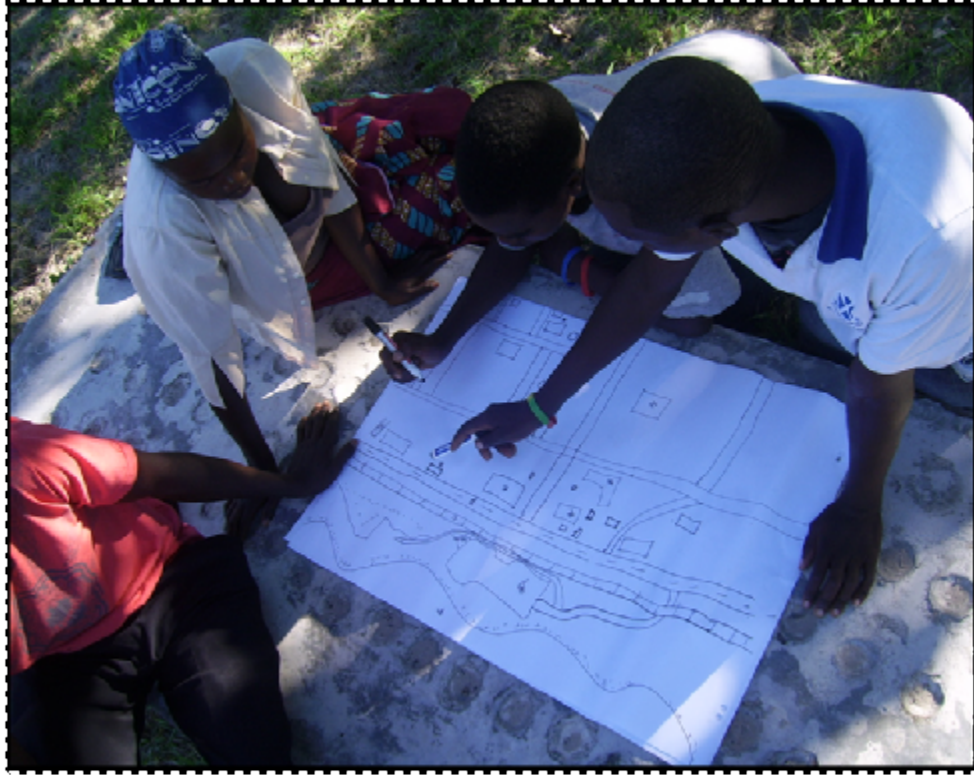


Strengthening Community Health Systems for HIV Treatment, Support and Care Marracuene District: Mozambique



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1. Executive summary

Mozambique remains among the less developed countries in the world, with a GDP per capita of USD 440 in 2008, and a Human Development Index (HDI) score of 0.284 in 2010 (ranking 165 of 169) (UNDP 2010). Mozambique ranks among the 10 most HIV/AIDS affected countries in the world. HIV/AIDS has been accelerating with increasing intensity with an adult (15–49) prevalence percent increasing from 9.4% in 2001 to 11.5% in 2009 according to the UNAIDS 2010 global report on HIV/AIDS. Given the high average prevalence level, coupled with structural factors such as poverty, gender inequality, cultural conditions and high levels of labor mobility conditions conducive for a continuing increase in HIV infection within the country. Currently, an estimated 1.4 million people living with HIV or AIDS in the country, with only an estimated 170 198 people receiving treatment at the end of December 2009 constituting an estimated 32% ART coverage (UNAIDS 2010)

It is this background that premises the Participatory Action Research (PAR) carried out in Nhangonhana, in Marracuene district – Mozambique jointly with communities. This work is being carried out in east and Southern Africa with research coordination through the Training and Research Support Centre (TARSC) and with University of Eduardo Mondlane (UEM) in Mozambique. Through South-North cooperation in the ACP Science and Technology programme, the Community Based Systems on HIV treatment (COBASYS) Consortium in Africa and Europe aims to use the evidence from a Participatory Action research process to inform advocacy on building primary health care oriented systems that respond to community systems for responding to HIV/AIDS and services that support these systems. This is to ensure that resources get to those who need them to most. The study used mainly qualitative Participatory Reflection and Action (PRA) approaches using a PRA research protocol guide (Machingura et al 2010). The PRA protocol used various PAR tools that enabled the drawing of data from the study units in the field while also prospectively planning and defining mechanisms through which systems for strengthening HIV responses could be built and supported.

The study units included men, women, young people, health workers, opinion leaders, leadership living with or affected by HIV/AIDS in Marracuene district. Marracuene is a part of Maputo province and is 30 Km from the city of Maputo, bordered to the north by the district Manhiça (Maputo Province), the south by Maputo city, west by the District of Moamba and on the east by the Indian Ocean.

This report presents findings of this action research.

The community social mapping highlighted that peasants constitute the main social group in rural Marracuene, other groups include religious groups, Home Based Care Givers sportspeople, dancers, youth, children and HIV/AIDS support groups, Community based groups and NGOs.

Women's participants' prioritised lack of adequate infrastructure. They argued the shortage had a huge bearing on privacy and confidentiality issues; this problem was particularly common amongst Antenatal care services. This was reported to reduce service uptake. Lack of bridges was reported to disable communities from producing adequate food; impacting on the nutrition security at household level. Resultantly, HIV/AIDS clients particularly those on ARVs find it difficult to adhere to treatment. The participants recognized food and nutrition insecurity often drive young girls into prostitution to provide food for their siblings and for themselves, further they noted that young boys are often driven into criminal activities and some land on the street in the Capital Maputo about 30KM away.

Lack of safe water supply was noted a social determinant to ill health, a cause for diarrhoeal diseases reported as common among children; with Children living with HIV most at risk. Lack of transport was reported to increase the out of pocket costs discouraging HIV clients from seeking their treatment on time. Often cases, HIV clients default from treatment as a result. Unavailability of doctors at local clinics meant that there was no trusted advice and consultation from the health services. Drug side effects, was reported to require the accessible expertise at the lowest level of the health system.

The findings suggest that health service availability is generally poor at the primary care level of the health system with more resources in higher service levels. Essential Medicine supply, adequate staffing; equipment and other supplies is still far from the demanded need. The shortage of trained health workers at the point of care was observed to undermine contact coverage. Findings suggest that this shortage often leads to huge out of pocket costs; long waiting times; service dissatisfaction; reduced service quality; foul patient health worker client communication.

The gender norms remain a key element for spreading the HIV infection. This is because they impair both women's and men's capacity to take preventive measures, and in one way or another affect their access to health care and sound education of young people. The peasant women are generally not responsible for selling the products they produce in the field. The husbands take care of the sales, and keep the money. In case of sickness it is not easy for a woman to get to the health centre and pay for the expenses. Economic dependence leads to engagement in unprotected sex and a cycle of poverty and ignorance is vicious. If women are abused, they hardly have the desire to seek medical care, much less on HIV.

Overall, the opportunity to scale up the Mozambiquan national HIV treatment response in the wake of enormous challenges due to the lack of adequate financial, human, technical and institutional capacities at all levels appear amenable to action.

Important conclusions can be drawn from this study:

- 1) due to the shortage of health workers and shortage of resources (including information resources) at the primary care level, most people living with or caring for those living with are neither able to give good information to the sick or those at risk nor able to understand treatment literacy. Continuing education and health Literacy are therefore vital.
- 2) Community participation can be supported and strengthened, thus, it is important in order to build a strong prevention program integrated with care and treatment of PLWHA and support to orphans. Community participation is particularly vital for the scaling up of home-based care for PLWHA, including the development of community DOT systems as part of the ARV therapy.
- 3) Given the general lack of access to health services and the levels of Poverty, the primary challenge is to save the life of a patient with HIV or AIDS and not let them succumb to malaria, diarrhea, cholera, tuberculosis or even malnutrition. Thus HIV care and treatment should be integrated in other treatment programmes at the primary care level. This will largely depend on the management of pharmaceuticals to acquire and distribute ARVs and other essential medicines, antibiotics for treatment of opportunistic infections, reagents for diagnosis and other consumables on time and adequately at primary care level.

2. Background

Mozambique remains among the less developed countries in the world, with a GDP per capita of USD 440 in 2008, and a Human Development Index (HDI) score of 0.284 in 2010 (ranking 165 of 169)¹. Mozambique ranks among the 10 most HIV/AIDS affected countries in the world. HIV/AIDS has been accelerating with increasing intensity with an adult (15–49) prevalence percent increasing from 9.4% in 2001 to 11.5% in 2009 according to the UNAIDS 2010 global report on HIV/AIDS. The high average prevalence level, coupled with structural factors such as poverty, gender inequality, cultural conditions and high levels of labor mobility, create conditions conducive for a continuing increase in HIV infection within the country. Currently, an estimated 1.4 million people living with HIV or AIDS in the country, with only an estimated 170 198 people receiving treatment at the end of December 2009 constituting an estimated 32% ART coverage (UNAIDS 2010) (see table 1 below summarizing the epidemiology of HIV in Mozambique).

Table 1: Summary of the epidemiology of HIV in Mozambique

Number of people living with HIV, 2009	1 400 000
Number of people receiving antiretroviral therapy in December 2009	170 198
Antiretroviral therapy coverage (2010 WHO guidelines)	32%
Life years among adults gained due to ART between 1996 and 2009	139 000
Adult (15–49) prevalence percent 2009	11.5%
Adult (15–49) prevalence percent 2001	9.4%
Adult (15–49) incidence rate 2009	1.19
Adult (15–49) incidence rate 2001	1.77
AIDS-related deaths in adults + children 2009	74 000
AIDS-related deaths in adults + children 2001	43 000
Reported number of people receiving antiretroviral therapy, 2008	128 330
Reported number of people receiving antiretroviral therapy, 2009	170 198

Source: UNAIDS 2010 global report on HIV/AIDS

The Mozambique national response to the HIV/AIDS epidemic started in 1998 through the National Programme to Combat AIDS set up by the Ministry of Health focusing on health related aspects of the epidemic. In 2000, the National AIDS Council (NAC) was set up as a government agency with the task of coordinating, monitoring and evaluating all HIV/AIDS-related activities in the country, as well as to mobilize resources for a comprehensive and Multisectoral response to HIV/AIDS. In the same year, the National Strategic Plan to Combat STD and HIV/AIDS 2000 – 2002 (NSP) was developed to strengthen the role and objectives of the National AIDS Council.

It is this background that premises the Participatory Action Research (PAR) carried out in Nhangonhana, in Marracuene district – Mozambique jointly with communities. The PAR is a part of the three similar researches Conducted in Mozambique to identify mechanisms to strengthen facilitators and address blocks in effective coverage of resources at the primary care level of the Health system. This work is being carried out in east and Southern Africa with research coordination through the Training and Research Support Centre (TARSC) and with University of Eduardo Mondlane (UEM) in Mozambique. Through South-North cooperation in the ACP Science and Technology programme, the Community Based Systems on HIV treatment (COBASYS) Consortium in Africa and Europe aims to use the evidence from a Participatory Action research process to inform advocacy on building primary health care oriented systems that respond to community systems for responding to HIV/AIDS and services that support these

¹ UNDP (2010) Human Development Report 2010; 20th Anniversary Edition: The real wealth of Nations: Pathways to human development; UNDP Newyork

systems. This is to ensure that resources get to those who need them to most. The learning and evidence from this tier of the health system is collated, synthesized for national level advocacy and further integrated at regional level for global engagement.

Within the overall framework of the COBASYS programme, **the Nhangonhana PRA research aimed to:**

1. Map the social economic differentials within the communities that affect risk and vulnerability to HIV and AIDS, and that may have an impact on uptake of available services for prevention, treatment and care of AIDS
2. Using this, identify the nature of the epidemic in the community in terms of risk groups and environments, the public health stage and burdens of the epidemic and discuss the nature of the responses needed for key social groups.
3. Map the resources, institutions and actors available at community and primary care level to respond to the epidemic.
4. Identify for key social groups the priority social and economic determinants at individual, household, community and system level that facilitate and block availability, access, acceptability, uptake, quality of care in and adherence to the resources above for prevention, treatment and care for HIV and AIDs (including community knowledge on social rights)
5. Review the evidence to assess the opportunities and mechanisms to enhance facilitators and overcome priority blocks to availability, access, acceptability, uptake, quality of care in and adherence to services: (e.g. opinion leader and health worker attitudes and practices; communication processes and skills, mechanisms for social dialogue and communication; resource transfers, service organization and so on)

3. Methods

The study used participatory Action research (PAR). This used various PAR tools that enabled the drawing of data from the study units in the field while also prospectively planning and defining mechanisms through which systems for strengthening HIV responses could be built and supported. The following table gives a summary of how the methodology was staged and how each tool was designed to address a study objective. The study PAR protocol is separately provided (Machingura F et al 20101)

Table 2: Staging of Methodology and how each of the aims was addressed

Objective	Method
Stage 1 meeting	
Map the social economic differentials within the communities that affect risk and vulnerability to HIV and AIDS, and that may have an impact on uptake of available services for prevention, treatment and care of AIDS	<ul style="list-style-type: none"> • Social mapping, • Map interview • Discussion
Using this, identify the nature of the epidemic in the community in terms of risk groups and environments, the public health stage and burdens of the epidemic and discuss the nature of the responses needed for key social groups.	<ul style="list-style-type: none"> • Stepwise diagram and Focus Group Discussion (use FGD guide)
Identify for key social groups the priority social and economic determinants at individual household, community and system level that facilitate and block availability, access, acceptability, uptake, quality of care in and adherence to the resources for prevention, treatment and care for HIV and AIDs (including community knowledge on social rights)	<ul style="list-style-type: none"> • Ranking and scoring • Problem tree • Discussion
Map the resources, institutions and actors available at community and primary care level to respond to the epidemic.	<ul style="list-style-type: none"> • Stakeholder analysis • Plenary roundtable (community roundtable)
Review the evidence to assess the opportunities and mechanisms to enhance facilitators and overcome priority blocks to access	<ul style="list-style-type: none"> • Leaping blocks • Market place • Discussion

Identify strategies for strengthening these opportunities and mechanisms as recommended by communities, health authorities, opinion leaders and key stakeholders, the actions that can be taken in the medium and long term for these strategies and the progress markers for these actions

- Margolis wheel
- Spider web
- Group discussions
- Market place

(Refer to Loewenson R et al 2006, Loewenson R et al 2007, Loewenson et al 2008, Loewenson et al 2009 and Machingura F et al 2010 – CoBaSys PRA Research Protocol) for further reading on tools used.

The study units included men, women, young people, health workers, opinion leaders, leadership living with, affected by, and or working on HIV AIDS issues in Marracuene. Prior to the research was necessary to get authorization from provincial health directorate in Maputo, contact the district administrative and health authorities. The study carried out in Nhangonhana, entailed a 4 days PRA research meeting.

A desktop study was employed to review literature, providing an update on the current progress and state of legislation with regard to HIV situation in Mozambique and this has been used in the compilation of this report.

It is therefore important to note that the tools used to define the PRA research in this study have been peer reviewed and tested to assert significance of tools in a sound research manner.

Weaknesses associated with PRA, noted in this research include:

- Problems with translations of terms that are not available in local cosmologies(i.e. during the mapping exercise)
- Working with a different language at different stages of the research(from Portuguese to changing in the data collection, English to Portuguese in the research tools)
- Time consuming and repetitive.

The research protocol outlines the conceptualisation of HIV treatment understood to encompass a range of curative services, including treatment of opportunistic infections, tuberculosis, sexually transmitted infections and the provision of antiretroviral drugs. Beyond this clinical component, treatment is also understood to include a range of management and support interventions such as treatment literacy, psychosocial support, nutrition education and integrated management of HIV/AIDS and STIs. These measures, aimed at maximizing treatment adherence and efficacy, are essential complements to medical interventions. Treatment may involve the actions of a single provider, but often involves the actions of different providers acting simultaneously.

3.1. The study site

Marracuene was purposively sampled for three reasons: 1) the historical high prevalence in the southern region in which Marracuene is geographically positioned (13.2% 2001 regional rate at second position after the central region (16.5%). This was attributed to the refugees returning to Mozambique, after the peace agreement in 1992, from neighbouring countries where rates of HIV/AIDS are high, such as Malawi and Zambia. The mobility of the population along the transport corridors that link Mozambique and the port of Beira to Zimbabwe and Malawi is also a factor. Marracuene in Maputo province, close to the province of Sofala all in the South are close to the major port of Beira where HIV prevalence has historically been reported as high (21% in 2001 according to the Ministry of Health). 2) Due to limited resources to implement this work in some of the furthest communities Marracuene provided a closer base where work can be jointly monitored with the communities.

Marracuene is part of Maputo province and is 30 Km from the city of Maputo. The district is bordered to the north by the district Manhiça (Maputo Province), the south by Maputo city, west by the District of Moamba and on the east by the Indian Ocean. The district of Marracuene extends for an area of 703Km² and is inhabited by a population of about 41.817 people, mostly

rural. It is subdivided into 5 Localities Michafutene, Nhongonhane, Macandza, Tafula 'e de locality headquarters'.

4. Findings

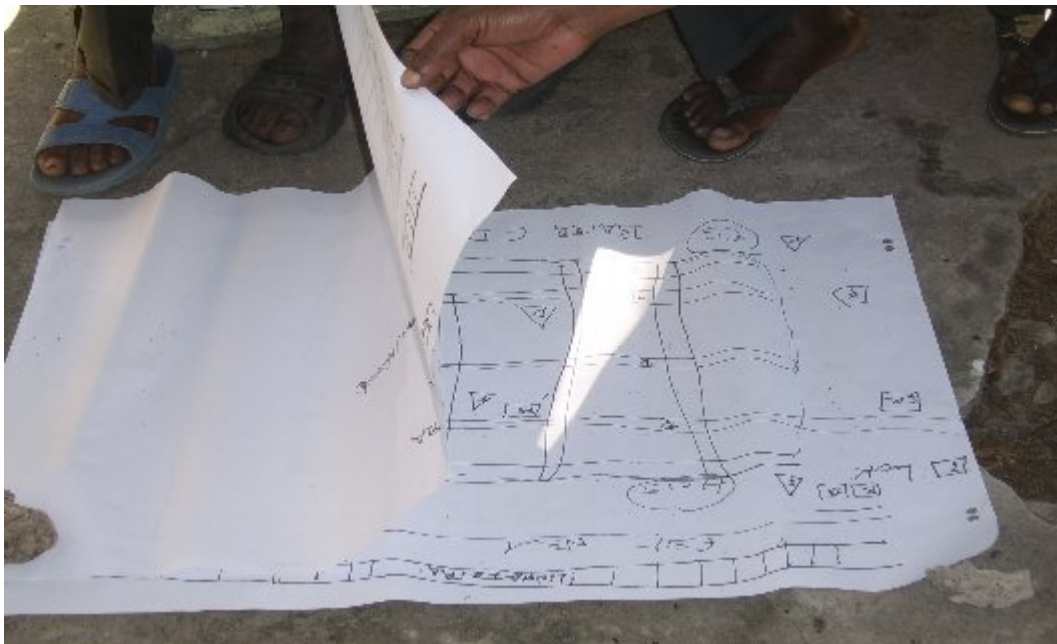
4.1. Mapping social and economic differentials in Marracuene district

Participants were divided into groups according to gender and age and drew a map of their community on flip charts. Three groups were established one comprised of young adults, the other comprised of women and the third one comprised of man. Participants identified the main features of their communities and discussed how the main features 1) facilitated and 2) blocked systems that respond to HIV at community level. Among the features, included roads, health facilities, churches, community leaders, local government structures, NGOs, houses as well as community centres, sources of waters, markets, schools, game fields, shops and the river.

In this context, participants understood a community as a group of people who share relationships by interacting around shared experiences, which are of interest to all of them for varying individual reasons. This group of people could live in same geographical location or may not, but rather as the network of actual social relationships they maintain, regardless of whether these are confined to the local area or run beyond its boundaries.

Whereas a community system was understood as the total of all the organizations, local government structures, civil society organizations, institutions and resources whose primary purpose is to improve health at primary care level. The community system draws organizations into a broader primary care based service provision network structure for improved service delivery into the wider health system. The primary care level is the first level of care in the health system, it is the lowest tier where people are and where need is greatest

This understanding stem from the contextualization and conptualising the action research protocol for the research (Machingura et al 2010)



Social maps: Nhongonhane, Marracuene District.

Main existing social groups

Peasants' are the main social group in rural Marracuene. However, one can also find State officials and servants working in the different locations of the district (e.g. health providers, teachers and other State agents). Merchants, especially street vendors, and those working in the informal sector, community leaders (among them local chiefs, religious leaders and traditional healers) are also to be found in Marracuene. At times, *activists*² from NGO's also show up during community activities, however, most of them are not based in the Marracuene district

Local residents constitute diverse social groups: religious groups, Home Based Care Givers sportspeople, dancers, youth, children and HIV AIDS support groups. Adult men, in particular, but at times also adult women, are found in drinking groups. Political organizations such as the Organization of Mozambican Women (OMM), Youth Mozambican Organization (OJM), Traditional healers Society (AMETRAMO) and peasants Associations compose other key social groups in the community. In Marracuene they also do have home based care groups.

Groups at risk

Participants highlighted that young people are at greater risk of getting infected by STIs including HIV due to their sexual inexperience, multiple and concurrent partners and lack or inconsistent use of condoms. Adults, both men and women, were also highlighted as risky social groups for the same reasons as youth groups i.e. multiple and concurrent partners and lack or inconsistent condom use. Alcohol abuse, for both men and women, was presented as one of the main drivers to STI and HIV infection. Alcohol abuse was reported to expose people, particularly adults, not only to *'unacceptable irresponsible behaviour'* but also to STIS.

4.2. Priority socio-economic determinants that facilitate and block health service coverage.

Using the PRA tool termed 'Ranking and Scoring' the researchers worked with communities to identify and prioritise the socio-economic determinants of HIV that facilitate or block service responses to HIV. The following table presents the findings.

Table 2: priority socio economic HIV AIDS problems and needs by social groups

Problems identified	priority
Women	
Lack of adequate infrastructure: (<i>Maternity hospital and medical consultation joined in the same place</i>)	2
Lack of water and electricity	3
Lack of bridges linking their residential areas and crop fields and hospital services	1
Men	
Lack of incinerator for hospital waste	1
Lack of transport for people living far away from the hospital	2
Lack of bridge linking their residential areas and crop fields and hospital services	3
Youth	
Lack of transport	3
Unavailability of doctors at the hospital	1
Lack of incinerator for hospital waste	2

² *Activistas* are people trained by Government institutions or NGO's to promote develop related matters.

Women's participants pointed out that lack of adequate infrastructure was associated with lack of privacy and confidentiality; this problem was particularly common amongst Antenatal care and other pregnant women services. This was reported to often lead to women who would have otherwise used services to shun away from these services. In some cases HIV positive cases would go unaddressed leading to children who might have had a chance to be born negative being born positive.

Absence of bridges was reported in both the women and the men's group. Both social groups reported that lack of bridges disable them from producing adequate food; impacting on the nutrition security at household level. They noted that for those living with HIV particularly those on ARVs find it difficult to adhere to treatment. The participants recognized food and nutrition insecurity often drive young girls into prostitution to provide food for their siblings and for themselves, further they noted that young boys are often driven into criminal activities and some land on the street in the Capital Maputo about 30KM away.

Lack of safe water supply was noted a social determinant to ill health, a cause for diarrhoeal diseases reported as common among children. Participants reiterated that Children living with HIV were most at risk. Further, they noted that while the impact was serious among the children the effect was the same for adults and young adults. Women, who are often found as the bearers for household chores were reported to walk long distances to fetch safe water, taking them away from other important chores such as caring for the sick at home. Thus, the sick were reported to be left without care and some succumb and die prematurely due to stress and lack of psychosocial care.

Men like youth reported that the lack of incinerators at the hospitals posed a public health risk for those working at the hospital and for the community at large. They noted waste management at hospital services was not being prioritised by the government albeit it being one of the key elements that should be considered in health service structures.

Lack of transport was ranked second by men participants and ranked as the first priority by youth. Both groups argued the shortage often increases the out of pocket costs discouraging HIV clients from seeking their treatment on time. Often cases, HIV clients default from treatment as a result of this problem

Youth participants noted that the unavailability of doctors at local clinics meant that there was no trusted advice and consultation from the health services. They reported that for drug side effects, they required the expertise of trained health workers, doctors in particular. The shortage meant that most cases of drug side effects went unreported, minor ailments went unaddressed leading to progression of HIV to AIDS for those not on treatment.

4.3. The underlying, intermediate and immediate causes of Priority HIV AIDS needs

To determine the underlying key determinants of the HIV treatment in Marracuene a PRA tool termed the '*problem tree*' was used. The action research tool explored and interrogated the immediate and underlying structural problems that lead to the prioritised problems for each social group. The following table presents the findings.

Table 3: Underlying and immediate causes of priority problems

Social group and priority problem	Underlying problems	Intermediate problems	Immediate problems
Women: Lack of Bridges	<ul style="list-style-type: none"> • Lack of political will • Poor prioritisation of community priorities at national level • Lack of community participation in defining government strategies 	<ul style="list-style-type: none"> • Food insecurity • Nutrition insecurity • Poverty • Low income to support health at household level 	<ul style="list-style-type: none"> • HIV treatment defaulting • HIV drug resistance • Progression of HIV to AIDS
Men: Lack of incinerator for hospital waste	<ul style="list-style-type: none"> • Poor prioritisation of community priorities at national level • Lack of community participation in defining government strategies 	<ul style="list-style-type: none"> • Disease outbreaks 	<ul style="list-style-type: none"> • Progression of HIV to AIDS for those not on treatment • Low HIV Service uptake
Youth: Unavailability of doctors	<ul style="list-style-type: none"> • Outmigration of trained doctors to developed countries for greener pastures • Low resources allocated for health • Poor health worker incentives 	<ul style="list-style-type: none"> • Poor health worker remuneration and • Poor incentives to retain doctors and other key human resources for health 	<ul style="list-style-type: none"> • HIV treatment defaulting • Increase in HIV drug side effects • HIV drug resistance • Progression of HIV to AIDS for those not on treatment • Low HIV Service uptake

Discussing on the facilitators to avert problems associated with disabling people centred HIV systems at community level and to enable access to HIV treatment, participants echoed the central element of involving communities in programme planning and resource allocation. Central to this discussion was the willingness of communities to take responsibility in addressing challenges that disable delivery of HIV services particularly for treatment. Community groups, local organisations including NGOs and local government structures were also provided as existing structures that could take a leading role in facilitating access to treatment. Community level leadership including traditional leadership and local authorities were argued to have a key role in enabling the delivery of HIV services at community level. Community pressure groups were noted to have a role in advocacy particularly to put pressure on the government to fairly remunerate doctors and other key health workers including providing incentives to retain the few that are available.

4.4. Current service coverage, gaps and barriers

The discussion on the levels of health service effective coverage of HIV AIDS services and resources used the Tanahashi conceptual framework for the organization of data. The framework aggregates the levels into five domains i.e. Availability coverage; acceptability coverage; accessibility coverage and contact coverage. Health service coverage was understood as the extent to which services reach out to communities needing it. In this context it is the extent to which health services reach out to communities affected and living with HIV including some vulnerable groups and other social groups in similar social networks. It also

addressed how communities interacted with the services provided by community health systems and the wider health systems in terms of access, provision and uptake of HIV treatment, support, prevention and care services. Services included those provided by health care systems, those demanded by communities, resources generated for health, financing of health systems and stewardship

- 1) **Availability coverage:** Are the health care resources (infrastructure, medicines, personnel) available, and for whom.
- 2) **Accessibility coverage:** Are these health care resources accessible, and for whom? There may be physical or financial barriers to access.
- 3) **Acceptability coverage;** Are the health care resources / services acceptable to the population, and for whom? This includes social, cultural and perception financial barriers to using services.
- 4) **Contact coverage:** Are people making contact with the services, and who? Or utilisation
- 5) **Effective coverage:** what share of the population in need of an intervention effectively receives that intervention? This does not include the health impact of the intervention, but does include successful and complete compliance with the entire intervention, whether treatment, maternal health services etc.

Figure 7: Tanahashi model of health service coverage



The following table presents the findings:

Availability coverage	
Available resources	Unavailable resources
<ul style="list-style-type: none"> • Community participation through the facilitation of traditional leadership, faith based organizations; Home Based Care groups; local and international NGOS such as Action Aid; and AMETRAMO on civic education 	<ul style="list-style-type: none"> • Shortage of health workers • Shortage of essential medicines • Inadequate infrastructure and equipment •

<ul style="list-style-type: none"> • Infrastructure ('Postos de Socorro'- facilities at the lowest level of the health system and District Hospitals) • Family planning, ANC, PMTCT services • HIV/AIDS Counseling , testing CD4 counting and treatment at the district hospital • ARVs are available at higher hospital service level. 		
Accessibility coverage		
Factors facilitating accessibility coverage	Factors inhibiting accessibility coverage	
Services are mostly free	<ul style="list-style-type: none"> • HIV services needed by clients are found at the district level bar testing and counseling • Transport costs increase the cost of HIV services 	
Acceptability coverage		
Factors facilitating acceptability coverage	Factors inhibiting acceptability coverage	
	<ul style="list-style-type: none"> • Lack of trust between communities (HIV clients) and health workers (Clients believe that health workers disclose their private information to the public) • Poor infrastructure (maternity wards are close to the consultation rooms, most women feel uncomfortable delivery at the local Marracuene clinic and opt to go elsewhere) • Gender norms that impair both women and men to fight HIV. • Stigma and discrimination against HIV and AIDS 	
Contact coverage		
Factors facilitating contact coverage	Factors disabling contact coverage	
<ul style="list-style-type: none"> • Counseling • HIV/AIDS information • Rapid testing • Health education • CD4 count, ARVs, at the district level 	<ul style="list-style-type: none"> • Congestion at health services facilities • Low health worker motivation due to low remuneration 	

The shortage of skilled health workers, medicines and equipment at the peripheral level of the health system overloads the District Hospital as more and more clients choose to jump the local facility to the district hospital where services can be found. Consequently, clients with preeminent needs, including PLWH have to wait for long time to be seen by a doctor or to collect their medicines.

The following quotes corroborate some of the findings presented in the table above:

“People from communities away from Marracuene find it difficult to reach the district hospital for several reasons. Some of them lack money to pay for transport that would take them to Marracuene. Those who do have money but live far away from the main road to Marracuene do not have access to transport to the main road. Those who manage to reach the main road face an additional problem, the chapa³ which are the main means of transportation do not carry people travelling shorter distances, such as those travelling to Marracuene instead they prefer to carry people travelling longer distances. E.g. those travelling to Maputo city, from Manhiça”

³ *Chapa* is the name given to 12 seats mini buses used as the main mean of transport in Mozambique.

“Before being tested, the person receives a pre counselling session followed by a post test counselling session, once the test is done. The health facility notifies the partner to come to the health facility. Those who accept to come are tested for HIV. However, most of the partners do not accept to bring in their entire network of partners. Women, normally will argue that their partners are working abroad or out of the district, making impossible to test them. While sometimes it might be true, most of times its simple the strategy that they find no to bring in their partners, specially partners socially perceived as inappropriate (e.g. Lovers, especially those who are married). Men, on their turn most of times do not bring in their partners, especially when they got infected from sex workers or other kind of occasional partners who are not easel to track”

“At times, testing might contribute to create social problems. For instance, in the context where HIV is mainly perceived as an infection that is contracted from extramarital affairs, it becomes difficult to explain to an husband who is HIV negative that his partner is HIV positive, or to explain to a HIV negative wife that her husband is HIV positive. And in such situations violence and divorce are not exceptions but the rule.”

4.5. Community systems and mechanism for referral network in HIV treatment

In the context of this research participants conceptualized a referral as a system that enables client needs to be met for comprehensive HIV care and supportive services such as setting up appointments or giving directions to facilities including reasonable follow-up efforts to facilitate contact between service providers and to solicit clients' feedback on satisfaction with services. Participants identified local groups, NGOs (Assomude, AJACEM, APOJ, KULIMA, ORAM, Action aid, ORAM) and Home Based care givers as the referring institutions at community level. The services provided by these institutions include home visits, psychological support, and awareness campaigns for HIV testing, training on gender and HIV and AIDS. Home Base care givers were reported to assist an HIV client in managing hygiene, bathing, fetching water and firewood working on voluntary basis.

Participants noted that volunteerism is considered a yardstick by which civic engagement, participation in development and social capital can be assessed. Through volunteering, social capital is fostered by investing time to build mutual trust in communities. However in places where social services are underdeveloped, government can rely unfairly on the volunteers, contributing to the professionalization of volunteering without adequately remunerating volunteers for their contribution in the area of health.

Participants highlighted that the Integrated Network at the district hospital provides the basic infrastructure of care (though not adequate and undermines privacy), clinics, VCT, treatment of opportunistic infections and chemoprophylaxy, as well as antiretroviral treatment. It links the different services, including the tuberculosis program, PMTCT, and home based care.

“First, our work is not recognized, not remunerated, and men as bread winners cannot commit to this type of work , they are not socialized to be better cares and letting an unknown man into one's house is still taboo”

Participants reported that the referral system in the health system is not followed as most people often leave their homes to the district hospitals often congesting services, tiring health workers and leading to low quality services provided to the HIV client.

5. Discussion and conclusions

Based on the findings, the evidence from this action research suggests that health service availability is generally poor at the primary care level of the health system with more resources in higher service levels. This is perceived as a cost particularly to HIV clients who are forced to fork out transport costs, food and other travel expenses to reach the district hospital where services are and where services are for 'free'. The roads and means of transportation available in Marracuene do not allow proper communication to/from health centers. Essential Medicine supply, adequate staffing; equipment and other supplies is still far from the demanded need. The shortage of trained health workers at the point of care was observed to undermine contact coverage. Findings suggest that this shortage often leads, to some clients either spending more waiting for a health worker to serve them; receive unsatisfactory service either from an inexperienced health worker or simply from their perception to want to be served by a doctor. This could lead to defaulting in treatment, non adherence to treatment. Both results can lead to drug resistance which can be argued to be an issue that can cost the health system and the government in the long term.

Accessibility of health services is one of the government main concerns and many actions in place to ensure that health services are accessible to those in need, by extending the existing coverage both in terms of existing facilities as well as in terms of available services at the lower level of the health system. The presence of volunteers and community based groups at community level provide an opportunity to strengthen community participation and support volunteerism as an HIV response mechanism. From these findings, volunteerism can be considered a yardstick by which civic engagement, participation in development and social capital can be assessed. Through volunteering, social capital can be fostered by investing time to build mutual trust in communities. However in places where social services are underdeveloped, such as in Marracuene Mozambique; government can rely unfairly on the volunteers, contributing to the professionalization of volunteering without adequately remunerating volunteers for their contribution in the area of health.

The gender norms remain a key element for spreading the HIV infection. This is because they impair both women's and men's capacity to take preventive measures, and in one way or another affect their access to health care and sound education of young people. The peasant women are generally not responsible for selling the products they produce in the field. The husbands take care of the sales, and keep the money. In case of sickness it is not easy for a woman to get to the health centre and pay for the expenses. Economic dependence leads to engagement in unprotected sex and a cycle of poverty and ignorance is vicious. If women are abused, they hardly have the desire to seek medical care, much less on HIV.

Overall, the opportunity to scale up the Mozambiquan national HIV treatment response in the wake of enormous challenges due to the lack of adequate financial, human, technical and institutional capacities at all levels appear amenable to action.

Important conclusions can be drawn from this study:

- 4) due to the shortage of health workers and shortage of resources (including information resources) at the primary care level, most people living with or caring for those living with are neither able to give good information to the sick or those at risk nor able to understand treatment literacy. Continuing education and health Literacy are therefore vital.
- 5) Community participation can be supported and strengthened, thus, it is important in order to build a strong prevention program integrated with care and treatment of PLWHA and support to orphans. Community participation is particularly vital for the scaling up of

home-based care for PLWHA, including the development of community DOT systems as part of the ARV therapy.

- 6) Given the general lack of access to health services and the levels of Poverty, the primary challenge is to save the life of a patient with HIV or AIDS and not let him or her die from malaria, diarrhea, cholera, tuberculosis or even malnutrition. Thus HIV care and treatment should be integrated in other treatment programmes at the primary care level. This will largely depend on the management of pharmaceuticals to acquire and distribute ARVs and other essential medicines, antibiotics for treatment of opportunistic infections, reagents for diagnosis and other consumables on time and adequately at primary care level.

6. List of Acronyms

ART	Anti-Retroviral Therapy
CBO	Community Based Organisation
CISM	Centro de Investigação em Saúde da Manhiça
CoBaSys	Community Based Systems in HIV Treatment
INE	Instituto Nacional de Estatística
NGO	Non Government Organisation
STI	Sexually Transmitted Illness
PARPA	Absolute Poverty reduction Strategy
PLWHA	People Living with HIV AIDS
PRA	Participatory reflection and Action

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