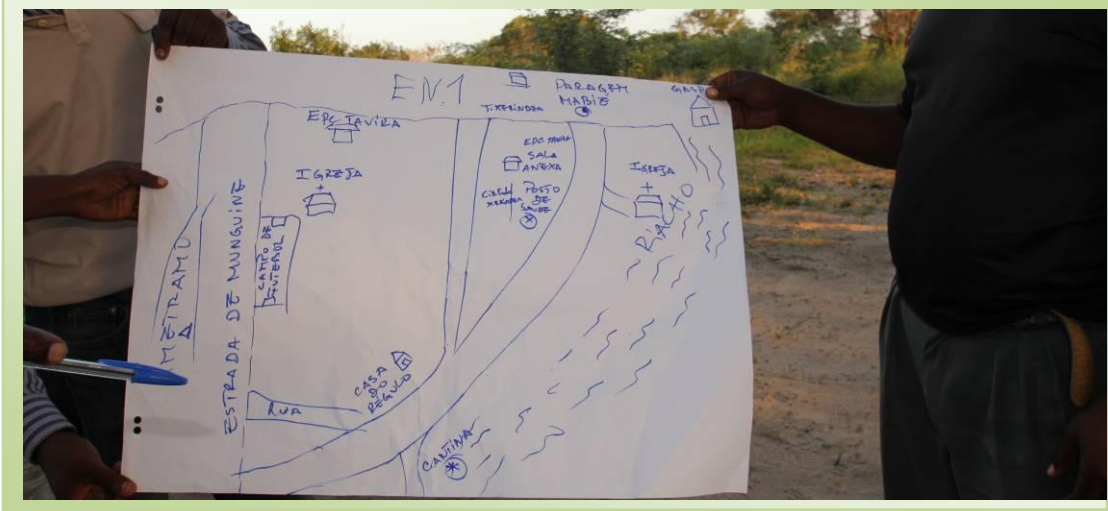


Strengthening Community Health Systems for HIV Treatment, Support and Care Manhiça District – Mozambique



An ACP-EU co-operation programme in the field of science and technology
 Ana Laforte, Emidio Gune, Adérito Machava, Alexandre Mate, Fortunate Machingura



**University of Eduardo Mondlane
 Training and Research Support Centre
 In the Community Based Systems in HIV
 Treatment (CoBaSys) programme**



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Table of contents

1. Executive Summary	3
Recommendations for community action	4
Recommendations for health system actions.....	4
2. Background	6
3. Methods	9
Site Selection	11
The PRA research meetings	12
4. Findings of the PRA research.....	13
4.1. Mapping social and economic differentials in Manhica district	13
4.2. Priority socio-economic determinants that facilitate and block health service coverage.....	15
4.3. Identifying the underlying, intermediate and immediate causes of health needs.....	16
4.4. Defining HIV/AIDS responses for key social groups in health services coverage.....	18
5. Discussions	21
6. Recommendations and conclusions	21
6.1. Recommendations for community action.....	21
6.2. Recommendations for health system actions	22
7. List of Acronyms	23
8. References	24

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Cover photo: Adérito Machava

1. Executive Summary

The gradual increase in adult HIV prevalence (15-49) age group from an estimated 10.3% in 2001 to 12.5% in 2007 (UNAIDS/WHO 2008 epidemiological fact sheet) shows an increase in the need for ART in Mozambique. The number of people on antiretroviral treatment increased more than 13 fold from an estimated 7000 to 90000 in 2004 and 2007 respectively. However, according to the UNAIDS/WHO methodology, the number of people needing antiretroviral therapy was estimated at 390 000 in 2007 (compared to 90000 people on treatment in the same year) which leaves a gap of more than 300 000 people needing treatment (*and not on treatment*) (UNAIDS/WHO 2008). These inequities signify need for effective interventions that enhance effective coverage of HIV treatment while strengthening factors that enable access to health care at the primary care level.

Thus, as the number of people on HAART increases in resource-limited settings, not only new models of delivery are needed to manage increasing caseloads but also new mechanisms for enhancing effective coverage of treatment support and care at the primary care level of the Health System. Mozambique with a national HIV prevalence estimated at 12.5% in 2007 (UNAIDS/WHO 2008) and approximately 170,000 people on ART in 2009 (Caluwaerts C. et al 2009) needs primary care strategies to prevent avoidable morbidities and mortalities due to HIV /AIDS.

Available literature (UNAIDS/WHO 2008; Caluwaerts et al 2009; MSF 2007; Mills, J, E et al 2007; Sigrid C.J.M et al 2007; Kwong-Leung J et al 2007; Posse M and Baltussen R 2009) shows that managing ever growing caseloads of patients and retain them on lifelong ART is both a planning challenge and an implementation burden. This is due to a number of factors including limited human resources for health, limited infrastructure, waiting times, distance to travel to health facilities for ART, transportation difficulties, financial constraints of patients, the organisation and quality of care, community or social support for adherence, as well as therapy, disease and patient related-factors

Given the foregoing, the University of Eduardo Mondlane (UEM) is implementing a Community based systems in HIV treatment (CoBaSys) programme to empower communities to support antiretroviral delivery programmes for patients with HIV infection in east and southern Africa (ESA). This is done through a regional network for policy advocacy targeting vulnerable groups in ESA and Europe with support from the European commission through the African Caribbean and Pacific (ACP) group of States.

The project primarily focuses on building solid 'community based systems that support the HIV treatment to benefit most vulnerable social groups at primary care level. The learning and evidence from this tier of the health system within the Manhica District-Mozambique is collated, synthesized for national level advocacy and further integrated at regional level for global engagement.

A quasi experimental design was used. The study employed qualitative techniques with varying Participatory Reflection and Action (PRA) approaches and tools to triangulate the methodologies and ensure validity and reliability of data. The study units included men, women, young people, and elderly, People living with HIV/AIDS, health workers, opinion leaders, leadership and other key stakeholders. The study was carried out in Maluana, and it entailed a 3 day 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. A PRA study protocol used in the research was developed by TARSC; peer reviewed and pretested prior to implementation (Machingura F et al 2010). The Maluana PRA research participants

were drawn from Ministry of health and Child Welfare (MOHCW), local authorities, health workers, community representatives, people living with HIV/AIDS (PLWHA) and other key stakeholders

This report presents findings of a participatory research out of the COBASYS programme carried out in Maluana in Manhiça district. In the wider CoBaSys Programme, The UEM is establishing a Stakeholders' Forum in order to map the institutions, resources and social actors, as well as their mandates in the communities to respond to the HIV / AIDS. This is particularly important to identify strengths and weaknesses of stakeholders and institutions critical in developing strategies to strengthen existing mechanisms for prevention, treatment and care of AIDS in Mozambique. The participation of the key institutions and stakeholders alike will be more effective if effective evidence based approaches are taken into consideration from the outset. It is from this ethos that the UEM , Training and Research and Support Centre (TARSC) with the CoBaSys network have carried out this research

This research identified recommendations that policy should consider in defining a comprehensive community based model for HIV treatment, support and care amongst PLWHA and those affected. These recommendations have been framed into three main health system domains for HIV treatment. These include the recommendations at community level and in the health system

Recommendations for community action:

- i. Community campaigns on education and adherence to treatment, change in gender norms and community mobilization for elimination of stigma and discrimination related to HIV and AIDS
- ii. Information on treatment: medicines must be given in local languages to facilitate knowledge and adherence to treatment
- iii. Build capacity of NGOs to manage programs and develop networks and support for people vulnerable to HIV and AIDS.
- iv. Promote the provision of medical care and drugs supplies at health posts.
- v. Develop training programs on HIV prevention, modes of transmission and life skills among local leaders.
- vi. Promote inclusiveness among leaders to participate in planning process and programs to HIV and AIDS treatment.
- vii. Mobilizing solidarity groups and their leadership to provide support to PLWHA.
- viii. Develop strategies to reach and work with women and men who have been previously excluded in local programs to fight HIV and AIDS.

Recommendations for health system actions:

- i. Ministry of Health need to implement measures to ensure knowledge and adherence to ARV treatment at district level proposed in the strategic plan (National AIDS Council, The National Strategic Plan on HIV/AIDS 2005-2009) such as:
 - Undertake information, Education and Communication activities targeting different population segments, adapting the message and the vehicle to target audience and make use of mother tongues. Particular efforts should be made to ensure that messages reach and make are female audiences;
 - Make all sectors in general, and the public sector in particular aware, by promoting an increase in knowledge about HIV/AIDS, in population segments they cover.

- ii. Government should invest in the elimination of differentials in access to services providing drugs supply and health workers at primary district levels.
- iii. Implement policy proposal to remove fees for primary care and monitor it regularly
- iv. Improve resource allocation to health services, including vehicles for ambulatory services.
- v. Implement at district level, ARV treatment to facilitate access.
- vi. Training of health workers to build trust and self esteem among PLWHA.

2. Background

As the number of people on HAART increases in resource-limited settings, not only new models of delivery are needed to manage increasing caseloads but also new mechanisms for enhancing effective coverage of treatment support and care at the primary care level of the Health System. Mozambique with a national HIV prevalence estimated at 12.5% in 2007 (UNAIDS/WHO 2008) and approximately 170,000 people on ART in 2009 (Caluwaerts C. et al 2009) needs primary care strategies to prevent avoidable morbidities and mortalities due to HIV /AIDS.

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Thus in this context *“Treatment of HIV/AIDS encompasses 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.”* (Machingura et al 2010)

The wider CoBaSys project aims to:

1. to empower local communities in their fight against HIV/AIDS through participatory research and action programme (PRA) within the identified target areas;
2. to generate evidence from target areas with high rates of HIV infection supporting learning on community based and patient centered approaches to HIV treatment from target areas with high endemic HIV infection;
3. to share pre-existing knowledge as well as knowledge generated by the project via conferences and workshops and presenting the state of the art and the prospects for international cooperation in the field of quality health care policies concerning HIV/AIDS treatment. This will enhance the ‘collective responsibility’ and *ownership* of interventions by all stakeholders.
4. to promote local stakeholders advocacy towards national health policies concerning HIV/AIDS treatment set up a stable regional network for regional engagement.
5. to demonstrate mutual interest and benefit in scientific cooperation on HIV/AIDS at Euro-African level through shared learning on HIV/AIDS treatment

The PRA research in Maluana was conducted in the context of CoBaSys main objectives (1) and (2) above. The research explored the factors that facilitate and block access to, use and effective coverage of services and responses to HIV, and identified relevant and effective approaches to building community systems for responding to HIV /AIDS and services that support these systems.

Within the overall framework of the research programme, **the Maluana 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)

6. 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.

The Health delivery System in Mozambique

Mozambique's health System is comprised of health facilities, traditional healers, faith based organizations and popular medicine. The government is the major provider of health services running major health facilities and while the private sector is in charge of private clinics and hospitals mainly concentrated in urban areas.

Health facilities are divided into three main categories: clinics without maternity services, clinics with maternity services and hospitals. Hospitals are divided into District hospitals, rural hospitals, Province hospitals, General hospitals and Central hospitals. Health facilities without maternity services are the most peripheral and common facility along the country, amounting to more than 650 against 440 health facilities with maternity services and 43 hospitals (MISAU, 2009)

Access to health care is clearly a problem, with only 57 percent of patients using formal health care facilities for treatment (MISAU, 2009). The northern region of the country is less served by health facilities compared to the centre and south regions. This poses challenges for HIV treatment given that most public health facilities do not have adequate human resources, drugs, equipment and sundry. Furthermore, public spending on health estimated at USD16.2% per capita is lower than the recommended 34% USD\$ per capita. This spending hugely depends on external financing, yet external funds to the health sector have declined since peak spending from in 1996/97 to 12% USD per capita. Cost recovery from health services represents a paltry 3% of total Ministry of Health spending. Health spending per capita is still below the USD 34 internationally recommended (such as The Commission of Macroeconomics and Health) as the minimum necessary for costing a basic package of health interventions in developing countries.

Mozambique continues to face critical shortages of human resources for health with 4,49 doctors per 100.000 inhabitants, 23,36 nursing personnel per 100.000 inhabitants in 2009(MISAU,2009). This is exacerbated by poorly trained staff with only 18% out of 15,900 employees with high or mid level qualification and only concentrated in urban areas(Center for Global Deveoplment: 2009) . The vast majority of health workers have only basic or elementary training.

However, addressing these challenges will imply the expansion of infrastructure and health personnel. This is possible to do given that Health workers are viewed in policy as the most valuable resource to improve accessibility of health services, especially for the poorest population in rural areas, to consolidate primary health care. More so,

Mozambique health policies have continued to articulate a commitment to universal coverage and primary health care including in HIV prevention, treatment and care. For instance the Health Sector Strategic Plan (2007-2012) which combines primary health care, equity and better quality of care re-commits to strengthening PHC. This has worked to strengthen the government policy commitment to human development and poverty reduction through the 2006 Absolute Poverty Reduction Strategy Plan (PARPA II). The plan aims to strengthen equitable access to quality health services in Mozambique. Furthermore, the government of Mozambique committed to its constitutional provisions of the right to universal access to primary health care through a policy commitment to abolish user fees at clinic level. .

These policy commitments are critical for prevention of HIV as much as they are for the management and treatment of HIV/AIDS at the primary care level of the Health system. The National Health Sector Strategic Plan has set a plan that integrates varying components of care including counselling, voluntary testing, laboratory examinations, ART and treatment for opportunistic infection at no cost. On the other hand, the number of health centre units integrating PMCT services increased from 286 in 2007 to 800 in 2009 (KULA, 2010). This has seen the number of women needing ART increasing 15 fold from a mere 3% in 2004 to 46% in 2007 (UNAIDS/WHO 2008)

The National Council of AIDS established in 2000 has since been coordinating the national response to HIV and AIDS. The Council has integrated gender disparities particularly among young people in its operational framework.

Young people, especially girls, are the most physically vulnerable to HIV/AIDS. Practices such as early sexual initiation, partnering of young girls with older men and incidences of male sexual violence all put young women at high risk of HIV infection at an age when they are physically most vulnerable to lesions and STI infection. Young people trying to protect themselves from STI / HIV infection are confronted with conflicting social and cultural norms such as early marriage, polygamy and the high value attributed to having children, which conflict with the need for reducing personal risk.

Gender inequality is a key factor in the spread of HIV/AIDS. In a broadly male dominated society, women often have little access to information or decision-making around their own sexual health. Even when they have enough information to assess their own risk, their precarious social and economic status means that women are often unable to negotiate safe sex or fidelity with their partners. As the epidemic has been increasing among young people this mean a need to complement efforts towards universal coverage with specific initiatives and services intensified for those groups at risk, even while treatment expansion takes place.

HIV / AIDS Situation in Manhiça District

Maputo province of Mozambique has a total population of 1 205.553 (INE, 2007) and an HIV prevalence of 19.8% (MoH, 2010). To mitigate the burden of the pandemic, integrated action plans that include components of prevention, treatment, support, care and impact mitigation have been asserted by the WHO as holistic measures of managing HIV in Mozambique. In addition, the National Strategy for Acceleration of HIV Prevention commits to the HIV treatment, support and prevention, respecting the social, cultural and economic strength of communities. It is estimated, for the District of Manhiça, that 29% of the total population (156 445 13%) is infected with HIV and AIDS (WHO, 2009). In the same report, WHO notes that, 25% of pregnant women who had a chance to visit the ANC were HIV-positive.

The District health system works with institutions and stakeholders in addressing the HIV pandemic. This includes institutions such as CISM which has been instrumental in pediatric care including: hospitalizations, outpatient visits; consultations, casualties and nutritional rehabilitation programme. This has been coupled with equipment resuscitation, diagnostic services and counseling. CISM has supported the building of a Health Centre in Manhiça and rural hospital funded with donor support.

3. Methods

A quasi experimental design was used. The study employed qualitative techniques with varying Participatory Reflection and Action (PRA) approaches and tools to triangulate the

methodologies and ensure validity and reliability of data. The study units included men, women, young people, elderly, People living with HIV/AIDS, health workers, opinion leaders, leadership. The study was carried out in Maluana, and it entailed a 3 day 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.

'PRA approaches are often associated with weaknesses of time-consumption and should also not be used to provide detailed information about problems without a follow-up commitment to take action on the problems identified. However, weaknesses are necessary tradeoffs of collaborative and adaptive research design. Moreover, sacrificing some level of time consumption and additional follow ups is well worth the additional face validity and practical significance that is gained through a PRA approach. PRA research provides an intensive yet very analytical methodological rigor and technical validity. These characteristics define the primary significance of any academic or similar research. PRA research provides a powerful means of improving and enhancing practice by involving community dialogue at the very early stages of programme planning. Thus, it builds a basis for negotiation and partnership between researchers, resource holders and beneficiaries.' (Machingura F 2010)

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.

Other weaknesses associated with PRA noted in this research include:

- The sampling technique can be biased. This is so because key informants (PRA research participants) who may provide with narrow and rigid views of the problems may be inadvertently selected.
- Time consuming: Adequate time is needed to complete the planning process. Thus data collection without the development of a plan/protocol of action compromises the objective of the research, the findings and the conclusions of the research analysis. Thus to overcome this problem, the research should be conducted over a period of time while other factors are put on constant.

A PRA study protocol used in the research was developed; peer reviewed and pretested prior to implementation (Machingura F et al 2010). The protocol was co-authored by Machingura F, Loewenson R and Kaim B from TARSC and peer reviewed by PRA experts, University of Manchester, University of Eduardo Mondlane, University of Namibia, University of Botswana, University of Modena, University of Helsinki, REACH trust Malawi and by the University of Zimbabwe. The tools were pre-tested in Goromonzi district IN Zimbabwe by the researchers with a sample of 30 community members representing the target social groups. UEM Researchers were trained over a 3-day regional training workshop in April 2010 (Harare) on participatory methods for community based systems in HIV treatment – '*Strengthening capacities for qualitative research using PRA approaches*' run by TARSC (TARSC 2010)

The following table shows how the methodology was staged in the protocol for each objective of the research

Table 1: Staging of Methodology and how each of the aims was addressed

(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.

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	<ul style="list-style-type: none"> • Margolis wheel • Spider web • Group discussions • Market place

The PRA research meeting participants were drawn from Ministry of health (opinion leaders), local authorities, Zionist representatives, health workers people living with HIV/AIDS Youth representatives, support groups, other health service providers and other religious group representatives.

Site Selection

The PRA research was conducted in the Administrative Post of Maluana which is the Mozambique District of Manhiça. Maluana was selected for this research for several reasons including:

- High HIV prevalence rates recorded at 20% in 2010 .There is huge human traffic in Maluana due to its proximity to the South African Boarder (through Moamba District), and the sugar cane plantations (huge labour force) in the administrative Posts of Xinavane and Maragra. These factors make this district vulnerable to HIV/AIDS.
- It is conveniently located closer to the capital city. This makes it easier for monitoring, communication and community feedback
- It is easier to access the target group particularly People Living with HIV and AIDS and support groups (Government, NGOs and communities) and those involved in HIV prevention, and Antiretroviral Treatment;

Manhiça is part of Maputo province and is distant 80 Km from the city of Maputo. The district is crossed by EN1 and is bordered to the north by the district Macia (Gaza Province), the south by Marracuene district, west by the Districts of Moamba and Maputo on the east by

the Indian Ocean. The district of Manhiça extends for an area of 2,373 km² and is inhabited by a population of about 192,638 people, mostly rural (the urbanization rate is 12%, concentrated in the towns of Manhiça and Xinavane), female (56%) and young (41% below 15 years of age). [INE 2007]. It is subdivided into six administrative posts, including Manhiça (district headquarter), Calanga, Ilha Josina Machel, Maluane, Xinavane and “3 de Fevereiro”. The District covers 13 villages as shown below.

Table 1: District Population per Administrative Post

	Total	Age Groups				
		0 – 4	5 – 14	15 - 44	45 – 64	65 e mais
District of Manhiça	192.638	29.326	50.010	76.913	25.803	10.586
Men	85.419	14.425	25.202	31.849	10.144	3.800
Women	107.219	14.901	24.809	45.064	15.659	6.786
P.A. da Manhiça	60.031	9.266	15.752	23.947	7.799	3.268
Men	27.263	4.629	7.958	10.451	3.077	1.148
Women	32.768	4.637	7.794	13.496	4.722	2.119
P.A. de Calanga	13.967	1.824	3.733	4.754	2.369	1.287
Men	6.143	878	1.940	1.986	869	470
Women	7.824	946	1.793	2.768	1.500	817
P.A. da Ilha J. Machel	14.365	2.147	4.036	5.833	1.700	649
Men	5.982	992	1.995	2.146	630	220
Women	8.382	1.156	2.041	3.687	1.070	429
P.A. de Maluana	22.236	3.338	5.542	8.554	3.353	1.448
Men	9.933	1.596	2.735	3.825	1.246	531
Women	12.303	1.742	2.806	4.729	2.107	918
P.A. de Xinavane	31.180	4.593	7.812	13.428	4.039	1.308
Men	14.161	2.323	3.902	5.580	1.840	516
Women	17.019	2.270	3.910	7.847	2.199	792
P.A. 3 de Fevereiro	50.860	8.158	13.135	20.397	6.544	2.626
Men	21.937	4.008	6.671	7.861	2.483	915
Women	28.923	4.150	6.464	12.537	4.061	1.711

Source: MÉTIER estimate based on 1997 Census

The district is dominated by an epidemiological focus on malaria, diarrheal diseases, STI and HIV / AIDS with a total of 22 health facilities i.e. 8 health facilities with no maternity 2 and 12 peripheral health facilities. In average each Sanitary Unit covers 8730 inhabitants; 1 hospital bed for 655 inhabitants; and a qualified health professional serves on average 1,600 inhabitants of the district. The Manhiça district also hosts an International Research Centre on Malaria.

The PRA research meetings

The PRA meeting was held in Maluana Village in May 2010. The PRA protocol was used to define and shape the sessions of the focus group discussions while the length of the meeting was longer than time stipulated in the protocol. This was to accommodate local interests and contextual circumstances. The delegates included, men, women, youth, leadership and people living with HIV AIDS all coming from the povoado of Chirindza.

The research team welcomed the delegates and participants introduced themselves. Using the varying tools of PRA in the research was observed as powerful empowering research mechanisms that enable every participant to communicate and express self fully.

In this report, youth will be understood as those young people who have not yet married. This is an understanding and a definition that was collectively agreed with participants in the

field. This also shows the power PRA tools have in participatory research; conceptualization can be done on the ground with participants during research.

While some social groups were able to interact in group sessions, health workers failed to do so due to representation through one health worker. Thus most of the discussions with the health workers were in an interview dialogue.

4. Findings of the PRA research

4.1. Mapping social and economic differentials in Manhiça district

4.1.1. Social/community mapping

Participants were divided into groups according to gender and age and drew a map of their community on flip charts, mentioning the main features such as roads, hospitals, churches, sources of waters, markets, schools, shops and the river.

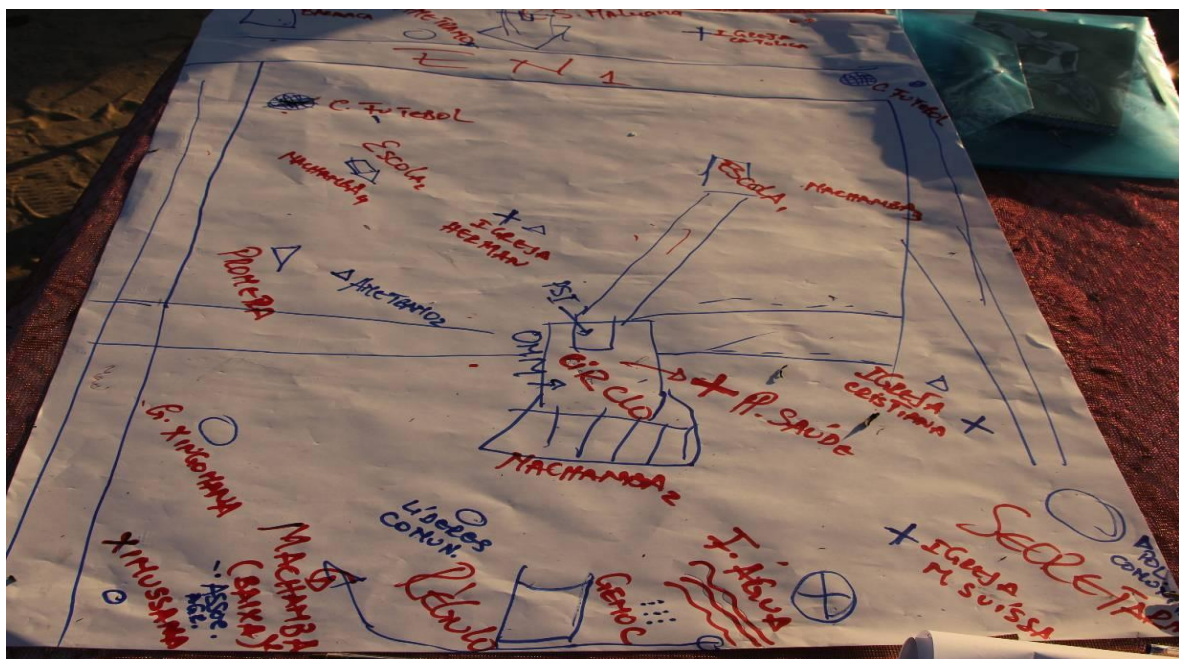


Fig.1. Social maps in Maluana (Chirindza). Manhiça District.

“A community system is 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” (Machingura F. et al 2010)

Main existing social groups

Apart from the District's health network Manhiça has traditional healers, herbalists and various faith based health providers. There are also different social groups in the Manhiça community that can be grouped: permanent residents, seasonal residents and activists from NGOs. The category of permanent residents includes the general population, their churches (Catholic, Zionist, Velhos Apóstolos, Metodista Unida) choral groups (women, men and youth) sport clubs, dance groups of women (Chingomana, and Chimussana Muthimba), and dance groups for girls (Muthimba) and for men (Makwaela). Also include party organizations or advisory councils, the Organization of Mozambican Women (OMM), AMETRAMO, PROMETRA both are associations of healers and peasants Associations. The category of seasonal residents includes Mozambicans who work or live temporarily in South Africa and the people who work in Sugar cane companies of Maragra or Xinavane. The category of NGOs activists include the Hunger Project (Operating in the area of food safety), Tsembeka (Operating in the area of HIV), PSI (Operating in HIV), Community Health Workers (They operate in health).

In Maluana, there are several organizations that provide home care to people with serious or chronic diseases, including AIDS. This activity is shared by religious organizations in the communities. Community leaders do sensitize people to adhere to testing services and comply with the treatment prescribed in hospital. In this area of study, social groups took a leadership role in providing basic needs for women and men in AIDS-affected households, many of these responses have a clear focus on alleviating poverty. On the other hand, Zionist churches were reported to provide solidarity and help among their believers. They established networks for home based care for elderly, people living with HIV and AIDS and orphans. Among the Zionists, people seek support, treatment and care for various diseases. Financial resources and goods are provided through modicums of money donated by other members who regularly pay ‘what they call –dizimo’.

Associations like PROMETRA play a significant role in the response. Initially primarily concerned with protecting their members from the effects of stigma and discrimination and lobbying for access to treatment, they are now observed as partners in the development of HIV/AIDS policies and laws in Mozambique. Traditional healers treat and support to people living with HIV and AIDS, orphans, elders individually and /or collectively. The main healer, commonly referred to as the ‘Nyamussoro’, was reported as the the leder of all traditional healing activities during the day and the night. The Nyamussoro is highly trusted and most people including PLWHA visit the healer frequent.

Groups at risk

Overall, participants suggested that young people, adults, elderly and children are the ones who are at greatest risk of HIV infection in their respective order.. Women and girls show that they are vulnerable because their husbands, who work in neighboring South Africa, return from the mines infected and transmit the virus to them. Young men and women were reported to be highly vulnerable due to multiple sexual partners with whom they do not use condoms with

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

4.2.1. Prioritizing Health needs of PLWHA and those affected (Ranking and scoring)

Table 2: Problems, score and priorities identified by social groups

Problems identified	Distribution of counters (scoring)		prioritizing of the problem (ranking)
	First round of scoring	Re-distribution of seeds after ties	
Women			
Men not committed to HIV prevention/refuse to use condoms	2	3	1
Lack of a hospital	2	2	2
Shortage of drugs	1		3
Youth			
Abandonment of treatment	1		1
Medicines highly expensive	1		2
Lack of medicines	1		3
Opinion leaders			
Lack of water	3		1
Lack of money	2	4	2
Lack of ambulance	2	3	3
Common health need across group			
Stigma and discrimination			

Women ranking included: **Men's non commitment to HIV prevention shortage of hospital infrastructure, rheumatism; Men refuse going to health centers when advised by partners** Participants highlighted that the non commitment of men to HIV prevention is associated with culture and traditional norms. Usually, men refuse to use condoms. Men allege that in African tradition they are the heads of the households and their word is the law and women must be submit to men . Therefore, women have fewer possibilities to negotiate their sexuality with men. On the other hand, married women refuse having sex with their husbands when they use condoms, alleging that men had sexual relations outside. Also, many men are afraid of revealing their HIV positive status because they fear losing their partners and being rejected by their social group.

Youth ranked **insufficiency of health personnel, high cost of medicines, and lack of medicines** as their priority problems. Youth asserted that the local health centre is rough with lack of equipment and medicines. The other located in Maluana village is far from the community and there is a lack of transports and money to reach there. This aggravated due to the rough conditions of the roads. The rural hospital of Manhiça which is commonly referred to as the 'the reference hospital' in the district is far, and people face transportation Opinion leaders ranked the **lack water, lack of HIV testing packs, lack of food**. They stressed that "water means life" and they need to support to bore water hole supplies.

4.3. Identifying the underlying, intermediate and immediate causes of health needs

Table 3: Underlying and immediate causes of health

Social Group	Underlying Causes	Causes
Women	Difficulties of transport	Availability of private cars for rental (300 Mt); Where we live and is far from the road and there are difficulties in entering the cars• The government does not answer our requests; Lack of cars and other local transport.
	Hospital is situated far away from the community	Being in Maluana (headquarters) and Manhiça; Because we live far from hospitals; Lack of hospital construction where people reside
	Rheumatism	Most people suffer from rheumatism which is made worse by household chores such as fetching water, firewood. Getting charcoal. This tires the body and makes most households unproductive. Unavailability of rheumatism medication from the health facilities makes it more difficult to manage this condition.
	Men refuse going to health centers when advised by partners	Multiple sexual partnerships amongst men make them vulnerable to STIs including HIV AIDS and this is common knowledge amongst this social group. However, this risk of getting tested for HIV and testing positive is considered too heavy ' cost benefit analysis ' because men would ultimately lose their partners and families. Furthermore, traditional norms hinder progress in HIV treatment. Most men are traditionally seen as advisers not receivers of information. Thus, any information that is provided by women is neither considered important nor beneficial.
Youth	Lack of ambulance	Lack of good road network (transportation system) Lack of fuel for cars
	Medicines highly expensive	Poor policies of medicine procurement and distribution Lack of medicines in state pharmacies; Availability of medicines in private pharmacies; Selling of medicines in informal markets.
	Ways of access	Difficulties in road links with national road (N1) due to poor road system Concentration of main infrastructures (markets, banks, shops, ets) in towns and villages
Opinion leaders	Lack of water	Lack of water holes Lack of money to bore water holes supply
	Lack of HIV/AIDS testing packs	Lack of mobile brigades for voluntary HIV testing Lack of money for travelling
	Lack of food	Drought Lack of seeds Lack of hospital support

Table 4: Solutions for the problems identified by social groups

Problems	Solutions
<i>Solutions for the problems identified by women group</i>	
Lack of transport	<ul style="list-style-type: none"> • The government has to provide an ambulance or tractor; • The government has to subsidize the taxi drivers in fuel for carrying them to hospital when needed; • The government can help in providing wagons
Hospital is far located	<ul style="list-style-type: none"> • The government should build hospitals in the community; • Foreign investments should prioritize building hospitals at community level where need is greatest • The government has to improve the road network in the locality.
Rheumatism	<ul style="list-style-type: none"> • The government through Ministry of Health should ensure that rheumatism treatment is available in health facilities primarily at community level. • The government can provide tractors for communities to use in farming activities including in other household activities. This should be completed by provision of donkeys, cows, etc through support from the ministry of agriculture.
Men refuse going to health centres when advised by partners	<ul style="list-style-type: none"> • Men working hand in hand with women when advised to seek treatment in hospitals should be the new campaign in gender related advocacy on HIV interventions • More campaigns of sensitization for men at community level ; • Participation of local authorities and local leadership is crucial in changing unbeneficial gender – patriarchal tendencies that perpetuate poverty. This is critically essential in community based treatment systems for HIV.
<i>Solutions for the problems identified by opinion Leaders</i>	
Lack of water holes	Government and NGO's can support communities financially, while communities can provide the labor and the leadership on community interventions
Lack of money for bore a water hole	Availability of employment through income generating projects.
Lack of mobile brigades/clinics for HIV testing	Ministry of Health has to provide a budget for mobile clinics. These are essential in accessing hard to reach areas and hard to get social groups.
Lack of money for traveling	The ministry of health should banish user fees and support communities to reduce out of pocket costs in health service access.
Drought	Government and NGO's can support communities by providing seed, fertilizer and other inputs. This should be complimented by capacity building in food preservation and food storage particularly amongst people living with HIVAIDS.
Lack of seeds	Government and NGO's and must provide seeds
Lack of money	Without employment there is no money Government must create employment
<i>Solutions for the problems identified by youth</i>	
Lack of transport	The government must provide public transport
Cost of medicines	The government must provide and subsidise medicines in the public pharmacies

Communications	The government and NGO's must help local people on maintaining and rebuilding the roads linking the national road number 1.
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Table 5: Solutions to improve health care outcomes

What the Community can do to improve the healthcare services	
Field of Intervention	Means of Community Support
<i>Community support to hospital</i>	<ul style="list-style-type: none"> • Hospital cleaning • Provision of food for in-patients; • Maintenance and expansion of the health centre • Sensitization for diseases' prevention; • Environmental sanitation; • Construction of water closets and HIV prevention
<i>Community support to health personnel</i>	<ul style="list-style-type: none"> • Building houses for health personnel; • Providing water; • Providing firewood; • Providing food
<i>Coordination with health providers</i>	<ul style="list-style-type: none"> • Hold regular meetings (monthly); • Seek support in hospital for problems that healers cannot resolve
What the Community can do to improve the healthcare services	
Field of Intervention	Means of Community Support
<i>Community support to hospital</i>	<ul style="list-style-type: none"> • Hospital cleaning; • Collect money for rehabilitation of the health centre; • Sending vegetables for the diseased • Pray for the diseased and for the health personnel; • Support in identifying ill people in the community and send to hospital
<i>Community support to health personnel</i>	<ul style="list-style-type: none"> • Sensitize people to seek hospital for treatment; • Support in food for health personnel; • Support in dissemination of information for the using of condoms and mosquito nets; • Seek financial support for ill people
<i>Coordination with health providers</i>	<ul style="list-style-type: none"> • Hold periodic meetings; • Cooperation between the hospital and informal health sector; • Send the diseased to hospital when healers and religious leader cannot provide cure; • Send people suffering of spirits to the informal health sector;

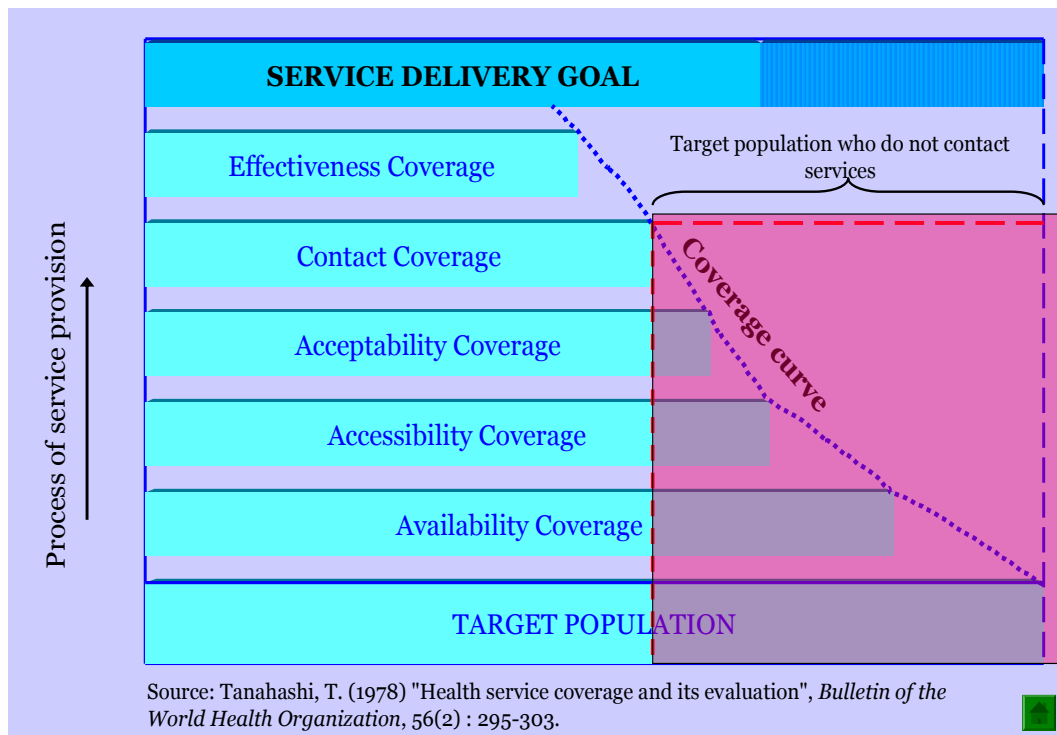
4.4. Defining HIV/AIDS responses for key social groups in health services coverage.

Health service coverage is the “*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 addresses how communities interact 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 will*

include those provided by health care systems, those demanded by communities, resources generated for health, financing of health systems and stewardship” (Machingura et al 2010)

To 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 response needed for key social groups the Tanahashi model was used. Tanahashi (1978) provided a concept of coverage that helps to understand the level at which inequalities in peoples’ contact with health care may arise. Tanahashi provides for five domains for this (See Figure 4):

Figure 4: Tanahashi model of health care coverage



Access reflects the fit between characteristics and expectations of the providers and the clients, although some definitions focus on whether people are actually using services. The availability measures the extent to which the provider has the requisite resources, such as personnel and technology, to meet the needs of the client. Accessibility refers to geographic accessibility, which is determined by how easily the client can physically reach the providers location.

For us the central concern in health service coverage is whether individuals that can potentially benefit from effective health care do in fact receive it. Health programs and systems should be evaluated against this objective through examination of the rate of utilization of effective health care among the population in need, which has been referred to as effective coverage.

Participants noted that although the policy to remove user fees at primary level is implemented with the aim of promoting an increased utilization of primary health care services, the effective coverage is low due to lack of facilities, equipment and medications necessary to address the conditions of the majority of population. Even when some resources are available, people have no access as these resources are not located in sufficient quantities relative to need and demand.

The first level of services is provided at Community level by international NGOs and community institutions such as traditional healers and faith based institutions as we mentioned before.

The second level of health service provision in Manhica district is the health unit at District hospital level (Rural Hospital Manhiça), the health facilities with maternity, health facilities without maternity and peripheral health facilities.

Participants observed that the Health facilities are linked to one another in a chain that starts at traditional healers or faith based institutions stepping to peripheral health facility (*Posto de Socorro*). From the *Posto de Socorro* clients suspected of having HIV and AIDS are referred to the nearest Health facility, which in turn makes referrals to the Rural Hospital where the tests and treatment are available.

Before being tested the person receives a counseling session Known as a pretest counseling session. This is followed by a post test counseling session. The client is usually encouraged to inform his/her partner on the result of the test. In the event that the client test positive, the partner is screened for HIV at the health facility. Following this is a CD4 count test at the rural hospital. A client with less than 200 CD4 count is enrolled into the Anti-Retroviral Treatment (ART). ART drugs are only available at the rural district while drugs for opportunistic infections are available at the local health facility with maternity services.



Fig 2, Posto de Socorro in Maluane

While there are services related to HIV and AIDS, it was mentioned that access has been difficult long distances travelled by patients on foot¹. The Poor road network makes it

¹ From Chirindza to reach the rural hospital of Manhiça by foot it takes about 3 hours. Using a car the same distance is covered in 10 min. The same difficulty is faced when they want to go to Maluana Health Center which takes 1 hour. Renting a car to Manhiça it costs 300 Mt (6 euro) and to Maluana is 100 Mt (2 euro) which the community members cannot afford.

increasingly difficult for patients to access health care services on time and when they can get transportation it usually takes longer and is expensive. For those who manage to make on time to the Rural Hospital face contact barriers including long waiting times . Participants also observed that health workers defy privacy of patients by asking some privacy questions in public such as: *how old are you? How many children do you have? How many grandchildren do you have? At this age what brings you here?* Faced with these questions these adults choose not to seek the services again or change the contact with health services opting for a health facility that could be further away from the place of residence. Such experiences were reported to have been shared with other community members who also end up not accessing the health facility.

5. Discussions

In Manhiça low quality of public primary health care result in patients forgoing care at the facilities and seeking care in another sector or simply staying at home.

In fact there are challenges associated with access, availability and accessibility that prevent effective coverage. The health providers don't have the requisite resources, such as personnel and technology, to meet the needs of the clients. There is also a problem related to the geographic accessibility, which is determined by how easily the client can physically reach the providers location.

In the case of Manhiça although the policy to remove user fees at primary level is implemented with the aim to promote increased utilization of primary health care services, the effective coverage is low due to lack of , equipment and drugs necessary to address the conditions of the majority of population. Even when some resources are available, people may not have access as these resources are not located in sufficient proximity to those in need.

6. Recommendations and conclusions

Community members must be viewed as prime actors rather than passive beneficiaries, an approach that gives them ownership over project processes and outcomes and help to build the sense of collective efficacy in fighting HIV and AIDS. Community leaders could be used as social change agents, as facilitators whose role is to provide information on risk reduction and increase access to HIV and AIDS services.

The research identified recommendations that should be considered in defining community based systems for HIV treatment. This should be accompanied by a community based model for HIV treatment at the primary care level of the Health system. The following recommendations shape actions for communities and for health systems

6.1. Recommendations for community action:

- i. Community campaigns on education and adherence to treatment, change in gender norms and community mobilization for elimination of stigma and discrimination related to HIV and AIDS
- ii. Information on treatment: medicines must be given in local languages to facilitate knowledge and adherence to treatment
- iii. Build capacity of NGOs to manage programs and develop networks and support for people vulnerable to HIV and AIDS.
- iv. Promote the provision of medical care and drugs supplies at health posts.
- v. Develop training programs on HIV prevention, modes of transmission and life skills among local leaders.

- vi. Promote inclusiveness among leaders to participate in planning processes and programs for HIV /AIDS treatment.
- vii. Mobilizing solidarity groups and their leadership to provide support to PLWHA.
- viii. Develop strategies to reach and work with women and men who have been previously excluded in local programs to fight HIV and AIDS.

6.2. Recommendations for health system actions:

- i. Ministry of Health needs to implement measures and interventions to ensure knowledge on adherence to ARV treatment at community level (see page 4).
- ii. Government should invest in the elimination of differentials in access to services providing drugs supply and health workers at primary district levels.
- iii. Implement policy proposal to remove fees for primary care and monitor it regularly
- iv. Improve resource allocation to health services, including vehicles for ambulatory services.
- v. In order to facilitate access to ART, the government through the Ministry of Health should ensure that health facilities at community level including in the district hospitals have adequate ARVs complemented by trained Human resources.
- vi. Training of health workers to build trust and self esteem among PLWHA.

7. List of Acronyms

ART

CBO

CISM

CoBaSys

INE

NGO

STI

PARPA

PLWHA

PRA

Anti-Retroviral Therapy

Community Based Organisation

Centro de Investigação em Saúde da Manhiça

Community Based Systems in HIV Treatment

Instituto Nacional de Estatística

Non Government Organisation

Sexually Transmitted Illness

Absolute Poverty reduction Strategy

People Living with HIV AIDS

Participatory reflection and Action

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