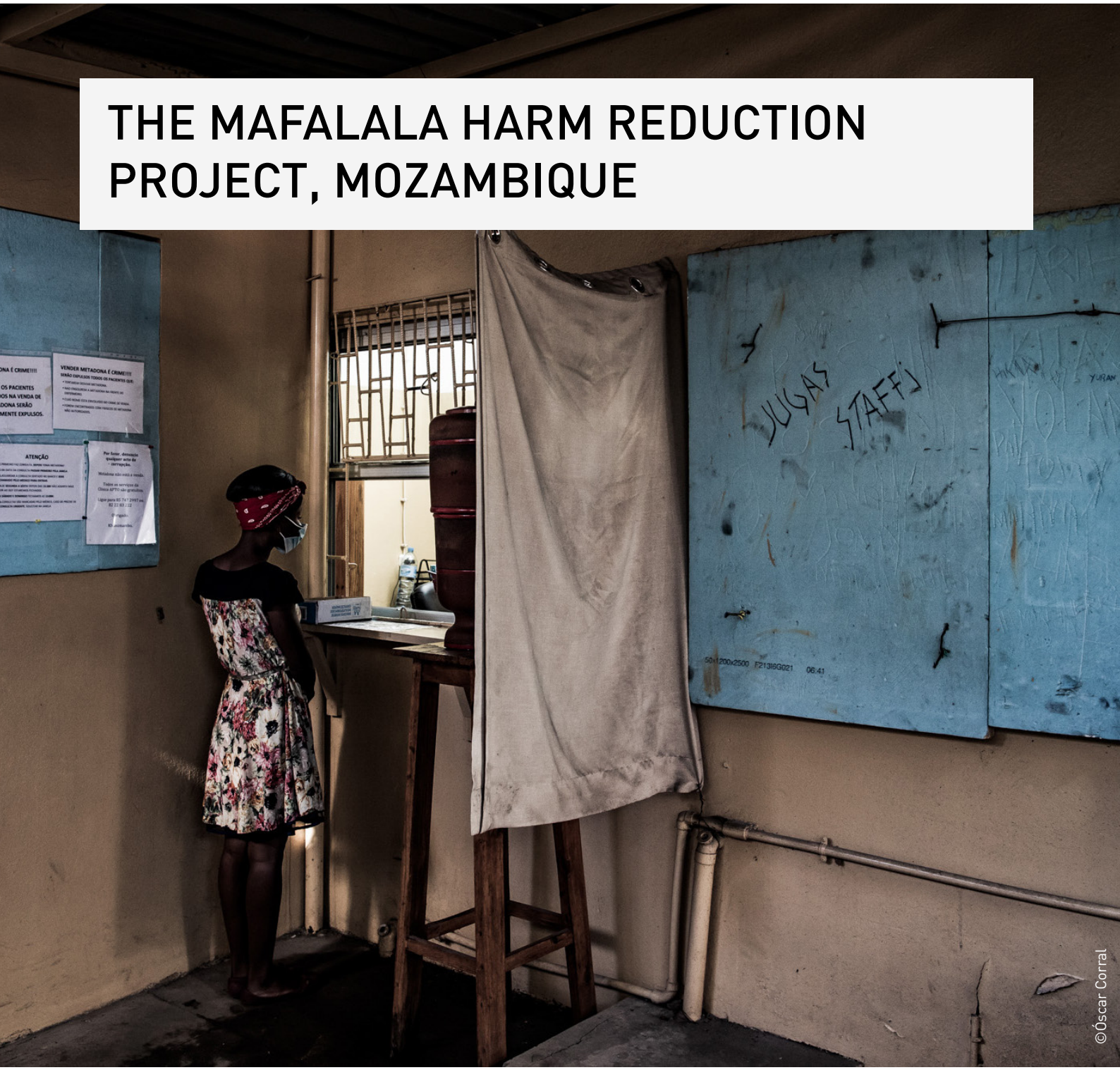
BY THE COMMUNITY, FOR THE COMMUNITY

THE MAFALALA HARM REDUCTION PROJECT, MOZAMBIQUE



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MEDECINS SANS FRONTIERES

People who use drugs are among the most vulnerable groups in Mozambique and are exposed to a range of severe health conditions. Those who inject drugs are among the most at risk of contracting or transmitting bloodborne diseases, such as HIV and hepatitis C, and co-infections such as tuberculosis (TB). Yet, people who use drugs are also among those with **the least access to prevention, care and treatment services** as a result of widespread stigma, discrimination and harassment, often related to the criminalisation of drug use.

A patient has wounds on his forehead bandaged during a consultation at the MSF supported Mafalala drop-in centre in Maputo. ©Tadeu Andre

Why Mozambique

Mozambique has one of the highest rates of HIV infection in the world – 13.8[1] per cent of the population carry the virus – and it is particularly high among people who use drugs. A study on modes of transmission showed that **28.7 per cent of new HIV infections happened within key groups**[2] that include people who use drugs, sex workers and men who have sex with men.[3] Among people who use drugs, the sharing of needles and syringes to inject drugs is the most significant risk factor. It has led to a very high prevalence of HIV and viral hepatitis among this group. An Integrated Biological and Behavioural Survey in Maputo city in 2013-2014 found that **among people who injected drugs 50 per cent were HIV-positive and 44 per cent were infected with hepatitis C.**[4]

Mozambique is a transit country for illicit drug trafficking and drugs are readily available in urban centres like Maputo. Drug consumption is criminalised and, while not explicit, the law is widely interpreted in a way that also criminalises carrying drug paraphernalia including needles. As a result, people who use drugs often fear being arrested for carrying these items and resort to sharing needles or paying other drugs users to inject them with shared needles. An assessment carried out by MSF on drug use in Maputo found that syringes could be shared as many as 10-15 times.

Providing medical treatment and preventive care for people who use drugs is an essential step towards eliminating HIV, hepatitis C and other bloodborne diseases.

[1] Ministério Da Saúde. MISAU PNC ITS HIV/SIDA Relatórios Anuais [Internet]. 2020 [cited 2021 Jan 13]. Available from: https://www.misau.gov.mz/index.php/relatorios-anuais
[2] Key Populations, see https://www.theglobalfund.org/en/key-populations/
[3] MISAU. Directriz para integração dos serviços de prevenção, cuidados e tratamento do HIV-SIDA para a população chave no sector da saúde. 2016.
[4] Baltazar 2019. High prevalence of HIV, Hbsag, and HCV positivity among PWID: results of the first bio-behavioral survey using respondent-driven sampling in two urban areas in Mozambique. BMC Infectious Diseases, 19:1022-1035.

A new model of care

MSF has been supporting and treating people living with HIV in Maputo since 2001. This includes specialised treatment for people with advanced HIV and deadly associated infections, such as TB and hepatitis C, which can occur when HIV lowers the body's immune system. After evidence showed that many patients with hepatitis C also injected drugs, MSF concluded that there was a need to provide specific medical care and to make harm reduction services available for people who use drugs. This would improve their health and ensure better access to preventive measures, benefitting both the patients and the wider the community.

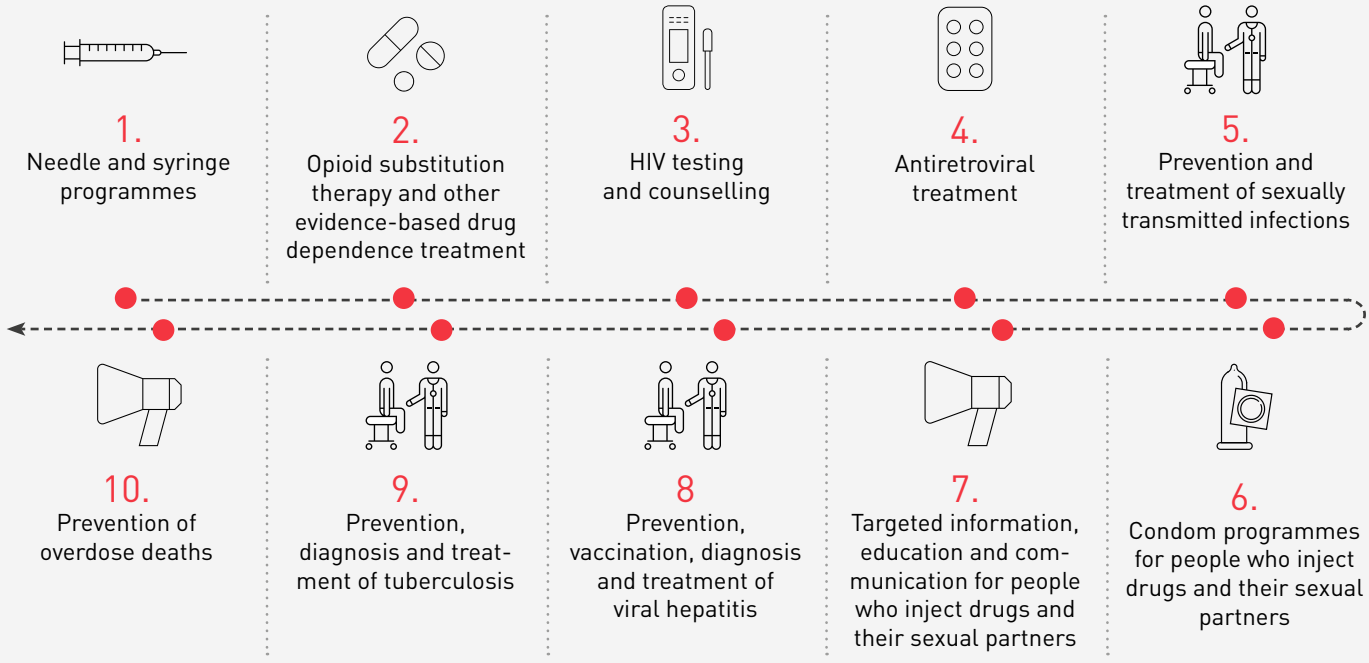
MSF joined forces with UNIDOS, a local community-based organisation working with people who use drugs, to start harm reduction services in the Maputo slum of Mafalala. The Centro Comunitario para Pessoas que Usam Drogas opened its doors in May 2018. This drop-in centre, located in an area of the city where people who use drugs often gather, **is a first point of contact for health services** for people who use drugs. It provides testing for HIV and other illnesses, and ensures those who need it receive medical care for conditions including HIV, hepatitis B and C, TB and sexually transmitted diseases. People who come to the centre can receive counselling, psychosocial support and can have minor injuries treated by trained nurses. For many, the centre provides a safe, stress-free environment where they can have a shower, wash their clothes, rest and relax.

In the years since 2018, t**he centre has expanded its services and now includes all 10 components of harm reduction** as recommended by the World Health Organization (WHO) and the Joint UN Programme on HIV and AIDS (UNAIDS) (see below)[5]. This includes a needle exchange programme, opioid substitution therapy (using methadone) and overdose treatment (using naloxone).

The Mafalala project was the first to pilot a full harm reduction programme in Mozambique. The combination of harm reduction and health services constituted a completely new model of care, based entirely on the needs of the people using the services.

What is harm reduction?

Harm reduction is a set of policies, programmes, services and actions that aim to reduce the harm to individuals, communities and society caused by drug usage. They include needle and syringe exchange programmes, which have been proven to reduce the spread of HIV and viral hepatitis among people who inject drugs. There are 10 elements in the WHO/UNAIDS package for HIV prevention among people who inject drugs. Harm reduction programmes are recommended by international health bodies including WHO, UNAIDS and UNODC.



[5] WHO, UNODC Guidelines for Harm Reduction for People Who Inject Drugs 2012 and World Drug Report 2020, https://wdr.unodc.org/wdr2020/index.html

Working with peers in the community

To reach people who use drugs, MSF/UNIDOS teams work alongside peer workers (made up of former or current people who use drugs) at the hotspots called bocas, where heroin is sold and consumed. There, they talk to people about safe injection practices and sexual behaviour, and the services available in the drop-in centre. They also offer HIV and hepatitis C testing, and distribute and collect syringes. This outreach approach allows them greater access to people who use drugs, including those who otherwise may not visit regular health centres or even the drop-in centre.

Needle and syringe exchange programme

The drop-in centre began its needle and syringe exchange programme in 2018. It continues to provide people who use drugs with safe injection kits, which include syringes, needles, alcohol swabs, sterile water, cookers (used to prepare drugs for injection), cotton balls (to clean the injection site) and plasters. These are distributed at the centre (20 per cent), at pre-identified streets points (40 per cent) and at bocas via drug dealers or drug users who inject others (40 per cent). The used needles and syringes are collected in safe boxes situated in different locations and later disposed of safely.

A staff holding a pre-packed injection kit. The kits are distributed to people who use drugs in Maputo as part of the harm reduction programme. ©Óscar Corral

In 2020, more than 192,000 syringes were distributed and collected.[6]

[6] The number of collected syringes is not exact, it is an estimation based on the weight of the collected safety boxes

Opioid substitution therapy (methadone)

Opioid substitution therapy, often in the form of methadone, is used by harm reduction services to reduce opioid use and to help people living with both drug-use and HIV to adhere to their antiretroviral treatment. Such substitutes, including methadone, help to stabilise people with opioid use disorder by allowing them to reduce their drug consumption, while avoiding withdrawal and intoxication.

Methadone is on the WHO list of Essential Medicines for use in the treatment of opioid use disorder.[7] It is effective at reducing deaths among people dependent on opioids, including fatal overdoses, illnesses related to HIV/hepatitis C, criminal activity, and other drug use.[8] For most patients, opioid substitution therapy is a longstanding and even lifelong treatment.

Aissa, 49, a recovering drug user takes her dose of methadone during her consultation at a methadone treatment centre in Maputo. ©Óscar Corral

In February 2020, MSF began a methadone treatment programme, involving 200 people, all of who were regular users of opioids. Among this group, self-reported heroin use has dropped dramatically. At the start, 100 per cent of patients consumed opioids every day. After one month, 50 per cent consumed less than 10 times a month. After three months of methadone substitution, more than 50 per cent of the group had not consumed heroin at all in the past month. Some patients had a rapid decrease in opioid consumption, while others reduced more gradually. There is naturally a transition period during which many patients reduce or eventually abstain from use entirely.

The retention in the programme has been very good. After one month, 95% per cent of enrolled patients remained in care and after twelve months this was still at 80 per cent.

As a pilot project, the enrolment capacity was limited, but the strong demand from people who use drugs and the programme's long waiting list show that there **is an urgent need to increase access to methadone treatment in Mozambique.**

[7] The World Health Organization Model List of Essential Medicines

[8] Larochelle MR, Bernson D, Land T, Stopka TJ, Wang N, Xuan Z, et al. Medication for opioid use disorder after nonfatal opioid overdose and association with mortality: A cohort study. Ann Intern Med [Internet]. 2018 Aug 7 [cited 2021 Jan 15];169(3):137–45. Available from: https://pubmed.ncbi.nlm.nih.gov/29913516/ and, Sordo L, Barrio G, Bravo MJ, Indave BI, Degenhardt L, Wiessing L, et al. Mortality risk during and after opioid substitution treatment: systematic review and meta-analysis of cohort studies. BMJ [Internet]. 2017 Apr 26 [cited 2021 Jan 15];357:j1550. Available from: https://pubmed.ncbi.nlm.nih.gov/28446428/

Overdose treatment

Opioid overdose is one of the leading causes of death among people who inject drugs worldwide.[9] In Mozambique, no data is available and the extent of the problem is likely underestimated. Many people coming to the Mafalala drop-in centre told MSF about friends who had died from probable overdoses. They also reported that unsafe procedures had been carried out at the time of the overdose, for example, injecting salt water.

Naloxone is a lifesaving medicine that is used to reverse the effects of opioids and is on the WHO list of Essential Medicines. There is good evidence to support the positive impact of naloxone when it is distributed among peer users of opioids, as they are the often ones present at the time of an overdose.[10]

A sign where beneficiaries have written the name of friends who have passed away as a result of an overdose is seen at the Mafalala Drop-in Centre. ©Óscar Corral

MSF started providing members of the Mafalala community with naloxone in August 2020. To do so, individuals likely to be present and able to intervene when an overdose occurs within the community were identified and invited to take part in voluntary naloxone training. They were trained to recognise the signs of opioid overdose, to carry out basic resuscitation procedures, to administer injectable naloxone, and in what to do after a resuscitation. They received a kit with two vials of naloxone, two syringes and needles, alcohol swabs and a pamphlet with user instructions.

Naloxone is available in an injectable form and as a nasal spray. While the nasal spray would be easier to use and better suited to use by lay people, the injectable version is provided in Mafalala, due to the price and availability of the spray.

> **MSF trained and supplied 79 persons with a naloxone kit. Between August and December 2020, 14 interventions on suspected overdoses were performed by trained community members.**

[9] EHRN, Open society foundations. Why Overdose Matters for HIV - Open Society Foundations [Internet]. [cited 2021 Jan 13]. Available from: https://www.opensocietyfoundations.org/publications/why-overdose-matters-hiv

[10] World Health Organization (WHO). Community management of opioid overdose [Internet]. Geneva; 2014 [cited 2021 Jan 13]. Available from: www.who.int

Key figures

From opening of project until 31 July 2021

160
average number of people visiting the drop-in centre per day before COVID-19 (March 2020), After COVID-19 23/day

250.000
condoms distributed

2460
people who use drugs registered – out of which 378, (15.4 %) people who inject drugs

192,000
syringes were distributed and collected

HIV + rate (including people already knowing their HIV status)

Total among injectors:	41%	157/378
Total among non-injectors:	16.8%	350/2082
Total among all:	20.6%	157/378

The results from the screening in the drop-in centre and community revealed alarming prevalence rates: 41.5 % of injectors were HIV + and 27 % were hepatitis C +

61% of HIV+ were connected to HIV care after testing positive

HIV+ testing and treatment[11]

507/2460	270/442[1]	210/231	120/186	63/120	48/63
41% tested HIV positive	**61%** of which connected with HIV care	**90%** of which started antiretroviral therapy at MSF[1]	**64.5%** which were still in care after 6 months[2]	**52.5%** HIV Viral load test after 6 months	**76%** out of which had suppressed viral load

[1] Some people already knew their HIV positive status and where not retested. They are not included as tested but included in the treatment continuum
[2] No data is available concerning the follow up (start of treatment and HIV viral load) for patients referred to care with another HIV centre

Hepatitis C virus (HCV) + rate

[1] Some HCV patients were referred directly from other health providers
[2] Only people with a detectable viral load, with an active HCV infection, require treatment

Total among injectors:	27%	100/378
Total among non-injectors:	4%	84/2082
Total among all:	7%	184/2460

184/2460	Out of which	69/129[2]	52/69	19/30
7% tested positive for HCV	**129** people had a detectable HCV viral load[1]	**53%** of which were connected with HCV care	**75%** of which started HCV treatment	**70%** cured among patients who finished treatment 13 remain on treatment

[11] Including people already knowing their status prior to testing

Tuberculosis + rate: drug sensitive (DS), drug resistant (DR TB) and multi drug resistant (MDR TB)HIV status)

Total among all tested:	4.4%	109
Total among injectors:	7.4%	28
Total among non-injectors:	3.9%	81

All 109 patients, including 11 DR TB patients, started TB treatment during 2019-2021.

Working with the community and local authorities

Acceptance by the community and local authorities is crucial for a project to be successfully implemented, particularly in a slum area. Piloting this model of care involved many steps to gain this acceptance at community, local and national levels.

The community

The nature of the drop-in centre's activities was new for the local community. As such, it was important to involve them from the very beginning in how run the project to ensure it was accepted and understood. A steering committee, made up of formal and informal community leaders, influential people in the slum and, importantly, people who use drugs, was created to help guide the management of the drop-in centre and represent the community's perspective. The committee helps to address concerns, relay recommendations and promote public understanding of harm reduction activities. This helped the drop-in centre to be recognised by the neighbourhood as a community centre.

MSF peer worker, Carlos, hands out safe injection kits to people who use drugs in Maputo. ©Tadeu Andre/MSF

Local and national authorities

MSF and UNIDOS engaged in long, intense negotiations and wide-ranging engagement work before the launch of the Mafalala project to convince the relevant health and law enforcement authorities of the positive impact it would have on public health. Strategies were put in place to raise awareness among the police, national and local health authorities, and organisations working with civil society and people living with HIV. The project team visited every police station in the Mafalala area to present the planned activities and reinforce the need for cooperation.

The project's community outreach activities were considered particularly sensitive, with MSF's presence in the hotspots perceived by some stakeholders as problematic, as it might identify the different drug consumption sites, putting people at risk of arrest. MSF carefully negotiated this access, and the sensitivities around it, so these activities could take place. As part of this, MSF/UNIDOS's presence at the hotspots was made less visible by removing the use of logos and avoiding bringing cars directly to the sites.

Challenges

Reaching women

Despite various initiatives having been put in place, the number of women who use drugs that have registered with the drop-in centre continues to be low. The overwhelming majority (92.2 per cent) of people using the centre are men. While people who use drugs are usually men, women are more at risk of violence and have different healthcare needs. After exploring the barriers to accessing the centre for women, MSF and UNIDOS created a weekly women-only day, with specific messaging and opportunities for referral to family planning and sexual and reproductive health services. Despite this, reaching women who use drugs remains a challenge.

COVID-19

In March 2020, a state of emergency was declared in Mozambique due to the COVID-19 pandemic, with authorities imposing restrictions to decrease the risk of further spreading the virus. The Mafalala project's activities were adapted to ensure they could continue, but the number of people coming to the drop-in centre fell significantly. This presented the project team with an opportunity to develop the needle and syringe programme in the community, as people could no longer travel to the centre. As a result of their increased outreach work, the distribution of syringes considerably increased in 2020. COVID-19 posed a particular problem for the methadone programme, as movement restrictions prevented patients from going to the health centre each day to receive their doses. After months of negotiations with local health authorities, take-home doses were approved, making patients' lives significantly easier.

The legal system is a barrier in the battle against HIV, hepatitis C and TB

Mozambique's current law against drug trafficking and consumption is widely interpreted in a way that criminalises carrying drug paraphernalia, including needles.[12] Drug use is punishable by up to two years' imprisonment and a corresponding fine, with a higher penalty if the person has already been sentenced for drug trafficking. **This law contributes to the exclusion of people who use drugs by preventing them from seeking healthcare. It makes people who inject drugs more vulnerable and marginalised, and results in higher rates of disease transmission.**

Advocating for harm reduction

Based on the positive experiences of the Mafalala pilot project, MSF advocated for the expansion of harm reduction services elsewhere in the country. To achieve this, MSF worked with the Mozambican Drug Prevention Agency, the National AIDS Council, the Ministry of Health, the UNODC, international donors and others to agree a harm reduction policy and organise funding for future activities.

As a result, **a national harm reduction plan has been approved by the Mozambican Ministry of Health**[13] and harm reduction is included within the government's national hepatitis guidelines and draft key populations guidelines.

In its 2021-2023 grant, the Global Fund to Fight AIDS, Tuberculosis and Malaria **committed to fund the expansion of harm reduction services in Mozambique**, including decentralised HIV and hepatitis C treatment, methadone therapy and overdose treatment. This will allow activities to be implemented in Sofala, Nampula and Maputo provinces, and ensure the continuity of the Mafalala project after MSF's planned handover in December 2021.[14]

Detail of the methadone syrup and single-use cups with which beneficiaries of the heroin substitution programme take their dosage. The dosage is set by a doctor at the Alto-Mae health centre. ©Óscar Corral

[12] Boletim da República, I Série – Número 11, 13 de março de 1997 (Republic Bulletin, I Series – Number 11, published on 11 March 1997) on traffic and consumption of drugs. It does not refer to carrying needles and syringes as illegal. However, disposing of them in a way that puts people at risk of infection is subjected to imprisonment and fines.

[13] Mozambique Harm Reduction programmatic national plan, December 2020

[14] Global Fund funding request for Harm Reduction for 2021-2023

Conclusion

People who use drugs have important health needs, yet they are often excluded from health care. Protecting them from harm and providing them with care not only addresses their needs, but is also essential to combatting the spread of HIV, hepatitis C and other bloodborne diseases.

The MSF/UNIDOS pilot project in Mafalala showed that it is feasible to address the needs of people who use drugs and implement effective harm reduction activities in a resource-limited setting. Despite the challenges faced before and during the early stages of the project, the results of its activities have demonstrated significant potential public health benefits. The project was implemented progressively over three years. It was the first national harm reduction programme in Mozambique, and one of the first projects in Africa to provide naloxone for overdose management at the community level.

The successful implementation of the project can be attributed to several factors:

— **The model of care was well adapted to the setting, with the different services tailored for the needs of people who use drugs.** People could access the services they wanted at different places and times, whether for harm reduction or for healthcare.

— **The peer workers were key to reaching people who use drugs**, and helped to define the outreach strategy that then ensured acceptance of the activities.

— **People who use drugs were considered as partners in the project and were made to feel responsible for their own care.** The services and activities were discussed with the patients and recipients to ensure they responded to their needs.

— **The project was planned, supported and facilitated by the community**; an enabling environment was created by engaging with people who use drugs, drug dealers, civil society organisations, medical staff, local police, community members and local health authorities. **It is an activity by the community, for the community.**

Psychosocial counsellor Fatima Macía is one of the first people to talk to those interested in enrolling in opioid substitution therapy. She says she has learned and received more from drug users than she has been able to give, and finds it very hard to get them on the waiting list. ©Óscar Corral