**M-Health Initiative Baseline Assessment** 

Ugunja, Kenya

Tiffany McCabe

## Background

In Western Kenya HIV/AIDS remains a major challenge, even though HIV/AIDS awareness is high. St. Paul's Health Centre and Ugunja Community Resource Centre (UCRC) have realized that a critical gap in Ugunja is HIV/AIDS treatment awareness and education. To address this gap St. Paul's and UCRC propose to develop a database driven web platform which integrates mobile phones to enable community health workers, HIV/AIDS patients, AIDS support groups, home-based care individuals and the families affected to ease interactivity between the health care providers and their clients to communicate effectively. Access to information is critical in management, mitigation, and support of people living with HIV/AIDS. Technology has a key role in information access; the key piece of technology in this project is the mobile telephone, which has been embraced in rural Kenya. This is an applied research project, where at the same time we will be providing social welfare services we will also be collecting information on how well the education needs of people infected or affected with HIV/AIDS are being met with through the implantation of using the mobile phone for educational purposes.

The M-Health project management team started meeting in May 2010, Tiffany McCabe, an intern with the University of Calgary Master of Social Work student took initiative in developing the baseline assessment tool, with the supervision of Charles, Cleopa, Domas, Bibiani, Dan, Paul, and Beatrice. The baseline was created with three objectives in mind;

- 1. Knowledge about HIV/AIDS; to establish the level of HIV/AIDS knowledge with clients of St. Paul's health clinic.
- HIV/AIDS treatment and resources; to determine what sort of resources 2. regarding HIV/AIDS treatment is needed.
- Educational and literacy needs; to understand how best education can be 3. established and maintain; to determine how we can package and support people with HIV/AIDS; to determine the usefulness and availability of cell phones for people living with HIV/AIDS

# Methodology

After the baseline was developed and approved by everyone on the project management team, it was decided that health care workers at St. Paul's clinic would be hired as enumerators. This was decided because many of the health care workers themselves are people living with HIV/AIDS, thus the participants could speak openly and freely with the enumerators, the enumerators also had a high degree of sensitivity and respect for the participants.

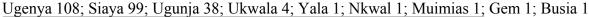
Participants were recruited in several stages. The first stage happened in mid June where Charles, Bibiani, and Tiffany held a meeting at the St. Paul's clinic talking to the clients about the upcoming M-Health project. The atmosphere at the initiation meeting was positive and full of excitement. The clients were very receptive to the idea of using mobile phones to meet literacy needs of people living with HIV/AIDS. The people at the meeting raised several questions; is there a way to use voicemail messages for people who may not be able to read and what about those people who do not have access to mobile phones. The project management team has kept

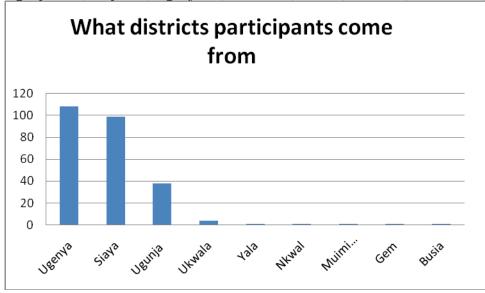
these questions by their side while figuring out the final details of the implementation of the project. The project management team also used posters within the clinic to give information and dates to the clients. The baseline assessment used a convenience sample, using people who use the services at St. Paul's clinic. In total 266 people were interviewed, but only 252 interviews were used for the analysis, the other interviews were not used for various reasons.

All participants were given a consent form, which was explained verbally and in written formation. Each participant signed the consent form and the enumerators as a witness. All consent forms and interviews are being stored in a locked drawer, within a locked room, within a locked office.

#### Results

#### 1. What is your district?





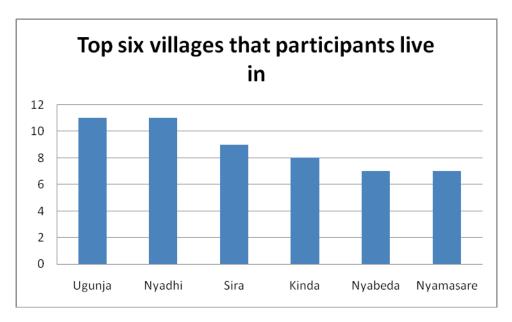
This graph indicates that the majority of participants recruited from St. Paul's Health Centre live in the approximate region of the clinic. However, because of the large rural surroundings many of these people still need to take public transportation to be able to reach the clinic, which may cost a lot of money depending on the family income.

#### Village?

Ugunja 11;Nyadhi 11; Sira 9; Kinda 8; Nyabeda 7; ; Nyamasare 7; Ambira 6; Mundindi 6; Uyore 6; Suwinga 6; Lunjre 5; Nyathi 5; Uhembo 5; Umala 4;Got Osimbo 3; Agul 3; Masiro 3; Naya 3; Ndere 3; Sirandumb 3; Sikala 3, Ulwani 3; Anyiko 2; Asango 2; Asere 2; Dendiole 2; Nanga 2; Imbaya 2; Kaluol 2; Kamariambo 2; Nyagara 2; Ury 2; Raneda 2; Rariedg 2; Usiging, 2; Uhambo 2; Simewo 2;

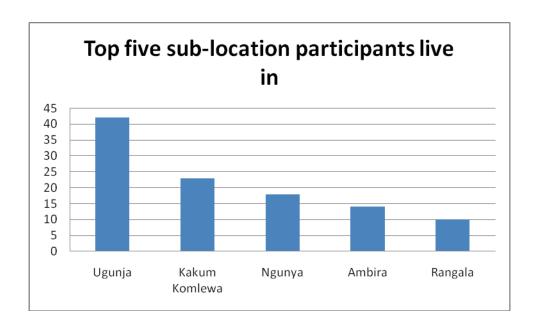
Baratheng 1; Buoire 1; Dandio 1; Denayo 1; Embaya 1; Gombe 1; Hareka 1; Hono 1; Kadhal 1; Kaivovyoma 1; Kalvo Ugoma 1; Kayombi 1; Kirindo 1; Kit Lwingo 1; Kombera 1; Konjera 1; Koyeyo 1; Ligega 1; Lufu 1; Luru 1; Luru 1; Magoya Rambula 1; Magwar 1; Mahinga

1; Malukum1; Manga 1; Manmbe 1; Manya Rambula 1; Manyala 1; Mariwa 1; Markung 1; Masinde 1; Mauna 1; Maunaya 1; Miudiudi 1; Mulkum 1; Murumba 1; Muyayi 1; Myadhi 1; Myaruiro 1; Ngura 1; Nyagweya 1 Nyamboyo 1; Nyamtenda 1; Nyangu 1; Nyenya 1; Ochiko Wange 1; Ogwange 1; Ombwende 1; Rambula 1; Ramunde 1; Rangala 1;; Reingala 1; Rmarewa 1; Sango 1; Sango/ Ugunja 1; Sidindi 1; Sigomere 1; Siguoda 1; Sihayi 1; Siholo 1; Sim 1;; Simur 1;; Sirongo 1; Siruhga 1; Siwnga 1; Srunga 1; Sugulu 1; Sujimbo 1; Sumuru 1; Surunga 1; Suwar 1; Udin 1; Ugana 1; Ugaro 1; Ugaso 1; Ugduwo 1; Uhanya 1;; Uholo Gotasimbo 1; Uhunya; Ulawe 1; Uluan 1; Ulumba 1; Uombe 1; Urof 1; Usenga 1; Usera 1; Usugu 1; Walera

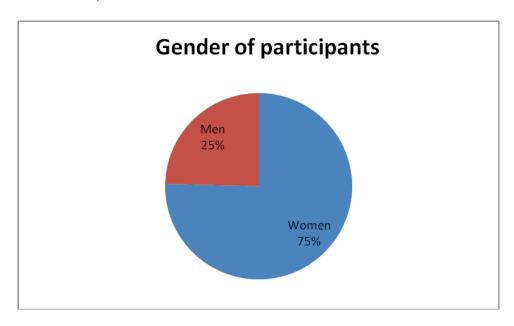


#### **Sub-location?**

Ugunja 42; Kakum Komlewa 23;Ngunya 18; Ambira 14; Rangala 10; W. Uholo 10; Got Osimbo 9; Rambula 8; Koyeyo 7; Umala 7; Ligala 5; Koomolo 5; Anyiko 4;Hono 4; Sigomere 3; Yengo 2; Asango 2; C. Iloyeyo 2; Uholo 2; Ugenja 2;Magoya 2; Mahogo 1; Marach 1; Masiho 1; Masino Nyangongo 1; Simur 1; Sirisia 1; Ugenya 1; Ukwala 1; Mgunga 1; Uyongo 1; Uyore 1; W. Simur 1; Mlare 1;Ombabo 1; Royeyo 1; S. Rambula 1; Sega 1; Shayi 1; N. Rambula 1; Ndere 1; Uhannya 1; Ino 1; Kagombi 1; Canyiko 1; Gombe 1;Logala 1; Lur 1; Got Nanga 1; Awelo 1;Bar Agulu 1; Bikaya 1; Gunya 1; C. Alego 1; Kayombi 1; Kochieng B 1; Koeyo 1; Kokoyo 1; Kombewa 1; Ahyiki 1



# 2. What is your gender? Women 190; Men 62



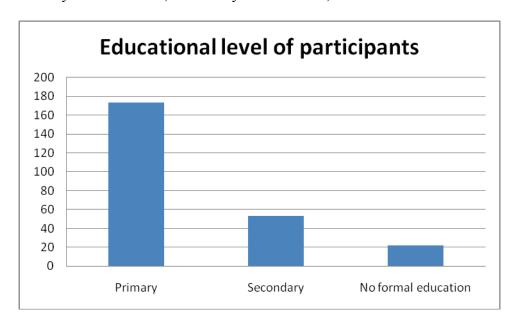
The figure showing the percentage of women and men who participated in the assessment is reflective of the people in the clinic. The clinic on average cares for more women than men; this can be correlated to the fact that women need to access health facilities because of pregnancy and therefore have a wider range of opportunity to get HIV tests.

## 3. What is your age?

Thirty 30; Twenty-three 14; Thirty-five 13; Thirty-two 13; Forty 11; Thirty-three 11; Forty-two 9; Thirty-four 9; Twenty-one 9; Thirty-seven 8; Twenty-six 8; Fifty 7; Thirty-one 7; Twenty-seven 7; Forty-five 6; Twenty-eight 6; Twenty 6; Forty-eight 5; Forty-seven 5; Forty-one 5; Twenty-five 5; Nineteen 5; Sixty 4; Fifty-five 4; Forty-nine 4; Forty-six 4; Forty-three 4; Thirty-eight 4; Thirty-six 4; Sixty-five 3; Fifty-seven 3; Fifty-two 3; Twenty-nine 3; Twenty-four 3; Forty-four 2; Eighteen 2; Fourteen 2; Seventy 1; Sixty-eight 1; Sixty-six 1; Sixty-one 1; Fifty-eight 1; Fifty-six 1; Fifty-four 1; Fifty 1; Thirty-nine 1

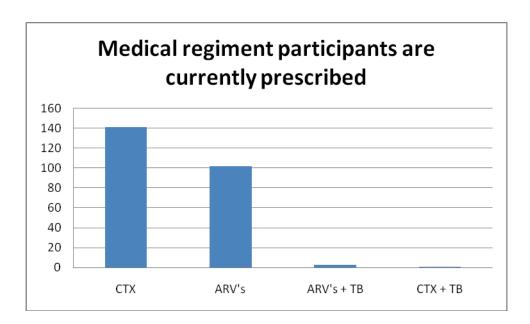
The average age of the participants was 36. The youngest participant was fourteen and the oldest participant was seventy.

# 4. What is your education level? Primary education 173; Secondary education 53; No formal education 22



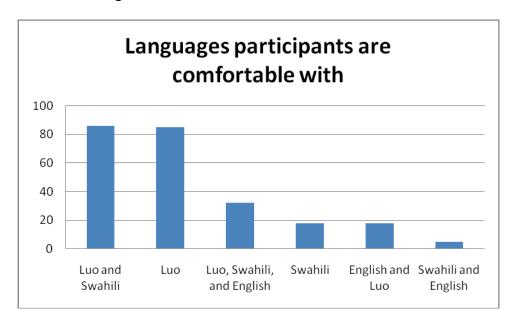
As shown through the graph the majority of participants had some sort of formal education; this indicates that there is at minimum a basic level of literacy. Therefore most participants should be able to follow along and understand education through mobile sms.

5. What medication are you currently taking? CTX (HIV booster medication) 141; ARV's 102; ; ARV's + TB 3CTX+ TB 1

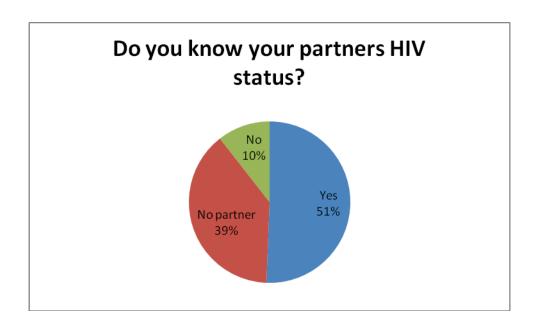


This graph shows that the majority of the participants are maintaining the initial HIV status. One of the goals of this project is to ensure proper education to people living with HIV so that they can pro-long their life and understand the right knowledge in order to help them do so.

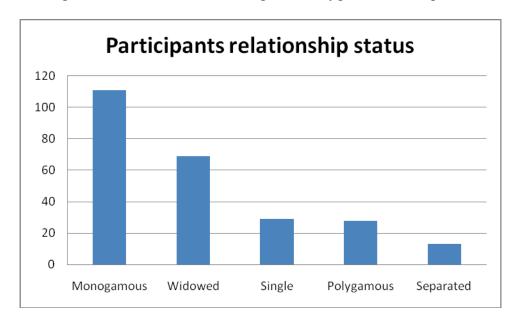
6. What languages are you comfortable in? Luo and Swahili 86; Luo 85; Luo, Swahili and English 32; Swahili 18; English and Luo 18; Swahili and English 5



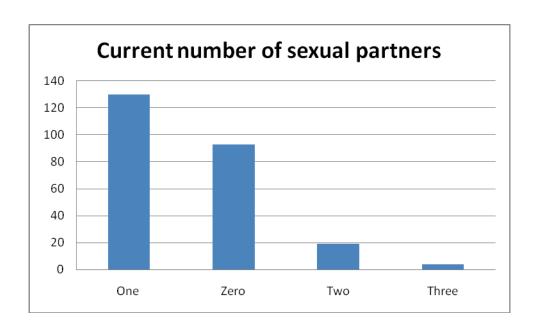
7. Do you know your partners HIV status? Yes 120; No partner 92; No 25



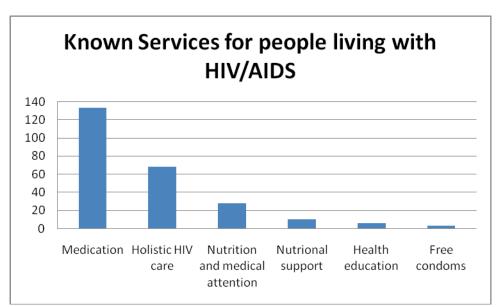
8. What is your marital status? Monogamous 111; Widowed 69; Single 29; Polygamous 28; Separated 13



9. How many partners do you currently have? One 130; Zero 93; Two 19, Three 4



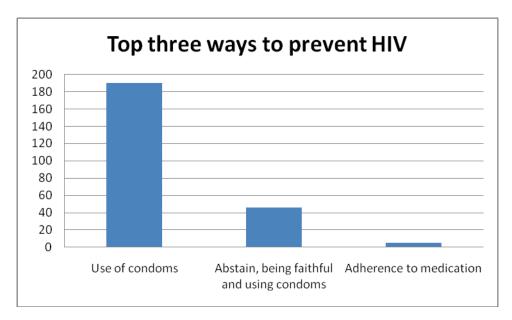
10. What do you know about available treatment services for people living with HIV/AIDS? Medication 133; Holistic HIV care (medication, counseling, nutrition) 68; Nutrition and medical attention 28; Nutrition support 10; Health education 6; Free condoms 3;



This graph indicates that there is a definite need for health education that is accessible to all patients because as the graph indicates there are not a lot of known educational services. Medication is the most known service; however for people to properly understand and use medication they need to know why they are taking medication and the potential effects (both positive and negative) of the medication.

11. What do you know about how to prevent HIV?

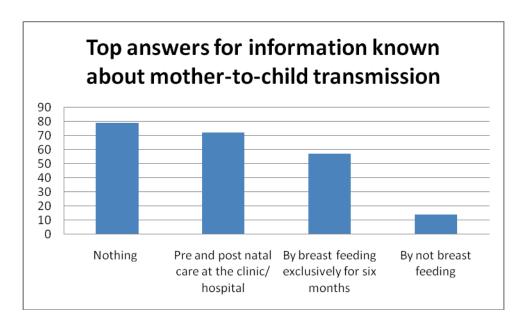
Use of condoms 190; Abstain, being faithful and using condoms 46; Adherence to medication 5; Abstain 4; Do not share sharp objects 3; Gloves 3; Abstain and do not share sharp objects 2; Trust 2; By eating well 1; By not practicing wife inheritance (this is historically a common practice but is becoming more uncommon) and condoms 1; being faithful 1



It is interesting that this figure shows that the majority of participants know that using condoms prevents HIV; yet in following questions there seem to be a gap between the knowledge and the adherence. It is also interesting that a small amount of people think that taking medication will prevent the HIV infection.

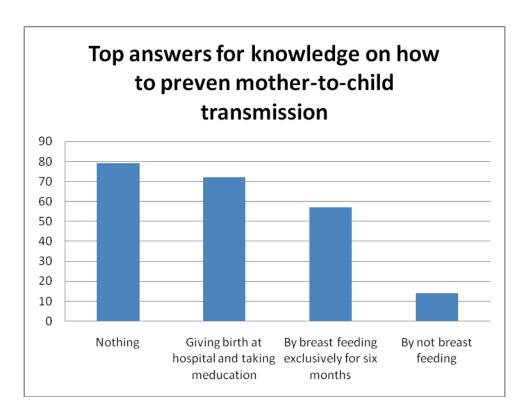
12. What do you know about mother-to-child transmission of HIV?

Nothing 79; Pre and post natal care at the clinic/hospital 72; Exclusive breast feeding for six months 57; Not to breast feed 7; Not to breast feed and pre and post natal care 7; Not to breast feed or breast feed for short time and pre and post natal care 6; Breast feed only or mix feed only 2; Give birth at hospital and mix feed 1; Do not breast feed or breast feed for short time 1; Continuous HIV testing for the baby 1; Breast feed and attend clinic 1; Avoid wounds 1



With this question there seems to be a lot of miss information and miss understanding for the information present about mother-to-child transmission. Taking into consideration that the majority of participants in this study are female, clear conscious information about mother-to-child transmission is a need. Participants are quoted as saying, "Mix feeding before six months", "Children can be born negative if proper care is taken", "When the blood of the mother gets in contact to the child during delivery". Through these quotes one can the variety of knowledge and misinformation.

13.Do you know how to prevent mother-to-child transmission? If so How? Nothing 79; By going to the hospital to give birth and taking medication 72; By breastfeeding exclusively for six months 57; By not breastfeeding 14; By giving birth at the hospital; taking medication, and not breastfeeding 7; By taking medication before and after birth and not breast feeding or breastfeeding for a short time period 6; Breastfeeding only or mix feeding only 2; Giving birth at the hospital and mix feeding 1; Do not breastfeed or only breastfeed for a short amount of time 1; Continuous testing 1; Breastfeeding and attending the clinic 1; Avoid wounds 1



Again, although 72 participants knew to prevent mother-to-child transmission the mother needs to give birth at the hospital and take medication, as quoted, "Give birth at the hospital" and "Women should get drugs at labour onset and children to get drugs at birth immediately"; however, there still seems to be a lack of information in this area, one participant reported, "Choose one mode of feeding, e.g. exclusive breastfeeding or mix feeding". This is a definitely an area where education about mother-to-child transmission can be beneficial to the population because mother-to-child transmission can have a very high success rate of prevention if handled properly. Expecting and potential mothers need to get accurate information about breast feeding that is culturally and environmentally appropriate in Western Kenya.

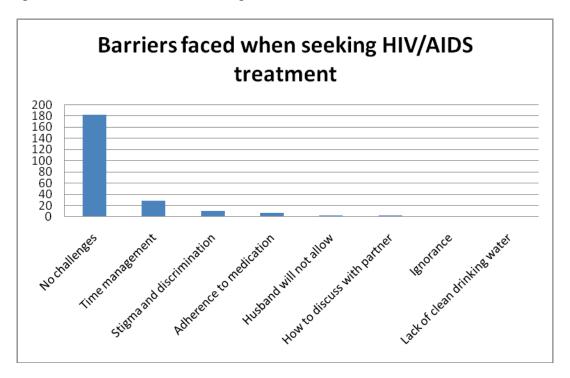
14. What are some myths about HIV/AIDS in your community? Witchcraft/ chira 84; AIDS is a long term killer disease 64; Nothing 59; AIDS kills cells in the body 12; It is a disease that eats the blood 12; AIDS is bad 8; AIDS is not serious, it is like malaria 5; Only prostitutes gets AIDS 5; Community stigma 4; HIV is not existing 1; AIDS is scary 1; Only for the young 1; There is a cure 1 Quotes from the participants;

Evidently this figure shows that there are still several myths in the community that lead to discrimination, stigma and denial of one's status. Some myths in the participants own words are; "It kills cells in the body", "Killer disease", "The people in the community believe that HIV/AIDS is chira. They believe that person has been witched and should be given herbs", "If

you have it [AIDS], you should not be allowed in the community". Through the community radio broadcast program a goal for this is to decrease the community stigmas and increase oneness of humanity and acceptance.

15. What barriers/ challenges do you face when seeking HIV/AIDS treatment? How could this be solved?

No challenges 182; Time management (distance, slow service) 29; Stigma and discrimination 10; Adherence of medication (afraid to take medicines, shortages of medication, seeing no change when taking medication) 7; Husband will not allow 2; How to discuss HIV/AIDS with partner 2; Ignorance 1; Lack of clean drinking water 1

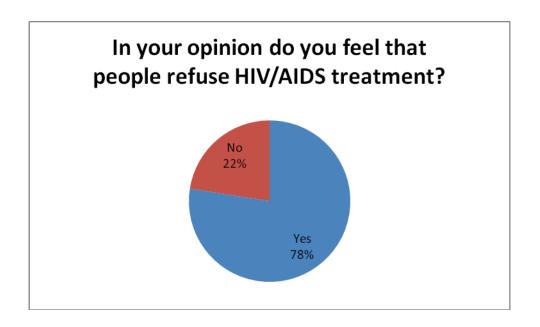


Many of the participants reported that they did not face many challenges that they would like to speak to when seeking treatment. The biggest issue was time management which included distance to the clinic and waiting time at the clinic.

#### 15b. Solutions

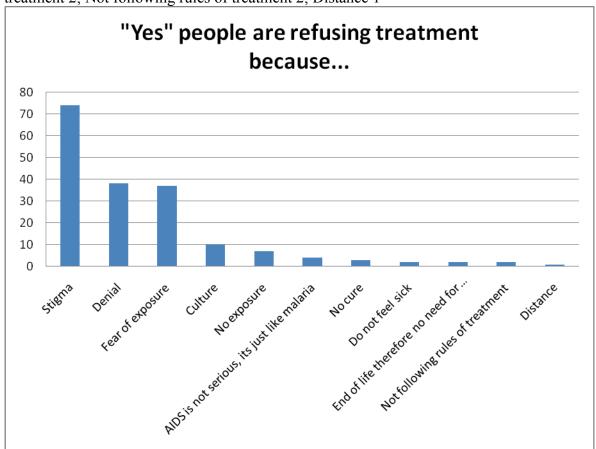
Community acceptance 6; Acknowledging HIV/AIDS 2; Health education 1; Less appointments 1; Better storage of medication 1

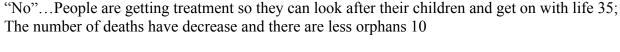
16 a. In your opinion do you feel that people refuse HIV/AIDS treatment? Yes 193; no 56

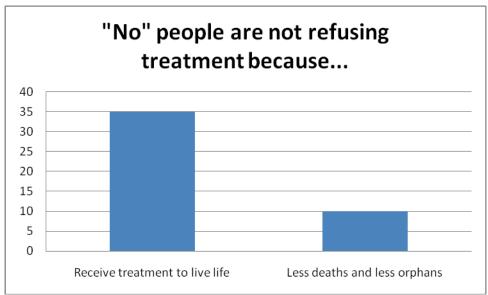


16 b. Explain

"Yes"...Stigma 74; Denial 38; Fear of exposure 37; Culture 10; No exposure 7; AIDS is not serious, it is like malaria 4; No cure 3; Do not feel sick 2; End of life therefore no need for treatment 2; Not following rules of treatment 2; Distance 1



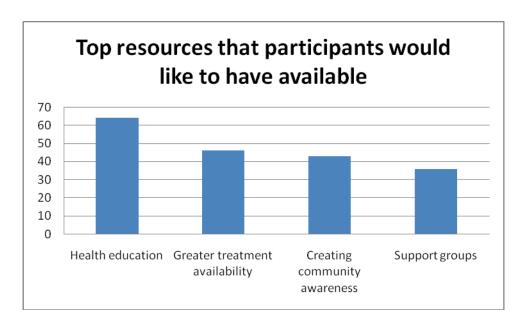




The interesting aspect to this figure is exactly the reason why Ugunja Community Resource Centre and St. Paul's VHC is doing the M-Health initiative; because more people are taking medication and living a longer life and need to know the right information about the disease and medication. It is also interesting that several of the participants are noticing a local trend that more people are living longer and not feeling the effects of orphans. One participant was reported saying, "It [treatment] helps people to improve their living standard". With the combination of medication, support, and literature we hope to improve these living standards.

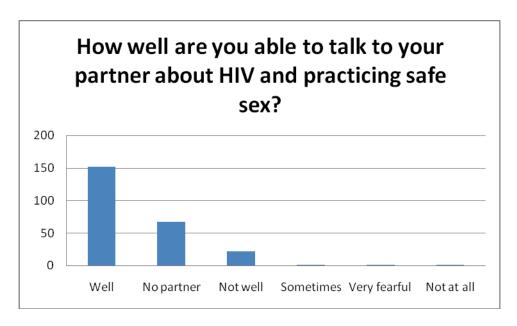
17. What kind of resources would you like made available regarding HIV/AIDS? Health education 64; Greater treatment availability 46; Creating community awareness 43; Support groups 36; Adherence counseling 18; Nutrition counseling 17; Food and water available at clinic 9; Job opportunities for people living with HIV/AIDS 12; Condoms 9; To be able to do TB and CD4 testing on site; Social counseling 4; Confidentiality and better communication between clients and staff 2; Finding a way to give medicine at home 1; A cure 1; Family planning 1; Transportation 1

\*note this question was suppose to be about literacy needs, however the question was not clear and some people answered the question with general needs; the information is still valuable and can be used for this project. For example we could dedicate several text messages to known job opportunities in the area.



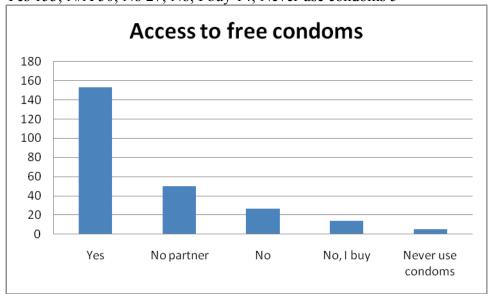
Again this figure shows a need for HIV literacy resources and also a greater awareness in the community about living with HIV. It is interesting that 36 participants reported that they wanted support groups when there are several supports already happening at the clinic; through the M-Health initiative reminders and awareness can be brought to the clinic community about events such as support groups.

18. How well are you able to communicate with your partner about HIV and practicing safe sex? Communicate well 152; No partner67; Not well 22; Sometimes 1; Very fearful 1; Not at all, husband in denial 1



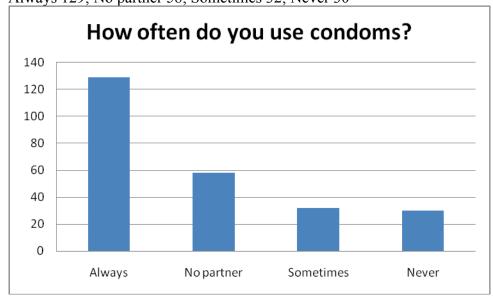
The majority of people with partners reported that they were able to communicate openly with their partner about HIV and safe sex.

19 a. Do you have access to free condoms? Yes 153; N/A 50; No 27; No, I buy 14; Never use condoms 5

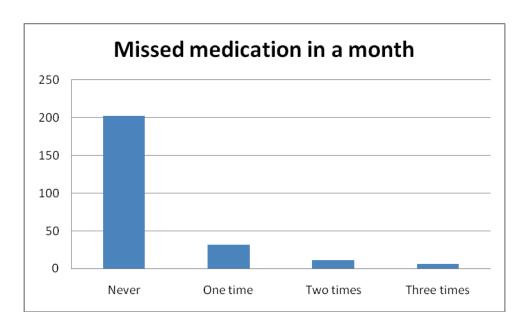


19b. Where do you have access to free condoms? Clinics 96; St. Paul's Health Centre 30; Ambira SDH 13; Shops 6; Siaya 3; Yala Health Centre 2; Husband 1

20. How often do you use condoms with your partner(s)? Always 129; No partner 58; Sometimes 32; Never 30

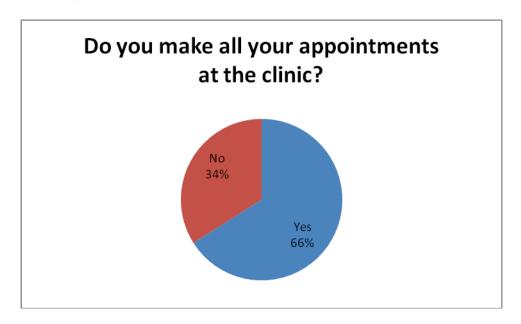


21. How many times in a month would you forget to take your medication? Never 202; One time 32; Two times 11; Three times 6



Although the majority of people reported that they do not miss any medication, people who are being initiated for the first time may have a harder time adhering to the regiment; by sending sms to people new to the clinic this can decrease missed medication, which is important for health maintenance.

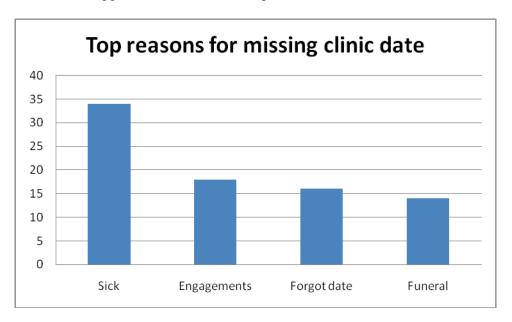
22a. Do you make all your appointments at the clinic? Yes 165; No 85



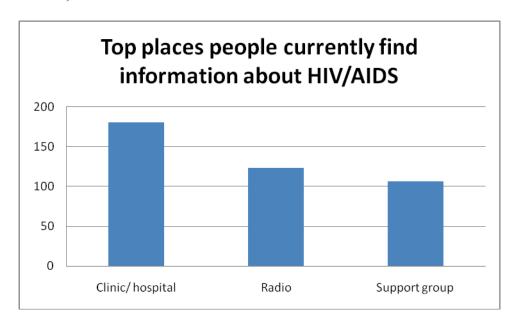
22b. Why do you miss appointments?

Never miss 164; Sick 34; Engagement (travels/safari) 18; Forgot date 16; Funeral 14; Looking after sick 3; No transportation 2; No permission from school 2; To meet family needs 1; Misunderstanding 1

With this imitative hopefully the sms communication is on both sides, this will allow individuals to tell the clinic in advance if they will be unable to make an appointment; or if they are too sick to make an appointment and need the medication delivered. With the sms people who frequently tend to miss appointments can receive personal reminders.

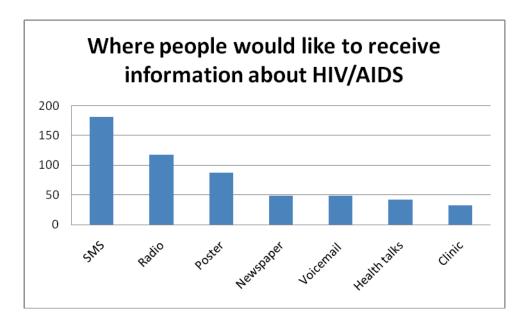


23. Where do you currently find information about HIV/AIDS? Clinic/ hospital 180; Radio 123; Support group/ friends/ Baraza (this is when the chief of the village calls a village talk) 106; Churches 20; Poster 19; Newspaper 11; Market 10; Health talks/ seminars 8; Schools 6; T.V.'s 4; Pamphlets 3; Community 2; Home base care 2; CCC 1; Mobile clinic 1; Funerals 1



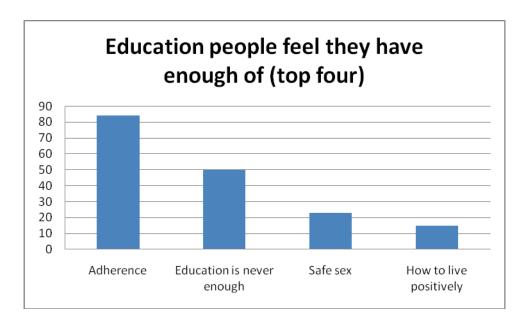
24. How would you want to receive information about HIV/AIDS treatment?

Text messages (sms) 181; Radio 118; Poster 87; Newspaper 48; Voice mail (through mobile phone) 48; Health talks 42; Clinic 32; Internet 3; Pamphlets 1; CCC 1



The reported results from this question showing that sms would be received well by the majority of the participants may be a bit biased because we told the participants about the M-Health project. However, there is a good change that this is very realistic when looking at how popular the mobile phone is in rural Kenya.

25. What HIV/AIDS education do you feel you have enough of? Adherence 84; Education is never enough 50; Safe sex 23; How to live positively 15; Nutrition 6; How to stay safe 5; Mother-to-child transmission 4; Disclosure 3; Health talks 3; Related HIV/AIDS infections 2; How to talk to one another 1; That HIV can damage CD4 level 1; Discrimination 1; To get tested 1



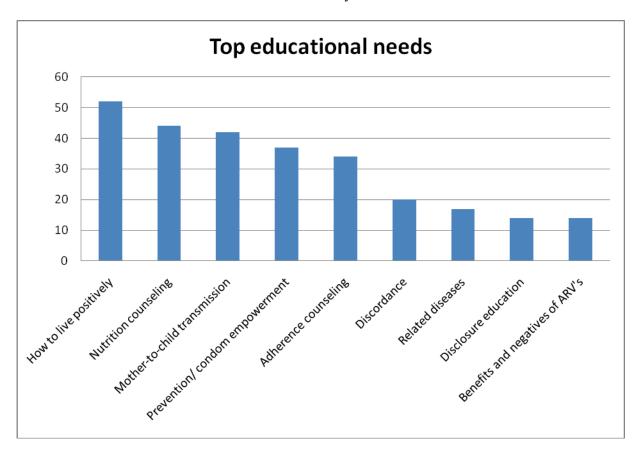
Having 50 participants report that "Education is never enough" shows the hunger and willingness for learning about HIV/AIDS. It is also interesting that 23 people reported they knew enough about safe sex, one participant said, "The education that I have is that I abstain from sex". There seems to be some misinformation about safe sex and how to protect yourself from other streams of HIV and how to protect your partner.

## 26. What HIV/AIDS education do you need?

How to live positively 52; Nutrition counseling 44; Mother-to-child transmission 42; Prevention/condom empowerment 37; Adherence counseling 34; Discordance (marriage issues) 20; Related diseases (i.e. TB, STI'S) 17; Disclosure education 14; The positive and negative reasons for taking ART's and the side effects of ART's 14; Anything 11; Discrimination education 11; Health education 10; How to look after a positive child 9; Denial education 4; Information about a cure /is there a cure? 3; Know about the AIDS virus 2; What happens when CD4 level is low 2; Behaviour change 2; Not to fear death 1; Sanitation 1; Sexuality 1; Spirituality and HIV 1 Quotes from participants:

- "How can I improve my life?"
- "How to live longer"
- "The importance of ARV's"
- "How to prevent diseases related to HIV"
- "What happened to the immune system when CD4 is lower"
- "Consequences of unprotected sex"
- "Education on discordance"
- "For how long should one take drugs and if so can you find when your negative after taking drugs for long"
- "I need to know what to eat while on ART's"
- "How my life can be while living with HIV"
- "How to live with a child HIV"
- "How to stay with wife when you want to give birth to a negative child"
- "How to talk to those who are in a state of denial"

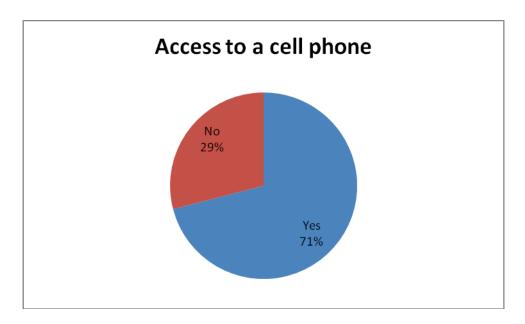
<sup>&</sup>quot;Teach me how to use a female condom because my husband does not want to use his"



This figure shows the need, want, and willingness for more information about HIV/AIDS. The following quotes were pulled from the surveys completed by participants; "How can I improve my life?", "How to live longer", "The importance of ARV's", "How to prevent diseases related to HIV", "What happened to the immune system when CD4 is lower", "Consequences of unprotected sex", "Education on discordance", "For how long should one take drugs and if so can you find when your negative after taking drugs for long", "I need to know what to eat while on ART's", "How my life can be while living with HIV", "How to live with a child HIV", "How to stay with wife when you want to give birth to a negative child", "How to talk to those who are in a state of denial", "When will the disease be cured", "Teach me how to use a female condom because my husband does not want to use his".

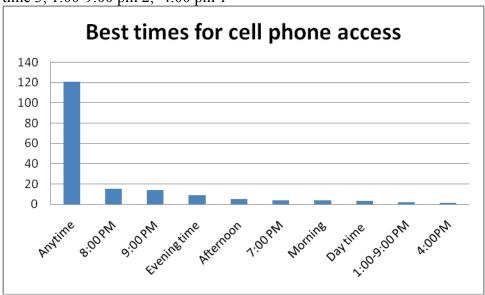
27. Do you own/ have access to a cell phone? Yes 176; no 72

<sup>&</sup>quot;When will the disease be cured"

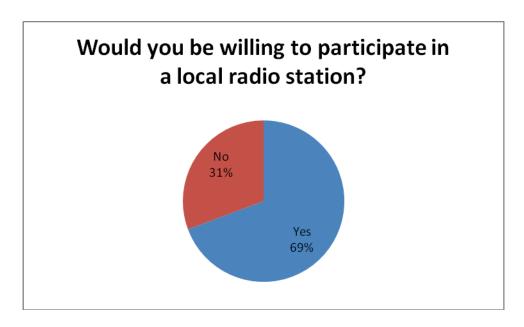


Since 71% of the population has access to a mobile phone there should be a high chance of success for this project.

28. What times do you have access to a cell phone? Anytime 121; 8:00 pm 15; 9:00 pm 14; Evening time 9; Afternoon 5; 7:00 pm 4; Morning 4; Day time 3; 1:00-9:00 pm 2; 4:00 pm 1



29. Would you be willing to participate in a local radio station? Yes 174; No 77



## 33. Is there anything else you would like to share?

We need more community awareness about HIV/AIDS and discrimination 11; What foods do I eat while I am on medication 5; Need food at the facility 3; Business help 2; Couple counseling, especially with condom use 2; Mother to child transmission 1; Related disease 1; What causes the immune system to be low 1; Health education 1; Faster service at the clinic 1; Share ideas with the support group 1; I am old and have orphans and no food how can you help1; I need help because my wife is negative and I am positive, what do we do if we want a child 1; My husband is in denial, he will not take medicine, what do I do 1; Home or door to door counseling because of denials 1; Education on how to continue to live positively 1; Proper mobilization 1

#### Limitations

One limitation of this assessment is the potential for unintended influence from the enumerators where participants may have been trying to answer the questions to please the enumerators. This possibility is evident in question twenty-four where 181 participants reported that they would like to receive sms to learn more about HIV/AIDS. However, considering the current popularity of the mobile phone in Kenya this could simply just correspond to the popularity of mobile phones.

Another limitation of this assessment was not interviewing any participants outside of the St. Paul's clientele. If we interviewed other community members we would have been able to understand the literacy level of the general population; however since we are trying to keep people living with HIV/AIDS informed so they can live a longer healthier life, it seemed appropriate just to interview people living with HIV/AIDS.

A final limitation of this assessment was a language barrier. The assessment was created in English and originally translated into Luo; however the translation of the assessment did not make sense in writing so the enumerators translated the assessment from English to Luo verbally, the participants answered the questions verbally in Luo then the enumerators wrote the answers down in English. Therefore this leaves a possibility for misunderstandings and mistranslations.

#### **Conclusions**

Based on the information collected from the baseline assessment the participants know what to do, for example taking medication, but they do not know why, or the potential benefits and side effects of such things. There also seems to be a lot of. misinformation (i.e. some people think to prevent mother to child transmission they need to breast feed only, while others think not to breast feeds, and others think to mix feed). Harmonization of information needs to take place. Therefore there is a definite need for a platform to create greater literacy awareness about living with HIV/AIDS. The assessment indicates that most people have high enough educational level to understand short and simple health messages and that using the mobile phone is an acceptable platform to create more awareness. Next steps are to start the trial of sending sms messages and continuous monitoring of the affects the project is having on the community.

## Appendix: Baseline assessment

The following questions were created and administer as the baseline assessment;

## Section 1, General information

- 1. What is your district/village/sub-location?
- 2. What is your gender?
- 3. What is your age?
- 4. What is your education level?
- 5. What medication are you currently taking?
- 6. What languages are you comfortable in?
- 7. Do you know your partners HIV status? Yes or No or No partner
- 8. What is your marital status?
  - a) single
  - b) monogamous relationship
  - c) polygamous relationship
  - d) widowed
  - e) separated
- 9. How many sexual partners do your currently (in the last year) have?
  - a)0
  - b) 1
  - c) 2
  - d) 3
  - e) 4 or more

#### Section 2, Knowledge about HIV/AIDS

- 10. What do you know about available services for people living with HIV/AIDS?
- 11. What do you know about how to prevent HIV?
- 12. What do you know about mother-to-child transmission of HIV?
- 13. Do you know how to prevent mother-to-child transmission of HIV? If so how?
- 14. What are some myths about HIV/AIDS in your community?
- 15. What barriers/ challenges do you face when seeking HIV/AIDS treatment? How could this be solved?
- 16. In your opinion do you feel that people refuse HIV/AIDS treatment? Explain?

## Section 3, HIV/AIDS treatment and resources

- 17. What kind of resources would you like made available regarding HIV/AIDS?
- 18. How well are you able to communicate with your partner about HIV and practicing safe sex?
- 19. Do you have access to free condoms? Where?
- 20. How often do you use condoms with your partner(s)
  - a) always
  - b) sometimes
  - c) never
- 21. How many times in a month would you forget to take your medication? Never, 1 time, 2 times, 3 times, 4 times or more
- 22. a)Do you make all your appointments at the clinic?
- 22. b) What are some of your reasons for missing appointments at the clinic?

Section 4, HIV/AIDS education and literacy needs

- 23. Where do you currently find information about HIV/AIDS treatment?
- 24. How would you want to receive information about HIV/AIDS treatment?
  - a)poster
  - b)newspaper
  - c)voice mail through mobile phone
  - d)text message through mobile phone
  - e)radio
  - f)internet
  - g)other (please indicate)
- 25. What HIV/AIDS education do you feel you have enough of?
- 26. What HIV/AIDS education do you need?
- 27. Do you own/ have access to a cell phone?
- 28. What times do you have access to a cell phone?
- 29. Would you be willing to participate in a local radio station? Yes or No

## Please answer the following three questions with a yes or no or I do not know

- 30. With proper diet, hygiene, and medication you can stabilize your health while living with HIV/AIDS.
- 31 .By using condoms you can stop spreading HIV to your partner.
- 32. By being tested for HIV during pregnancy and receiving proper pre-natal care you can reduce the chance that your baby will contract HIV.
- 33. Is there anything else you would like to share?
- \*Note in the analysis question number 30, 31, and 32 were taken out because the questions were not properly filled.\*