

Strengthening Community Health Systems for HIV Treatment, Support and Care Kariba District – Zimbabwe

An ACP-EU co-operation programme in the field of science and technology



Fortunate Machingura



Training and Research Support Centre
(TARSC) in the
Community Based Systems in HIV Treatment
(CoBaSys) programme



May 2010

With support from the European Commission

Table of contents

1.0. Executive Summary	2
2.0. Background	5
3.0. Methods.....	8
3.1. Community mobilisation and planning meeting	10
3.2. Introduction to the PRA research meeting	10
4.0. Findings of the PRA research	11
4.1. Mapping social and economic differentials in Kariba Urban district.....	11
4.2. Priority socio-economic determinants that facilitate and block health service coverage	14
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.....	19
4.5. Recommendations and actions to address flaws in availability Coverage	24
4.6. Recommendations and actions to address flaws in accessibility coverage	25
4.7. Recommendations and actions to address flaws in acceptability coverage.....	26
4.8. Recommendations and actions to address flaws in contact coverage	28
4.9. Community Systems and Mechanisms for Referral network in HIV treatment.....	28
4.10. Community Systems and Mechanisms for Clinical Mentoring in HIV treatment.....	29
4.11. Mapping community resources, institutions and actors that respond to HIV AIDS	32
4.12. Strengthening communication opportunities for health workers and communities.....	33
5.0. Discussion	34
6.0. Recommendations and conclusions	36
6.1. The community level	36
6.2. The frontline health system.....	36
6.3. The interaction between community and health system.....	36
7.0. List of Acronyms.....	38
8.0. References	39

Cite this publication as: **Machingura F (2010) Community Based Systems on HIV Treatment (CoBaSys): Strengthening Community Health Systems for HIV Treatment, Support and Care Kariba District – Zimbabwe: TARSC, Harare**

For further information on the PRA programme in CoBaSys (www.cobasys.eu) please contact

Training and Research Support Centre (TARSC)
47 Van Praagh Ave, Milton Park, Harare, Zimbabwe
Tel + 263 4 705108/708835 Fax + 737220
Email: admin@tarsc.org Website: www.tarsc.org

Acknowledgements:

With thanks to the research team: Fortunate Machingura (TARSC), Senele Dhlomo (TARSC), Itai Rusike (CWGH), Edgar Mutasa (CWGH) Esther Sharara (CWGH), and Francesco Guaraldi (University of Modena). Acknowledgements to peer review from: **Dr Rene Loewenson (TARSC), Professor Simba Rusakaniko (Chairperson: Research Advisory Committee on HIV AIDS Zimbabwe). Dr Medicine Masiwa (University of Zimbabwe Institute for Development Studies)**. Acknowledgement and gratitude to the Kariba Research participants, Kariba Urban PRA research team and the technical Peer Reviewers who have made the completion of this Research possible. Support to protocol development acknowledged from Dr R Loewenson and B Kaim.

Cover photo: Fortunate Machingura (May 2010- Kariba PRA research meeting) © TARSC 2010

1.0. Executive Summary

The Community based systems in HIV treatment (CoBaSys) programme is empowering 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 Kariba Urban District-Zimbabwe is collated, synthesized for national level advocacy and further integrated at regional level for global engagement.

Zimbabwe is experiencing a decline in HIV AIDS prevalence and in new HIV infections, first of such kind in southern Africa. The estimated HIV and AIDS prevalence in adults in the 15-49 age groups was 14.1% in 2008 and declined to an estimated 13.7% in 2009 (MOHCW 2009). However, the prevalence remains high with more than one in seven Zimbabweans still infected with HIV. In Kariba District, HIV prevalence is estimated at 19.1% based on the Mashonaland west province statistics from Central Statistics Office (CSO 2008).

The research used qualitative Participatory Reflection and Action (PRA) research methods. 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. However, PRA is often time-consuming and should not be used to provide detailed information about problems without a follow-up commitment to take action on the problems identified. 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 Kariba 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 provides findings and an analysis from a PRA research held in Kariba in May 2010 to investigate and provide collective recommendations to community based systems in HIV treatment. The PRA research explored 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.

The Research findings indicate that Kariba urban has a number of economic activities and groups that could be tapped into to facilitate an efficient HIV/AIDS treatment and support system at primary care level. Economic activities included fish farming, tourism industry and vending. It also has social groups that are potential channels for enabling an interlinked system delivering on HIV/AIDS activities including Home Based Care, Support groups, primary care volunteers and PLWHA income generating projects.

All the Kariba Health facilities provide Voluntary Counselling and Testing (VCT) services; Prevention of Mother to Child Transmission (PMTCT) services, Provider Initiated Testing and Counselling (PITC) services. However, the district relied on the Chinhoyi provincial hospital for the CD4 counting machine more than 150km away from Kariba. Even so, the services for CD4 counting were often unreliable due to power cuts, trained human resources amongst other factors. Furthermore, the members of the African apostolic faith church were noted to object health services, this was observed as one of the largest barriers to HIV treatment interventions.

Similarly, HIV treatment interventions in Kariba mainly targeted women positioning men in vulnerable conditions particularly on treatment literacy. This reflects a gender inequality dimension that programmers should note at planning level. On the other hand, user fees and out of pocket costs were highlighted as disabling factors to HIV treatment care.

Women reported that their vulnerability is founded on their lack of access to and control over resources, child-care responsibilities, household chores, restricted mobility and restricted freedom to make decisions. Women in Kariba assume the greater share of Home Based Care (HBC) giving in the family and in the community as is assumed that the role best fit women. Lack of employment amongst **men** living with HIV AIDS causes economic pressure at household level leading to depression, anxiety and social isolation, associated with inability to look after own families. The **youth** noted that unprotected sexual intercourse particularly before marriage is common and often complimented with risky behaviour. Shortage of staff, unrealistic workloads, lack of Post Exposure prophylaxis and substandard facilities were respectively rated the top three priorities by **health workers**. Stigma and discrimination was rated the one most important need across all social groups.

Tanahashi model was used to qualitatively interrogate the health service coverage in terms of HIV treatment in Kariba district. The five domains of coverage were expressed in terms of availability, accessibility, acceptability, contact and effective coverage. The gaps identified for Clinical mentoring stem from shortages of funds to retain qualified personnel, and where these personnel exist, it is very little. There were flaws in the patient flow that crop up from the long waiting time; the shortage of human resources, both of these factors makes it difficult for health workers to be more efficient. Furthermore, the Kariba participants noted that the household monthly Health levy should be channeled towards clinic administration needs.

Stakeholder analysis in Kariba urban showed the lack of solidarity and absence of harmonization of HIV/AIDS and related projects. This perpetuated vertical approaches to health that distorts the health system particularly Primary Health Care (PHC). Stakeholders were observed to operate as single competing entities leading to duplication of efforts and less effective coverage of services. Research interventions such as the impact of male circumcision, Breast milk in PMTCT, coping strategies of adolescents born with HIV, and pharmaco-vigilance of alternative therapies created knowledge gaps.

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, those in the frontline health system, and those on the interaction between community and health system.

1. The community level

- i. Stakeholders should work together to support community structures that protect the rights of individuals and facilitate access to health and social welfare services. Thus, the government should prioritize the role of social welfare department to address the needs of Orphans and other children made vulnerable by HIV and AIDS.
- ii. PLWHA should be supported by family members and through local government funds earmarked for health such as the Health levy to support and sustain support groups.
- iii. The Social Welfare department, MOHCW, NGOs and other players should invest in creating partnerships and referral networks to provide a comprehensive service package

2. The frontline health system

- i. PLWHA should begin ARV treatment before signs of immune system damage emerge. This can be strengthened by supporting local pharmaceutical companies to produce ARVs to facilitate cheap access and increased availability.
- ii. Furthermore, there is an urgent need to recruit and train more primary care nurses to facilitate clinical mentoring programmes complimented by laboratory monitoring training
- iii. The MOHCW should enforce standardization of HIV treatment for first line treatment particularly for occupational and non occupational Post Exposure prophylaxis (PEP).
- iv. The MOHCW should decentralize outpatient treatment sites to clinic level. This includes provision of laboratory services such as the CD4 counter closest to the communities to encourage sustenance of care.

3. The interaction between community and health system.

- i. Primary care workers should provide mechanisms for supporting PLWHA on treatment to adhere to treatment through direct observations and monitoring. Lessons to do this can be learned from the successful 'Directly observed Therapy' (DOT) treatment strategy used for Tuberculosis control in Zimbabwe.
- ii. The HBC programme should be revitalized and supported as a national policy priority. This is fundamental in institutionalizing community participation and mechanisms in which they participate. There is potential to address other underlying determinants of health that impede on HIV treatment and care through prioritizing HBC programmes.
- iii. The National AIDS Council should support its decentralized structures including the District AIDS Action Committees and Ward AIDS Action Committees in their role of managing HIV AIDS related services including HIV treatment services. This includes ensuring that the AIDS levy benefits PLWHA at the grassroots.
- iv. Comprehensive HBC programmes open an opportunity for palliative care. Based on this, HBCG require training on basic management of ART patients, pain management and diagnosis of opportunistic infections and; the DOTS for tuberculosis.
- v. The MOHCW ART programme should consider developing HIV AIDS treatment systems in the wider framework of Primary Health Care (PHC). This calls for the integration of **community Participation, PLWHA Leadership** within a broader framework of the **Social Determinants of Health**.
- vi. Coordination and stakeholder solidarity is important in implementing action researches. Action researches should prioritize the following knowledge gap areas: Impact of male circumcision; Breast milk in PMTCT; Coping strategies of adolescents born with HIV; Pharmaco-vigilance of alternative therapies and the impact of administering occupational and non-occupational Post Exposure Prophylaxis (PEP).

We acknowledge that communities are not homogenous entities, thus while learning from this can be used to inform critical decisions in defining a community based model for HIV treatment in Zimbabwe, district level interventions will need more systematic flexibilities that enable them to use the information within their own contexts in line with national guidelines. If this is provided for policy, there is a fundamental need to define how this should be decentralised to suite norms and turn rights into capabilities with as much little constrains as is possible. However, we note possible weaknesses that this can bring, particularly if human resources gaps are not addressed. Human resources for health play a critical role in ensuring that community priorities are part of the wider health system. The participatory methodologies used in the research created dialogue and ownership of the CoBaSys work from the outset.. We agreed that subsequent meetings will consolidate feedback and update on actions implemented. We observed that PRA processes empower communities and play a wider role in supporting processes of community dialogue and participation in HIV interventions.

2.0. Background

Zimbabwe is experiencing a decline in HIV AIDS prevalence and in new HIV infections, first of such kind in southern Africa. The estimated HIV and AIDS prevalence in adults in the 15-49 age groups was 14.1% in 2008 and declined to an estimated 13.7% in 2009 (MOHCW (2009)). The estimated number of adults and children living with HIV and AIDS was 1,102,864 in 2009. A review of available data in Zimbabwe (UNAIDS (2005), UNICEF (2006), Hallett, T.B et al (2006)) determined that the decline in HIV prevalence resulted from a combination of an increase in adult mortality in the early 1990s and a decline in HIV incidence starting in the mid 1990s. While the decline in HIV prevalence is encouraging, the prevalence remains high with more than one in seven Zimbabweans still infected with HIV.

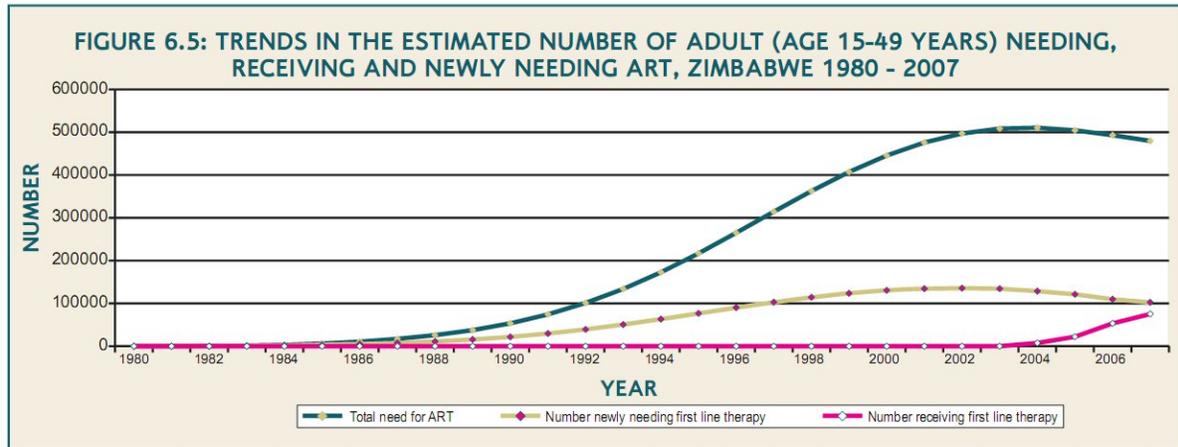
WHO (2006) estimated that between 2002 and 2006, the population of Zimbabwe decreased by four million people, more so both infant mortality and maternal mortality increased (Medicines Sans Frontiers 2009). Mortality rates of children younger than 5 years and infants rose from 77/1000 and 53/1000 live births in 1992 to 82/1000 and 60/1000 in 2003, respectively (CSO 2006).

The average life expectancy is estimated at 34 for women who are particularly affected by Zimbabwe's AIDS epidemic, the lowest anywhere in the world, however this figure is argued to be lower than this, since the data used was based on old statistics. Related to this is the estimated number of orphans, in proportion to its population, Zimbabwe has the highest number of orphans than any other country in the world, according to UNICEF 1 in 4 children in Zimbabwe are orphaned as a result of parents dying from AIDS (Medicines Sans Frontiers 2009). Similarly, maternal mortality rose from 168 per 100 000 births in 1990 (Mbizvo et al 1993) to 725 per 100 000 in 2007 while Tuberculosis new infections increased from 136 per 100 000 in 1990 to 557 per 100 000 in 2006 (Ministry of Health and Child Welfare 2007).

The MOHCW ART rollout program started in 2004 on the understanding that people living with HIV and AIDS will survive longer if they are on ART, however more than half of the estimated number of adults (age 15-49 years) needing antiretroviral therapy have not been able to receive treatment (UNDP 2009) see figure 1 below. Still, there has been a remarkable increase in the number of women accessing HIV testing and counseling services, but the gap in those testing HIV positive and those receiving Nevirapine for PMTCT still remains.

In Kariba District, HIV prevalence is estimated at 19.1% (Mashonaland west province) (CSO 2008), above the national average of 14.1% in 2008 (Zimbabwe National HIV and AIDS Estimates 2009). Related to this is the incidence of teenage pregnancies recorded in the 2003 poverty assessment study survey (PASS) as the highest, at 6.3% for Mashonaland west. Kariba district is located on the north eastern border with Zambia. It is a small and isolated enclave bounded by the lake, the Zambezi River, Kaburi Wilderness and Urungwe Safari Area rich in wildlife. Kariba town has a population of approximately 25,000 people (CSO 2008) concentrated in the Nyamhunga and Mahombekombe townships, with smaller communities on the Heights, Chawara, Charara and Camp hill.

Figure 1: Trends in the estimated number of adult (age 15-49 year) needing, receiving and newly needing ART, Zimbabwe 1980-2007



Source: Zimbabwe millennium development goals -2000 - 2007 Mid-term progress report (UNDP 2009)

The Kariba urban District Health System provides an operational level of the health delivery system. Its goal is to provide a comprehensive range of promotive, preventive, curative, rehabilitative and palliative health services, to all the sectors of the community, in line with national and provincial policies and guidelines. Community and other sectors' health inputs are captured through the Kariba Urban District Development Committees coordinated by the office of the district Administrator. The Kariba Urban Primary Health Level comprises of Nyamhunga and Mahombekombe clinics that provide the first point of contact between the communities, Home Based Care Givers (HBCG) and the formal health delivery system. This level provides comprehensive promotive, preventive, curative and rehabilitative services.

Thus, the Kariba district health system integrates the primary health level and resonates with the three pillars of the Zimbabwe national Health system:

1. Priority in health care is based on the development of comprehensive and integrated preventive and curative primary level services, starting with the provision of services to those in greatest need; primary health care services which are supported by increasingly specialized higher levels of care, in a coherent national health system. (Primary Health Care Strategy)
2. Communities participating actively in the planning and organization of primary care services.
3. Actions being taken in economic and social sectors that address the non-health determinants of health development.

However, good access to health facilities providing affordable and or free good first-level health care remains problematic. It is a hindrance to effective and efficient functioning of the Kariba District hospital, as outpatient departments become overcrowded with patients from areas without health centers like the 'Heights' and from Nyamhunga and Mahombekombe townships who prefer free services at the government hospital. In most cases the quality of care delivered to these patients is poor because within the district health system the hospital is not the best place for the supply of comprehensive, integrated and continuous care. Eventually, high hospital involvement in first-level care can jeopardize the delivery of adequate referral care for those patients who desperately need the hospital's technology and expertise.

This report provides findings and an analysis from a PRA research held in Kariba in May 2010 to investigate and provide collective recommendations to community based systems in HIV treatment.

The Community based systems in HIV treatment (CoBaSys) programme is empowering 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 the building solid 'community based system that supports the HIV treatment to benefit most vulnerable social groups at primary care level. 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.

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 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 Kariba 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 Kariba 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.

Kariba is one of the districts TARSC Zimbabwe prioritized for the Community based systems in HIV treatment (CoBaSys) programme. On analysis of selected indicators, Kariba district presents with characteristics of a vulnerable population. The Multiple indicator Monitoring Survey MIMS (CSO 2009) showed that percentage of women aged 15-49 in marriage or union before their 15th birthday (8%) was one of the highest following Mashonaland central with 9%. this was particularly high in the lowest wealth quintile and in the social groups with very little formal education. Kariba recorded the lowest number of women tested for HIV during ANC visits (45.7%) compared to Harare and Bulawayo that recorded 70.5% and 82.1% respectively (CSO 2009). the Poverty Assessment Study Survey (PASS) 2006 shows that the poverty incidence amongst the very poor and the poor rose from 6% and 28% in 1995 respectively to 7% and 27% in 2003 respectively, while the total poor population in Kariba urban rose from 34% in 1995 to 53% in 2003 (Ministry of Public Service, Labor and Social Welfare 2006). The same reported showed that teenage pregnancy was highest in 2003 in Kariba at 6.3% compared to Bulawayo lowest at 2.2% (CSO 2009) in the same year. MIMS 2009 reported that only 1.0% of the population in Mashonaland west province used condoms in 2009 compared to 3.2% in Bulawayo. The ZDHS (2005-6) shows that HIV prevalence in Kariba urban (provincial disaggregations) was at 19.1% compared to the national average of 18.1% in the same period (CSO 2006).

3.0. Methods

The study used mainly qualitative Participatory Reflection and Action (PRA) approaches. PRA is 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.

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 by the researchers with a sample of 30 community members representing the target social groups. 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) to understand the meaning of method 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	<ul style="list-style-type: none"> • Ranking and scoring

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"> • 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 (District administrator's office) health workers (matron, nurses in charge, primary care nurses), home based care givers (HBCG), people living with HIV/AIDS (PLWHA), OVC, Youth representatives, support groups, other health service providers, local leadership, herbalist and religious group representatives. This group constituted a total of 36 men women, children and youths infected and affected by HIV in Kariba urban district.

The research team comprised of 5 people who had had experience in PRA and had been trained on the PRA protocol prior to implementation. These Included (Machingura Fortunate (Lead Researcher), Senele Dhlomo, Edgar Mutasa Esther Sharara, Francesco Guaraldi, Itai Rusike).

3.1. Community mobilisation and planning meeting

The TARSC local organizer in Kariba district had begun preparations in early may before the PRA meeting. The planning meeting was attended by civil society organization (CSOs), local authorities, district officials and health workers. The planning meeting introduced the programme to key stakeholders and the district authorities. It was part of promoting the project and its objectives to stakeholders. Following, the local organizer visited individual offices to confirm the dates, venue and times of the three day workshop.

3.2. Introduction to the PRA research meeting

The PRA meeting was held in the Nyamhunga township in May 2010. There were a total of 36 delegates, with 19 women and 17 men; there was one child at the age of 12. The delegates included 7 youths Including OVC; 9 health workers, 10 Representatives from the Zimbabwe National Association of People living with HIV/AIDS (ZNNP+), 6 from the Red Cross HIV/AIDS support group, teachers; a matron, district Administrator, 2 councillors, members of the police force; the clergy (roman catholic); Apostolic Faith church representatives, Muslim group representatives; community members from Kariba urban and the research team.

The research team welcomed the delegates and participants introduced themselves. The Kariba District Administrator officially opened the meeting and formally introduced CoBaSys in Kariba district. The two councillors gave welcome remarks and expressed their interest in the meeting.

On interviewing the map, communities discussed how the socio-economic differentials may have an impact on uptake of available services for HIV/AIDS.

“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)

Participants were divided into groups according to gender and age from their wards and drew a map of their community on flip charts, highlighting landmarks such as clinics, hospitals, church, AIDS service organisations, churches, dams, schools, shops and social and community features. The maps are shown overleaf.

When the maps were presented and discussed, the major social features were noted as

1. Economic facilities including the Kariba Dam, crocodile farm, shops, lake harvest fisheries, Kapenta industry, wildlife safaris, flea market, vendors market, banks, home economics and other income generating projects including the sawing compound, boarder service area
2. Social services, particularly schools, clinics (ANC (Antenatal Care), PITC (Provider initiated Testing and Counselling, VCT(Voluntary Testing and Counselling) and PMTCT (Prevention of Mother to child Transmission) services) , social welfare offices, NGO (Non Governmental organisations
3. Community facilities such as churches, foot/netball fields, beer halls, night clubs, bus terminuses, hotels, lodges, boat houses, recreational centres, fuel service stations, Home based care givers, support groups, community halls
4. Houses, wildlife and mountains

Social groups were identified by each of the three groups. Of particular importance was the emphasis on the ‘*Death Recreational house*’ in Nyamhunga Township. The residential house was reported to operate as a ‘*Shabeen*’ (illegal night club selling intoxicating compounds such as a toxic traditional beer termed ‘*chikokiana*’ and also operated as brothel accelerating the spread of STIs. Other social groups identified in the community as having an influence on health were **Economic groups**: wealthy people business people (mainly residing in the northern mountainous suburbs of ‘Heights’), the business community, Lake Harvest (The largest fishing company in Zimbabwe); the tourism industry including hotels, restaurants, lodges, boat houses, boat cruise facilities and catering industry, women in projects and clubs (e.g. those found at the sawing compound). **Social groups** –Home Based Care givers, HIV/AIDS support groups, women’s groups, youth groups, political parties; - and **particular groups** in the community – Men who have sex with Men (MSM), PLWHA, cross boarder traders, health workers, commercial sex workers, women care givers, members of the apostolic church, Traditional healers, other faith healers, orphans and other children made vulnerable by HIV/AIDS, widows, and poor people.

There is potential for developing systematic comprehensive community based systems for HIV treatment in Kariba urban. This is founded on the analysis of the social mapping results. Kariba urban has a number of economic activities and economic groups that could be tapped into to facilitate a healthy efficient HIV/AIDS treatment, support and care system at that tier of the health system. It also has social groups that are potential channels for enabling an efficient interlinked system sufficiently delivering on HIV/AIDS

related activities. The social mapping also identified specific vulnerable groups in the townships, there is however variation in this across the district.

The 'Heights' area is characterised by wealthier people of the community with better infrastructure, while Nyamhunga and Mahombekombe townships have smaller land areas and bigger populations (high density areas) putting a strain on the available resources within their respective townships. All areas had some wealth, although at different levels. For instance Nyamhunga ward 1 had income generating projects whilst others did not. The majority of the low income jobs such as working in the crocodile farm, the fishing industry vending and other jobs mainly resided in the Nyamhunga and Mahombekombe, on the other hand top managers, private business owners and other high ranking officials reside in 'Heights'.

The Kariba district hospital (the only government health facility) is found in the 'Heights' area. Myamhunga and Mahombekombe clinics are both local authority clinics. Government hospitals provide cheaper services compared to private and local authority clinics that demand card fees on consultation. While the less/non poor social groups have the hospital close to them for free services the poor/very poor still pay user fees to access health services closer to them. Furthermore, reaching the District hospital in the hilly area of Heights requires an investment in out of pocket costs.

In addition, proximity to better standard of living in the wealthier suburb draws better qualified human resources into the area relative to the township clinics.

The absence of a clinic in the Heights causes unnecessary overloading of Kariba District Hospital referral centre. This negatively affects the care of the Hospital, due to competition with primary care cases that should otherwise be solved at clinic level.

While all the Health facilities provided the VCT, PMTCT and PITC services, the whole district relied on the provincial hospital for the CD4 counting machine. Chinhoyi Provincial Hospital more than 100km away from Kariba provided CD4 counting services. The services were often unreliable due to power cuts at the provincial hospital and or lack of fuel or the vehicle to collect swabs from Kariba health facilities to Chinhoyi. Some patients were reported to have visited the clinics as early as 0300hrs in the morning to get their blood samples to Chinhoyi hospital through the clinic truck early enough to prevent the blood from coagulating.

Kariba Hospital is an ART site, Reports from the research indicate that there common and recurrent ARV stock outs. This caused huge adherence challenges on patients.

"Behaviour change information from some of the NGOs within Kariba educate people about HIV, particularly on treatment support system, take for instance Tony-Waite foundation, Catholic services, Kariba AIDS Project, Batsirai to mention a few, have been quite instrumental in HIV treatment programmes. We are happy with their health promotion services. Batsirai also provides testing services while Tony Waite assists children in need of treatment and covers the CD4 count costs" **Participant**

The existence of members of the apostolic church faith who resist and object health was noted to make the members vulnerable to an increased rate of untreated communicable diseases and non communicable diseases including HIV. Similarly untreated STIs may exist in commercial sex workers and Men who have sex with men.

‘ we are very worried about the Johanne Marange Apostolic Faith sect, condom use is a taboo, polygamy is encouraged, health seeking behaviour is foreign, treatment from health services is punishable in the church e.g. some members get to be excommunicated from the church, forced marriage is a culture, and worse they do not get their children for immunisation. What beats me is how they convince some of us on treatment to leave treatment for their alternative spiritual therapy; I can tell you that this group could be the biggest cause for most HIV treatment defaulters in Kariba’: **participant**

There were gaps noted on resources targeting vulnerable social groups such as children, OVC, women, and adolescents particularly for Children Living with HIV AIDS (CLWHA). The absence of mechanism to support OVC and CLWHA makes it difficult to create a conducive environment for treatment of these social groups. Further knowledge gaps around adolescents born with HIV makes interventions targeting youth less efficient. This is perpetuated by inequities around the HIV interventions in Kariba. Most interventions seem to only target women and/or involve more women putting men at vulnerable positions because of their sex. This reflects a social group and gender inequality dimension that programmers should take note of at planning level.

Further, HIV treatment projects do not adequately involve Apostolic Faith church groups and Muslim groups in the community. Leaving out these social groups leaves a huge ‘unmet need’ and distorts strategic planning and ultimate service delivery. This is so because these key social groups are not included in the planning system yet they are part of the community and can enable or disable the effective implementation of HIV treatment and support programmes in the community.

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

Participants defined the major health needs in their social groups using the ranking and scoring Participatory tool. They did this in groups divided by gender and age and one other group with health workers and distributed seeds against the health problems they felt needed greatest attention. The total seeds for each problem were used to determine the three top health priorities. This was done to identify 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 in key social groups).

Women prioritized **gender inequality, food insecurity and divorce** as their top three priorities respectively. They noted that their biggest needs at community level that relate to HIV were mainly centred on gender-related barriers in access to services. These particularly prevented women from accessing HIV treatment at the right time. Women highlighted that their vulnerability is founded on their lack of access to and control over resources, child-care responsibilities, household chores, restricted mobility and restricted freedom to make decisions. Women in Kariba assume the greater share of home based care giving in the family and in the community as is assumed that the role best fit women. On the other hand, women reported to stop treatment mostly when their husbands die as they tend to lose their homes, inheritances and other property from greedy family relatives. This leaves women with no source of income to purchase drugs or to pay the card fees to access health care at the local clinic or for covering ‘out of pocket costs’ to access free drugs at the Kariba District hospital. Food insecurity ranked

as the second major priority affect more women as they reported lacking a reliable source of income and often rely on the decisions made by their husbands/partners on what to buy and prioritise in the household. Often, when food is scarce women sacrifice themselves over the rest of the family members. Consequently, the third priority problem was divorce. Divorce results in broken families and increases susceptibility to HIV infection particularly for young divorced women or young girl children from these families. These young girls may shy away from sharing their HIV status and accessing treatment.

Table 2: Social Groups' Priority needs

Problems identified	Distribution of counters (scoring)		prioritizing of the problem (ranking)
	First round of scoring	Re-distribution of seeds after ties	
women			
Gender inequality	6		1
Food insecurities	5	18	2
Divorce	5	9	3
Men			
Unemployment	7		1
Lack of nutritional support	5	14	2
Cultural beliefs (<i>Ngozi, Vuka Vuka, business, politics</i>)	5	7	3
Youth			
unprotected sex before marriage	11		1
lack of care	1		2
stigma and discrimination	2	6	3
Health workers			
Shortage of staff (unrealistic workloads)	4	14	1
Lake of Post Exposure Prophylaxis	4	14	2
Substandard facilities/ equipment	3	10	3
Common health need across group			
Stigma and discrimination			

Men ranked **unemployment, lack of nutritional support, cultural beliefs (*Ngozi, Vuka Vuka, business, politics*)** as their priority needs respectively. Lack of employment amongst men living with HIV AIDS causes economic pressure at household level leading to stress, depression, anxiety, social isolation, and low self-esteem associated with inability to look after own families. Men raised concerns that this is associated with cultural connotations around socialization of men which could mean that men will not seek HIV services due to a fear of stigma and discrimination, losing their jobs and of being perceived as "weak" or "not man enough".

Furthermore, lack of employment could also mean that the reduced income levels negatively affect the food and nutrition security of households. Because men are traditionally seen as the providers, and they believe that they must fulfill this role, many of them react negatively if they cannot find work or if they are unable to provide for their family. Men's sense of anger or disempowerment may lead to. Unemployment was reported to be associated with low nutrition levels; this was reported to be worse for men due to absence of nutritional support services. These services key to PLWHA and should form the referral network at the clinic level. Men, often find it difficult to talk about sex and to reveal one's HIV status. Advocating abstinence, faithfulness or condom use can be difficult for many couples. In the community, openly discussing sexually transmitted infections can often mean breaking local taboos, resulting in a loss of prestige. Many men are afraid of revealing a HIV-positive diagnosis because they fear

losing their jobs and being rejected by their social group, or because they feel guilty towards their regular partner.

The **youth** noted that unprotected sexual intercourse particularly before marriage is common and more often complimentary to night clubbing and shabeen frequenting. More often, rebellious attitudes amongst youth are a result of 'lack of care' rated the second highest priority amongst this group. Lack of care was attributed to lack of attention paid to young people by adults and the society at large. Young people tend to resort to other risky behaviours like unprotected sex. The lack of tertiary institutions in Kariba districts makes it very difficult for young people to make career decisions as opportunities are very scarce. This has resulted in high unemployment rates amongst the youth. Discussions with this social group showed that most crimes in Kariba are committed by young people. Stigma and discrimination is very common amongst youth, this makes it generally hard for young people to access health information, access VCT and or visit the health facilities. They suggested, HIV/AIDS programmes particularly on treatment should be generalised and be accessible at primary care level with general ease in the same way as people access diabetes treatment and or TB treatment. They suggested that the community engage in activities that create career opportunities for young people, programmes that reflect attention and care such as the youth HIV/AIDS department within the Ministry of health and Child Welfare.

Shortage of staff, unrealistic workloads, lack of Post Exposure prophylaxis and substandard facilities and equipment were respectively rated the top three priorities by health workers. Shortage of health workers places a burden on the few available health workers with unrealistic workloads coupled with poor remuneration. They face difficult and often dangerous working conditions while occupational post exposure prophylaxis is in short supply if available at all. Human resources for health funding should cover both health service providers, and the management and support workers who provide administrative services to the health system. Health Workers reported that the Ministry of Health and Child Welfare should invest in training existing health workers, to keep them updated changing priorities primarily on administration of HIV treatment. They also suggested that mechanisms should be put in place to enable retired matrons and doctors to go back to work to alleviate the problem of staff shortages. The army barracks in Kariba are reported to have enough and perhaps more than enough human resources for health, health workers added that the ministry of health should strengthen relationships and collaborate with staff in the military to maximize the efficiency of huge workloads.

Stigma and discrimination was common amongst all groups and was rated the one most important need across all social groups.

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

On identifying the causes of the problems, using the '*problem tree*' participatory tool women noted that the underlying causes of their health problems include cultural and religious connotations that perpetuate gender inequalities. The policies in place that promote gender equality and protect women against all forms of violations are not enforced and followed up on to turn the rights into capabilities. Service delivery particularly on treatment should be monitored with women as the primary monitors of these policies. While poverty plays a crucial role in undermining brilliant policies, the gap between policies and implementation is wide. Sector wide approaches that enable the realisation of health rights can play a huge role in transforming

societal impressions on the socialisation of women in the wider community. The Zimbabwean constitution is not explicit in protect the right to health and women bear the biggest burden. Community based HIV treatment particularly for home based treatment should include men while PMTCT programmes should orient more towards PPTCT to strengthen the role of men in HIV treatment programmes.

Youth's immediate causes of problems included unemployment, stigma and discrimination, poor qualifications and closure of industries and malfunctioning of

Intermediate causes included the absence of social security, communication with health services while immediate `causes pointed at lack of knowledge, lack of education, lack of employment opportunities and fear of stigma and discrimination. Intermediate problems pointed at poor access to ARVs, poor quality of education caused by poor remuneration of teachers. The underlying causes pointed at the volatile macroeconomic environment. On the other hand, the underlying causes of problems of health workers included poor implementation of policies through the National AIDS council that should enforce provision and access to post exposure prophylaxis. They argued that the Health services board (a board that is enacted to address human resources for health problems) did not protect health workers enough to their satisfaction. Other underlying causes included inadequate budget allocated for health. The budget is not sufficient to address infrastructural deficiencies, drug stock-outs, equipment failure, and staff remuneration.

The table below summarises the underlying, intermediate and immediate causes of health of the four social groups (women, youth, men and health workers)

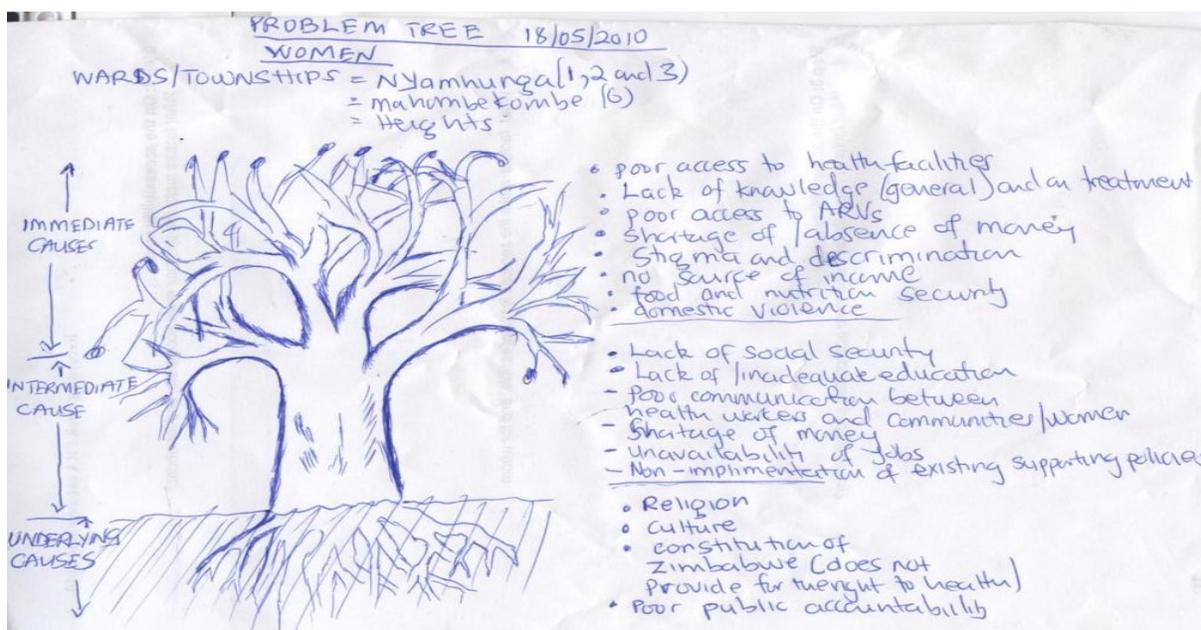
Table 3: underlying, intermediate and immediate causes of health needs

Social group	Underlying causes	Intermediate causes	immediate
Women	<ul style="list-style-type: none"> • Religion, • Culture, • Non effective policies / constitution that is not explicit on Health rights 	<ul style="list-style-type: none"> • Absence for social security for health, • poor communication with health workers 	<ul style="list-style-type: none"> • Lack of knowledge/ education, • lack of employment opportunities
Men	<ul style="list-style-type: none"> • Poverty, • economic policies, • political environment 	<ul style="list-style-type: none"> • Poor social protection, • lack of income generating projects • broken industry 	<ul style="list-style-type: none"> • Prostitution, • food insecurity, • poor access to treatment, • drug stock outs
Youth	<ul style="list-style-type: none"> • Inefficient agricultural policies like the land reform programme • The poor economic environment 	<ul style="list-style-type: none"> • Poor access to ARVs • Poor quality of education • Poor remuneration of teachers 	<ul style="list-style-type: none"> • Stigma and discrimination • Fear of judgement from fellow citizens • Poor qualifications • Lack of career opportunities. • Industry breakdown
Health Workers	<ul style="list-style-type: none"> • Policies on health workers • Insufficient health budget • Economic environment 	<ul style="list-style-type: none"> • Lack of retention schemes • In adequate mechanisms to ensure ART for occupational PEP • Inadequate transport, housing, • hospital equipment 	<ul style="list-style-type: none"> • Lack of skills to administer PEP • Lack of PEP kits • Corruption • Favouritism • lack of transparency in the allocation and distribution of resources

The social groups agreed in the discussions that there were causes that were already being acted on. Women noted that education concerns were partly being addressed through the ministry of education through the girls' bursaries programme that encourages and provides opportunities for girls to proceed with education. The policies that protect children's rights provide girls with opportunities not to miss school attending menial household chores. This creates great opportunities for girls in proceeding with their education. Men highlighted that AIDS levy was meant to help PLWHA, however they were not benefiting from the fund. On the other hand some causes were being addressed through Non Governmental Organisations such as Batsirai, Catholic Services and Tony Waite. Issues of transport amongst health workers were already being acted upon through aid from the Global Fund and some NGOs through the Ministry of Health. Some organisations such as Crown agencies were reported to provide some incentives` to health workers.

Actions proposed: There were causes that each individual social group could act on within the community. **Women** identified adult learning revival as a strategy that could enhance knowledge for worm particularly on HIV treatment, prevention, support and care. Working with NGOs and other community based organisations helps in employment women empowerment and confidence building pertinent for HIV programmes and decision making around HIV related issues. Using resources they already have, **men** identified causes they could act on. For prostitution men suggested posting cases of prostitution in suggestion boxes to the police department, organise housing cooperatives to create employment. Men also noted the importance of holding community campaigns against stigma and discrimination on PLWHA, Campaigns on HIV treatment literacy and condom use within marriage.

Figure 3: Problem tree analysis of underlying causes of health



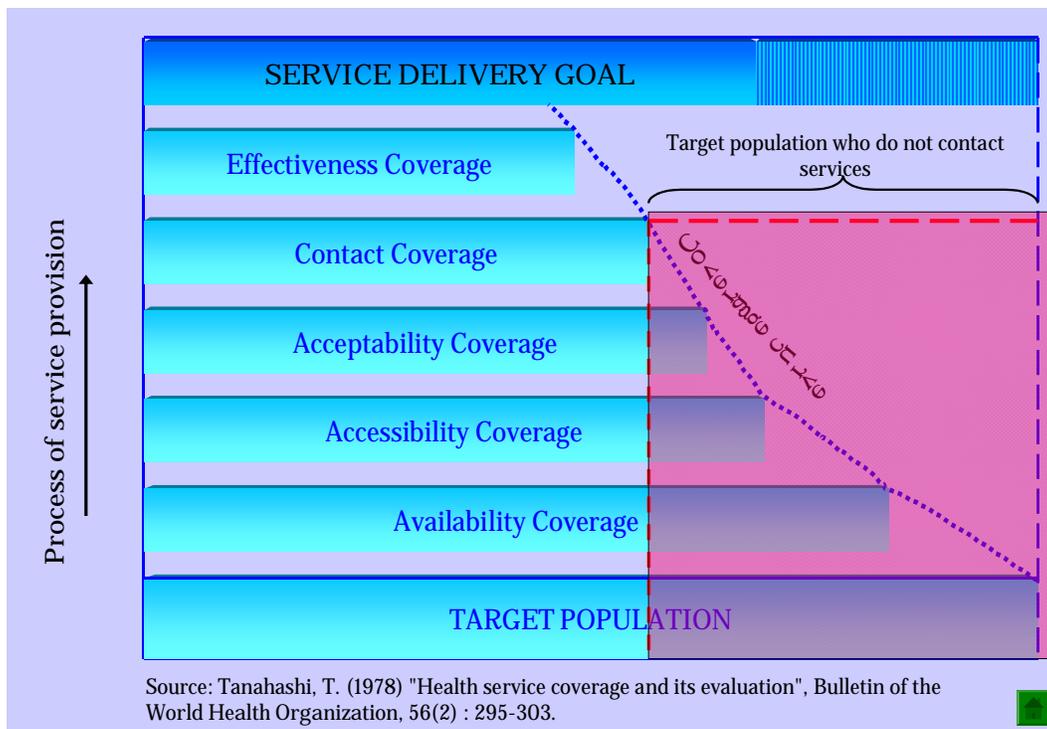
Problem tree analysis: women's group-Kariba PRA meeting
 Source: Fortunate Machingura © TARSC 2010

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

We understand Health service coverage 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 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



Three social groups each identified a service where resources were available but where the social group faced challenges in accessibility, acceptability of those resources up to the point of contact and effective coverage. All the social groups noted that HIV treatment systems and services were available, however there were challenges associated with accessibility, acceptability, utilizations that did not translate to effective coverage.

Tanahashi model was used to qualitatively interrogate the health service coverage in terms of HIV treatment in Kariba district. The tool was designed to enable communities to express coverage of HIV treatment relative to need of the population requiring treatment who have used the service. Importantly the qualitative component of the provision of care is what the Tanahashi model interrogates. Reasons for flaws in availability, accessibility, acceptability, contact and effective coverage were identified and possible solutions were discussed, including recommendations on how to strengthen the community based system on HIV treatment. The five domains of coverage were expressed in terms of availability, accessibility, acceptability, contact and effective coverage as outlined below.

- i. Are the care resources (infrastructure, drugs, personnel) available, and for whom? termed **availability coverage**.
- ii. Are these resources accessible, and for whom? This is termed **accessibility coverage**. There may be physical or financial barriers to access.
- iii. Are the resources / services acceptable to the population, and for whom? This is termed **acceptability coverage**. This includes social, cultural and perception financial barriers to using services.
- iv. Are people making contact with the services, and who?, termed **contact coverage**, or utilisation, and finally
- v. **Effective coverage**, or what share of the population in need of an intervention effectively receive 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.

4.4.1. Mapping availability coverage

Available resources	Unavailable resources
<p>Human Resources for Health Nurses (2 senior nurses per clinic), primary care workers (including primary care nurses who still require training and experience), Home based care givers (mainly women);</p> <p>Drugs ARVs (only at the district Hospital),</p> <p>Services Voluntary Counselling and Testing (VCT), Provider Initiated Testing and counselling (PITCT), Nevirapine for PMTCT(VCT, PITCT, PMTCT services at the clinics only accessed by those who can afford the user fees at the local authority clinic), Condoms, support groups; Antenatal Care (ANC)</p> <p>Equipment and sundry Gloves, soap, Rapid HIV treatment Kits</p> <p>Infrastructure Health facilities; Opportunistic infection services (OI Clinic);</p>	<p>Human Resources for health Doctors, nurses and other staff trained for ARV administration (these are available in very minute proportions relative to the population needing their services),</p> <p>Drugs ARVs (inadequate relative to the population in need and only available in one area of Kariba urban); Occupational and non occupational Post Exposure Prophylaxis</p> <p>Services youth friendly centers; Nutrition services; Treatment Literacy; Occupational and non occupational Post Exposure Prophylaxis, social welfare services, psychosocial support, workplace clinical services</p> <p>Equipment and sundry CD4 counting machines; Other diagnostic testing equipment such as X-Ray machines, Transport/Ambulances</p>

4.4.2. Accessibility coverage

The resources might be available but too costly or geographically difficult to reach, therefore hindering access. Thus distance from township facilities to the Kariba district hospital was a contributing factor to accessibility. The discussions around accessibility coverage were therefore centered on the following key questions

- 1) Is the distance to the Kariba District hospital within the standard 5km radius?
- 2) Are transportation facilities to the Kariba district hospital from the township clinics readily available and if available are they available in time?
- 3) Is transport to the Kariba district hospital generally available?
- 4) Is travel time to the district hospital a barrier?
- 5) Is the distance and travel time to the provincial hospital a barrier?
- 6) Is the waiting time to see a health professional associated with consumers' perception of accessibility of services?

In the social group discussions, participants in each group identified, discussed and agreed on the factors that make the services more accessible, and for whom (*inside the accessibility coverage step*) while also identifying and discussing the factors that make the services less accessible, and for whom (*outside the step*)

The consolidated group discussions showed that the district hospital (the only available ART site) was outside the 5Km radius from the majority of the population. The District Hospital is situated in the Heights area. This residential area is populated by people with a better socio-economic status. The hospital is understaffed and workloads are huge resulting in inefficient services. The health workers who attend to ART patients also had to deal with minor cases that should be dealt with at clinic level. The Heights residential area does not have a clinic, thus, cases that should be dealt with at clinic level for that population are dealt with at hospital level. This contributed to long waiting times for most patients needing attention from the same health workers hindering access to care. Kariba urban has a hilly terrain, and wildlife such as elephants are always on the loose. For the majority of patients who do not have disposable income to cover out of pocket costs to cater for transport costs, the walking distance was too long, tedious and dangerous. This was presented as a huge physical access barrier. On the other hand, diagnostic tests and other specialized care is only available at the Chinhoyi provincial hospital more than 150km away from Kariba Urban. Both Nyamhunga and Mahombekombe clinics do not have ambulatory services making referral for critically ill patients almost impossible. Those who needed to walk to Kariba district hospital spent more than 2 hours walking to the hospital, travel by bus to Chinhoyi provincial hospital was not only expensive and difficult (due to unreliable public transport services) but also long (average of 2 hours by bus).

4.4.3. Acceptability coverage

While resources can be available and accessible to the population, these services may not be acceptable to this share of the population. Thus, these HIV treatment resources may end up not being used if they are unacceptable to that population. Social groups discussed questions of acceptability coverage with respect to the following factors.

- 1) Are the services affordable?
- 2) Are the services acceptable culturally?
- 3) Are the services acceptable by your religion, beliefs, gender?
- 4) Is the type of facility acceptable including the neighborhood of facility? (*Class and taste*).



Community members at the May 2010- Kariba PRA research meeting Source: Fortunate Machingura © TARSC 2010

The discussions showed that religion played a huge role in the acceptability of health services. Members of the Apostolic Faith Christian sect form a huge social group in Kariba urban. This following is divided into different sects, some of which do accept health care facilities and services they provide. However, the majority objects health care and health services based on religious beliefs. Most of the HIV treatment, support and care interventions in Kariba district were reported to be absent amongst this social group. The Nyamhunga and Mahombekombe clinics are both municipal/local authority clinics that demand user fees in the form of card money to cater for its day to day administrative functions. The \$4 (Four United States Dollars) charge by the local clinics was beyond the reach of many. This was coupled by challenges associated with cultural perceptions that perpetuate gender inequality. This included the lack of power amongst women to make financial decisions on health services payment, worse still, waiting for permission from their husbands, elder brothers or father figureheads to grant permission to access health services.

Other areas of concern pointed the political associations of some health workers with particular political parties. Participants expressed fear of intimidation to accept health services from particular facilities based on this. On the other hand, participants highlighted that some facilities had very poor infrastructure and equipment making them look incompetent, substandard. This made some patients not accept these health services as they fail to trust them.

4.4.4. Contact coverage

When services are available, accessible and acceptable to the population and people make contact with them, contact coverage is achieved. HIV treatment to translate into effective coverage, patients need several contacts with a health worker- for instance an HIV patient can make contact with the health facility, however the health worker may not be available; or a trained health worker to administer ARVs is not available; or the drugs are out of stock; or the

patient may fail to pay for diagnostic cost such as the X-ray, Liver function or CD4 count and viral load tests. This compromises the potential for contact coverage to translate to effective coverage.

The discussions on contact coverage identified the resources and services that were being used, and those not being used. The resources/services that were being used included ANC (and PMTCT services). However, most pregnant women who tested positive could not access Nevirapine resulting in low contact coverage for PMTCT services. On the other hand, most people on treatment were reported to default from treatment due to alternative therapies particularly from the faith healers -the African Apostolic Faith church commonly referred to as “*Maprofita*” loosely translated as “*The Prophets*” and traditional healers commonly referred to ‘*Tsikamutandas*’ who discourage them from continuing on treatment opting for spiritual alternatives. Consequently, patients resort to faith healing and discontinue treatment grossly undermining contact coverage efforts. This was reported to result in low contact coverage for HIV treatment. Overall, shortage of drugs, inadequate health staff, shortage of equipment and other services and community spiritual beliefs were reported to significantly compromise contact coverage

“...tinoparapara kuti tiwane kamari kekukwira kombi kuenda ku Heights ku Hospital, zvinodzorerera kumashure chaizvo kana wasvika uchiudzwa so kuti hakuna mapiritsi, dzokai Tuesday. Vamwe vanotiudza kui Tianche, ma Alovera products ava kungowanikwa pese pese haakonzere ma side effects and ari natural, kwete ma ARVs anouya nemaside effects ekuti paunofamba unenge uchinongedzwa. Munoono ma ARVs anokonzera kuneta kunotyisa ande kuti tizive kuti long term effect yacho tinenge tiripi hatizivi. Saka, kana munhu akakugutsa kuti MuProfita nHINGI anoshandira kana kuti Aloe Vera juice kana mushonga wema China we Tianche inoshanda tinodzoka tosiya ma ARV tichida zvatinenge taudzwa kuti ndizvo zvinoshanda and zvakapfava ende ichi ndicho chikonzero chevanhu vari ku Defaulter”
Male participant-Kariba District May 2010

Loosely translated as

“... We struggle to raise money to get Kombi fare (mini-bus/taxi fare) to the Hospital, it's so discouraging to get there and be told that ARVs are out of stock try next week Tuesday. Some people tell us that Tianche, Alovera is better and more natural than ARVs that come with unbearable side effects that lead to stigma and discrimination. You, see these ARVs cause so much fatigue and we do not even know what the long term side effects are, so when someone convinces you that holy water from a Prophet or Aloe Vera juices and Tinanche Chinese medicines is more organic without side effects and results in better health, we tend to want the easy way out, and I can tell you that this has been the one biggest cause of defaulters”
Male participant-Kariba District May 2010

The following table summarizes the actions that need to be taken to address availability, accessibility, acceptability and contact coverage. These were analyzed with respect to the following key questions:

- What does this mean for what needs to be done inside communities?
- What does this mean for what needs to be done inside the health system?
- What does it mean for what needs to be done between communities and the health system?

4.5. Recommendations and actions to address flaws in availability Coverage

	To address availability
actions in the community	<ul style="list-style-type: none"> • Accompanying people living with HIV/AIDS to the hospital or clinic to ensure that they receive treatment. • To carry out community level advocacy to influence local pharmacists to stock drugs that is needed for people living with HIV/AIDS. • Participating in national level strategic planning processes and advocacy campaigns that ensure the development of standard treatment guidelines for HIV/AIDS. • Lobbying with the government officials to improve the supply of HIV/AIDS-related drugs in hospitals particularly at clinic level • National level NGOs to develop advocacy campaigns that lobby international pharmaceutical companies to reduce the price of HIV/AIDS related drugs; • To develop national level interventions that encourages international drug suppliers to make HIV/AIDS-related drugs widely available at low cost. • To facilitate the provision of the Edliz drug list of Zimbabwe to be available at clinic level for staff administering HIV treatment to standardise treatment dosages for those on first line treatment. • To advocate for treatment literacy campaigns that increase the knowledge levels of communities on dosages and side-effects of HIV treatment so that information is widely accessible and usable. This will generalise HIV treatment and reduce stigma. • Institutions and organisations involved in providing care and treatment such as Tony Waite should be involved in the process of developing the treatment guidelines • Community campaigns that advocate towards unbiased and accessible information about drugs. This will strengthen and encourage the rational use of drugs. • Promote the local drug industry to produce ARVs the information on drugs should be developed by people who understand the local context to avoid perpetuation of financial interest particularly on information written on the drugs. • The information on drugs should be written in local languages to promote treatment literacy and drug adherence • Budget allocations for HIV treatment should always include research at local level and purchase of updated reference books that provide recent evidence on drug safety and or new drugs.
actions in the interface between community and health system	<ul style="list-style-type: none"> • Health workers should be provided with sufficient treatment information that is understandable in terms of how it is used, the risks associated with the drugs, the advantages of taking certain combination therapies over others, keeping sufficient stocks of ARVs and readiness for treatment to enhance drug treatment literacy and drug adherence (this work should be done together with communities, support groups, HBCG, NGOs and other relevant players in the community) • Adequate information should be made available publicly to both health workers and communities on defaulting in treatment and implications particularly on the development of resistant viruses and shortening of life • Strong social support groups should consist of PLWHA, communities and health providers to help people to adhere to the treatment regime, to maintain access to prescribed drugs and to cope with side-effects; • Community level advocacy campaigns should be integrated in national level campaigns to systematise key messages around prevention and reduction of stigma and discrimination to discourage people from shying away from using ARVs • integrated health systems that include treatment for TB, for opportunistic and sexually transmitted infections and for other health problems should be supported by a network on other support services at community level such as nutrition support groups, Income generation projects, counselling services, psychosocial support and other diagnostic testing centres. • Procurement of drugs should be centralised and well managed to ensure a systematic

	<p>supply of services that can maintain adequate and uninterrupted supplies of ARVs and other HIV/AIDS-related drugs, HIV test kits and laboratory materials, which translates to congruency in strategic HIV policy priorities with budgetary allocations to realise this. This ensures uninterrupted treatment.</p> <ul style="list-style-type: none"> • Health systems should device mechanism that embrace community input in the development of interventions that support patients who are not eligible for treatment while also encouragement utilisation of alternative ways for positive living
actions in the health system	<ul style="list-style-type: none"> • HIV treatment should be administered by health workers trained in clinical management of HIV/AIDS • Government should invest in laboratory services to provide checks on the level of HIV infection, through CD4 ; testing for drug side-effects (such as liver damage) at district level to decentralise care from the provincial hospital • Health systems should prioritise investment in equipment such that health workers who have received pre- and in-service training must have supplies and equipment for diagnosis when they return to their duty stations. This strengthens synchronisation of logistical systems for making resources and services available. Without this, staff training and capacity building is wasted because supplies, equipment, and pharmaceuticals are not associated with program activities. • ARV side effects must monitor be monitored such as with liver function tests. Thus both government and donor funds should make provisions for the supply of such equipment at district hospital level and expertise to carry these out. • Post Exposure prophylaxis should be made available at the health facility for health workers and this should be budget for in the budget processes. • Donors, church related hospitals and NGOs involved in supporting HIV treatment should work with the Ministry of Health to support provision of essential medicines in line with national essential medicines list and or the WHO essential medicines list should. • Health workers should be trained in constant monitoring of the shelf life of drugs to avoid expiry dates of drugs and maintaining stocks while also keeping drugs in a secure place so that people cannot take them away without permission or recording on the card

4.6. Recommendations and actions to address flaws in accessibility coverage

	To address accessibility
actions in the community	<ul style="list-style-type: none"> • Ministry of Health and its strategic partners together with communities should implement information dissemination strategies that embed health promotion strategies at district level so that everyone involved in ARV treatment is well informed about the drugs, the services that are needed to support their use, and the risks and benefits of using them. • Communities to lobby Ministry of Health to provide ARVs at clinic level to enhance access • District level planning and budgeting should be also be done at clinic level to promote the role of clinics and autonomous costing centres • NGOs/CBOs/PLWHA groups who are already involved in providing ARVs to relatively small • numbers of people should support clinics with vehicles for ambulatory services • Communities should participate in the development of community health financing schemes that should support and strengthen an equitable resource allocation formulae that ensures that those who need treatment and cannot access it are able to access it • NGOs and other stakeholders working in the health sector should orient interventions basing on human rights based approaches. These should involve all social groups in

	<p>order to integrate the religious backgrounds and cultural perceptions that hinder and enable access to care</p> <ul style="list-style-type: none"> • Communities should come together to campaign against health workers who use political interests and political affiliations to determine who gets treatment and who does not. Political interests should be separated from service delivery of HIV AIDS resources • Kariba District hospital services should be widely accessible to the majority of the population by increasing the staff compliment and strengthening staff retention schemes
actions in the interface between community and health system	<ul style="list-style-type: none"> • Communities and the health system should strengthen through capacity building the supportive structures and mechanism that build trust within supportive relationships. Supportive relationships promote good use of treatment – because even drug-based treatments need a supportive environment in order to work properly particularly on the understanding of values that are needed for the removal of user fees at primary care level. • Through support groups that both communities and health systems support, PLWHA should be supported to help them and support others affected by HIV/AIDS. Any relationship involving people living with HIV/AIDS needs to be based on a positive attitude and a belief that treatment is worthwhile
actions in the health system	<ul style="list-style-type: none"> • The CD4 counting machine should be available at the Kariba district hospital to cut on out of pocket costs (<i>transport costs</i>) • Ministry of Health should ensure that the Kariba District Hospital and the respective clinics in Nyamhunga and Mahombekombe has enough and maintained vehicles to take blood samples to Chinhoi district hospital in time

4.7. Recommendations and actions to address flaws in acceptability coverage

	To address acceptability
actions in the community	<ul style="list-style-type: none"> • Communities should through support groups, churches and other formal and informal groups promote the understanding of views and beliefs about ARV drugs. What people believe about the drugs they are taking is a very important part of any treatment. If people think their drugs will not work, they are less likely to start taking them or to use them correctly. This may lead to confusion and result in use of alternative therapies that may not have evidence of efficiency. Thus, it is critical to find out what people know and think about drugs and lobby for Health workers through the Ministry of Health to change the way drugs are prescribed or provide education for community members to improve their understanding about drugs and the way they are used • Community ownership and involvement should be strengthened and institutionalized as it helps to support collective activities and role modeling particularly from more senior members and leaders of the apostolic church, thus implementers and policy-makers must encourage and ensure that many people from this religion in the community are involved as caregivers and support group members; • The local community members of the apostolic church, including relevant leaders, should be involved in the conceptualization, inception and execution of Home Based Care programmes. Thus, services should respond to the felt needs of the community and use such information for rights based planning and programming.
actions in the interface between community and health system	<ul style="list-style-type: none"> • HIV treatment interventions should support mechanisms that enable PLWHA be respected as people who can make choices about treatment. Treatment will be more effective if the helpers, with technical knowledge, encourage people living with HIV/AIDS to be actively involved in their own treatment. This promotes treatment acceptability. • Acceptability should be promoted through media reforms and messages that support the eradication of stigma and discrimination such as PLWHA who help their sero-negative partners to avoid infection, to maintain treatment use and treatment

	<p>acceptability. This should be done by health systems and communities collectively.</p> <ul style="list-style-type: none"> • Conduct community education with men living with HIV, young men, community leaders and male opinion leaders on the importance of male involvement, providing concrete information to encourage them to assume care giving roles. • Promote campaigns that avoid messages that reinforce negative stereotypes to the effect that only women or girls can provide care or conduct activities such as bathing sick people or cooking for sick family members, or that only men can interact with government authorities on behalf of sick people. • Promote joint advocacy that encourage caregivers, volunteers and community outreach workers conducting home-based care activities to form their own support groups, where they can share and exchange experiences and ideas for coping with and caring for sick family members. • Promote local authority, NGOs, government, ministry of health and communities to complement roles in community support groups that provide solidarity and personal support for PLWHA others in touch with treatment needs • Government systems should provide quality policies, leadership, human resources and material support (such as skilled health workers, drugs and medical supplies) for treatment work; • Businesses can support the health system by providing resources campaigns on treatment to reduce the burden of stigma and promote role models in the society as frontline campaigners • Professional associations such as TARSC and academic institutions such as the University for Zimbabwe should contribute knowledge and guidance on treatment, as well as contributing research and generating new knowledge that may be helpful in improving treatment systems at primary care level. These researchers should be relevant to communities and possibly PLWHA at community level should be involved in the research to make information usable applicable and promote acceptability of information and treatment of HIV • Religious organizations such Members of the African Apostolic church should be encouraged to provide volunteers for treatment work mobilize community support and help to reduce discrimination. • Media and community radio should be promoted to provide with accurate information about treatment issues, to help raise awareness and reduce stigma. • HIV training programmes should tap into existing networks of PLWHA who should co- this should also include health workers living with HIV.
<p>actions in the health system</p>	<ul style="list-style-type: none"> • Every child has the right to life, thus the Ministry of Health and Child Welfare (MOHCW) should ensure that every child is immunized and access HIV treatment if living with HIV regardless of the religious orientation of their parents and 4) the MOHCW and other relevant medical authorities should disseminate the right information that gives confidence to health seeking behavior amongst the general population • Health-care providers can help caregivers to make practical arrangements through available community resources for issues such as will preparation, spiritual or religious support, funeral arrangements and children’s educational needs. This generalises HIV and makes services relatively acceptable to communities. This should be extended to orphan-headed households through assistance with house rent, school fees and the provision of meals. This is particularly important to protect young girls and reduce stigma related to HIV and HIV treatment. • Treatment education and literacy programmes need to provide health workers with complete information about how HIV is and is not transmitted and how practicing universal precautions can allay their fears. • Occupational and non-occupational Post Exposure prophylaxis administration capacity building should be institutionalised in addition to basic HIV epidemiology. This will facilitate the ability of health workers to understand the occupational risk of HIV infection relative to other infectious diseases that are more highly transmissible and

	<p>commonly found in health care settings. The response should include private and confidential counselling and testing services, on the premises or at a convenient location.</p> <ul style="list-style-type: none"> • Health facilities should respond in a multi-faceted way to address HIV-positive health workers' fear of stigma and loss of confidentiality. • The enactment and enforcement of anti-discrimination policies to protect health workers living with HIV should involve the participation of health workers
--	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

4.8. Recommendations and actions to address flaws in contact coverage

Only actions in the interface between communities and health workers were identified to strengthen contact coverage. These included the following:

- Access to essential drugs at all times in adequate supplies should be promoted and advocated for to enable the consistent supply of drugs to prevent stock outs. This was suggested as one way that ensures the rational drug use. Thus, rational use of ARVs is possible if the necessary drugs are continuously available and accessible. If not, it is difficult to encourage rational prescribing and the use of an essential medicines list. People will seek alternative drug supplies from private doctors or pharmacies and will not always get the continuing support they need for their treatment; may not always afford them or will resort to faith healing or traditional healing through traditional medicines
- Educate communities and people living with HIV, especially women, about the availability of diagnostic tests for the CD4 count and the eligibility criteria for initiating ART, so that they will know if they qualify for treatment and can seek services

4.9. Community Systems and Mechanisms for Referral network in HIV treatment

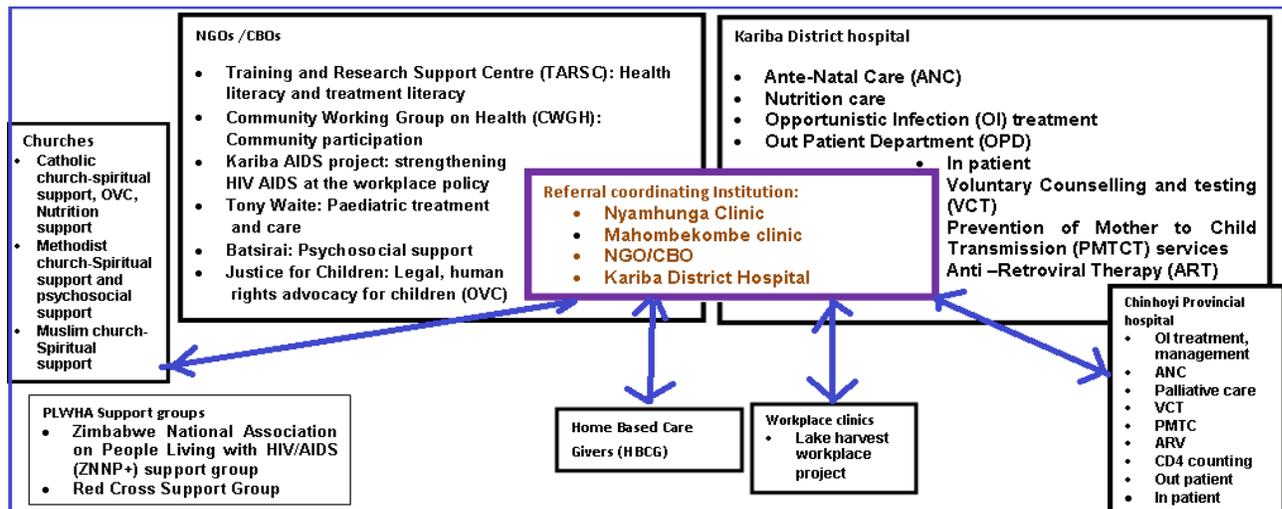
In this context of community based systems in HIV treatment, *'a referral is the process by which immediate client needs for comprehensive HIV care and supportive services are assessed and clients are helped to gain access to services, such as setting up appointments or giving directions to facilities. Referral should also include reasonable follow-up efforts to facilitate contact between service providers and to solicit clients' feedback on satisfaction with services.*

The organization that first makes the referral is called the referring organization; it is also sometimes called the point of initiation of the referral. The organization to which the client is referred for services is called the receiving organization; it is also sometimes called the organization that fulfilled the referral. The organization designated as a central focal point for the referral network is called the coordinating organization. The interaction between referring, receiving, coordinating organizations in the overall patient flow of the patient in clinical care and community services is called the referral network. Usually a referral network thrives to provide a comprehensive continuum of care for the patient' (Family Health International 2005)

The flow diagram below is a summary of the HIV treatment referral network showing how the referral points are network within Kariba Urban. The PRA meeting focus group discussions highlighted that the social welfare department should provide social welfare services, the National AIDS Council district structures such as the District AIDS Action committees should taking a leading role in HIV AIDS treatment systems at community level. Nutrition support services and mental health services were not very significant.

Actions/Recommendations proposed: The Ministry of Health and Child Welfare should collaborate with existing partners in providing psychosocial support, palliative care, treatment literacy, PPTCT, mental health services within Kariba urban.

Figure 5: Community based system for HIV treatment in Kariba urban the referral network



4.10. Community Systems and Mechanisms for Clinical Mentoring in HIV treatment

“Clinical mentoring is a system of practical training and consultation that fosters ongoing professional development to yield sustainable high-quality clinical care outcomes in HIV treatment. Expertise in managing antiretroviral therapy and opportunistic infections is often not found on the district management team in programmes that are starting to scale up HIV treatment. A clinical mentor in the antiretroviral therapy context is a clinician with substantial expertise in antiretroviral therapy and opportunistic infections who can provide ongoing mentoring to less-experienced HIV clinical providers by responding to questions, reviewing clinical cases, providing feedback and assisting in case management. This mentoring occurs during site visits as well as via ongoing phone and e-mail consultation. Clinical mentoring is critical to building successful district networks of trained health care workers for HIV care and treatment in resource-constrained settings.” (WHO 2006)

Very little clinical mentoring exists in Kariba urban. The clinical mentoring in HIV treatment that exists includes the training on PMTCT, VCT and HIV regimens for pregnant women. While The Ministry of Health is mandated to provide cadres that cascade clinical mentoring on the administration of ARVs and management of ART and TB, very little of such mechanisms are in place due to shortages of qualified human resources for health that should be operating as clinical mentors.

The gaps in Clinical mentoring stem from shortages of funds to retain qualified personnel, and where these personnel exist, it is very little. This creates huge deficiencies in supply relative to the need/demand of such training. While there are donor funds (such as the Global fund) that provide for clinical mentoring only a few qualified personnel benefit from such provisions and this was reported as unsustainable since donor funds can be discontinued or can get

exhausted. Further, this was noted to create '*selective inequitable benefit*' as only the same and few individuals (usually high level) benefit. Research participants noted that this donor selective mechanism not only distorts the health system but also destroys health worker morale particularly for both the health workers who may be discontinued from the scheme and those who may not be benefiting from the donor scheme. Those not on the scheme are usually expected to support their colleagues funded by donor support albeit huge salary disparities.

Other needs were noted to include poor strategic planning within the wider Ministry of health budget allocations that do not provide for capacity building and in-service training that result in decentralized clinical mentoring.

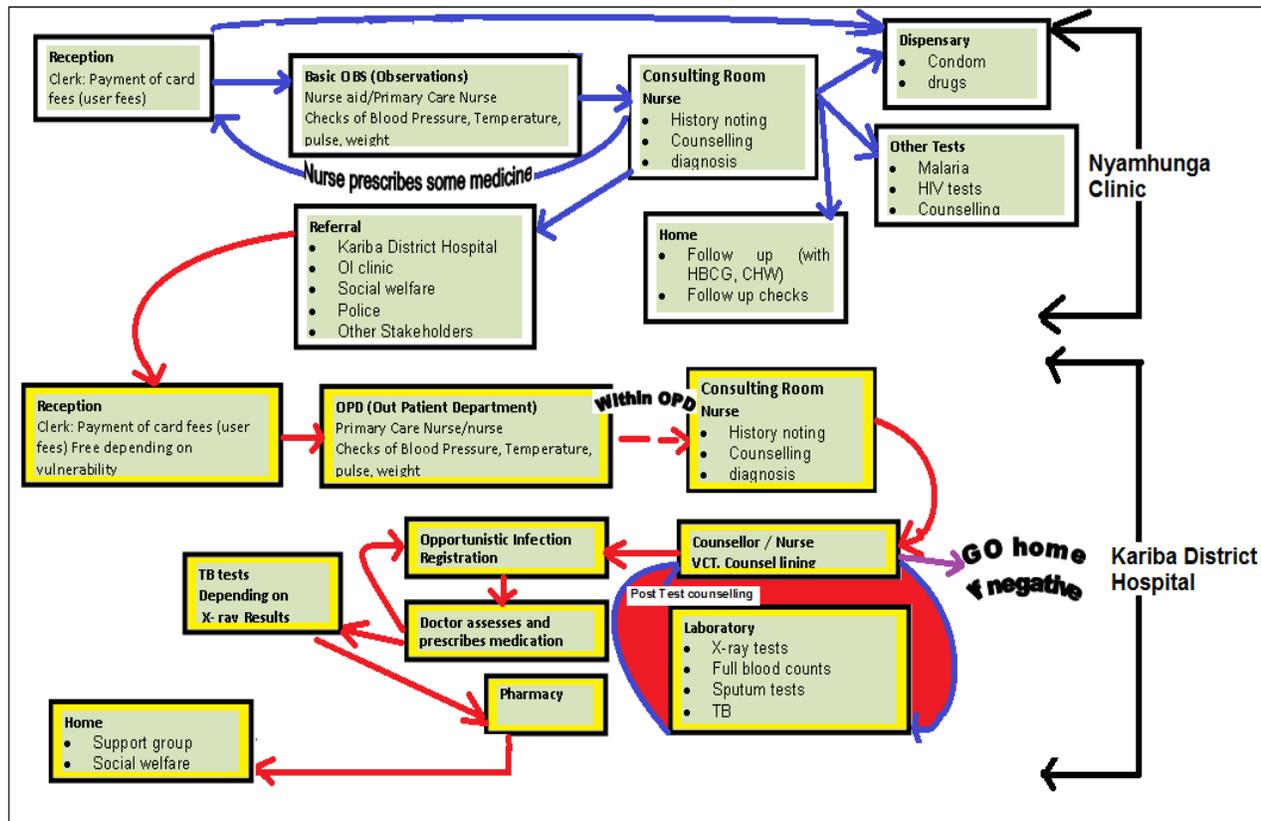
Actions/Recommendations:

Health workers suggested that basic clinical mentoring is only possible if supportive supervision is strengthened particularly in HIV testing and in the management of ART at primary care level through task-shifts. To support this, the following recommendations regarding clinical mentoring were made:

- **Rapid HIV testing:** The ministry of health and or District level hospitals through the district health executive should approach donors and other partners to solicit funding for training on Rapid HIV testing and this should be institutionalised.
- **Decentralizing HIV care and antiretroviral therapy:** ARV and HIV care systems would strengthen HIV treatment systems at the first level of the health system if capacities at clinic and district level facilities were built to enable the provision of services that have been restricted to specialized referral centres (such as expertise in CD4 count, only available at the Chinhoyi provincial hospital).
- **Task-shifting:** Chronic HIV care management depends on a huge base of well-trained health care personnel. This was suggested to be more effective if planning on task-shifting at national a level is based on a more strategic planning needs analysis that involves health workers. This will enable health workers to make decisions on how task shifting should be done and how this has implications on clinical mentoring. This should be backed up by resources and incentives from the national level
- **Access to clinical protocols and the national guidelines on treatment regimens:** The EDliZ guidelines should be updated on a regular basis and should provide treatment protocols for the administration of PEP not just first line regimens (The recent EDLiZ does not explicitly provide for the administration of PEP). There should be protocols that help staff to identify, monitor and assist patients in the monitoring of complications and side effects particularly for patients using the first-line regimens. Further, health workers agreed that clear up-to date standardised clinical protocols that guide consultation and referral of complex cases should be clearly identified taking in cognisance the local context and working environment.

Understanding of Patient flows within Health facilities provides for a deeper analysis on the gaps that exists within health facilities. These gaps may hamper service delivery and clinical mentoring particularly for HIV treatment. The following chart gives an analysis of the patient flow at Nyamhunga clinic and the Kariba district hospital. The flow chart also provides information on the health personnel that is available at each point of the flow chart.

Figure 6: Kariba Urban Patient flow clinic level and district hospital level



Flaws in the patient flow crop up from waiting times that are usually too long. The shortage of human resources for health makes it difficult for health workers to be more efficient. Health workers suggested that an increase in the number of staff increases efficiency. The first patient point in the patient flow is the reception where the patient is asked to pay some money. This is the first barrier found in the patient flow. The Kariba participants suggested that the Health levy paid as part of the monthly rates by each house in the town should be used to cater for clinic administration needs. Paying User fees was seen as double dipping/ paying twice, Residents noted that paying card fees at the clinic is not called for, since the Health levy is meant for catering expenses such as these. On one note, participants highlighted that seriously ill AIDS patients who visited the health facility were not treated as emergency cases and not referred to the casualty department. This was unlike Road Traffic accident cases that automatically jump the queue as they are viewed as urgent cases. It was highlighted that some seriously ill AIDS patients have died on the queue whilst waiting to be attended to by a health worker.

Actions/Recommendations: Health workers noted the importance of capacity building on triaging particularly at the district hospital level. National guidelines on triaging should not only be distributed to health facilities but should also be accompanied by training on **1) what it is, 2) How it's supposed to be used and 3) its implications on clinical mentoring and the patient flow.** *Triaging is the process by which health workers attend to patients according to urgency of need within a health facility. Triaging should be the basis for defining the patient flow points of a patient as they enter into the health facility.*

4.11. Mapping community resources, institutions and actors that respond to HIV AIDS

While there are general shortages of resources for HIV treatment in Kariba Urban, there were institutions identified to provide services that contribute to HIV treatment systems in Kariba urban. These institutions were mapped by communities using the stakeholder analysis PRA tool. The tool maps the actors and identifies their actions. Participants were grouped into three social groups: Men, women and youth (including OVC). The stakeholder analysis highlighted that the actors providing services were not covering all social groups and were not providing the resources and services to optimum levels.

Recommendations included the following:

- **The medicines control authority of Zimbabwe:** should control counterfeit medicines on the streets including unregistered Chinese Tianche medicines.
- **The University of Zimbabwe and Research institutions such as TARSC:** should conduct research that shows the side effects of Tianche medicines on HIV patients in the short to long term
- **Churches:** The churches in Zimbabwe should strengthen an umbrella body of church leaders that works to strengthen human rights based approaches to HIV treatment. They should also provide education on combining ARVs with psychosocial support as two complimentary approaches to HIV treatment.
- **The social welfare department:** should be supported at national level so that it is able to provide services for vulnerable populations particularly for PLWHA and OVC.
- **NGOs, CBOs and Donors:** with the Ministry of health should strengthen the Health services fund to avert the burden of user fees at clinic and hospital level
- **The Ministry of Transport:** should resuscitate travel warrants schemes that provides for free transport to selected vulnerable members of the public particularly for PLWHA to facilitate access services such as CD4 counts in Chinhoyi district hospital
- **Ministry of Education:** should invest in colleges and provide tertiary college education for youth particularly for girls.
- **Child Protection committees** should be resuscitated and strengthen to cater for the needs of children,
- **Home Based Care programme:** should be supported by the Ministry of Health, Donors, NGOs and other stakeholders. Importantly is to provide services that attract the participation of men.

To strengthen the evidence above, a 'leaping blocks' participatory tool was used to consolidate the factors that enable and disable HIV treatment systems at primary care level. The discussions consolidated the learning from the stakeholder analysis in section 8.0 above; the problem tree analysis in section 5.5 above and the learning from the Tanahashi activity to address availability, accessibility, acceptability, contact and effective coverage on section 5.6 above. The activity reviewed the evidence to assess the opportunities and mechanisms to enhance access to HIV treatment, support and care at primary care level.

The activity highlighted that stakeholders present in Kariba urban had very little stakeholder solidarity and complimentary roles. There was unspoken tension and competition for space leading in duplication of roles. The role of the National AIDS Council (NAC) district structure, District AIDS committee was silent. Lack of Research activities created huge knowledge gaps particularly in the following areas:

- 1) **Male circumcision:** Its impact on population level taking note that Zimbabwe was on the brink of a national rollout
- 2) **Breast milk in PMTCT:** To what extent is this policy understood and followed by the providers at different levels in the health delivery system? Is there a choice for mothers living with HIV and or working mothers and are the implications for their choices understood? What type of breast feeding is best for Zimbabweans in the context of region, culture and traditional practices?
- 3) **Coping strategies of adolescents born with HIV:** With the advent of ARVs, some children born with HIV are surviving to adolescents and beyond. What are the coping strategies for this social group? How much is this social group being involved in treatment programmes at community level?
- 4) **Pharmaco-vigilance of alternative therapies:** The relationship and interaction of conventional and alternative medicines, drug side effects, effectiveness of alternative therapies as well as the relationship of nutrition to outcomes
- 5) **Administration of Post Exposure Prophylaxis (PEP)** both occupational and non-occupational.

4.12. Strengthening communication opportunities for health workers and communities.

Health workers act as a bridge between health system and community in providing HIV treatment and care. Knowledge, capacity and communication skills of the workers are key to both their own confidence and building trust within communities. This is thus, fundamental for the success of the health system. Using the Margolis PRA tool that identifies challenges faced by health workers in communicating with communities and subsequently addressing their needs (and vice versa) participants identified possible communication solutions. Thus the summary below documents communication needs and mechanisms for addressing these needs for both the health workers and communities.

Health worker communication problems	Solutions/Recommendations as suggested by communities
Failure of patient to communicate their problem when at the health facility	-Health workers should partner with NGOs to provide basic skills and education to members of the public particularly.
Patient speaks a minority language only hampering on effective communication.	Deploying systems should consider employing health workers who can communicate in Tonga language at all Health Facilities of Kariba Urban.
Costs of Health care determine who gets access to care and who does not. This frustrates health worker ethics (<i>its sending someone home to die because they cannot pay</i>)	-Treat everyone equally regardless of their ability to pay -laws that facilitate attending to patient first before request for treatment should be put in place and enforced by both the health workers and the communities
Failure of patients to appreciate absence of certain services or unavailability of drugs (suspicion and lack of trust).	Build and strengthen relationships that build trust and care between health workers and communities. Health workers should avoid favouritism.
Patients default on treatment	Health workers should educate patients on the importance of treatment adherence particularly with ARVs.

Community communication problems	Solutions/Recommendations as suggested by Health workers
Health worker insists on initiating ARVs even when patients communicate challenges of household food and nutrition insecurity	Health workers should be trained on pre and post HIV counselling and test patient readiness for treatment. Issues of nutrition and food security should be referred to active NGOs that work in that area including the social welfare department.
Health workers do not respect the Confidentiality of patients particularly for youth.	Health workers should be trained on ethics and patients rights to understand the legal implications.
Health workers are intimidated by knowledgeable patients.	Health workers should take time to listen to the patients without being intimidated or thoughts of being challenged. (Education and handling of such cases is needed)
Health workers stigmatise and discriminate HIV AIDS patients.	Health workers should be trained on how HIV is transmitted and how it's not transmitted at the workplace. Training should also go further to administration of PEP.

5.0. Discussion

This research raised a number of priorities for community based systems in HIV treatment in Kariba Urban District. It identified enabling and disabling factors that play a role in allowing services to be used and also raised concerns and recommendations on how to deal with disabling factors for HIV treatment, support and care. These findings will be consolidated with findings from another district in order to have a full understanding of HIV treatment systems at the primary care level in Zimbabwe.

The consolidation of these findings together with recommendations that will accompany them will be used to define a community based model in HIV treatment systems at the lowest tier of the health system where need is greatest. The use of Participatory Reflection and Action (PRA) qualitative methodologies provide a mechanism on which to build learning for communities to take further actions they can implement to begin working on this through a health literacy framework. Health Literacy refers to a process of reflecting on experience, informing and empowering people to understand and act on health information to advance their health and improve their health systems. It builds knowledge and capacity to act within a framework of participatory reflection and action that strengthens community level diagnosis, action and engagement with health systems. This process has already begun in Kariba through the engagement of communities with the Training and Research Support Centre (TARSC). Building effective community based systems in HIV treatment in Zimbabwe should be strengthened by a supportive Primary health care framework. The revitalisation of PHC should be supported by social empowerment processes such as Health Literacy that inculcates the values of community ownership and active participation.

Thus, this discussion summarises more generic recommendations, actions and lessons learned for follow up work to develop a framework on which this work will be founded on with regards to community based systems on HIV treatment. The one fundamental cross cutting element that

stems from this research is the need to integrate this learning in the broader Primary Health Care approach at district level in Zimbabwe.

The learning from this study reflects potential for local government authorities, church leaders; elected leaders, donor community, line ministries in government to work together to enable the institutionalisation of community based services for HIV treatment at primary care level. Policy planning and policy making should be bottom up and informed by research and participatory engagements with communities. Strategic planning and budget planning should involve communities and PLWHA. Programmes should include the needs of OVC and note their vulnerabilities in the context of a poverty environment as much as is what is done for women. Education of communities and people living with HIV, especially women, about the availability of diagnostic tests for the CD4 count and the eligibility criteria for initiating ART, so that they will know if they qualify for treatment and can seek services was observed to be critical amongst women.

Strategies that enforce sensitive approaches to the African Apostolic Faith sect that respect their right to religious freedoms but also assert women's and children's right to health are critical. Based on this, I suggest that community HIV treatment systems should embrace the following key issues

- 1) community ownership and involvement should be strengthened and institutionalized as it helps to support collective activities and role modeling particularly from more senior members and leaders of the apostolic church, thus implementers and policy-makers must encourage and ensure that many people from this religion in the community are involved as caregivers and support group members;
- 2) The local community members of the apostolic church, including relevant leaders, should be involved in the conceptualization, inception and execution of Home Based Care programmes. Thus, services should respond to the felt needs of the community and use such information for rights based planning and programming;
- 3) every child has the right to life, thus the Ministry of Health and Child Welfare (MOHCW) should ensure that every child is immunized and access HIV treatment if living with HIV regardless of the religious orientation of their parents and,
- 4) the MOHCW and other relevant medical authorities should disseminate correct and public relevant information that gives confidence to health seeking behavior amongst the general population

Communities are not homogenous entities, thus while learning from this can be used to inform critical decisions in defining a community based model for HIV treatment in Zimbabwe, district level interventions will need more systematic flexibilities that enable them to use the information within their own contexts in line with national guidelines. If this is provided for policy, there is a fundamental need to define how this should be decentralised to suite norms and turn rights into capabilities with as much little constrains as is possible. However, we note possible weaknesses that this can bring, particularly if human resources gaps are not addressed. Human resources for health play a critical role in ensuring that community priorities are part of the wider health system. This raises a need for collective community planning and active participation in the wider framework of community health systems.

6.0. Recommendations and conclusions

Overall, research identified recommendations that policy should consider in defining a comprehensive community based model for HIV treatment, support 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, those in the frontline health system, and those on the interaction between community and health system.

6.1. The community level

- i. NGOs, CBOS and other stakeholders should work together to support community structures that protect the rights of individuals and facilitate access to health and social welfare services. Thus, the government should prioritize the role of social welfare department particularly in addressing the needs of Orphans and other children made vulnerable by HIV and AIDS.
- ii. PLWHA should be supported by family members and through local government funds earmarked for health such as the Health levy to support and sustain support groups. This can be strengthened with a municipal building/ physical facility that provide a space to run support group and income generating activities.
- iii. The Social Welfare department, Schools, Private sector, business community, Health facilities, CBOs, NGOs, MOHCW and churches should invest in creating partnerships and referral networks in order to provide a more comprehensive package of services.

6.2. The frontline health system

- v. People living with HIV should begin ARV treatment before signs of immune system damage emerge. This can be strengthened by supporting local pharmaceutical companies to produce ARVs so that they can be accessed more cheaply and increase their availability and accessibility. Waiting to start treatment in accordance with current national guidelines of less than 200 CD4 count leaves individuals more vulnerable and less productive (the person may soon be at risk of developing AIDS).
- vi. Furthermore, there is an urgent need to recruit and train more primary care nurses that should be further trained to facilitate clinical mentoring programmes complimented by robust laboratory monitoring training (e.g. CD4 counting).
- vii. The Ministry of Health should enforce standardization of HIV treatment for first line treatment particularly for occupational and non occupational Post Exposure prophylaxis.
- viii. The Ministry of Health and Child Welfare should decentralize outpatient treatment sites to clinic level. This includes provision of laboratory services such as the CD4 counter closest to the communities to encourage sustenance of care.

6.3. The interaction between community and health system

- vii. Primary care workers should provide a mechanism for supporting PLWHA on treatment to adhere to treatment through direct observations and monitoring. The mechanism to do this can be learned from the successful 'Directly observed Therapy' (DOT) treatment strategy used for Tuberculosis control in Zimbabwe. The primary care worker ensures that treatment is taken on time as recommended by health providers. Recommendations to make this more effective pointed at tapping into modern internet SMS technology that

provides for free texts messages. This can be sent as reminders to take medication or to send information on treatment adherences. Health workers require training on how this should be done, managed and sustained.

- viii. The Home based care programme should be revitalized and supported as a national policy priority. This is fundamental in institutionalizing community participation and mechanisms in which they participate. There is potential to address other underlying determinants of health that impede on HIV treatment and care through prioritizing Home Based care programmes.
- ix. The National AIDS Council should support its decentralized structures including the District AIDS Action Committees and Ward AIDS Action Committees in their role of managing HIV AIDS related services including HIV treatment services. This includes ensuring that the AIDS levy benefits PLWHA at the grassroots.
- x. Comprehensive home-based care programmes open an opportunity for palliative care. Based on this, HBCG require training on basic management of ART patients, pain management and diagnosis of opportunistic infections and; the DOTS (Directly Observed Treatment Short-course) for tuberculosis.
- xi. The Ministry of Health ART programme should consider developing HIV AIDS treatment systems in the wider framework of Primary Health Care. This calls for the integration of **community Participation, PLWHA Leadership** within a broader framework of the **Social Determinants of Health**. Thus, NGOs, MOHCW, Churches, CBOs and other stakeholders can provide services that work simultaneously towards one goal. For example, HIV treatment should be encouraged for promotion of 'Treatment for prevention interventions '. HIV treatment reduces viral load and chances of infectiousness, thus significantly reduces the number of new HIV cases. On the other hand other providers could focus on other complimentary VCT, PITCT, PMTCT activities. Leadership stems from experiences of PLWHA who should act as role models in this context and promote good practices and champion behavior change interventions. This approach can position piecemeal interventions, parallel and vertical programmes within an integrated framework. It can help them consider how services mutually relate.
- xii. Coordination and stakeholder solidarity is important in implementing action researches. Action researches should prioritize the following knowledge gap areas: Male circumcision; Breast milk in PMTCT; Coping strategies of adolescents born with HIV; Pharmaco-vigilance of alternative therapies and the impact of administering occupational and non-occupational Post Exposure Prophylaxis (PEP)

The participatory methodologies used in the research created dialogue and ownership of the CoBaSys work from the outset. Participants noted that PRA approaches create an active research framework that enables communities to begin implementing collective action points without waiting for the research team to bring feedback.

We agreed that subsequent meetings will consolidate feedback and update on actions implemented. We observed that PRA processes empower communities and play a wider role in supporting processes of community dialogue and participation in HIV interventions.

7.0. List of Acronyms

ART	Anti-Retroviral Therapy
ARV	Anti-Retroviral
CBOs	Community Based Organizations
CD4	Cluster of differentiation 4: a glycoprotein expressed on the surface of T helper cells
CLWHA	Children Living with HIV AIDS
CoBaSys	Community Based Systems in HIV treatment
DOTS	Directly Observed Treatment Short-course
EDLiZ	Essential Drug List of Zimbabwe
HBC	Home Based Care
HBCG	Home Based Care Giver
NGO	Non Governmental Organization
OVC	Orphans and other Vulnerable Children
PEP	Post Exposure Prophylaxis
PHC	Primary Health Care
PITCT	Provider Initiated Testing and Counseling
PLWHA	People Living with HIV AIDS
PMTCT	Prevention of Mother to Child Transmission
PPTCT	Prevention of Parent to Child Transmission
PRA	Participatory Reflection and Action
MOHCW	Ministry of Health and Child Welfare
SMS	Short Message Services
TARSC	Training and Research Support Centre
VCT	Voluntary Counseling and Testing

8.0. References

1. Central Statistical Office (CSO) (2006). Zimbabwe demographic and health survey 2005–6: CSO and Macro International, Harare
2. Central Statistics Office (CSO) (2009); Multiple Indicator Monitoring Survey (MIMS) 2009: CSO, Harare
3. Family Health International (2005). Establishing Referral networks for comprehensive HIV care in low resource settings: USAID
4. Hallett, T.B et al (2006) 'Declines in HIV prevalence can be associated with changing sexual behavior in Uganda, urban Kenya, Zimbabwe and urban Haiti' *Sexually Transmitted Infections*, 82 (Supple I): i1-i8.
5. Loewenson R, Kaim B, Mbuyita S, Chikomo F, Makemba A, Ngulube TJ (2006) Participatory methods for people centred health systems A toolkit for PRA methods, TARSC, Ifakara , Ideas Studio, Harare
6. Loewenson R, Kaim B, Machingura F (TARSC) Rusike I, Chigariro T, Mashingaidze L, Makone A (CWGH) (2007) Health Literacy guide for people centred health systems: Zimbabwe, TARSC: Zimbabwe
7. Loewenson R, Kaim B, Machingura F (TARSC) Kawale P, Kwataine M (MHEN) (2008) Health Literacy Manual for people centred health systems: Malawi, TARSC: Harare
8. Loewenson R, Kaim B, Machingura F (TARSC) Kelemi C (BONELA), Mhotsha G (BFTU) (2009) Health Literacy guide for people centred health systems: Botswana, TARSC: Harare
9. Machingura F, Loewenson R ,Woodhouse P, Kaim B, and CoBaSys PRA teams (2010); Participatory Research Protocol for Community PRA meetings in community based HIV treatment in Zimbabwe, Malawi, Tanzania, Botswana, Namibia and Mozambique; Training and Research Support Centre; Zimbabwe; Harare
10. Mbizvo MT, Fawcus S, Lindmark G, Nyström L. (1993) Maternal mortality in rural and urban Zimbabwe: social and reproductive factors in an incident case-referent study. *Soc Sci Med* 1993;
11. Medicines Sans Frontiers (2009); 'No refuge, access denied: Medical and humanitarian needs of Zimbabweans in South Africa', MSF, Harare
12. Ministry of Public Service, Labor and Social Welfare (2006); Zimbabwe 2003 Poverty Assessment Study Survey Main report, Government of Zimbabwe, Harare
13. MOHCW (2007) Maternal and Perinatal mortality study (ZMPMS). Government of Zimbabwe, Harare.
14. MOHCW (2009); Zimbabwe National HIV AIDS Estimates 2009; Government of Zimbabwe
15. TARSC (2010); Participatory methods for community based systems in HIV treatment – '*Strengthening capacities for qualitative research using PRA approaches*' –Workshop Report- April 2010: TARSC Harare
16. UNAIDS (2005), 'Evidence for HIV decline in Zimbabwe: A comprehensive review of the epidemiological data' UNAIDS
17. UNAIDS (2008) 'Report on the global AIDS epidemic'. UNAIDS
18. UNDP(2009); Zimbabwe Millennium Development Goals -2000-2007 Mid-Term Progress Report: A report of the Government of Zimbabwe to the United Nations; August 2009: UNDP Zimbabwe
19. UNICEF (2005,) Zimbabwe's Forgotten Children. UNICEF, Harare
20. WHO (2006) Recommendations for clinical mentoring to support scale-up of HIV care, antiretroviral therapy and prevention in resource-constrained settings; WHO, Geneva
21. WHO (2008) Global Tuberculosis Control Surveillance, planning and financing: WHO, Geneva.