Using Participatory Rural Appraisal to assess community HIV risk factors: experiences from rural Uganda

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Introduction

The Rakai AIDS Information Network (RAIN) used PRA methods to help community members identify and analyse factors which put them at risk of HIV infection. This article describes the different methods used and what community members and programme staff learned about community HIV risk factors.

HIV infection in Uganda and Rakai district

Of Uganda's 19 million inhabitants, over 1.5 million are estimated to be infected with the human immunodeficiency virus (HIV). The first known Ugandan cases of AIDS appeared in 1982 in a small fishing village in Rakai District. Rakai is a rural district located in south-west Uganda two hours by road from the national capital, Kampala, and borders on Tanzania and Lake Victoria. HIV prevalence rates in Rakai have now reached epidemic proportions. The overall HIV prevalence rate in the District is 13%, however, rates vary considerably by geographic locale. For example, it is estimated that 39% of all adults in main road trading centres are HIV positive, 25% in rural trading villages on secondary roads, and 9% in rural agricultural villages (Wawer, 1991).

The major modes of HIV transmission in Uganda are through heterosexual contact and from mother to child (vertical transmission). Because of the nature of HIV transmission in Uganda, the devastating impact of the disease on geographic communities and limited government resources, it is essential that communities be involved in promoting sexual behaviour change and sustaining AIDS prevention programmes.

The Rakai AIDS information network

The Rakai AIDS Information Network is an Ugandan NGO with the goal of reducing the spread of HIV infection in Rakai District. It is run and managed by health care providers, health educators, counsellors and trainers from Rakai District. The organisation's strategy is to prevention integrated provide AIDS interventions within a community-based health care framework. Its programmes include community-based health care (CBHC) which trains village health committees, community health workers, and traditional birth attendants. The training includes basic community lealth care but with a special emphasis on HIV prevention. RAIN also conducts a peer education programme for village youths, consisting of a three day training on HIV prevention and condom promotion. Finally, RAIN has an HIV counselling, testing and medical treatment programme which operates through eight decentralised sub-clinics. Both the CBHC and peer education programmes are community-based, with community members selecting amongst themselves the participants to be trained. In addition, community members are responsible for implementing programme activities within their own communities.

In 1993, the Chairman of RAIN attended a Ugandan Community Based Health Care Association/World Neighbours participatory rural appraisal training. The training focused on using PRA for general community health. However, the Chairman thought the methods might be particularly useful in helping community members and programme staff explore factors which put people at risk of HIV infection. Thus, in 1994, RAIN facilitated PRA sessions in two rural high HIV prevalence areas.

Methods used and lessons learned

In order for community members and programme staff to assess community HIV risk factors, we used several different PRA methods. These included mapping, seasonal calendars and men and women's 24-hour activity clocks.

Mapping

Participants organised themselves by village. Each group then drew a map of their village on the ground, using locally available materials such as ash, beans, maize and stones. They first identified the physical features of their communities such as hills, swamps and roads, followed by social features such as homes, churches, schools, and agricultural lands. For each house, participants also identified residents by age and sex and the number of deaths that had occurred in the past 12 months. Participants were also asked to identify which deaths were caused by AIDS. However, because of the stigma still attached to the disease, participants declined to do so.

The village maps were transferred onto paper, and then presented to the group at large. By identifying the number of deaths in the past 12 months, participants realised that there had been at least one death in each home. Although the causes of death were not identified, participants knew that many were in fact caused by AIDS. By seeing the amount of death, participants came to realise the prevalence of AIDS within the community and the implications this has for the community's survival. Next, participants identified specific locations that might put them at greater risk of HIV infection. For example, they identified drinking establishments at which residents often drink alcohol and take outside sexual partners. They also identified isolated areas, such as wells and wooded lots, where women are at risk of being raped.

As solutions to these problems, men proposed that all drinking should be done during the day and that they come home early in the evening. Women suggested that they should go in groups to collect water and firewood, and decided that no water should be collected at night. Some men also offered to accompany their wives and one even said "I shall do the collecting of water to avoid the risk."

Seasonal calendar

A group of about 12 community members also created a seasonal calendar on the ground to identify seasonal health risks. Participants marked the 12 months of the year on the ground and then indicated the amount of rain or sunshine within each month. Under each month, participants then identified the prevalence of both malaria and diarrhoea. When finished, participants transferred the chart to paper (see Table 1).

While analysing the chart with the group, knowledgeable participants related the prevalence of the two diseases to the amount of rain or sunshine. A good portion of the participants were surprised. Thev had previously thought that malaria and diarrhoea were caused by eating certain foods, such as maize or mangos, which are present at specific times of the year. The facilitator then asked, "Does HIV transmission have a season?" He expected participants to say no because transmission occurs throughout the year. programme staff and However. many community members were surprised when a village elder stood and said, "Yes, in our own community here, we have found that when it is harvesting time and men have money, even a lady ... will accept (to have sex) because she knows he has money." To investigate this further, the facilitator added a third row to the chart and asked participants to indicate the prevalence of HIV transmission in each month. They said transmission was greatest in June. July and August. The facilitator asked why and participants explained that these are the harvesting times for maize, beans and coffee. Thus, these are the months men have money to spend on alcohol and additional sexual partners. Participants added that transmission is also higher in March and December. This is because men often sell their stored crops to prepare for the Easter and Christmas holidays.

	Jan	Feb	Mar	Apr	Мау	June	July	Aug	Sep	Oct	Nov	Dec
Rain or	##	\	///	////	١	#	###	##	/	//	//	\
sunshine												
Malaria	mm	0	0	m	0	mmm	mm	0	0	0	0	m
Diarrhoea	d	ddd	d	Х	Х	d	dd	d	х	х	Х	d
HIV	h	h	hh	h	h	hhh	hhhh	hhhhh	h	h	h	hh
Key: #=amount of sunshine				m=prevalence of malaria				d=prevalence of diarrhoea				

Table 1. Seasonal calendar

y: #=amount of sunshine \=amount of rainfall m=prevalence of malaria o=absence of malaria h=prevalence of HIV transmission d=prevalence of diarrhoea x=absence of diarrhoea

Community members. and particularly housewives, then realised that there are certain times of the year when they are at greater risk of becoming infected. To counteract this risk, members proposed different solutions. As one women said, "I have learned that ... during harvest season, people need to safeguard one another." Another women said, "Men should take precautions, they are the ones going out." This finding also has important implications tor RAIN's programmes. As said by a staff member at the exercise, "This is new to me. Now I know we have to intensify educational efforts and distribute more condoms at specific times of the year."

Twenty-four hour activity clocks

The final exercise was for women and men to create their own 24 hour activity clocks. The purpose was for participants to identify the differences between the amount of work women and men do and to reveal leisure time which might lead to risky behaviours. Men and women formed separate groups of about 15 people each. Each group discussed what they generally did for each hour of the day and an elected person took notes. Members of the two groups then transferred the notes onto paper and presented them to the group at large for analysis and interpretation.

The clocks revealed that in the morning hours women generally wake up, "play zigido" (a reggae-type of dance used as a euphemism for sex), clean the house, prepare tea, cultivate, collect firewood and water, and prepare lunch. In the afternoon, they usually eat lunch, make handicrafts or "play zigido", cultivate, collect firewood and water, and prepare dinner. At night, the women continue preparing dinner, feed their children and husbands, eat, sleep and "play zigido". In the morning, men generally wake up, "play zigido", take tea and cultivate, trade, fish or repair bicycles. In the afternoon, they bathe, eat lunch, and rest. Some will then resume work, or "go boozing", play board games or "go looking for sexual partners". At night men listen to the radio eat supper sleep and play zigido.

After each group presented their clocks the general question, "What have we learned?" was asked. An elderly man stood and said, "I have learned that women have more activities than me". Another said, "We give them all the work and I only realise that now." A lively debate then ensued about what constitutes men and women's work. Some men saw the need to better share the work and started to negotiate with the women. One man said, "If she goes for *firewood I will go for water*". But another man added "We need to help one another but do not *let It lead to conflict. If we get water then don't* tell us to also get firewood." A woman then boldly added, "Men, we work and work and work and then you ask for sex. We are tired. *Men should reduce the time for zigido.*" A man then asked, "Women which should we reduce sex or work?" Another man said, "We need to sit together with our wives and decide ... We should schedule the activities including sex."

By comparing their activity clocks, participants also identified several HIV risk factors. First they saw that men have a lot more leisure time than women some of which is spent drinking alcohol in local bars and having outside sexual partners. The facilitator pointed out that, *"You men leave all the work for the women and then you go out and bring back the virus."* Men also came to realise that because their wives are so tired they sometimes go to other women for sexual satisfaction. As one participant said, "The women because of all the work get old soon and look not so nice so we go for other women." However the group realised that by having partners outside of their marriage they put themselves and their wives at greater risk of HIV infection.

The proposed solution was again for husbands and wives to sit together and decide how to better share activities. That way women would be less tired and the men more occupied.

Conclusions

PRA methods were useful in getting community members and programme staff to identify, analyse and address sexual practices which put people at risk of HIV infection. Through mapping, participants were able to identify physical locations where they would be at greater risk. By creating a seasonal calendar participants saw that they might be at greater risk at certain times of year. The 24 hour activity clocks revealed that men have a fair amount of leisure time in which they can and do engage in risky behaviours and that women have an unfair burden of work.

These methods enabled community members to identify problems and find solutions themselves. This in turn may lead to more sustained behaviour change than conventional education information campaigns. Staff also learned more about local sexual practices and were then able to make educational and condom distribution programmes more appropriate. Finally PRA provided the means for men and women to discuss and even negotiate the sensitive issues of work and sex.

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