

Positive Partnership Project, New Phase

Endline Study Report

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Executive Summary

The Positive Partnership Project (PPP), or *Pa Thong Koe*¹, was designed with the goal of increasing quality of life for people living with HIV/AIDS (PLHIV) and the twin objectives of increasing PLHIV's level of income and reducing the stigma and discrimination they face. It is based on the principle of 'helping PLHIV to help themselves' by providing an occupational loan to a pair of recipients who live in the same community: one HIV positive and one HIV negative 'buddy'. Besides receiving loans to implement diverse income generation activities, buddy pairs are given skills training in marketing, accounting, and business management to ensure the success of their commercial activities. The program also conducts HIV/AIDS awareness and education activities in the communities where pairs live and operate their businesses. These activities address issues such as HIV prevention, care and support for people living with HIV, and reduction of stigma and discrimination. The buddy pairs also get to know each other through partnering on their business and on the community-based activities, which naturally results in greater understanding and reduced stigma. Through this, the community observes a model of 'living and working together as normal' between PLHIV and non-PLHIV.

The project included seven key interventions: the buddy partnership; the low-interest loan; capacity building activities organized by the Population and Community Development Association (PDA) such as training courses and site visits to other communities; the monthly meeting on banking day; the monthly HIV campaign activities; the Funfair edutainment activity; and the production of evidence-based information, education and communication (IEC) materials. Two model variations were implemented: the village development bank (VDB) in rural communities and the PPP clubs (PPPC) in both rural and urban communities. In addition, PPPCs had two types, community-based and hospital-based; the hospital-based PPPCs included PLHIV and buddies who may not be from the same community.

This report presents results of an endline study conducted from late 2010 to early 2011. The endline study used a mixed methods approach in order to gain a greater understanding of the impact and effectiveness of the intervention. The quantitative endline survey measured changes in HIV-related knowledge, stigma and discrimination of buddies, family and community members, as well as changes in economic status, internalized and experienced stigma and discrimination, self-esteem, self-efficacy, and quality of life of people living with HIV who were involved in the project. The qualitative part of the study investigated the effect of the project in more depth, including the reasons that some aspects and some models worked better than others. It also gained the perspectives of participants, communities and community leaders on the successes of and potential improvements in the project.

Both the qualitative and quantitative data show significant change in key outcomes among PLHIV, buddies, their families, and the project communities. For PLHIV, these include disclosure of HIV status to an increased number of people, including an increased percentage disclosing to their community; reduced self-isolation and fear of stigma from family and the community; increased self-esteem/self-efficacy; and increased quality of life. The multivariate analysis did not find significant relationships between participation in the program and change in the disclosure and stigma measures, but the small number of cases limited the analysis. Type of program model was found to

¹ *Pa Thong Koe* is a type of Thai fried doughnut in a "twinned" shape: two rectangular parts connected in the middle that can be pulled apart for dunking in hot soy milk or coffee.

be significantly related to increases in quality of life: VDB participants and PPPC urban club members more likely to report increased quality of life than PPPC rural members.

The buddy survey also found significant changes in HIV knowledge, fear-based and value-based stigma among the HIV-negative partners by the time of the endline survey. Qualitative interviews indicated that the community-based program models were more successful in maintaining buddies' participation in the program, as it was difficult for buddies to join the activities when they live in different communities. Multivariate analysis showed that buddies' discussion of HIV/AIDS with their PLHIV partner, participation in HIV informational campaigns, and the number of types of exposures to the program were significantly related to increased HIV/AIDS knowledge among buddies.

Family members of PLHIV and buddies also saw increases in their HIV knowledge and reductions in the stigma measures. Finally, the community survey found significant change in HIV knowledge, fear-based stigma and value based stigma. Multivariate analysis showed that increases in HIV knowledge were significantly related to the PPPC model and to the number of types of exposures to the program. The qualitative study also outlined how having a variety of platforms for IEC and for participation in program activities added to the strength of the program. The decrease in fear-based stigma was also related to the PPPC model and the number of types of exposure, while a decrease in value-based stigma regarding shame associated with PLHIV was significantly related to the number of types of exposure. These multivariate results, along with the explanatory power of the qualitative data, provide clear evidence that the program was successful in reducing stigma for PLHIV in their communities.

The findings suggest that VDBs and PPPCs should be based in one local community to build a higher level of participation for the general population and focus efforts to reduce HIV/AIDS stigma and discrimination. However, the hospital-based PPPC model can reach a larger group of PLHIV, and is appropriate for those PLHIV who do not want to take the risk of disclosing their HIV status. Also, the results show that a combination of various interventions is recommended to reinforce information to reduce fear and shame. The best results were found among those who were exposed to a variety of program activities and messages. The schematic framework of addressing internalized (self) stigma among PLHIV, and then moving to people around PLHIV and community members to address external stigma and discrimination, was an important thematic concept for the program. Thus interventions should be implemented on a continuous basis among PLHIV, their intimate friends, buddies (HIV negative loan recipients), family members of PLHIV and community leaders, so that people surrounding PLHIV can act as change agents for the wider community. A longer implementation timeline than two and a half years is recommended for future replications of the program.

The results also point to some program areas that could be improved and strengthened. Further research on approaches to reduce self-stigmatization of PLHIV should be conducted, as this was found to be a prevalent issue. Greater effort should be made for capacity building among HIV negative loan recipients (buddies) on providing emotional support to PLHIV and disseminating HIV knowledge to others. Finally, the program should focus on developing the community's in-depth HIV knowledge and understanding of risk behaviors. In addition, it is important to also address stigma for at-risk populations such as sex workers and MSM. Causes of blame stigma (believing that PLHIV are promiscuous) should also be analyzed further to tackle it more effectively.

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Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
HIV	Human Immune Deficiency Virus
ICRW	International Center for Research on Women
IEC	Information, education and communication
IPSR	Institute for Population and Social Research
IRB	Institutional Review Board
MSM	Men who have sex with men
na	Not applicable
n.s.	Non-significant
PDA	Population and Community Development Association
PLHIV	People living with HIV
PPP	Positive Partnership Project
PPPC	PPP club
QOL	Quality of Life
S&D	Stigma and Discrimination
SPSS	Statistical Package for the Social Sciences
STATA	Data Analysis and Statistical Software Package
UNAIDS	Joint United Nations Programme on HIV/AIDS
USAID RDMA	United States Agency for International Development Regional Development Mission for Asia
VDB	Village Development Bank
WHO	World Health Organization
WHOQOL	World Health Organization Quality of Life Assessment

1. Introduction and Research Objectives

The Positive Partnership Project (PPP), or *Pa Thong Koe*², was designed with the goal of increasing quality of life for people living with HIV/AIDS (PLHIV) and the twin objectives of increasing PLHIV's level of income and reducing the stigma and discrimination they face. The project has been implemented since 2002 and in 2007 was documented by UNAIDS as a 'Best Practice' (UNAIDS, 2007). It is based on the principle of 'helping PLHIV to help themselves' by providing an occupational loan to a pair of recipients who live in the same community: one HIV positive and one HIV negative 'buddy'.

Under the program, 'buddy pairs' receive loans to implement diverse income generation activities, and are also given skills training in marketing, accounting, and business management to ensure the success of their commercial activities. The program also conducts HIV/AIDS awareness and education activities in the communities where pairs live and operate their businesses. These activities address issues such as HIV prevention, care and support for people living with HIV, and reduction of stigma and discrimination.

Besides improving the livelihoods of PLHIV and their buddies, the partnership of an HIV positive recipient with another community member has the added benefit of reducing HIV/AIDS-related stigma and discrimination. This comes about in several ways. The partnership provides an opportunity for the HIV negative loan recipient (buddy) to increase related knowledge and understanding about HIV/AIDS through project activities, as the buddies are required to disseminate HIV/AIDS knowledge to others in the community. The buddy pairs also get to know each other through partnering on the business and community-based activities, which naturally results in greater understanding and reduced stigma. They provide mutual support to each other—not one-sided support from the buddy only—which may include material, emotional and occupational support. Besides the interaction between the buddy pairs themselves, the community observes a model of 'living and working together as normal' between PLHIV and non-PLHIV. Through observation of the model, the community is likely to reduce HIV/AIDS stigma and discrimination.

In 2008, USAID RDMA tasked Pact Thailand to provide funding to PDA to carry out a new phase of the PPP project as a pilot program for future scale-up. Under this funding, two enhanced variations of the model were implemented and tested: village development banks (VDB) and PPP clubs (PPPC), which were support groups of both HIV positive and negative partnerships. Loans were managed and disbursed through these community channels. The project duration was April 2008–September 2010 for this phase.

Several research components were built into this phase of the project. A baseline survey was completed in early 2009, with the results published at the end of that year (Jain et al, 2009). This study assessed the baseline levels of economic status, business skills, internalized and experienced stigma and discrimination, self-esteem, self-efficacy and quality of life of the people living with HIV who were participating in the project. It also surveyed the buddies, family members of the buddy or PLHIV, and community members residing in the intervention communities about HIV knowledge, attitudes towards people living with HIV, and actionable drivers of stigma and discrimination. The

² *Pa Thong Koe* is a type of Thai fried doughnut in a "twinned" shape: two rectangular parts connected in the middle that can be pulled apart for dunking in hot soy milk or coffee.

results of the baseline study were used to develop information, education and communication (IEC) materials addressing HIV stigma and discrimination issues that were used throughout the rest of the project.

This report presents results of an endline study conducted from late 2010 to early 2011. The endline study used a mixed methods approach in order to gain a greater understanding of the impact and effectiveness of the intervention. The quantitative endline survey captured the same information as the baseline: HIV knowledge, internalized and experienced stigma and discrimination, self-esteem, self-efficacy, economic status, and quality of life of people living with HIV who were involved in the project, as well as HIV stigma and discrimination of buddies, family and community members. The endline survey also measured exposure to project interventions in order to analyze the effect of the PPP interventions on change in stigma, discrimination and quality of life. The qualitative part of the study investigated the effect of the project in more depth, including the reasons that some aspects and some models worked better than others. It also gained the perspectives of participants, communities and community leaders on the successes of and potential improvements in the project.

2. Project Background

The new phase of the project was implemented in six provinces, divided into rural and urban sites as follows:

- Urban: Chiang Mai, Chonburi, and Bangkok
- Rural: Chiang Rai, Nakhon Ratchasima, and Khon Kaen.

Under this phase of the project, PDA established 11 PPP clubs (PPPC) and 12 village development banks (VDBs). Both entities were responsible for managing banking activities such as collecting savings, selecting loan recipients, administering the loans, and conducting HIV awareness-raising activities in their communities. Both were chiefly managed by the target group themselves with concrete and continuous support from PDA. Through the new models, key interventions in disbursing loans and reducing HIV/AIDS stigma and discrimination at the community level were implemented by the buddy pairs and community members themselves. Community leaders also helped the buddy pairs organize HIV/AIDS campaign activities.

As described briefly below, the project included seven key interventions:

1. The **Buddy Relationship**, as described above: one PLHIV and non-PLHIV individual form a partnership to receive a loan and to create a platform to provide mutual support. The partnership role also includes disseminating HIV/AIDS knowledge to the community.
2. The **low-interest loan** for the purpose of occupational activities, given to loan recipient partnerships through the VDB and PPPCs. The loan amounts did not exceed 12,000 Thai baht³ per person with an interest rate of Baht 0.50 per month.
3. **Capacity building** activities organized by PDA such as training courses and site visits to other communities; knowledge and skills conveyed included VDB/PPPC management, accounting, basic occupational skills, HIV/AIDS, the role of PPP loan pair, etc. PDA also conducted

³ Approximately US\$400.

training for community leaders in order to encourage stronger community involvement in reducing HIV stigma in the community. Community leaders were also trained on financial skills, as they often paid an important role in loan management, particularly for VDBs.

4. The **monthly meeting** on banking day, organized by the VDB and PPPC. These were an important mechanism to mobilize community resources on a continuous basis. Key activities during the monthly meeting included financial activities, such as deposits, loan repayment, loan disbursement, and financial reporting; discussion on progress of the VDB/PPPC; HIV/AIDS related activities such as quiz games and planning for information dissemination; and monitoring visits by project staff to follow up and provide suggestions to improve the management of VDB and PPPC.
5. **Monthly HIV campaign activities:** VDB and PPPC were required to conduct at least one HIV/AIDS campaign activity per month in the community. These included games, radio dramas, household radio programs, exhibitions, posters and billboards, condom and IEC material distribution, and motto (key message) distribution.
6. **Funfair (Edutainment activity on HIV/AIDS):** The PPPC that are not based in the community found it difficult to organize HIV/AIDS campaign activities on a monthly basis as required by the project. For this reason the Funfair was invented and co-organized by PDA, the PPPC and community leaders. These were conducted every six months and communicated through edutainment activities organized in different stations such as quiz games, darts, exhibitions, role play, etc. Though the VDBs were not required to organize Funfairs, some joined those organized by other PPPCs or organized their own when they realized their effectiveness.
7. **Production of Evidence-based IEC Materials:** The project developed three types of IEC materials based on needs or gaps found through data analysis of the project regarding HIV/AIDS stigma and discrimination reduction of the community and PLHIV. Those materials included posters, radio dramas and slips of paper with HIV/AIDS-related mottos that were distributed in the community. All of those three materials were aimed to deliver key messages of the project that directly link to reduction of HIV/AIDS stigma and discrimination.

It should be noted that there were some design differences in the two model variations during this new phase. Urban project sites all had the PPP club (PPPC) model, whereas the rural sites could have either a VDB or a PPPC. For VDB (all in rural sites) the monthly meeting/banking day and all HIV/AIDS campaign activities were organized in the community where the VDB office was located. PPP clubs (PPPC) had two types, community-based and hospital-based. The community-based PPPC were originated by PPP loan recipients (both PLHIV and buddies) and the general population who resided in the community where the PPPC office is located. The monthly meeting on banking day as well as HIV/AIDS campaign activities were organized in that community. The hospital-based PPPC, however, were originated by PLHIV-buddy partnerships that existed previous to the beginning of the new phase. In the hospital-based clubs the PLHIV were receiving ARV treatment at the same hospital, and most were from different communities. Non-PLHIV members or buddies may also not be from the same community. The monthly meeting or banking day was organized at the hospital. Since the buddy pairs in the hospital-based clubs did not have ties to the community where the hospital was located, HIV/AIDS campaign activities were organized at a selected community where there was at least one PLHIV club member who was willing to lead the activities and where stigma and

discrimination towards PLHIV still exists, as informed by a community assessment prior to program startup.

Program monitoring data provides additional detail about the number of people reached by the project (Table 2.1). The number of VDB participants is much higher than the PPPC participants; the VDBs had 2,150 participants by September 2010 whereas the rural PPPCs had only 150 and the urban PPPCs 340. Also, the number of PPPC members increased only slightly from 2009 to 2010 while there was a 15% increase in the VDBs. In urban areas, more PPPC members were in community-based clubs whereas in rural areas the hospital-based members out-numbered the community-based members.

Table 2.1: Program monitoring data on numbers of participants in PPP project by type of model and urban status, 2009 and 2010

	As of 30 September 2009		As of 30 September 2010	
	No. of total members/savers	No. of PPP loan recipients (PLHIV/ non-PLHIV)	No. of total members/savers	No. of PPP loan recipients (PLHIV/non-PLHIV)
URBAN PPP	287	160	340	186
Community based	201	90	240	102
Hospital based	86	70	100	84
RURAL PPP	132	41	150	43
Community based	33	10	28	10
Hospital based	99	31	122	33
RURAL VDB	1884	54	2150	63
TOTAL	2303	255	2640	292

3. Research Methodology

As mentioned above, the endline study used both qualitative and quantitative methods to investigate the impact of the program. This section describes the methodologies used in more detail.

3.1 Study design for quantitative surveys

The endline surveys followed the same study design as the baseline surveys. They were conducted among four main target groups, namely people living with HIV, buddies, family members of people living with HIV and/or their buddies, and finally community members. These surveys were conducted in the same communities as the baseline survey. The selection of communities was based on three criteria: 1) at least one person living with HIV was living in the community; 2) people living with HIV implemented interventions in the community; and 3) a PPP club (PPPC) was already established before the baseline survey started (in communities implementing the PPPC model). Geographic distribution was also one of key considerations taken into account for the selection of communities (Table 3.1).

Table 3.1: Number and distribution of communities selected

Province/Region	PPP Club Model		VDB Model	
	Total Number	Sample	Total Number	Sample
Bangkok and vicinities	4	2	0	0
Chonburi/Middle	2	1	0	0
Chiang Mai/North	2	1	0	0
Chiang Rai/North	1	1	4	2
Khon Kaen/Northeast	1	0	4	2
Nakhon Ratchasima/Northeast	1	1	4	1
Total	11	6	12	5

Eleven communities were selected, comprised of 6 communities using the PPPC model and 5 using the VDB model.

In the baseline survey, all program participants living with HIV in the sampled communities were successfully interviewed (N=107), and nearly all of the buddies (N=105) (two buddies declined to participate in the baseline survey). In the endline survey, 95 of the original 107 PLHIV were successfully interviewed and 75 of the original 105 buddies (Table 3.2). The loss to follow-up was 11.2% and 28.6% respectively. However, an additional 36 PLHIV who had not been interviewed for the baseline survey were interviewed at endline, as well as an additional 44 buddies (see Table 3.3).

Table 3.2: Number of original PLHIV and buddies interviewed for endline survey

Respondents	Baseline	Endline	Loss to follow-up
PLHIV	107	95	11.2% (12)
Buddies	105	75	28.6% (30)

The family member survey interviewed the family members of people living with HIV and their buddies where 1) the PLHIV or the buddy agreed to have their family members interviewed, 2) the

family member agreed to be interviewed and 3) the family member was not younger than 15 years old. In total, for the baseline survey N=95 family members of people with HIV representing N=52 people living with HIV (48.6%) were interviewed and N=103 family members of buddies representing 50 buddies (47.6%) were interviewed. At endline, N=67 of the baseline family members were re-interviewed and N=82 new family members were interviewed for a total of N=149.

Systematic random sampling was employed to recruit community members in the selected communities for the community survey. A listing of households was completed to construct the sampling frame, including mapping, and a census of all community members aged 15 and older was conducted before the household sampling process. The targeted number of households and respondents in each selected community was based on the census, with households randomly selected. Interviews included all family members aged 15 years old and over who agreed to participate in the survey. The same number of community members were interviewed at baseline and endline (N=560).

A summary of the total number of respondents interviewed for the endline survey is shown in Table 3.3.

Table 3.3: Total number of respondents to endline survey

Respondents	Baseline	Endline
PLHIV	107	131
Buddies	105	119
Family	198	149
Community	560	560

Data collection was carried out from November 2010 to January 2011. The data collection team consisted of ten staff with research experience of more than 10 years from the Research and Evaluation Department of PDA and 6 university students. PDA provided a two-day training, including practice in the community for all data collectors before data collection started. PPP program staff helped the data collection team with fieldwork logistics such as informing the target groups and communities, coordination, and making appointments.

The baseline and endline study design was reviewed and approved by Mahidol University's Institutional Review Board (IRB). To comply with ethical safeguards and procedures, all people living with HIV and buddies signed the informed consent form prior to the interviews. Due to the large sample size and the inconvenience of obtaining official signatures of all respondents, only verbal consent was obtained and documented among family and community members. All interviews of people living with HIV and buddies were conducted by PDA staff familiar with program implementation, with strong relationships to the community. The time and place of the interview was scheduled by respondents at their convenience and in order to maintain confidentiality throughout the process.

3.2 Qualitative study design

Qualitative methods were used to supplement the information collected in the impact survey. This data is used to provide context and meaning for the results, to explain the ‘how’ and ‘why’ of the findings. Three methods were used in the qualitative part of the study. In-depth interviews were conducted with project beneficiaries, namely the PPP loan pair (HIV positive and negative loan recipients). Focus group discussions using a semi-structured guide were conducted among other key informants such as community leaders and the VDB and PPPC committee members. The number and type of respondents in this part of the study are shown in Table 3.4.

Table 3.4: Respondents to qualitative study

Target group	Methodology	Number
1. PPP loan pair (HIV positive and negative loan recipients)	In-depth interview	22 pairs (44 persons)
2. Community leaders, VDB and PPPC committee members	Focus group discussion	7 groups

The qualitative study also included document reviews. Researchers reviewed project-related documents such as progress reports, monitoring visit reports, minutes of the technical working group meetings, and records written by researchers through observation and discussion with target group members in the field.

The data collected and compiled through the in-depth interviews, focus group discussions and document review were triangulated to verify and coordinate data drawn from different sources. A qualitative analysis workshop was held to analyze the linkages between project interventions and outcomes. The workshop included researchers, project staff and external academicians providing technical assistance in order to discuss, exchange and draw conclusions on the project results.

In the report, qualitative and quantitative data are intermingled by topic area in order to provide a multidimensional perspective on the study results.

3.3 Data Analysis

Scales

Several sets of scaled questions were used to measure stigma, self-efficacy, self-esteem and quality of life. Descriptions of the scales and their use in previous research are given in the findings sections where they are discussed. Several steps were used to analyze the scale data. First, individual items were examined to analyze whether there was change over time between the baseline and endline surveys. Paired T-tests were used for this analysis. Second, confirmatory factor analysis was conducted to confirm factors established at baseline and to reduce the number of items into subscales. The sub-scales were then analyzed for reliability as measured by Cronbach’s alpha. An alpha of at least 0.7 is generally accepted as signifying a scale that is internally consistent (DeVellis, 2003). Third, paired T-tests were used to examine whether there was change over time in the scales

and sub-scales. For those scales that changed significantly, results on the type of PPP model were compared to investigate if some models worked better than others.

For the community survey only, the scales were standardized so that scores ranged from 0 to 100, with a mean of 50 and a standard deviation of 10 (Nyblade et al., 2008). Each point on the scale represents one-tenth of a standard deviation. Point differences of three to five on the scale are considered significant based on standard guidelines for interpreting psychosocial indices (Cohen, 1988). These scales were used in the impact analysis described below.

Impact analysis

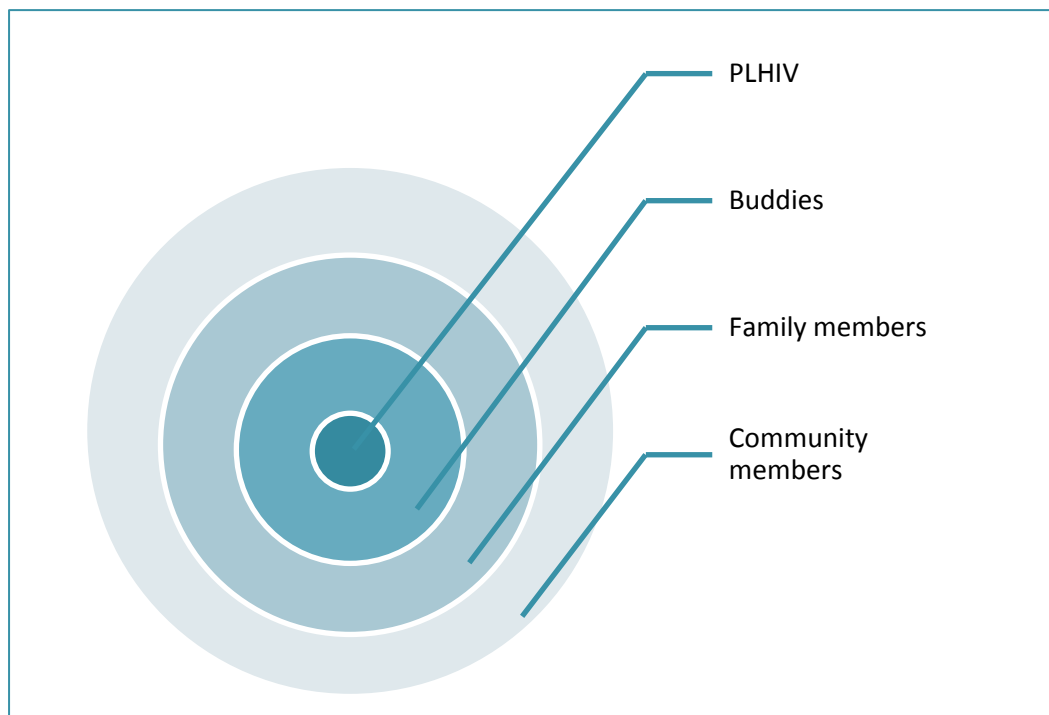
The goal of the multivariate analysis is to examine the association of exposure to PPP project interventions and change in the outcome variables of interest. Ordinary least squares regression was employed. Exposure measures were used as independent variables while controlling for respondent background characteristics (e.g. age, sex, exposure to media, educational attainment). Baseline measures were also included in the analysis to control for an individual levels of stigma at baseline. For the PLHIV survey, the dependent variables are disclosure, stigma and quality of life. For the buddy, family and community surveys, the dependent variables are HIV knowledge, fear-driven stigma, and value-driven stigma. In some data sets, however, the number of cases was too small to run full regressions and measures of exposure were tested one by one, as discussed further in the text.

Principal components factor analysis, internal consistency reliability checks, and linear regressions were conducted both in STATA version 10 and SPSS version 13.

3.4 Schematic framework

Figure 3.1 depicts the logical order of the presentation of the research findings. First the findings on the PLHIV themselves are presented. Subsequent sections present the findings from the buddies, family members and community member surveys, ordered from the perspective of their contextual distance from the PLHIV. The project created one-on-one relationships between PLHIV and their buddies, and these are presumed to be the most adjacent and thus most prominent effect of the project. The effect of the project on family members, because of their closeness to the PLHIV, are presented next. Finally the results for the community members are presented last.

Figure 3.1: Schematic diagram of research framework



4. People Living with HIV

4.1 Profile of Respondents

Table 4.1 shows the profiles of individuals living with HIV interviewed at endline (N=131) and those who were interviewed at baseline and endline (N=95). . Among all respondents interviewed at endline, the majority are female (60%) live in urban communities (65%), and are married (57%). Nearly half are in their 40s (47%) and the mean age is 43.4 years. Over forty percent (42%) completed at least some secondary school.

Table 4.1: Profile of PLHIV respondents (in percents)

	All Endline	Both Baseline and Endline
Gender		
Male	39.7	35.8
Female	60.3	64.2
Residence		
Urban	64.9	63.2
Rural	35.1	36.8
Marital Status		
Married	57.3	61.1
Single/divorced/widowed	42.7	38.9
Age		
18-39	34.3	30.5
40-49	47.3	50.5
50+	18.3	18.9
Mean age	43.4	43.9
Median age	43	43
Education		
None/primary	58.0	61.1
Second/high/vocational	36.6	31.6
University/B.A.	5.3	7.4
(N)	(131)	(95)

Respondents in urban areas were employed as small business owners such as vendors (37%) and as day laborers (52%) (Table 4.2). A large proportion of rural respondents are farmers (39%) and laborers (35%). Average monthly incomes are substantially higher in urban areas; fully 63% of rural respondents made less than 5,000 baht on average while 47% of urban residents made 7,000 baht or

more. Median monthly income was 6,000 baht in urban areas and 4,000 baht in rural areas (approximately US\$200 vs. US\$133).

Table 4.2 Occupation and income of PLHIV by urban status (all endline participants)

	Urban	Rural	Total
Occupation			
Farmer	0.0	39.1	13.7
Own business	36.5	23.9	32.1
Employee	4.7	0.0	3.1
Laborer	51.8	34.8	45.8
None	7.1	2.2	5.3
Average monthly income (Baht)			
<5000	28.2	63.0	40.5
5000-6999	24.7	17.4	22.1
7000+	47.1	19.6	37.4
Median income	6000	4000	6000
(N)	(85)	(46)	(131)

Table 4.3 shows the type of intervention model that endline respondents participated in. All urban respondents belonged to a PPP club (PPPC) whereas rural respondents were evenly split between the village development bank (VDB) and PPPC. With regard to the type of PPPC, urban residents were about evenly split between community-based and hospital-based clubs whereas only a few rural respondents (13%) belonged to community-based PPP clubs (PPPC).

Table 4.3: Model by urban status (all endline respondents)

Program Model	Urban	Rural	Total
VDB	0.0	50.0	17.6
PPPC	100.0	50.0	82.4
(PPP-club community based)	(55.3)	(13.0)	(40.5)
(PPP-club hospital based)	(44.7)	(37.0)	(42.0)
(N)	(85)	(46)	(131)

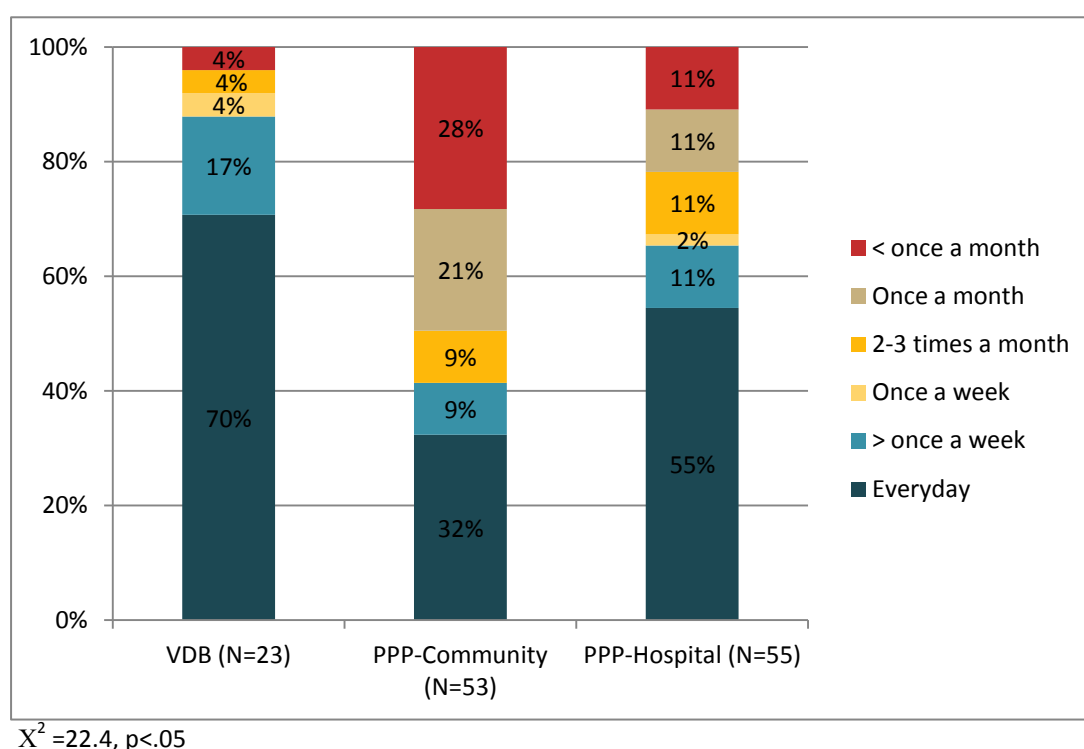
4.2 Participation in and exposure to the PPP project

In this section respondents' reports of their involvement and exposure to the project is presented, followed by an examination of the differences in participation by project model.

Involvement with buddies

When asked about their involvement with their buddies, almost half (48%) of PLHIV said that they talked to their buddy every day. The degree of involvement varied by type of model: VDB members talked to their buddies most often (70% every day) with members of the community-based PPPC least often (32% every day) (Figure 4.1). About two-thirds (66%) of respondents said they had talked about HIV/AIDS with their buddy in the past six months. Additional analysis showed that those in the hospital-based PPP clubs talked to their buddies more often than their community-based PPPC counterparts (55% vs. 32%, $p=.01$). While the same is true for both rural project intervention types (82% for hospital vs. 67% for community) and urban areas (42% vs. 28%), the differences are not significant when urban status is taken into account ($p>.10$).

Figure 4.1: PLHIV reports of how often they talked to their buddy by model



The qualitative study presents insights on how the type of intervention model affected involvement of buddies. In the hospital-based PPPC, many buddy pairs only met at the monthly meetings. Some of the HIV-negative buddies and other non-PLHIV PPPC members expressed the feeling that they were not an important component of the club, as the PLHIV tended to have the important roles in managing the club. This is illustrated in the following statement:

We should let PLHIV members to develop a plan to conduct HIV activities themselves, since suggestions from us (buddies) may not be accepted by PLHIV anyway. In addition, our available schedule may sometimes be different from PLHIV's, so we cannot join the activities planned and conducted by PLHIV. (Buddy, PPPC)

As a result, most hospital-based PPPC activities did not receive sufficient non-PLHIV participation, as non-PLHIV individuals did not feel 'ownership' over the club. The above statement indicates that buddies sometimes did not perceive themselves as important members in the PPPCs. On the other

hand, PLHIV perceived the buddies as not fully understanding their important role in the club, as illustrated by one PLHIV member who also offered an explanation:

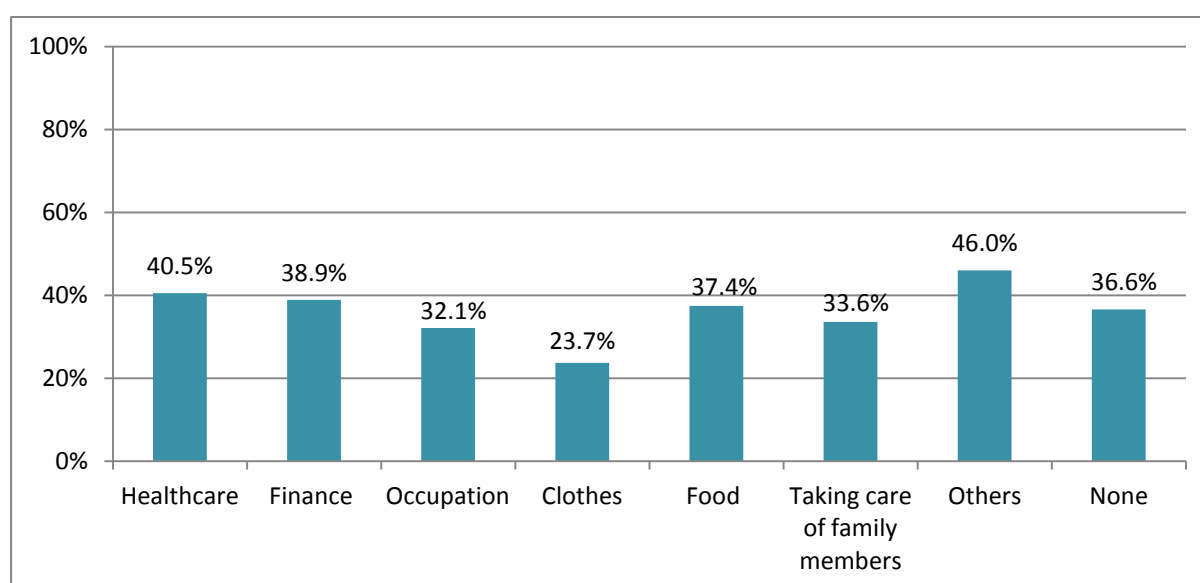
I feel that HIV negative loan partners (buddies) are not aware of their important roles towards the PPP club. They just come to join the PPP club's activities as required by the project. It may be that living in different communities may be a key difficulty preventing them from participating in the club's activities often. (PLHIV, PPPC)

The qualitative study also found that HIV/AIDS campaign activities conducted by PPPCs (both those in hospitals & communities) were not as cohesive as those conducted by VDBs. This could be because members of the PPPCs were living in different communities than that where the club is located and where intervention activities took place. The quantitative findings also suggest that the urban PPPC community-based club members had much less contact with their buddies than either the urban hospital-based clubs or the rural participants for all models (Figure 4.1 and discussion below). This finding suggests that buddies living in a different community created a barrier to communication, as was common in the urban PPPCs. This finding is discussed further below.

Support from buddies

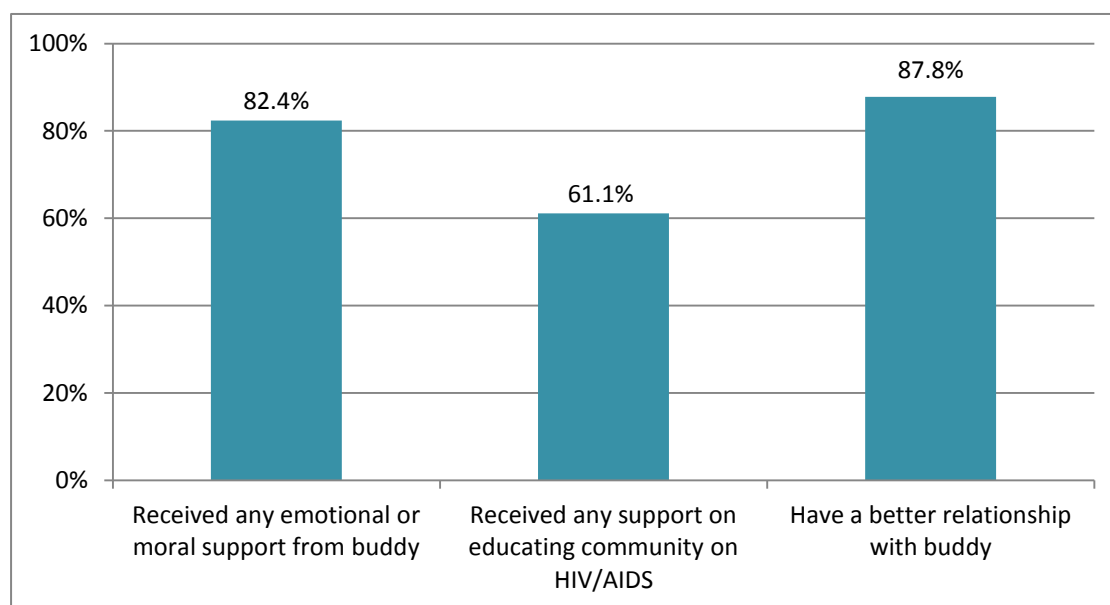
Figure 4.2 shows the material support that PLHIV reported receiving from their buddy in the past six months. Most (63%) received some type of support; health care, financial support and food were the most common.

Figure 4.2: PLHIV reports of material support received from buddies in the past six months



Non-material types of support from buddies were reported more frequently by PLHIV (Figure 4.3). Fully 82% said they received some emotional support from their buddies, and 61% received support for the HIV educational campaigns. A high percentage (88%) said that their relationships with their buddies had improved through participation in the program. When examining whether support from buddies varied by model type, the results showed that only material support varied significantly. Those in hospital-based PPPCs (urban or rural) were more likely to receive support with clothing and food than those in other models.

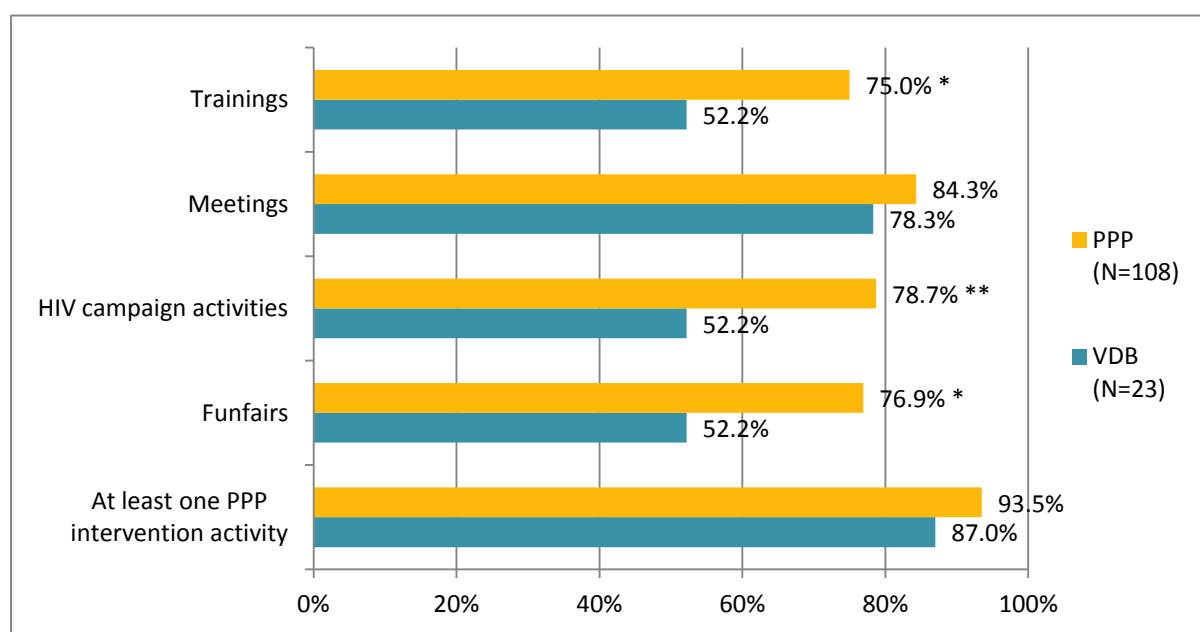
Figure 4.3: PLHIV reports of other support received from buddies in past 6 months



Participation in project activities

HIV positive respondents were asked about their exposure and participation in the various PPP activities in the past 12 months. Figure 4.4 contrasts the level of exposure for PPPC and VDB members. Attendance at a monthly meeting was high for both PPPC and VDB members (84% and 78% respectively), and a high percentage participated at least one activity (94% and 87%). However, PPP-club members were significantly more likely to participate in the HIV campaigns, PDA trainings and community Funfairs. Only about half of VDB members participated in these activities.

Figure 4.4: PLHIV exposure to PPP intervention activities by type of model

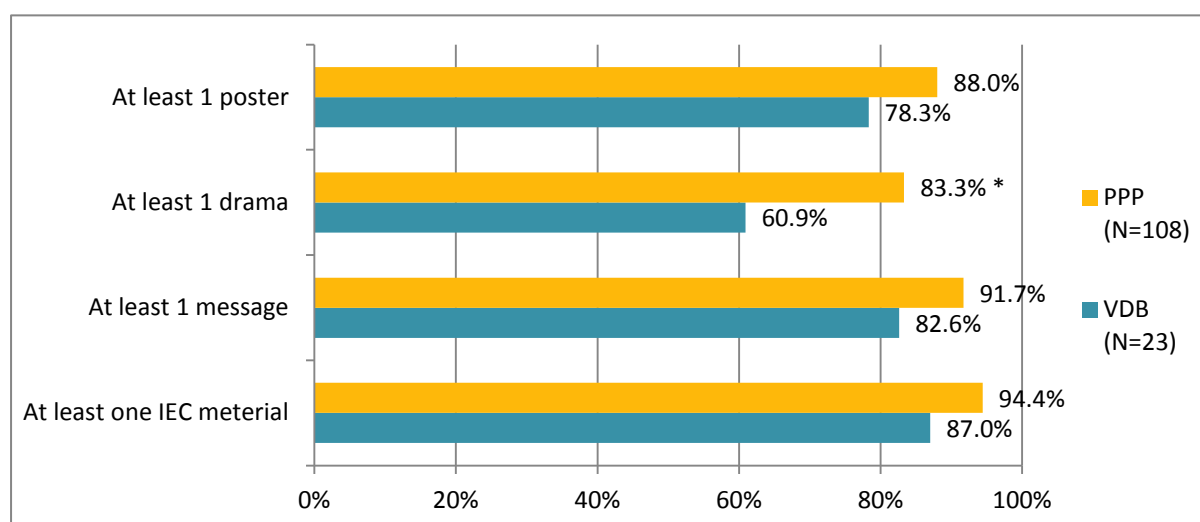


***p<.001, **p<.01, *p<.05, +p<.10

In analysis not shown here, no difference was found between the community-based PPPC and hospital-based PPPC in terms of exposure to intervention activities.

Figure 4.5 shows differences by model for exposure to IEC materials. The ‘slips of paper’ messages had the highest rate of exposure for both VDB and PPPCs (83% and 92%). Posters also had a high level of exposure (78% and 88%) with dramas somewhat less so (61% and 83%). A high percentage (87% and 94%) had seen at least one of these IEC materials; however, the PPPC members were significantly more likely to say they had seen the dramas.

Figure 4.5: PLHIV exposure to IEC materials by type of model



***p<.001, **p<.01, *p<.05, +p<.10

4.3 Disclosure of HIV status

Disclosure of one's HIV status is sometimes considered as a proxy indicator of the level of stigma present in the community. However, disclosure to a close friend or a family member is qualitatively different than disclosure to the wider community. Research suggests that stress and social support resulting from disclosure varies according to who is disclosed to; friends may provide more support than family and female family members are disclosed to more often (Kalichman et al., 2003). It is often assumed that an individual who is open about HIV status to an entire community is dealing better with internalized stigma than an individual who has disclosed to a single person. Therefore investigating who, to how many, and under what conditions disclosure occurs for people living with HIV is of great interest.

People living with HIV were asked if they disclosed their status to anyone besides their buddy or the VDB/PPP club, and if so to whom. At baseline, nearly all said that they had disclosed to someone else (98%), and at endline 100% of those who were re-interviewed said they had done so. This represents two people (of the 95 who were re-interviewed) who newly disclosed to someone between baseline and endline. In addition to these two people who newly disclosed, it should be noted that the PLHIV who were re-interviewed disclosed to a significantly larger number of categories of people in the time between surveys (average of 7.3 vs. 6.0) (Table 4.4). A significant increase was found in the percentage disclosing for all categories of people, including close relatives, other relatives, friends,

neighbors and the wider community. Of particular interest is that the percentage who said they disclosed to the community increased significantly, from 39% to 51% ($p<.01$).

Table 4.4: Disclosure of HIV status to others, baseline and endline (percent yes)

	Baseline	Endline	Significance of T-test	(N)
To anyone	97.9	100.0	n.s.	(95)
Current partner (of those with partner)	98.6	97.0	n.s.	(67)
Former partner	36.8	57.9	***	(95)
Mother	61.3	67.4	*	(95)
Father	49.5	55.8	+	(95)
Children	59.1	67.4	*	(95)
Sister	73.1	82.1	**	(95)
Brother	59.1	71.6	***	(95)
Other relatives	54.8	72.6	***	(95)
Friends	62.4	74.7	***	(95)
Neighbors	43.0	54.7	**	(95)
Community	38.7	50.5	**	(95)
Would advise other PLHIV to disclose	91.6	86.3	n.s.	(95)
Number of types of people disclosed to	6.0	7.3	***	(95)

*** $p<.001$, ** $p<.01$, * $p<.05$, + $p<.10$, n.s. not significant

A lower percentage at endline, however, reported that they would advise other PLHIV without symptoms to disclose to others (91% at baseline vs. 86% at endline, though this was not significant ($p=.167$)). Further examination of the sample shows that four people (4%) changed their mind in favor of disclosure between baseline and endline, but that nine people (10%) changed their mind against advising other PLHIV to disclose. Those who changed their mind against disclosure had themselves disclosed to only a few people. The small number of cases used in the analysis makes it difficult to investigate this issue further, but it may be an issue for further qualitative investigation.

The qualitative study provides further insight on the issue of disclosure, on both sides of the issue. Those who were members of the hospital-based clubs said that the model was appropriate for PLHIV who are not ready to disclose their HIV status to the community.

For those who have already disclosed their HIV status, they may feel nothing. But in Bangkok, if others know about our HIV status, they will not remain friends with us anymore. If our HIV status is disclosed, we may not be able to leave our houses and we may lose our job. (PLHIV, PPPC)

If community members know who a PLHIV is, they will not get close to them. Therefore, normally PLHIV are truly careful about HIV disclosure and avoid any actions that may cause unintentional disclosure of their status. Some community members still do not accept PLHIV, so it is difficult for PLHIV to disclose themselves to the community as it may cause problems to their lives. (PLHIV, PPPC)

Interviews with PLHIV PPP-club members revealed that those club committee members who did not disclose their own status were afraid to accept new members who are non-PLHIV. They do not believe that non-PLHIV can keep confidentiality regarding the members' HIV status, and indeed do not accept the underlying principles of the PPP project.

My PPP club manager does not want anyone knowing about the HIV status of all of us. She does not want us (PLHIV) to even mention or disclose our HIV status in any circumstances. She is afraid that non-PLHIV cannot keep the secret as agreed. She does not even tell about her HIV status to her family. She feels that non-PLHIV will never understand and reduce HIV stigma and discrimination. She thinks that non-PLHIV only participate in activities with PLHIV as required by the project to receive the PPP loan. Although the level of acceptance of non-PLHIV towards PLHIV may be increased, it cannot significantly increase resulting in a positive result towards the life of PLHIV. (PLHIV, PPPC)

I know that the project aims to reduce HIV stigma and discrimination, but PLHIV do not want non-PLHIV knowing their HIV status. I think the project should reconsider this issue. In addition, it is so difficult to find an HIV negative loan partner because we never know who we can trust. We cannot be sure who will not reveal our secret. We, PLHIV do not want anyone knowing our HIV status. We do not want non-PLHIV to become PPP club members. (PLHIV, PPPC)

I am happy to continue and sustain the project, but I just hope that there should be only PLHIV in the project to avoid any problems. For HIV/AIDS campaign activities, we can organize by ourselves as in the past just a few non-PLHIV collaboratively organize the activities anyway. (PLHIV, PPPC)

It should be noted that the findings show throughout the study that fear of being stigmatized and discriminated against is a key factor leading to self-stigmatization (internalized stigma) of PLHIV. Furthermore, not accepting one's HIV status and shutting down their world from others affects the psychological well-being of PLHIV.

Others expressed the positive impact of disclosure and of interaction with other community members 'as normal'. One good example is the case of one PLHIV who finally decided to disclose her HIV status to the community, after learning through the project that others do not stigmatize and discriminate PLHIV like she thought. Therefore, she wanted the relief of not covering up her HIV status anymore.

At first I felt that I am stigmatized, but after the HIV training conducted by the project for both PLHIV and non-PLHIV, I found that indeed non-PLHIV do not stigmatize PLHIV, but they never know us before. I am so happy when one of participants at the training who is non-PLHIV offered me a ride home. It is so good that disclosing my HIV status does not cause any negative effects to me. (PLHIV, PPPC)

Before I was not sure how many people knew about my HIV status. However, when the VDB is started I was invited to join and I now feel that they do not stigmatize PLHIV. Currently I

feel more relieved and happy because all community members know about my HIV status already and I do not have to think about keeping it a secret anymore. (PLHIV, VDB)

The quantitative findings show significant differences in disclosure to the community by type of model; 94% of those in VDB clubs have disclosed their status vs. 40% in the PPPCs (p<.001) (Table 4.5.) No differences were found by model type and by PPPC location (community-based vs. hospital-based) for whether the PLHIV would advise other PLHIV to disclose.

Table 4.5: Percent of PLHIV reporting they have disclosed their status to the community and would advise others to disclose by model type at endline

	Disclosed HIV status to community	Would advise other PLHIV to disclose	(N)
VDB	94.4	94.4	(18)
PPP	40.3	84.4	(77)
Signif. of chi-square	***		
PPP community-based	37.1	77.1	(35)
PPP hospital-based	42.9	90.5	(42)
Signif. of chi-square	n.s.	n.s.	
All	50.5	86.3	(95)

***p<.001, **p<.01, *p<.05, +p<.10, n.s. not significant

4.4 Stigma Results for PLHIV

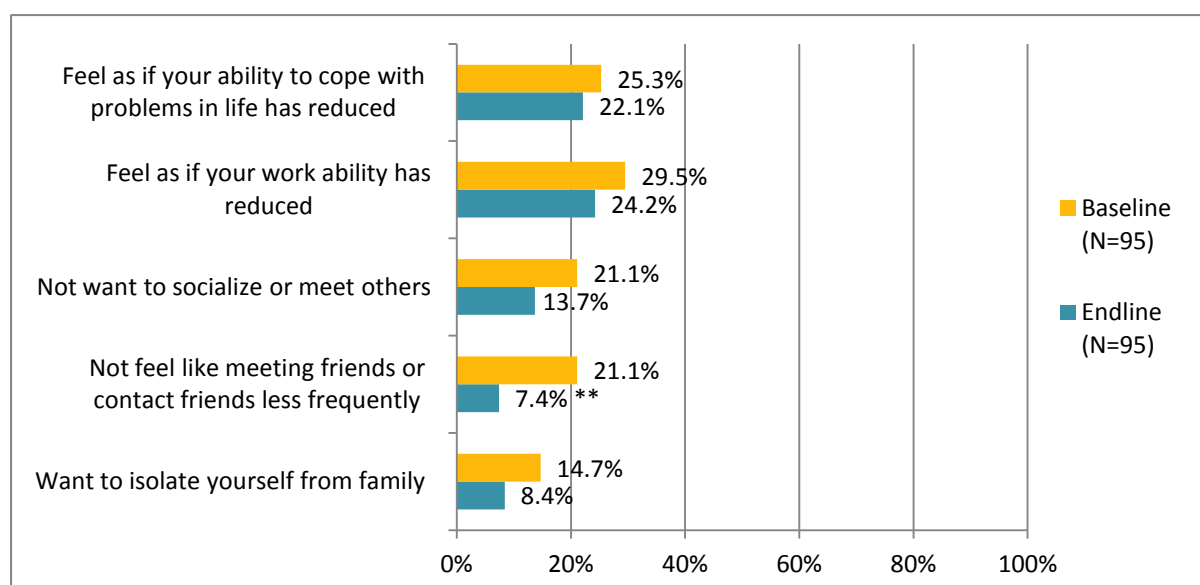
Previously validated scales measuring stigma were used to capture the domains of internalized stigma, disclosure, fear of experiencing stigma and enacted stigma (or discrimination) for PLHIV (Tanzania Stigma-Indicators Field Test Group, 2005). Each is described in more detail below.

Internalized Stigma

In both the baseline and endline surveys, respondents were asked if they have ever had thoughts or feelings of internalized stigma as a result of their HIV status. Internalized stigma is self-stigmatization that can lead to feelings of depression, suicide, low self-worth, and shame. These feelings are often manifested into self-isolation from family and friends or a reduction in ability to work or deal with life's challenges. They also can have a profound effect on HIV prevention, treatment and care. People living with HIV manage internalized stigma at various levels; and one of the goals of the intervention was to reduce these feelings through PLHIV normal interactions with their buddies and the community (Brouard & Wills, 2006; Leickness et al., 2007)

A series of questions were asked to people living with HIV in both surveys about whether they avoided certain situations or activities because of their HIV status. At baseline, nearly one third of respondents reported some type of internalized stigma. As shown in Figure 4.6, all of the items affected a reduced percentage of PLHIV at endline, though only "not like meeting friends/meet friends less frequently" reduced significantly (p<.01).

Figure 4.6: PLHIV internalized stigma item results at baseline and endline

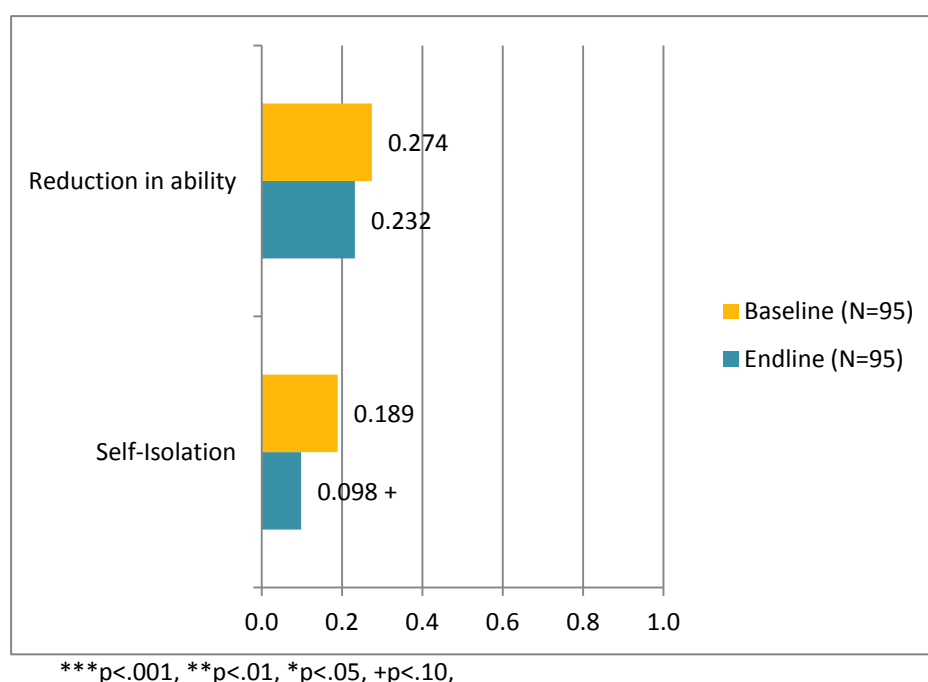


***p<.001, **p<.01, *p<.05

Principal components factor analysis of the internalized stigma items yielded two factors, representing self-isolation and reduction in ability to cope. The sub-scales had a Cronbach's alpha of at least 0.68 at both baseline and endline. The resulting sub-scales were compared at baseline and endline using paired T-tests.⁴ While scores on both sub-scales declined at endline, only the self-isolation score declined significantly. This result indicates that participants of the program felt less internalized stigma after participating in the PPP project (Figure 4.7). Further investigation showed that there was no difference in the decline by PPP model for the self-isolation sub-scale.

⁴ The scales were constructed by summing the number of "yes" items and dividing by the total number of items. The resulting scale ranges from 0 to 1.

Figure 4.7: Change in internalized stigma scales, PLHIV



Qualitative data also supports the finding that PLHIV became less isolated and self-stigmatized through participation in the program. Project documents reveal that some PLHIV likely do not accept their HIV status and are mistrustful about their HIV status being disclosed accidentally. The feeling links to a lack of self-confidence of PLHIV. However, the qualitative study shows that through implementation of PPPC and VDB activities and the role of the PPP loan pair, PLHIV have a broader chance to interact with non-PLHIV. Such interaction has taken PLHIV out of their isolated world and allowed them to be less preoccupied with their HIV status. Later, they have increased self-confidence and are able to attend more social activities.

Through the project, I receive mental support from my neighbors and community. Before I felt guilty for getting HIV infection, but my buddy (HIV negative loan partner) kept telling me that there is nothing to be embarrassed about. My buddy encouraged me to feel better and he always will be there for me. (PLHIV)

Another PLHIV confirmed that the PPP implementation has made PLHIV become aware of their self-value.

Before I was very afraid to talk about HIV/AIDS with the community or to hear the words 'HIV/AIDS' or 'PLHIV' as it causes me pain. But after I joined the project, I feel that there are still many people caring about me. Consequently, I am now able to accept and live with my HIV and able to tease or talk about HIV/AIDS with others. (PLHIV)

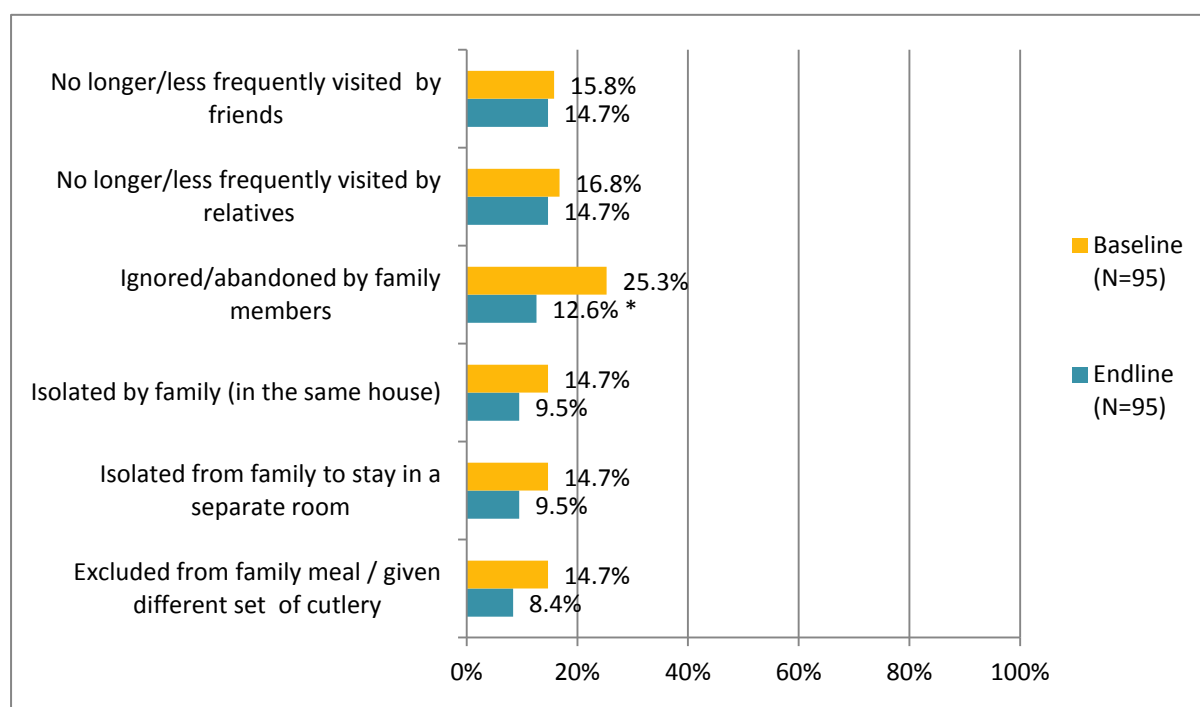
Fear of stigma and enacted stigma

Previous studies have shown that the fear of being stigmatized is more frequent among PLHIV than the actual experience of stigma (Tanzania Stigma-Indicators Field Test Group, 2005). In addition, individuals tend to have more extreme feelings about the fear of stigma than about the stigma they actually experience. In this survey, PLHIV respondents were asked about the stigma and

discrimination they had experienced from their family, friends and community in the past 6 months, and also about their fear of experiencing such stigma.

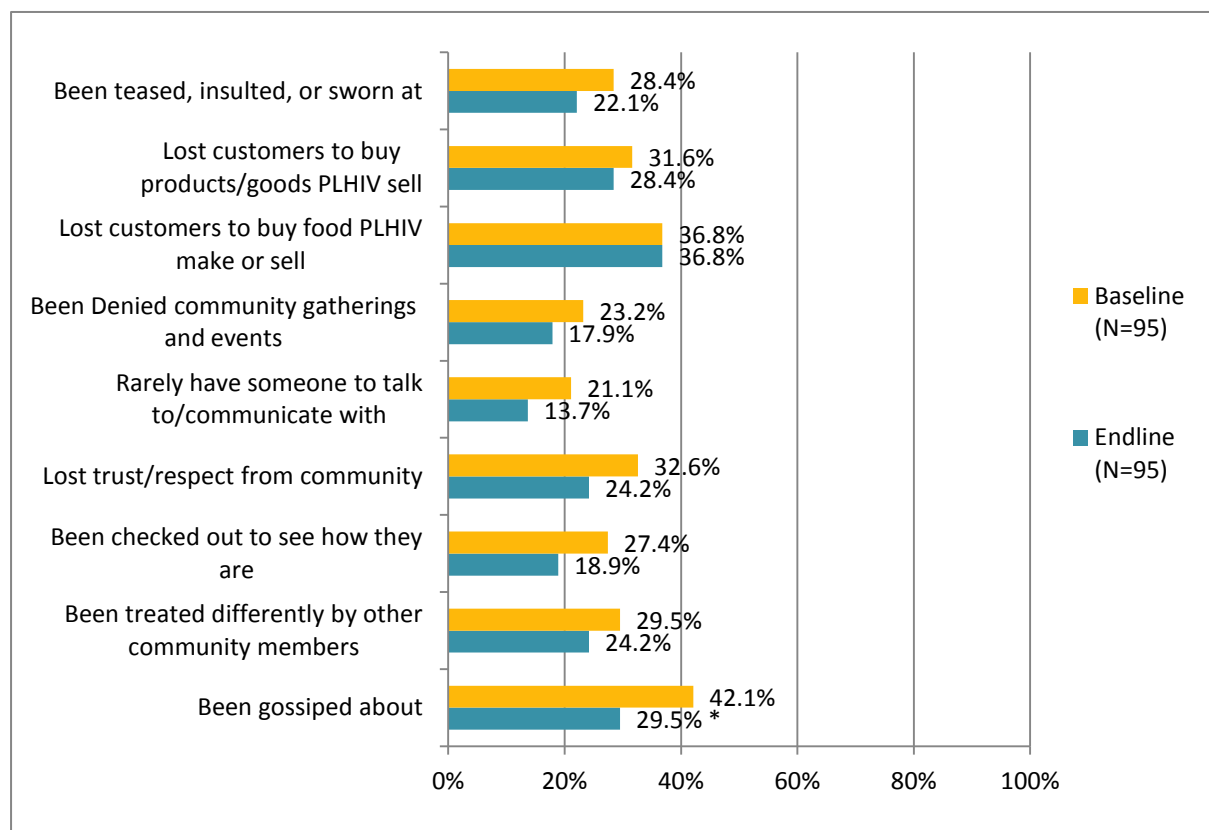
Two scales were constructed to measure fear of stigma, one for fear of stigma from family and friends and one for fear of stigma from the community. Figures 4.8 and 4.9 show the decline in PLHIV's agreement with the individual items in the two scales. While all of the items declined, only one from each scale declined significantly: "fear of abandonment" by the family and "fear of being gossiped about" by the community.

Figure 4.8: Change in scale items measuring fear of stigma from family/friends, PLHIV



***p<.001, **p<.01, *p<.05

Figure 4.9: Change in scale items measuring fear of stigma from community, PLHIV

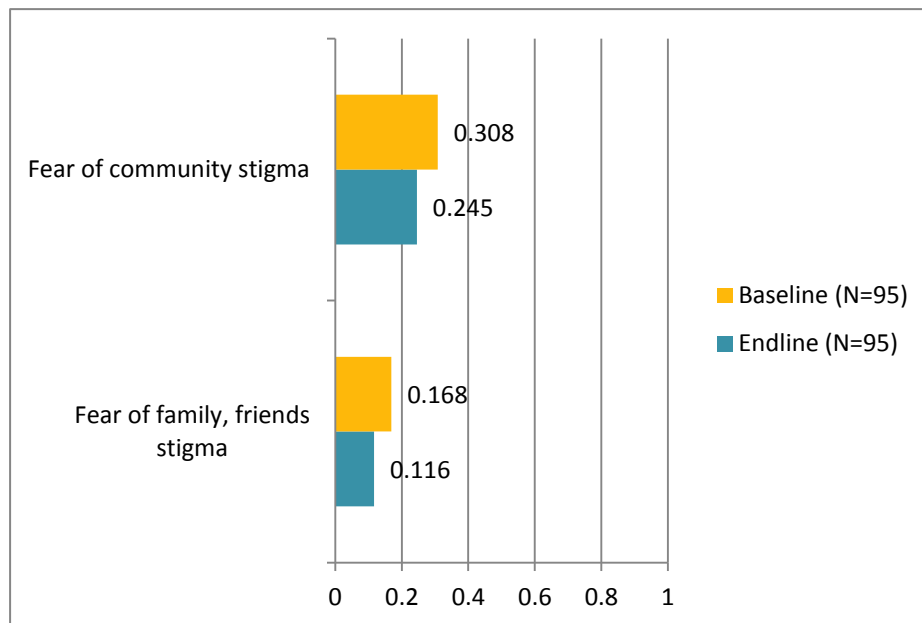


***p<.001, **p<.01, *p<.05

Confirmatory factor analysis was conducted on two baseline scales representing fear of stigma. The scales at both baseline and endline had alpha values of above 0.9. A t-test of the change in the two scales between baseline and endline shows that results for both scales declined significantly at the p<.01 level (Figure 4.10).⁵ Thus fear of stigma, both from family/friends and from the community, showed significant declines for PLHIV between baseline and endline.

⁵ The scales were constructed by summing the number of "yes" items and dividing by the number of items. The resulting scale ranges from 0 to 1.

Figure 4.10: Change in scales measuring fear of family/friends stigma and community stigma, PLHIV



The results for experienced or enacted stigma—which is also known as discrimination—are shown in Figures 4.11 and 4.12. In Figure 4.11, it is seen that while all of the items measuring stigma experienced from family and friends declined, none changed significantly. Three items measuring discrimination experienced within the community did decline significantly. These were “being checked out to see how you are”, “being gossiped about” and “being insulted, teased or sworn at.”

Figure 4.11: Change in scale items measuring enacted stigma from family and friends at baseline and endline, PLHIV

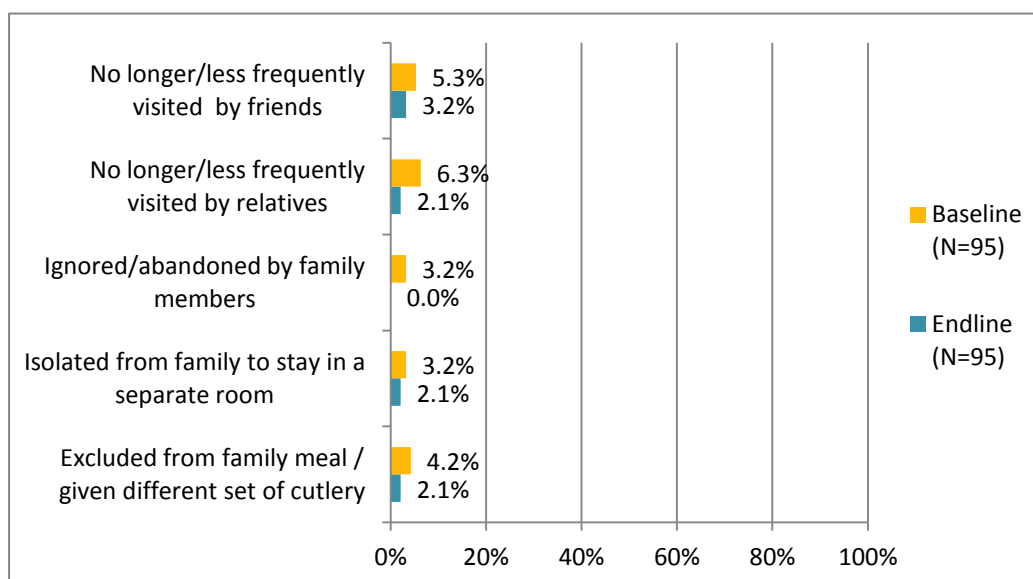
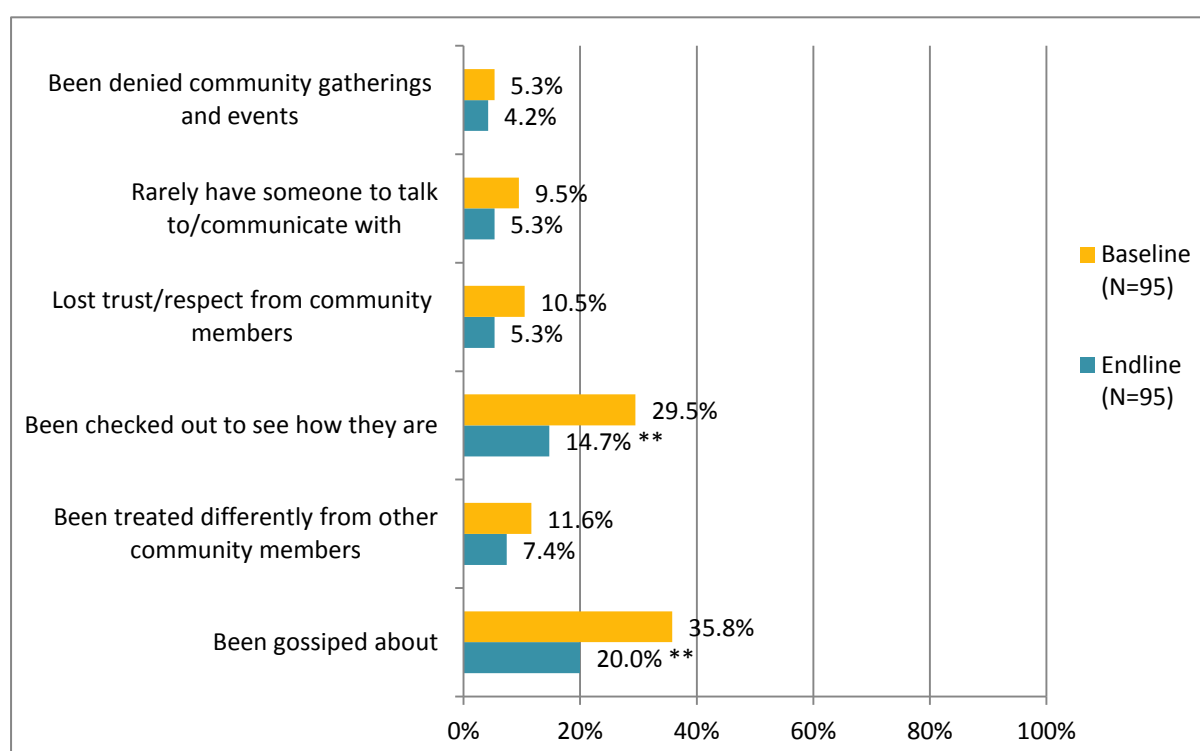


Figure 4.12: Change in scale items measuring enacted community stigma at baseline and endline, PLHIV



*** $p < .001$, ** $p < .01$, * $p < .05$, + $p < .10$

Principal components analysis of items measuring the experience of facing stigma and discrimination from family friends and community revealed three factors at baseline, measuring experiences of family isolation, family abandonment, and community stigma. At endline, these scales had reliability of $\alpha = .66$ for family isolation, $\alpha = .89$ for family abandonment and $\alpha = .88$ for community stigma. However, none of the scales showed significant change from baseline to endline.

In-depth interviews with the buddy pairs revealed how their interactions in working as financial partners and in working on the HIV campaigns had reduced stigma and discrimination.

On banking day, we work together with PLHIV. We ordered food to be shared and eaten together with everyone. We did not order separate lunch box; as a result, other community members have realized that we will not get HIV infection by sharing food with PLHIV. At the present, most of community members do not express any actions indicating stigmatizing or discriminating towards PLHIV at all. Some also join lunch with PLHIV as well. (Buddy)

Eating and sharing food with PLHIV is an effective model to emphasize that living and working together, and touching and sharing food, does not cause HIV infection. Sometimes, provision of HIV knowledge only cannot take away a 'feeling of fear' towards PLHIV, but knowledge together with observing a model of 'living and working together as normal' between PLHIV and non-PLHIV does.

4.5 Self-esteem and self-efficacy

A 3-item scale measuring **self-efficacy** and an 8-item scale measuring **self-esteem** were also included in the PLHIV survey. The three questions measuring self-efficacy were taken from the HIV Self-Efficacy (HIV-SE) questionnaire (Lorig et al., 1996). Four of the items measuring self-esteem were

conceptually based on Rosenberg's self-esteem scale, and the other 4 questions were developed by the research team for measuring PLHIV's feelings about their financial burdens (Rosenberg, 1965).

Change in the individual self-efficacy and self-esteem items between baseline and endline are shown in Figures 4.13 and 4.14. Many of the individual items show significant increases over time. PLHIV felt better equipped to ask for emotional and other types of support from family and friends after participating in the PPP project. There were also increases in the items measuring whether the PLHIV could provide financial support for their family, that they had things to be proud of, and that they felt useful to their community.

Figure 4.13: Self-efficacy at baseline and endline

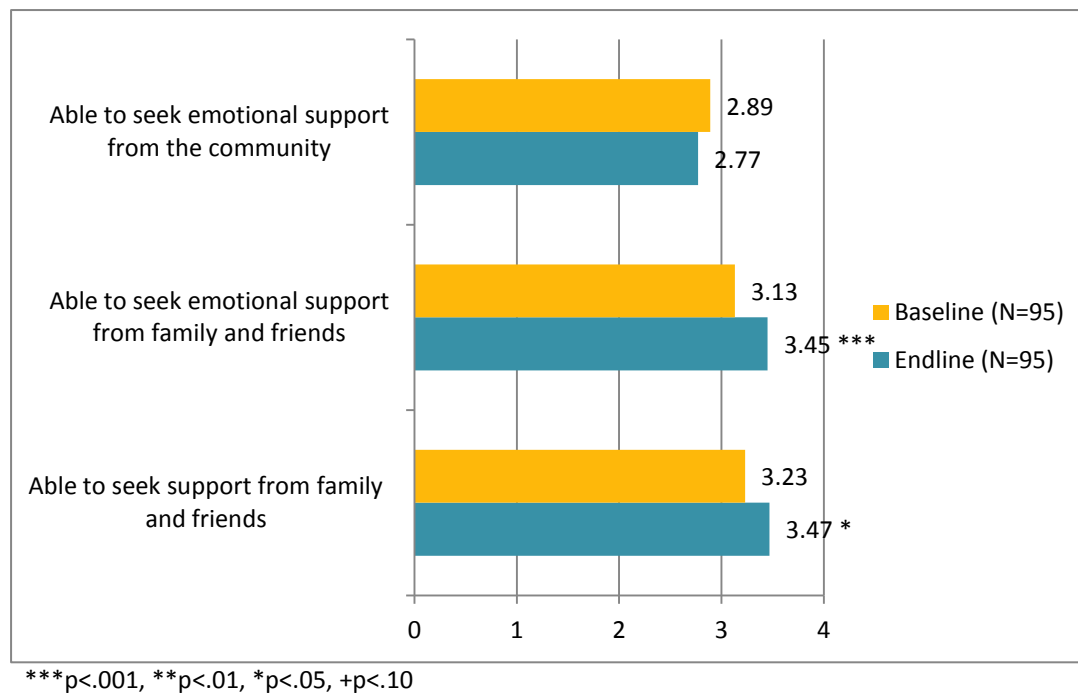
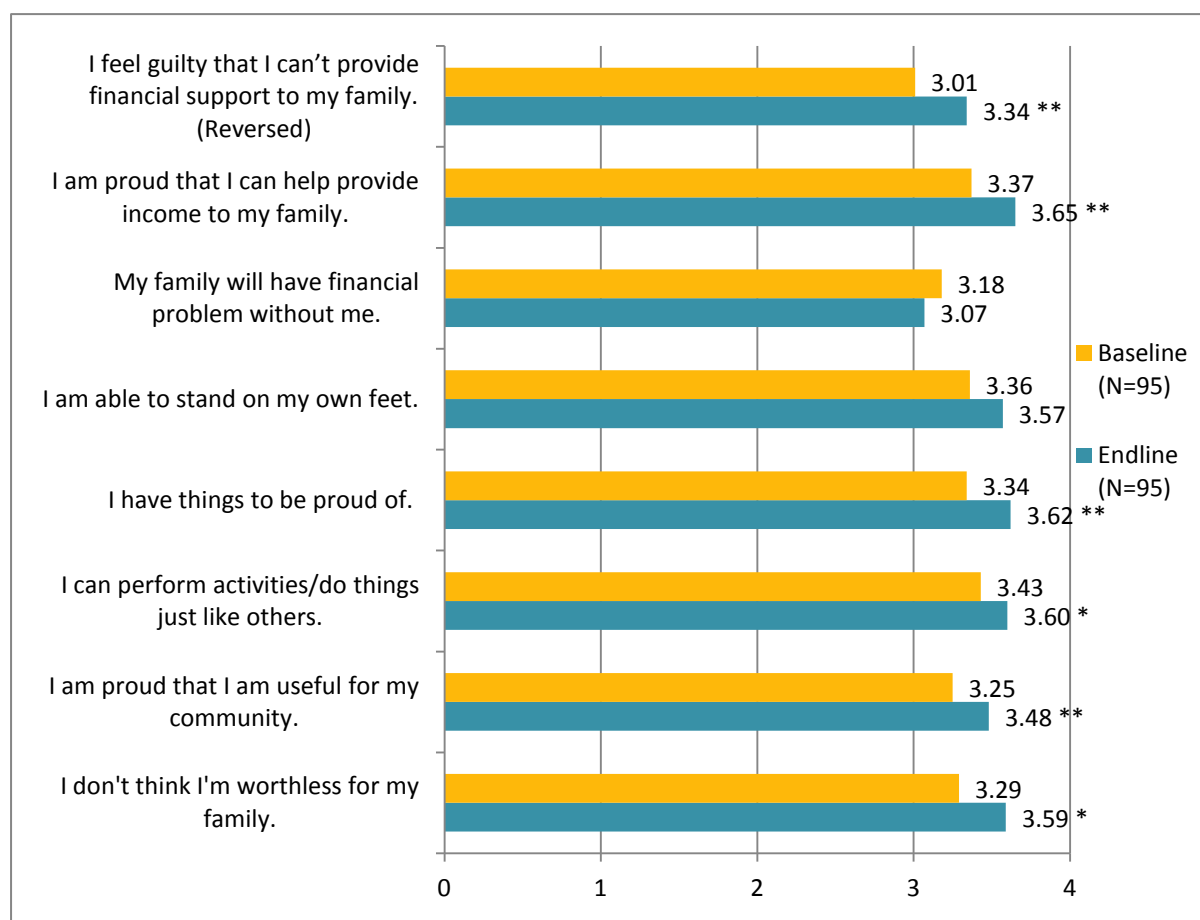


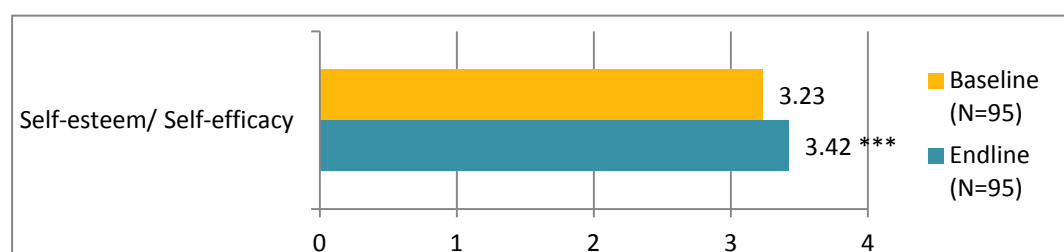
Figure 4.14: Self-esteem at baseline and endline



***p<.001, **p<.01, *p<.05, +p<.10

Although the questions measuring self-efficacy (3 items) and self-esteem (8 items) were intended to measure two separate constructs, reliability testing at baseline showed that the two sets of items did not yield reliable scales. Principal components analysis revealed that, when merged the 11 items loaded on one factor, forming a single scale with good reliability for both the baseline and endline data (Cronbach's α = .72 and .73). The single self-esteem/self-efficacy scale showed significant change between baseline and endline (p < .00) (Figure 4.15). On a scale ranging from 1 "strongly unconfident" to 4 "strongly confident", the average score for PLHIV increased from 3.23 to 3.42.

Figure 4.15: Self-esteem/self-efficacy results at baseline and endline



***p<.001, **p<.01, *p<.05, +p<.10

The qualitative study also found evidence that the PPP project increased feelings of self-worth for the PLHIV who participated. PLHIV members of the PPC or VDB said that they felt proud of

themselves because they realized their self-value through their contributions to the community. One PLHIV who is on a VDB committee stated:

Half of community members have known already that I am a PLHIV; after joining the VDB committee, I have become well-known and receive respect from others as I am a person who contributes (a giver) to the community. (PLHIV, VDB committee)

Likewise a community leader expressed how he considers PLHIV to be valuable persons to the community:

As I see it, I feel that PLHIV in the community are now more accepted by the community. I observed that in the past PLHIV were not welcome to join the community's activities. But when this project's activities are implemented regularly such as HIV Funfair events, PLHIV are encouraged to join or sometimes lead those activities for the community. Therefore, the community feels that PLHIV have contributed to the community and later they are viewed as valuable person. The project gave PLHIV a chance, a channel to prove themselves as normal persons to the community. I feel that PLHIV also view themselves as valuable persons as they can help prevent new HIV infection in the community. (Community leader)

By improving self-value through joining and contributing to the PPPC or VDB, PLHIV have increased their level of confidence in living and interacting with non-PLHIV. As well, they have learned that they are not actually stigmatized or discriminated by others like they thought; as a result; some PLHIV later decided to disclose their HIV status to the community even though it is not required by the project. Such HIV disclosure makes them feel comfortable since they do not have to worry about unintentional or accidental exposure anymore.

I now feel happy and proud of myself, although others have known about my HIV status. I think that it is good as I want to let them realize that although I have HIV I still can work and have knowledge of HIV to be disseminated to them. We have to accept ourselves, be confident and interact with others, so they will learn about HIV from us. (PPPC member)

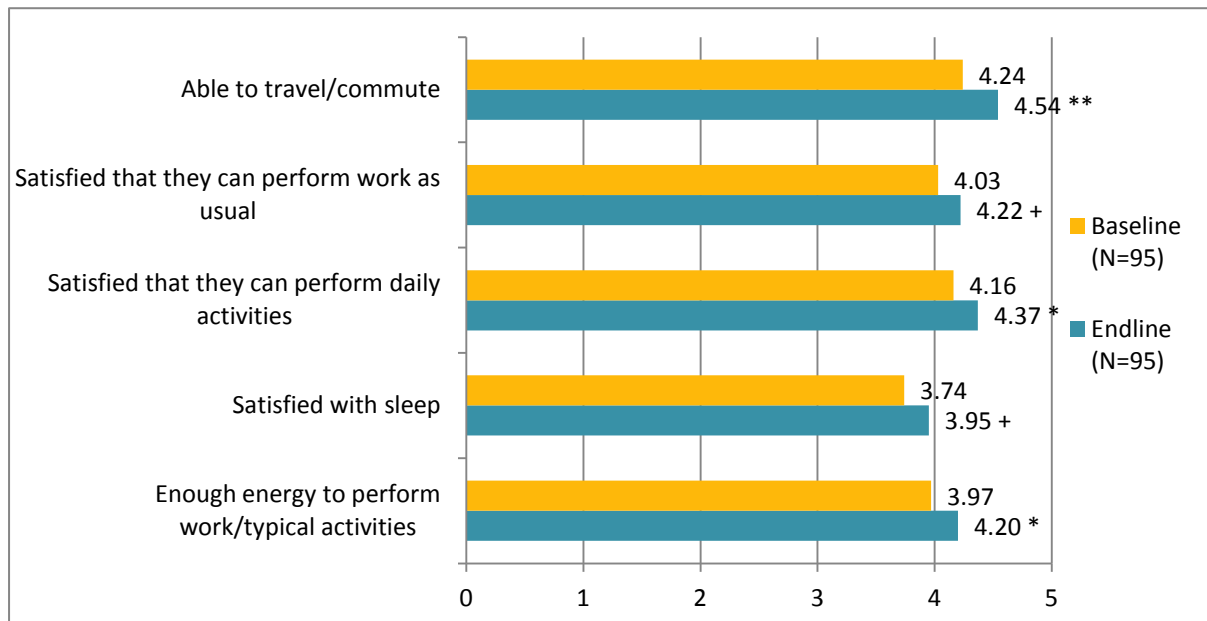
4.5 Quality of life

The PLHIV survey also included the WHO Quality of Life assessment (WHOQOL). The WHOQOL was developed and field-tested in 15 countries including Thailand, and thus the Thai version of the scale has been validated with many populations (Sakthong et al., 2007; Silpakit & Silpakit, 2003). The WHOQOL-BREF, which is the 26-item abbreviated version of the assessment, was pre-tested by PDA before the baseline survey. The pre-test was conducted with N=40 PLHIV who were not included in the baseline or endline survey. T-tests were calculated between high and low scorers on each item to determine whether the items had discriminatory power. From this analysis, five of the WHOQOL-BREF items were eliminated. One item, on family support, was added.

The remaining 22 Quality of Life items were used in both the baseline and endline PLHIV surveys. At baseline, the PLHIV surveyed had very high scores on the quality of life items; most scores had an average of 3.5 on a scale of 5. Yet the endline survey revealed that quality of life still improved significantly for the PLHIV participating in the PPP program. Figures 4.16-4.19 show the average scores on individual items within each subscale. The PLHIV respondents rated all of the items measuring physical and psychological quality of life significantly higher on average at endline. Only one of the social quality of life items significantly improved (the ability to socialize and make

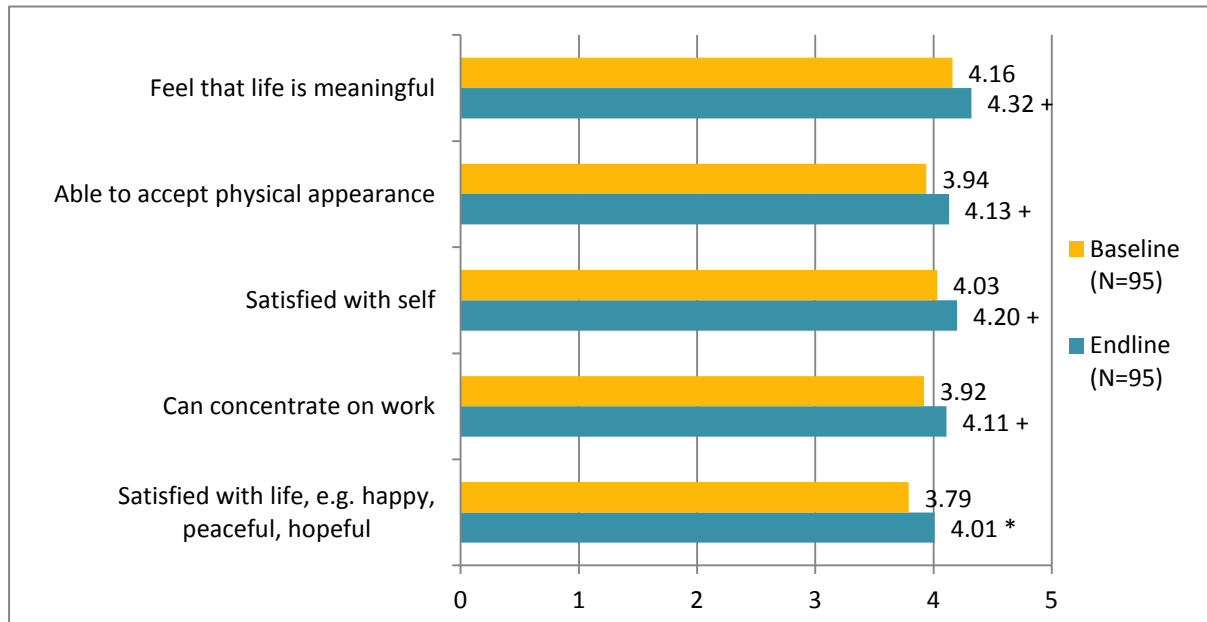
friends). Of the eight items measuring environmental quality of life, three were rated significantly higher.

Figure 4.16: Mean response on Physical Quality of Life Items (N=95)



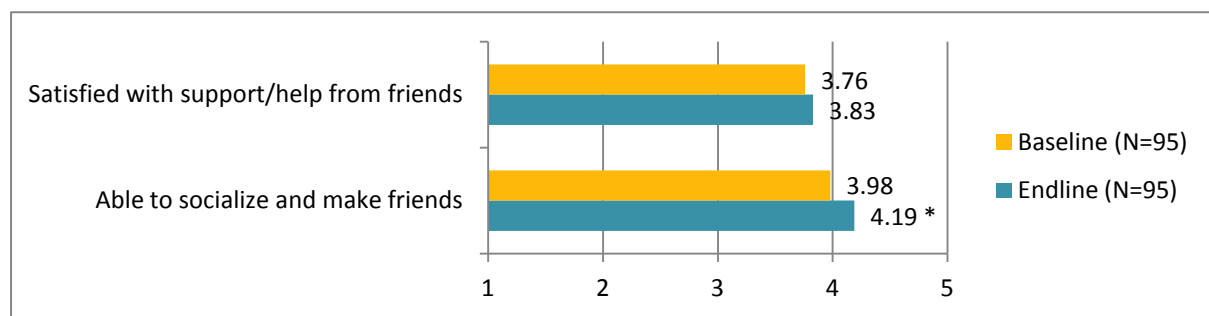
***p<.001, **p<.01, *p<.05, + p<.10

Figure 4.17: Mean response on Psychological Quality of Life Items (N=95)



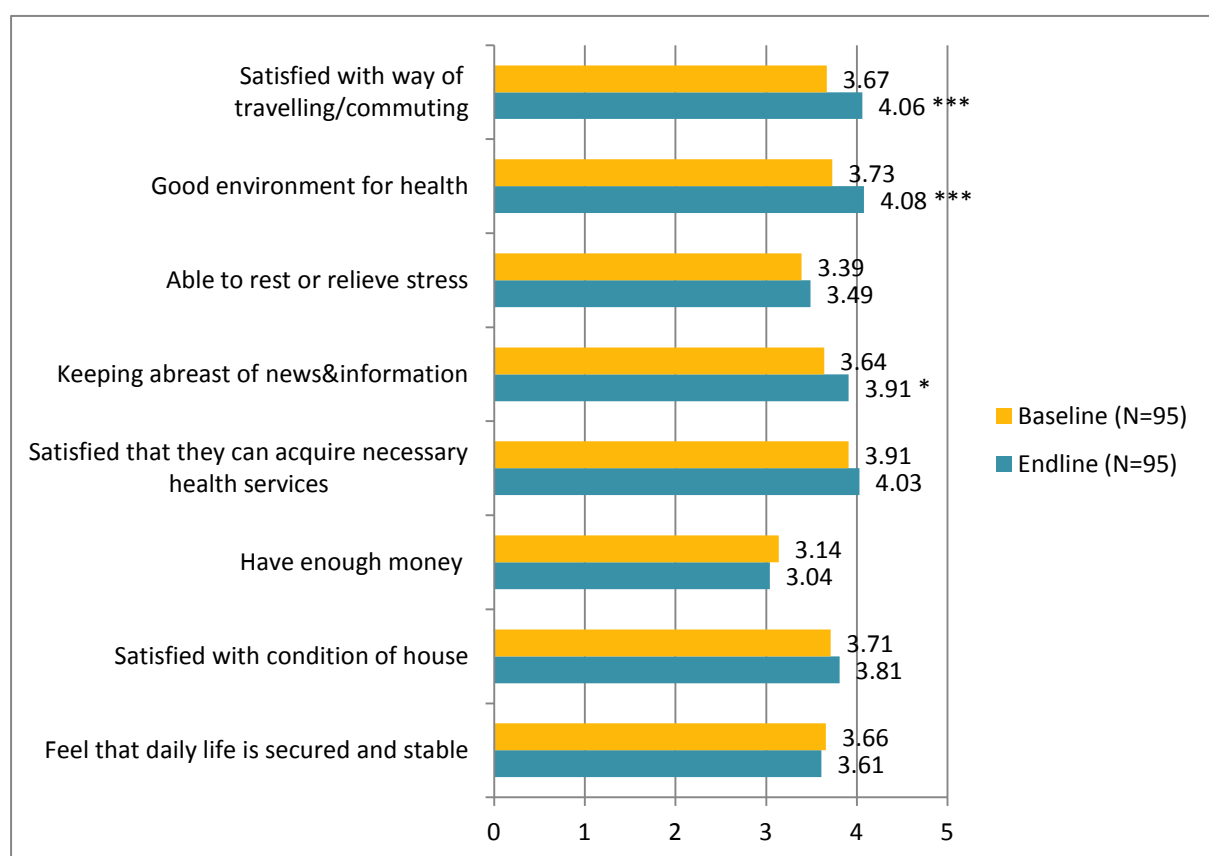
***p<.001, **p<.01, *p<.05, + p<.10

Figure 4.18: Mean response on Social Quality of Life Items (N=95)



***p<.001, **p<.01, *p<.05, + p<.10

Figure 4.19: Mean response on Environmental Quality of Life Items (N=95)



***p<.001, **p<.01, *p<.05, + p<.10

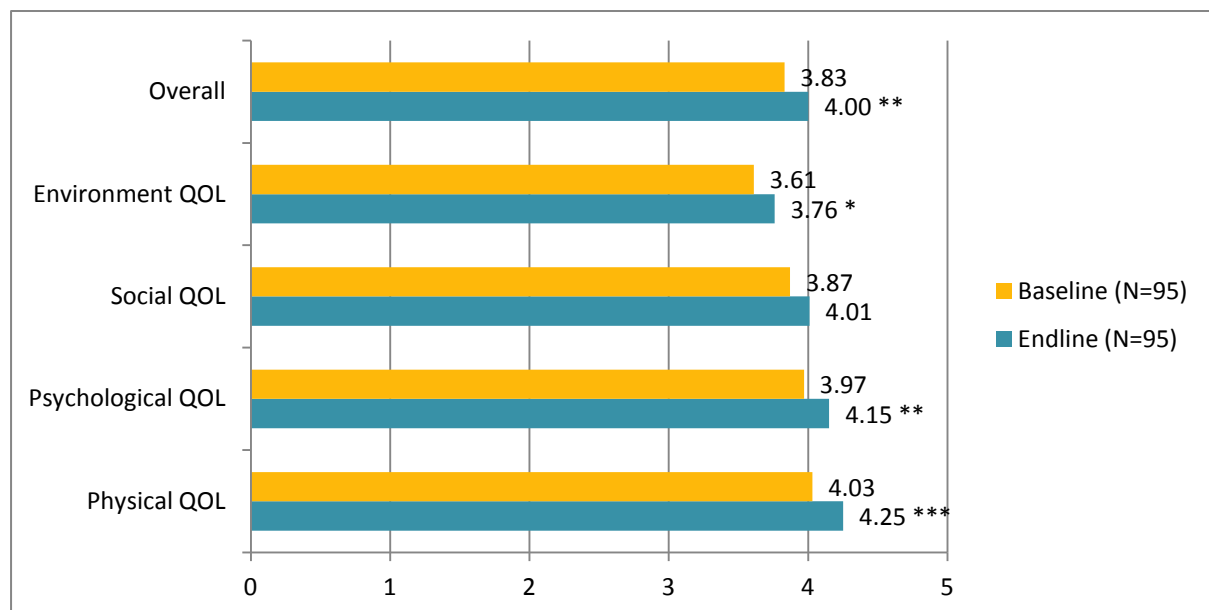
The sub-scales that were developed from the original WHOQOL scale were tested for reliability. All four sub-scales (physical, psychological, social and environmental) were found to have internal consistency reliability, with Cronbach's alpha scores above 0.7 (Table 4.6). Two of the items (the item on overall quality of life and the added item on family support) were dropped from this analysis.

Table 4.6: Reliability analysis for WHOQOL subscales with PLHIV dataset (N=107)

Subscale	Cronbach's α		Number of items
	Baseline	Endline	
Physical	.80	.85	5
Psychological	.81	.81	5
Social	.72	.78	2
Environmental	.77	.79	8
(N)	(107)	(95)	

The individual items are averaged to construct the overall quality of life scale and the four subscales (Figure 4.20). The overall quality of life scale increased from 3.83 to 4.00 ($p < .00$) and the physical (4.03-4.25, $p < .00$), psychological (3.97-4.15, $p < .00$) and environmental (3.61-3.76, $p < .02$) subscales also significantly improved by the time of the endline survey. There was no significant change in the social sub-scale.

Figure 4.20: Quality of life scales at baseline and endline



*** $p < .001$, ** $p < .01$, * $p < .05$, + $p < .10$

The PLHIV interviewed in the qualitative study discussed how the availability of the PPP loans increased their quality of life by creating security in their livelihood. Although the loan is regarded as only an additional amount for occupational investment, it is very important in improving the financial liquidity of PLHIV. PLHIV are able to make a living continuously and feel secure to know where they can seek financial support when needed. With the low interest-PPP loan, PLHIV also benefit by avoiding the need to borrow from 'loan sharks' with high interest. This is particularly important because PLHIV usually face limitations in getting a loan through official financial institutions, because they are not trusted to make repayment or are required to provide mortgage securities. Although the maximum PPP loan disbursement of 12,000 baht is not sufficient to cover all expenses in one occupation, it is considered a needed cushion in for financial security.

The PPP loan does not help in earning a lot more income, but it reduces a lot more troubles.

It does not matter how much maximum we can borrow, but that when we have a financial problem we know where to get a loan with low interest.

It is so difficult to borrow money from others as they are afraid that I as PLHIV cannot make a repayment. However, through the PPP loan, I do not have to worry about that problem anymore.

5. Buddies

5.1 Profile

As detailed above, while N=119 buddies were interviewed in the endline survey, only N=75 of these respondents had also been interviewed in the baseline survey. The majority of buddies who joined the PPP project at endline are female (70%) and live in urban communities (60%) (Table 5.1). While these characteristics are similar to those of the PLHIV counterparts, a higher percentage of buddies are married (77% vs. 57%). Also, buddies tend to be somewhat older than the PLHIV, with more than one-third in their 50s (39%) and a mean age of 45.6 vs. 43.4 years for PLHIV. Similar to the PLHIV, over forty percent (44%) completed some secondary school or higher.

Table 5.1: Profile of buddy respondents (in percents)

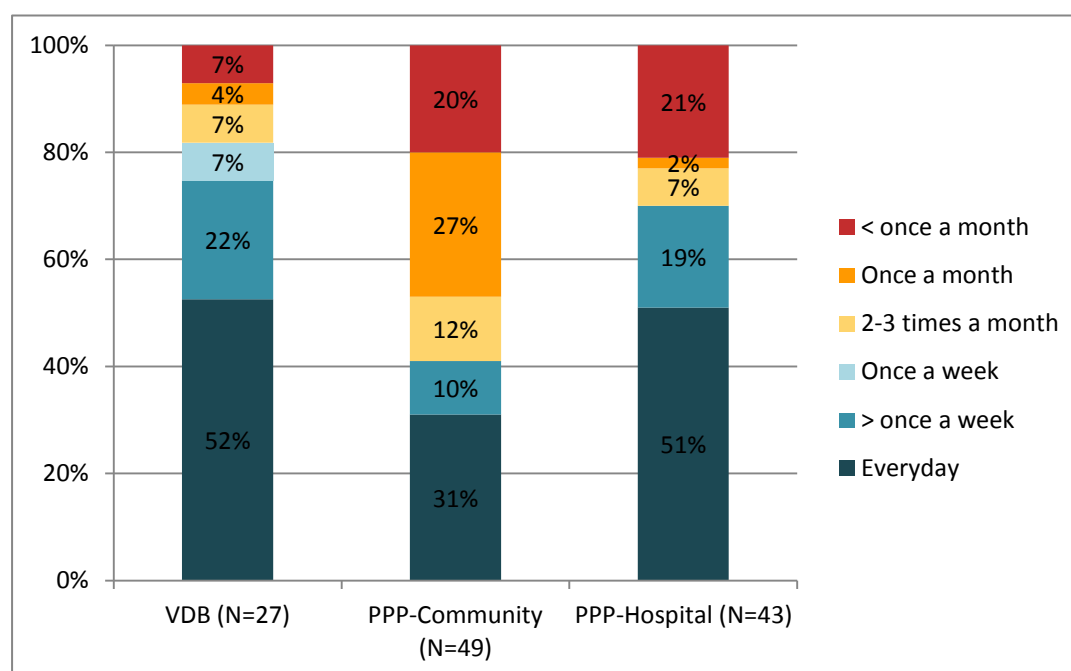
	All Endline	Both Baseline and Endline
Gender		
Male	30.3	28.3
Female	69.7	76.7
Residence		
Urban	59.7	56.0
Rural	40.3	44.0
Marital Status		
Married	76.5	78.7
Single/div/widow	23.5	21.3
Age		
18-39	27.7	25.3
40-49	33.6	28.0
50+	38.7	46.7
Mean age	45.6	47.0
Median age	46	49

	All Endline	Both Baseline and Endline
Education		
None/primary	56.3	58.7
Second/high/vocational	33.6	32.0
University/B.A.	10.1	9.3
(N)	(119)	(75)

5.2 Program exposure

Buddies were asked a series of questions about their participation in the PPP program. When asked how often they interacted with their PLHIV partners, the results closely paralleled the responses given by PLHIV (Figure 5.1). VDB buddies and PPP-hospital buddies had significantly more contact than PPP-community buddies. A check of reports of matched PLHIV buddy pairs showed that the partners agreed about the amount of contact 60% of the time. In 22% of the cases PLHIV said that they met more often than buddies reported, while in 18% buddies reported more contact. This result is probably due to normal recall bias rather than any systematic misstatements by either PLHIV or buddies.

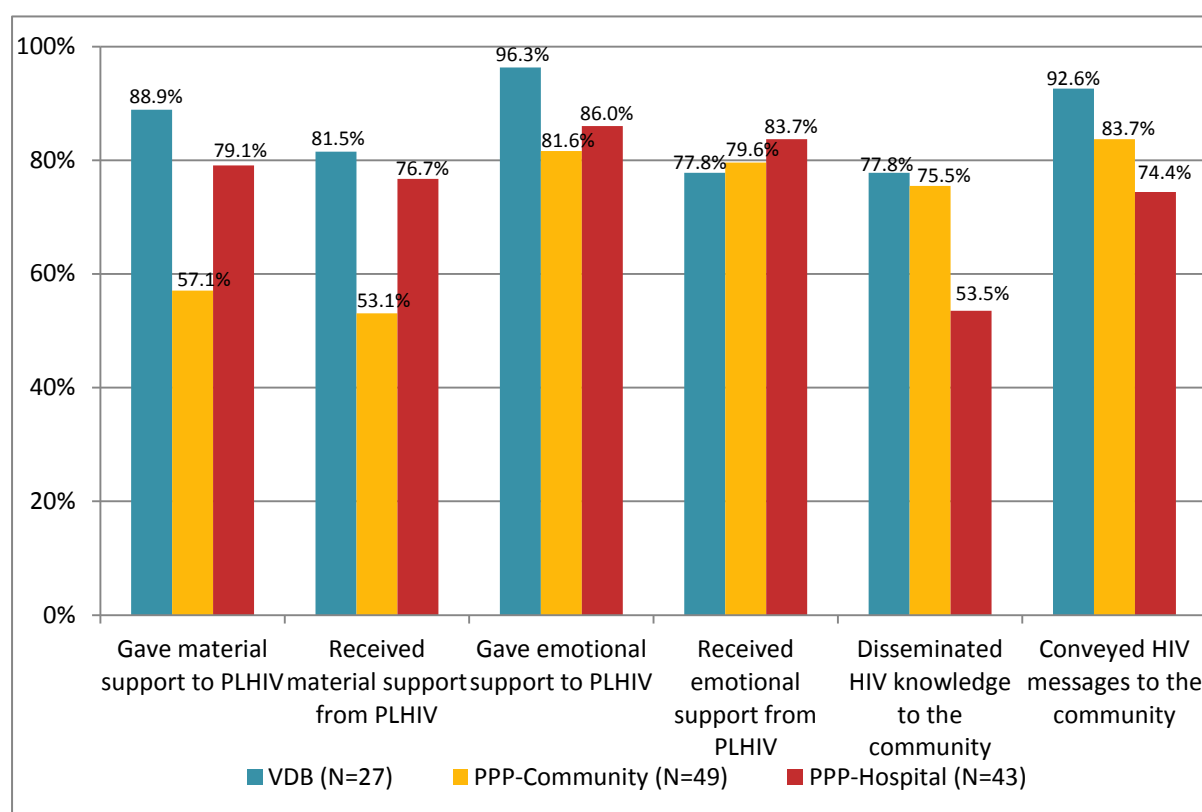
Figure 5.1: Buddy reports of how often they talked to their PLHIV partner by model



A majority of buddies reported that they both gave and received material and emotional support from their PLHIV partners (Figure 5.2). While 68% said that they participated in disseminating HIV information through the program, 82% said that they informally gave HIV information to community members. By model, the VDB and PPP-hospital buddies were significantly more likely to give and receive material support than the PPP-community buddies ($p < .05$); this finding is in line with the

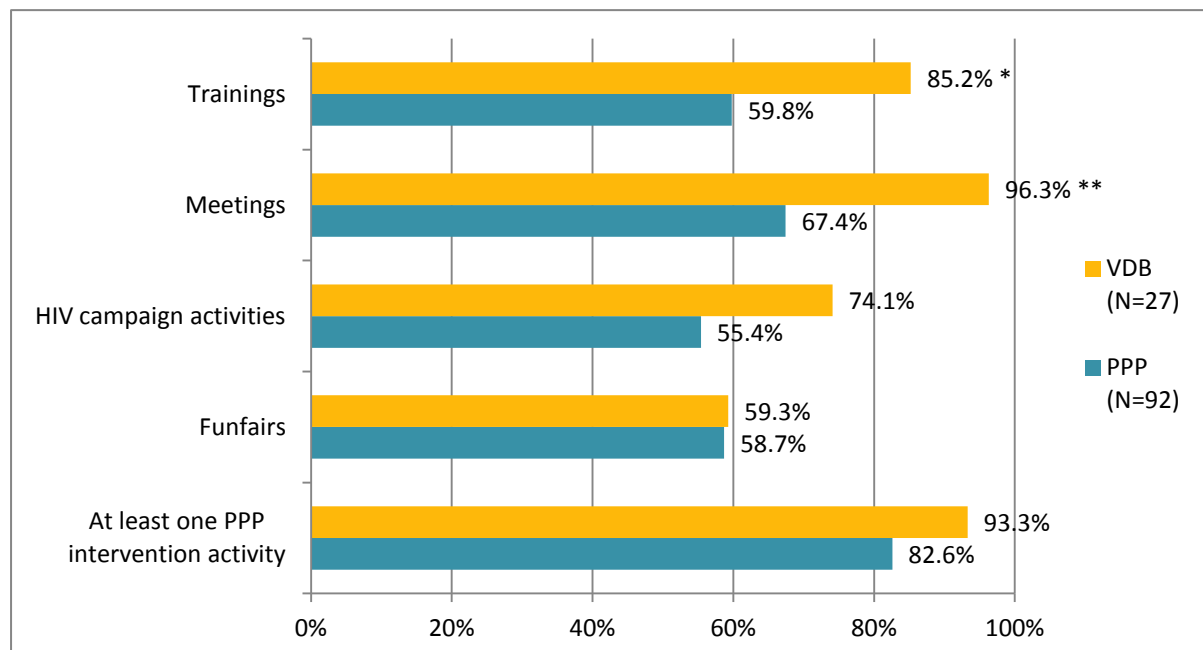
qualitative findings discussed above. However, the VDB and PPP-community based buddies were more likely to participate in the HIV campaigns than their PPP-hospital counterparts. This is likely because the hospitals are not located in the same communities as the campaigns, as discussed above.

Figure 5.2: Support given and received by buddies



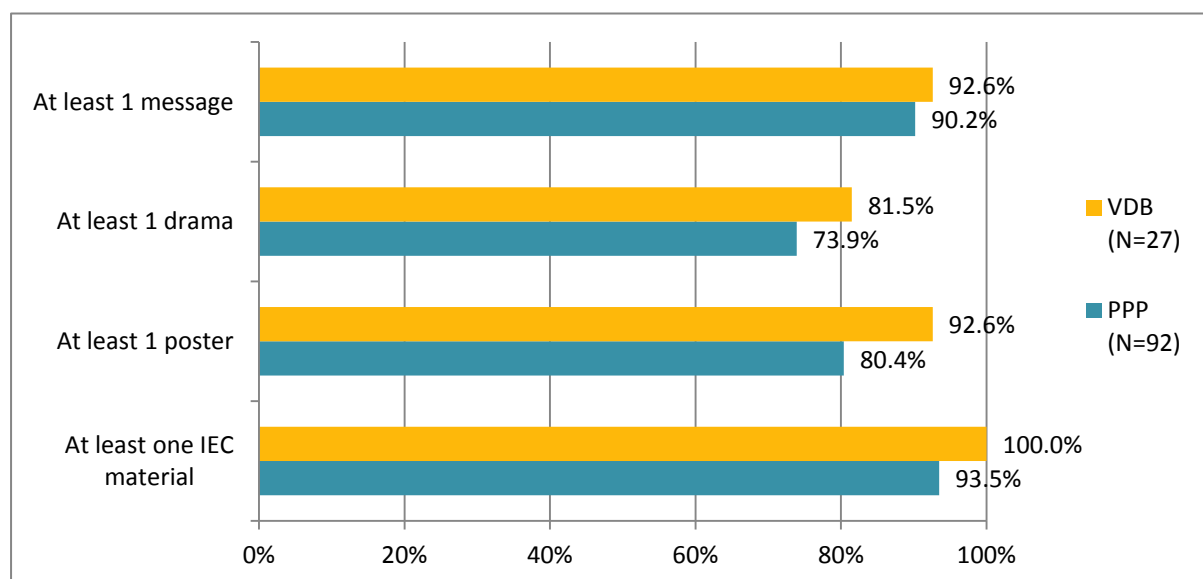
Buddies were also asked about their exposure to PPP project activities, and as seen in Figures 5.3 and 5.4 some significant differences were found by model type. While nearly all VDB buddies had attended a monthly meeting (96%), only two-thirds of PPPC members had done so (67%). VDB buddies were also more likely to have participated in a training (85% vs. 60%). A fairly high level of exposure was found for the IEC materials, especially for the “slips of paper” messages for both models (93% for VDB and 90% for PPP). All VDB buddies (100%) and 93% of PPP buddies were exposed to at least one IEC message.

Figure 5.3: Buddies' exposure to PPP intervention activities



***p<.001, **p<.01, *p<.05

Figure 5.4: Buddies' exposure to IEC materials



The qualitative study provided further insight into how the relationship between buddies and PLHIV developed successfully. The project required that HIV/AIDS campaign activities be organized by VDB/PPPC committees and loan pairs. This created a mechanism for PLHIV and non-PLHIV to collaborate with each other, and created a feeling of self-value to both HIV positive and negative loan recipients. While the primary motivation of the buddy is to be eligible for the loan, after participating in the project for a period of time they develop a higher level of motivation. Besides

being proud of themselves for providing benefits to others, they feel that they are fortunate to have a chance to experience and understand their PLHIV partner. Qualitative respondents stressed that ‘buddy’ is viewed as a meaningful role for them, as it means “care and support for both physical and psychological aspects”.

I meet and talk with my HIV positive loan partner almost every day. If I find what support I can give, I will not hesitate to do it. For example, her occupation is cassava growing, so I helped her to find a best young plant to grow and also always give consultation if needed. (Rural buddy)

I feel that I have contributed and sacrificed my time and effort to help PLHIV and the community by educating about HIV/AIDS to others. (Buddy respondent)

The qualitative study also identified that community leaders were particularly effective as buddies, especially in disseminating knowledge and understanding related to HIV/AIDS to community members. Since these leaders were already accepted and respected by community members, as a buddy they had better skills and opportunities to educate HIV to others. Since HIV is not in itself an interesting topic, unlike issues related to making a living or economic well-being, it is not easily discussed in routine life. However, for buddies in a position of community leadership, their skills in conveying HIV knowledge through many existing channels such as the village meeting and household radio made the project a success.

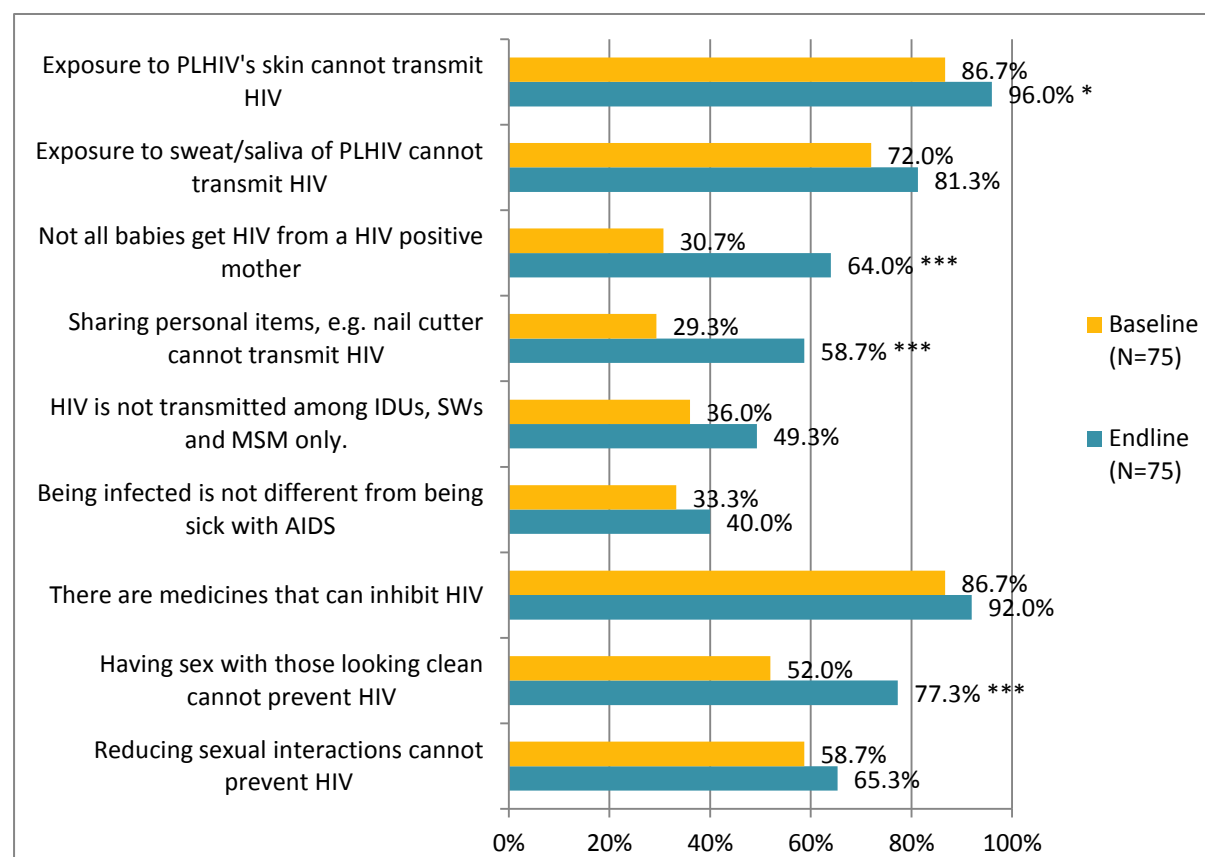
I paired up with a PLHIV as I want to help PLHIV to get the PPP loan and I also want to provide other types of support to my loan partner. My HIV positive loan partner is one of my village members. I also provide support to other PLHIV in my village who may be loan partners or not. When PLHIV in the community plan to organize HIV campaign activities, he/she will request my support in disseminating HIV knowledge to the community. Since I am a village headman, I have authorization to use household radio. (Buddy respondent)

However, the buddy relationship did not develop in the same way for models where the buddies lived in different communities. For some, the buddies only saw each other at the monthly banking meeting, and some buddies did not fulfill their roles of participating in the information campaigns. Buddies who did not perform these roles often stated that they do not know how to act or talk to their PPP loan partner (PLHIV) as they are afraid of performing any actions or words that are unintentionally inappropriate. For example, buddies reported being afraid to ask about their PLHIV partner’s health, as they may be hurt or distressed to think about their health condition. Another example given was that they feel that if they offer help to their partner, they could feel insulted by such an offer. Indeed, many PLHIV stressed that they did not want any material support from their buddy, only understanding and acceptance; they want others to view PLHIV as normal people like them.

5.3 HIV Knowledge

A comparison of HIV knowledge at baseline and endline for buddies who answered both surveys shows significant increases in some knowledge items, including mother-to-child transmission, sharing personal items, and judging HIV status by appearance (Figure 5.6). The index of correct HIV knowledge significantly improved among buddies from 4.9 to 6.2 of 9 total items ($p < .00$); no significant difference was found by program model.

Figure 5.5: Buddies' knowledge of HIV at baseline and endline



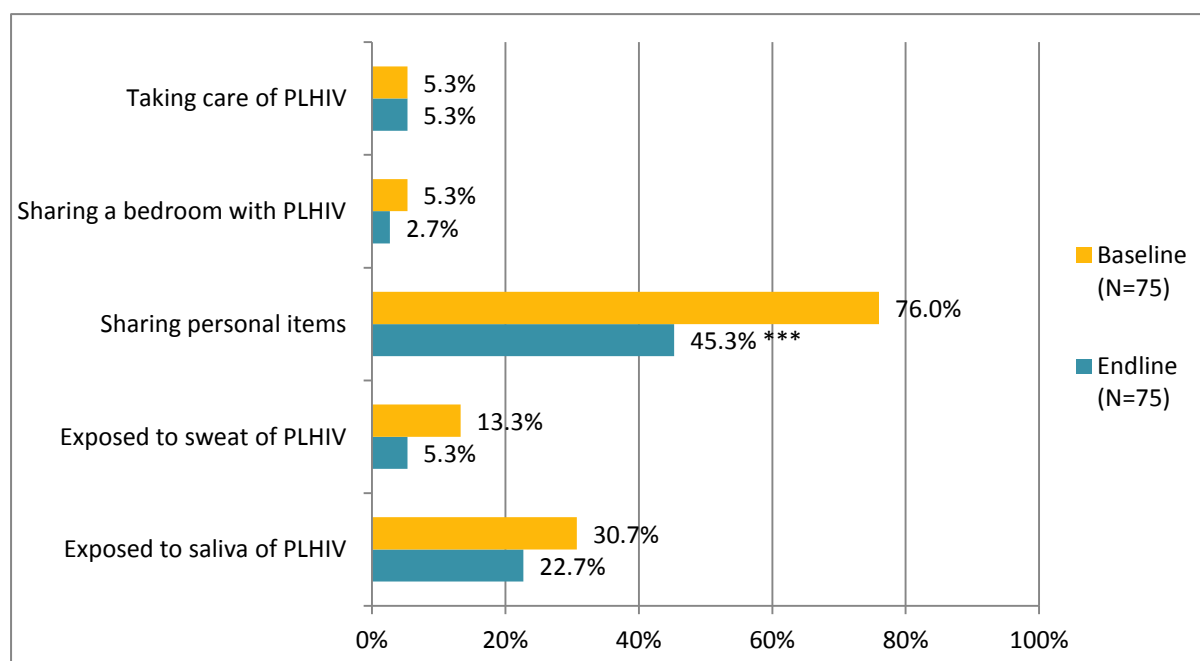
***p<.001, **p<.01, *p<.05, +p<.10

5.4 Fear and Value-Driven Stigma

One of the key outcomes expected by the PPP project is that the partnership with a PLHIV will reduce feelings of stigma in the buddies. Moreover, as negative loan partners, buddies should play a significant role in advocating to reduce stigma and discrimination at both the family and community levels.

Buddies were asked the same questions about their fears of contracting HIV in the baseline and endline surveys. As seen in Figure 5.6, most of the fear related items declined at endline. The percent reporting fear of contracting HIV from sharing personal items with PLHIV, which was most frequently mentioned at baseline, declined significantly from 76% to 45% ($p<0.00$). The overall scale measuring fear-driven stigma among buddies declined significantly from 0.118 to 0.080 on a scale of 1.0 ($p<.01$) (not shown).

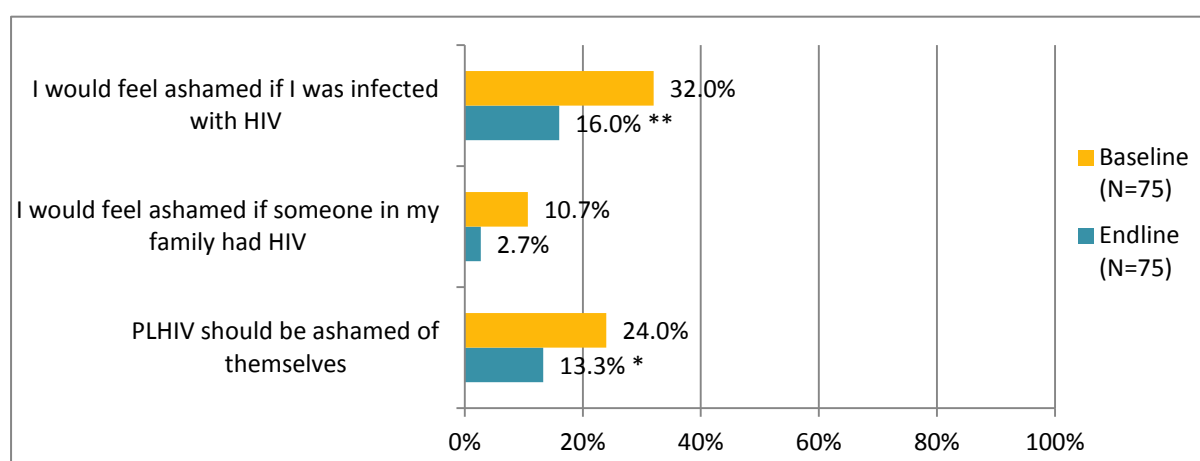
Figure 5.6: Change in buddies' fear of HIV transmission



***p<.001, **p<.01, *p<.05, +p<.10

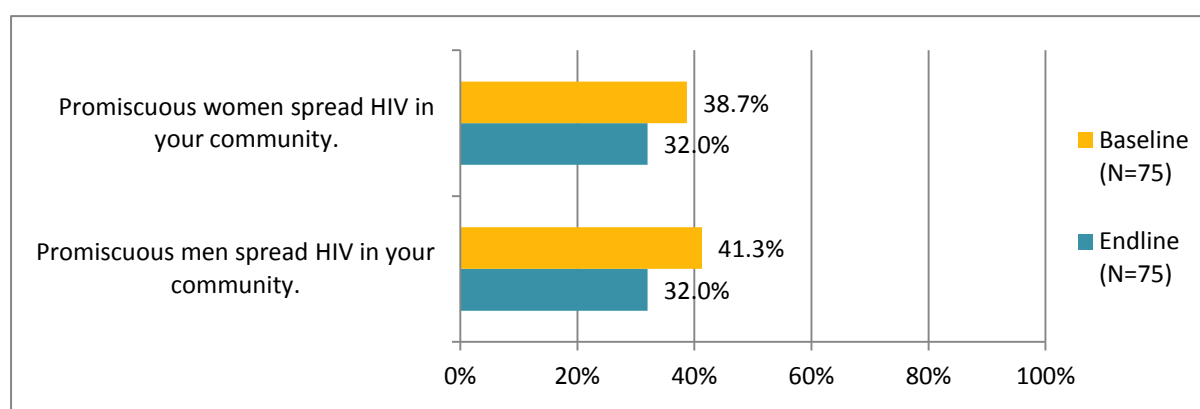
Buddy responses on shame statements measuring value-driven stigma also declined significantly, although few expressed agreement with these statements at baseline (Figure 5.7). The overall shame scale declined significantly from 0.222 to 0.107 on a scale of 1.0 ($p<.00$) (not shown). For blame statements (Figure 5.8), although the proportion of buddies who agreed with the statements decreased at endline, none of the reductions were significant. The average score on the overall blame index declined from 0.400 to 0.320, which is weakly significant ($p<.10$) (not shown).

Figures 5.7: Change in buddies' agreement with shame statements



***p<.001, **p<.01, *p<.05, +p<.10

Figure 5.8: Change in buddies' agreement with blame statements



In qualitative interviews, buddies expressed directly how getting to know their PLHIV partner had helped reduce their feelings of stigma about HIV.

I was terribly afraid of PLHIV. I did not want to get close with them at all. But after joining the project, I had a chance to attend the HIV training and meetings with PLHIV. My fear is gone and I do not stigmatize and discriminate PLHIV anymore. (Buddy respondent)

However, the qualitative study found that HIV/AIDS campaign activities conducted by PPPCs were not as cohesive as those conducted by VDBs. Since members of the club are living in different communities, it was quite difficult to get full participation from buddies to conduct HIV/AIDS activities in the selected community on a monthly basis as required by the project. Travelling to the selected community may cause problems regarding the cost of travel, absence from the job (lost income), and other difficulties. Therefore, for some selected communities, PLHIV were sometimes the only ones in the PPPC in organizing the activities, and the effort was not sufficient to run the campaign activities continuously and intensively enough to successfully address stigma and discrimination.

6. Family of PLHIV and Buddies

6.1 Profile

As discussed in the methods section, some family members who were interviewed at baseline were re-interviewed at endline (N=67), while some family members were newly recruited for the endline survey (N=82). For the full sample, the profile of the respondents did not change significantly between baseline and endline according to the characteristics shown in Table 6.1 (all chi squares $p > .10$). For this reason, and to utilize the maximum number of cases available, the full family sample is used in the analysis rather than the sub-sample who were interviewed for both surveys. Family members interviewed were fairly evenly split between members of PLHIV and families of buddies. The mean age was approximately 37 at both baseline and endline.

Table 6.1: Profile of family members of PLHIV and buddies at baseline and endline

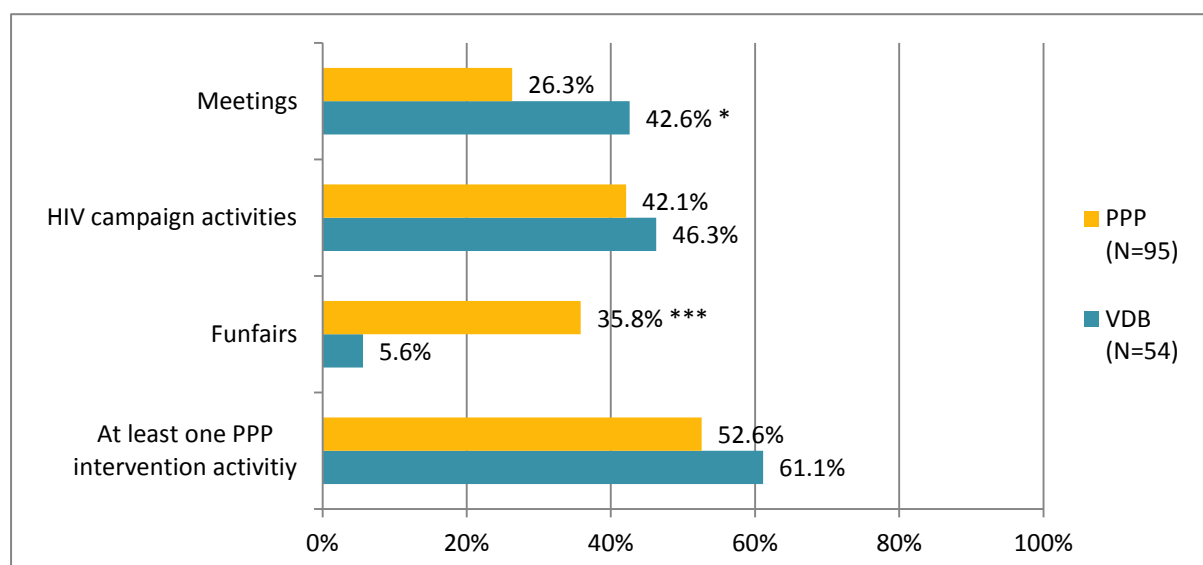
	Baseline	Endline
Relationship to project participants		
PLHA Family	48.0	46.3
Buddy Family	52.0	53.7
Gender		
Male	50.0	42.3
Female	50.0	57.7
Residence		
Urban	42.9	47.0
Rural	57.1	53.0
Marital Status		
Married	63.6	58.4
Single/divorced/widowed	36.4	41.6
Age		
15-29	39.4	37.6
30-39	13.1	18.1
40-49	17.7	18.1
50+	29.8	26.2
Mean age	37.7	37.2
Median age	36	37
Education		
None/primary	51.5	46.3
Second/high/vocational	43.4	47.7
University/B.A.	5.1	6.0
(N)	(198)	(149)

6.2 Program exposure

Through the creation of personal relationships between PLHIV and buddies, the PPP program aimed to reduce stigma and discrimination among families. The expectation was that the buddy pairs would share their positive relationships and convey information about HIV to their family members. It was also anticipated that family members would be exposed to PPP's informational campaigns and activities, especially if family members lived the intervention communities. Family members were asked about their participation in PPP program activities, as seen in Figure 6.1. Many family

members took part in PPP meetings, though the percentage was considerably higher for those in the VDB model (42% vs. 26%). Over 40% of family members said that they participated in HIV campaign activities. Family members who were related to a PPPC member were much more likely to say that they attended a Funfair (35% vs. 6%). Overall, 61% of family members related to a VDB member and 53% of family members related to a PPPC member participated in at least one program activity.

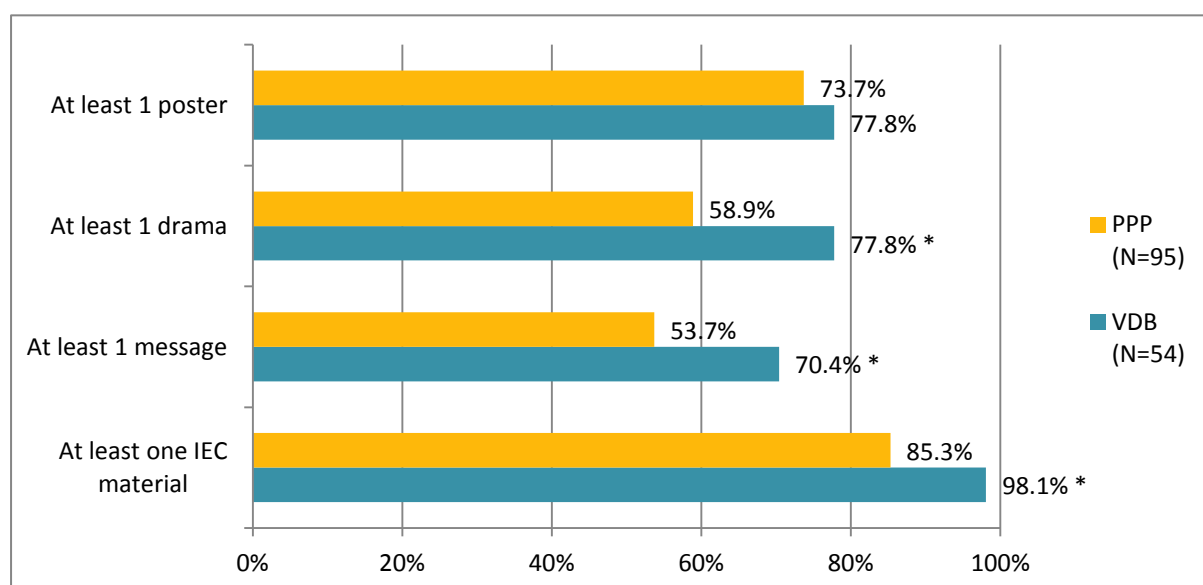
Figure 6.1: Family exposure to PPP intervention activities



***p<.001 **p<.01 *p<.05, +p<.10

The vast majority of family members reported exposure to at least one of the project's IEC materials—nearly all families of VDB members (98%) and 85% of families of PPPC members. Posters were seen by more than 70% of families of both models, while the dramas and 'slips of paper' were mentioned more often by VDB families (more than 70%, vs. 49-59% for PPPC).

Figure 6.2: Family exposure to IEC materials

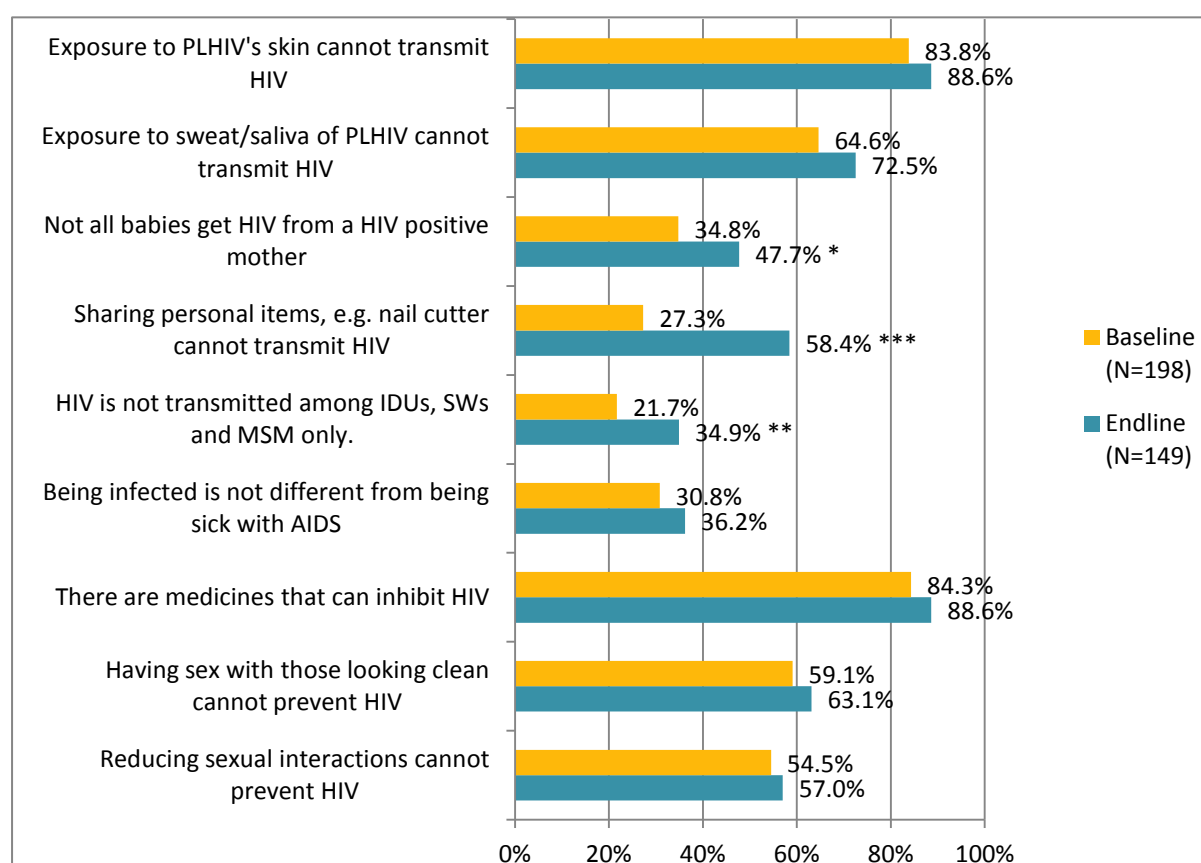


***p<.001 **p<.01 *p<.05, +p<.10

6.3 HIV/AIDS knowledge

The HIV knowledge items were compared for family members at baseline and endline (Figure 6.3). Of the nine items, three increased significantly from baseline to endline (HIV among risk groups, sharing personal items, and mother-to-child transmission). A t-test comparing the overall knowledge scores of family members showed that knowledge improved significantly, from 4.6 to 5.5 ($p < .00$) (not shown).

Figure 6.3: Family knowledge of HIV at baseline and endline

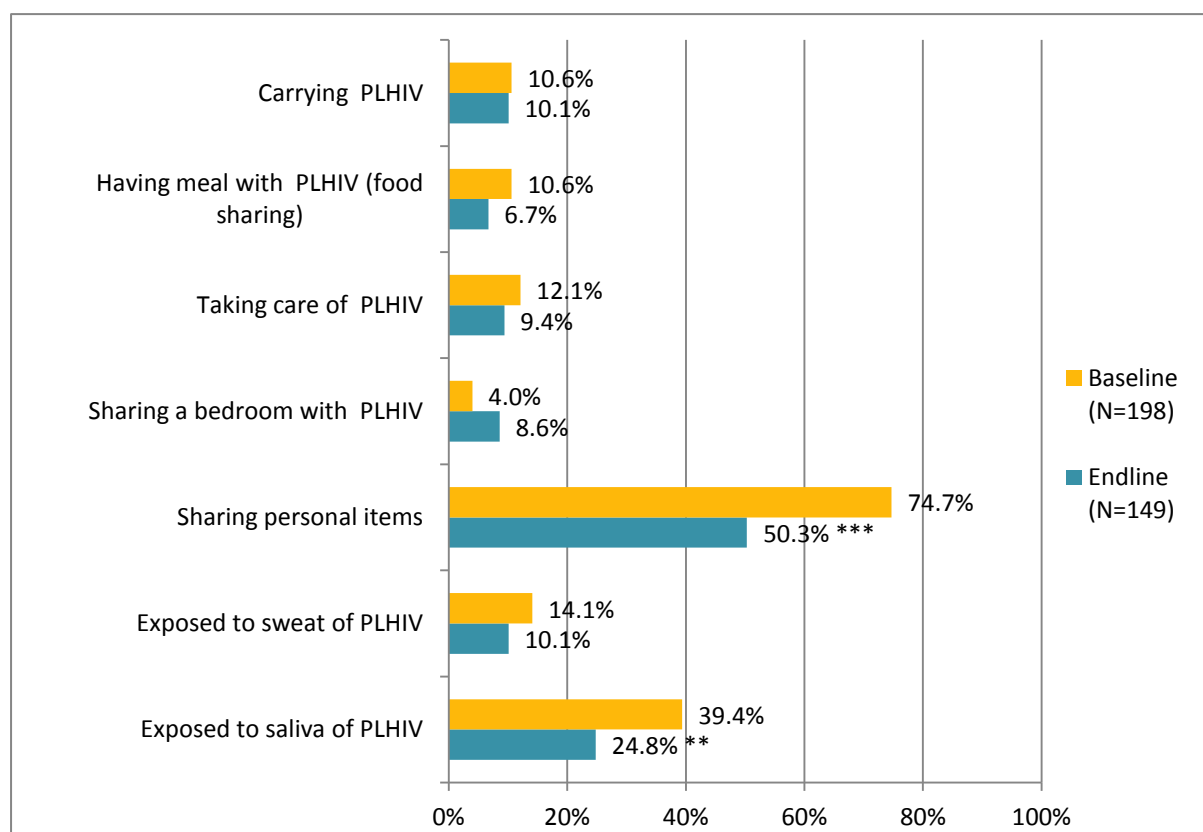


*** $p < .001$ ** $p < .01$ * $p < .05$, + $p < .10$

6.4 Fear and value driven stigma

As seen in Figure 6.4, fewer family members agreed with each of the fear statements at endline. Only two statements declined significantly however: sharing personal items and exposure to saliva. Overall, the fear scale declined for family members significantly (from 0.159 to 0.109, $p = .03$) (not shown).

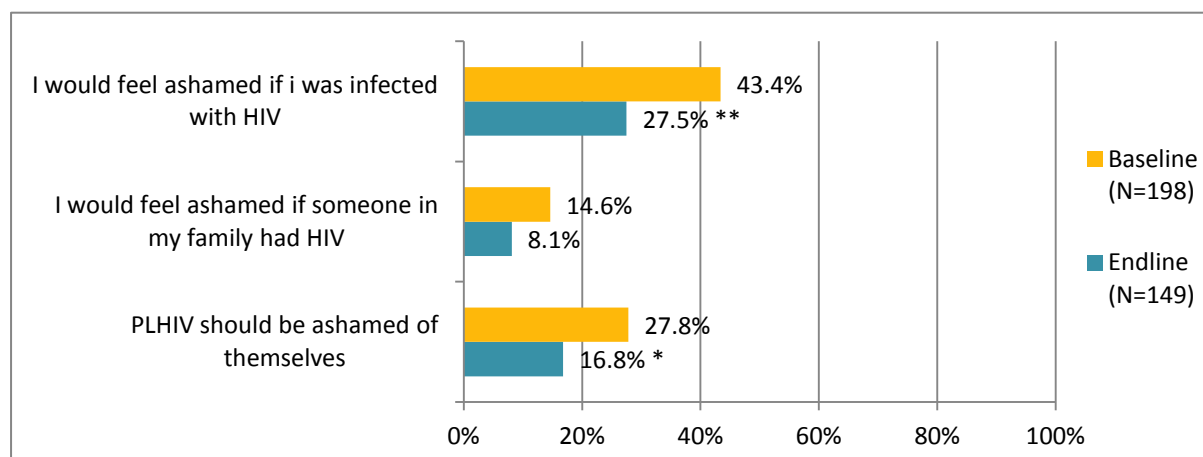
Figure 6.4: Change in family members' fear of HIV transmission



***p<.001 **p<.01 *p<.05, +p<.10

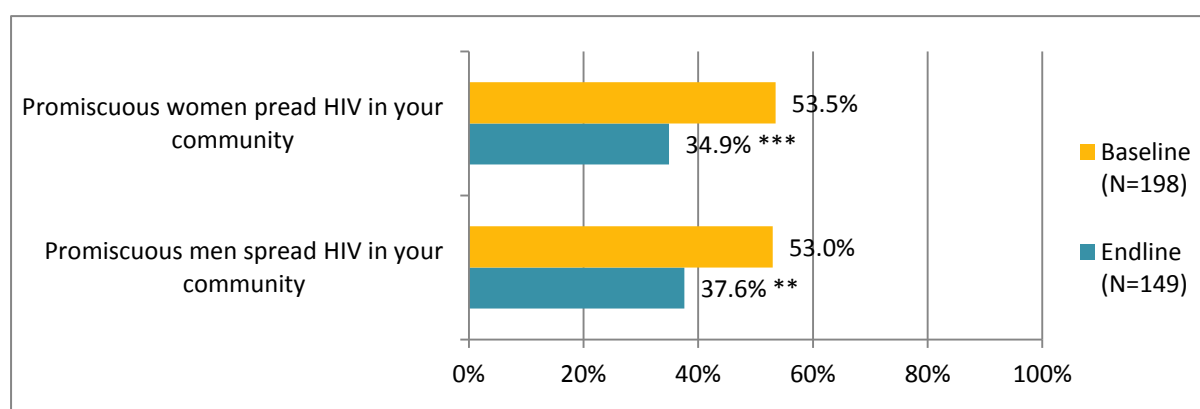
As seen in Figures 6.5 and 6.6, family members' agreement with the statements about value-driven stigma also declined significantly. Overall the blame scale declined significantly from 0.533 to 0.362 ($p<.01$), and the shame scale score declined from 0.310 to 0.278, which was significant ($p<.01$).

Figure 6.5: Change in family members' agreement with shame statements



***p<.001 **p<.01 *p<.05, +p<.10

Figure 6.6: Change in family members' agreement with blame statements



***p<.001, **p<.01, *p<.05, +p<.10

7. Community

7.1 Profile

As mentioned above, the community baseline and endline surveys followed a repeated cross-sectional design. A comparison of sociodemographic characteristics at baseline and endline (Table 7.1) found no significant differences between the two samples. The endline sample contained more women than men (59%) and the median age is 45. About one-quarter of the sample is factory workers or day laborers, and about one-fifth are farmers.

Table 7.1: Profile of community members at baseline and endline

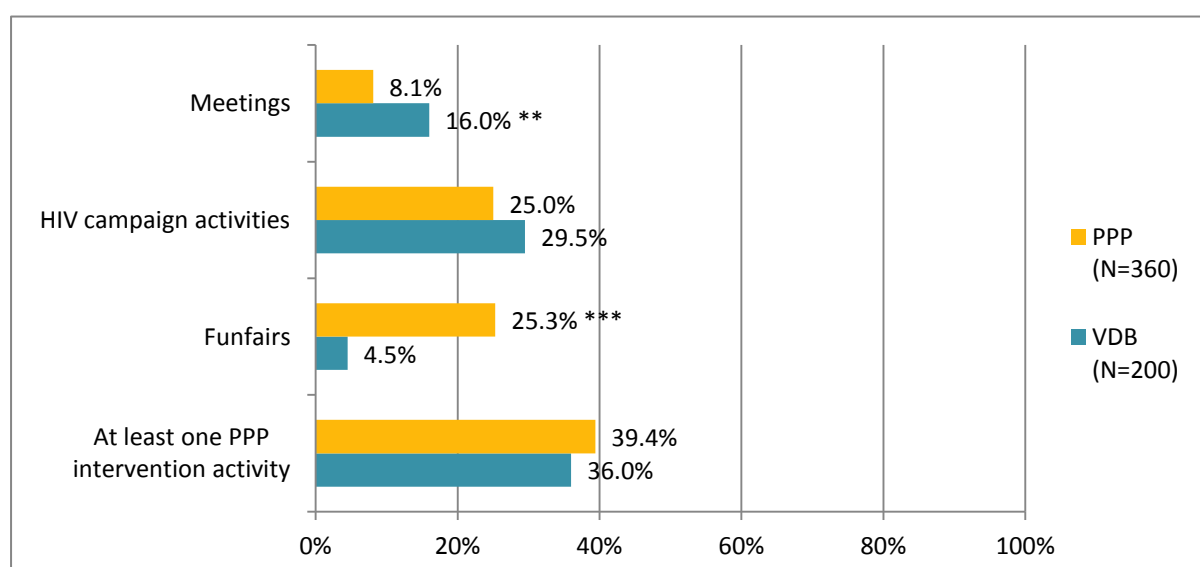
	Baseline	Endline
Gender		
Male	41.4	41.3
Female	58.6	58.8
Residence		
Urban	50.0	50.0
Rural	50.0	50.0
Marital Status		
Married	79.5	75.4
Single/div/widow	20.5	24.6
Age		
15-29	22.5	20.0
30-39	17.3	19.5
40-49	23.0	23.2
50+	37.1	37.3
Mean age	43.0	43.7
Median age	44	45

	Baseline	Endline
Education		
None/primary	58.0	55.5
Secondary/high/vocational	33.9	36.6
University/B.A.	8.0	7.9
Occupation		
Farmer	23.9	20.7
Small business owner	17.5	17.0
Private/govt. employee	10.0	12.0
Factory worker/casual laborer	26.1	25.9
Student	5.5	6.8
No occupation/housewife	17.0	17.7
(N)	(560)	(560)

7.2 Exposure to the PPP program

Measures of community recognition and participation in the program are a key indicator of success in raising awareness of HIV issues. More than one-third of the sample reported that they participated in at least one PPP activity, and there was no difference in overall participation by program model (Figure 7.1). Community members living in PPPC areas were much more likely to participate in the Funfairs (25% vs. 5%), which as mentioned earlier were developed for the PPPC model communities. Between 25-29% of respondents were aware of the program's HIV campaigns, with a smaller percentage saying they had attended a PPPC meeting.

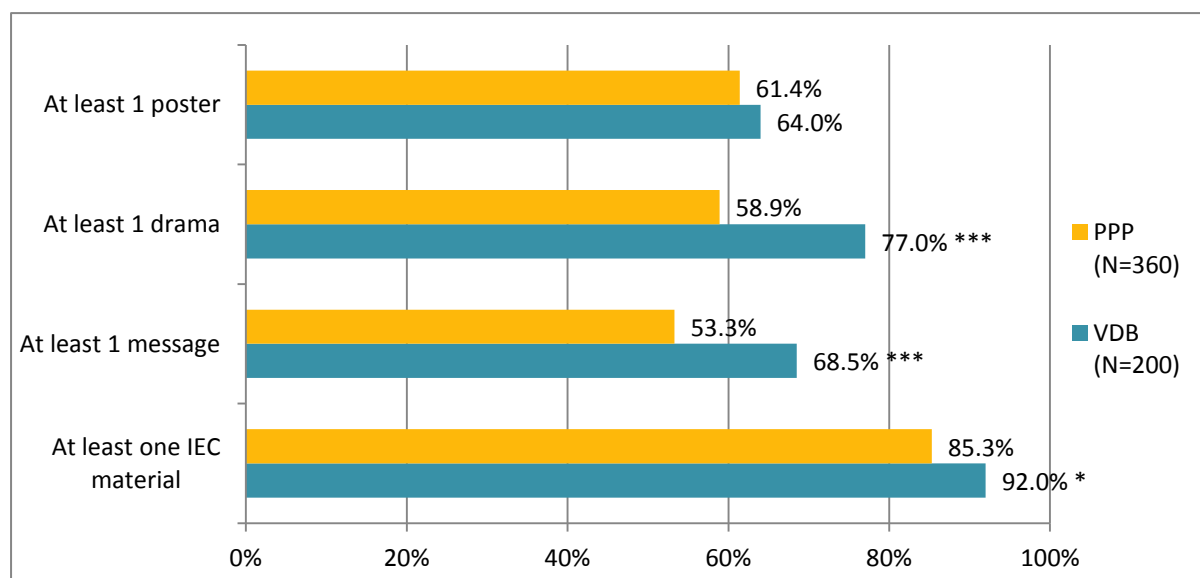
Figure 7.1: Community exposure to PPP intervention activities



***p<.001, **p<.01, *p<.05, +p<.10

Community members reported a high degree of recognition of the IEC materials; 92% of respondents living in VDB model communities and 85% of respondents living in PPPC model communities said they had seen at least one of the IEC materials (Figure 7.2). VDB community members were particularly likely to say that they had seen a project drama (77%) while for PPP-model communities the posters were most widely known (61%).

Figure 7.2: Community exposure to IEC materials



***p<.001, **p<.01, *p<.05, +p<.10

Qualitative respondents cited that some non-tangible factors, such as community leaders' willingness to participate and positive attitude towards the project, were a primary key to the program's success in implementing activities for the communities. With community leaders' buy-in to the project, any activities could be implemented smoothly and also received a good response from community members.

Money may be important for community members to manage the project, but it is not all. To gain collaboration from community members, leaders should have a people-personality and be well respected and trusted by community members. The issue of HIV/AIDS sometimes is not easily accepted by everyone, but with the positive personality and qualifications of leaders, other community members are likely to listen and follow what their leaders believe. (PPP committee member)

The committee is a very important group who leads VDB to success. Therefore, they should be honest, sincere, trustable, open-minded and sympathetic. Community members always believe in their leaders. If leaders say 'yes', they will say 'yes' too. (VDB member)

The variety of communication activities is also cited as an important factor in the program's success, including the integrated types of IEC materials. This variety helped in reaching more members of the target groups and in increasing the campaign's intensity.

HIV knowledge must be conveyed through several types of activities. [If there is] only one type of activity it may not help people to remember what they learn. Importantly, IEC

materials distributed to the audience are also very important as family members who did not join the HIV campaign activities will be also benefit. Additionally, using only one type of activity or IEC material may cause an unexcited feeling to the audience and they may not want to come back to participate in the activities any more. The varied types of activities and IEC materials give a better result for HIV campaign. (PPP committee member)

Moreover, the qualitative study found that each target group decided to access different types of materials and activities depending on their individual interest. Some people like reading, so they were likely to access posters more than those who are not skillful in reading. For some groups who cannot read properly, they were likely to listen to radio dramas through household radio. Apart from individual interest, some obstacles prevented the target groups to access the project's material and activities. For example, household radio transmission of some villages was not strong enough to provide coverage of the radio drama to all areas in the village.

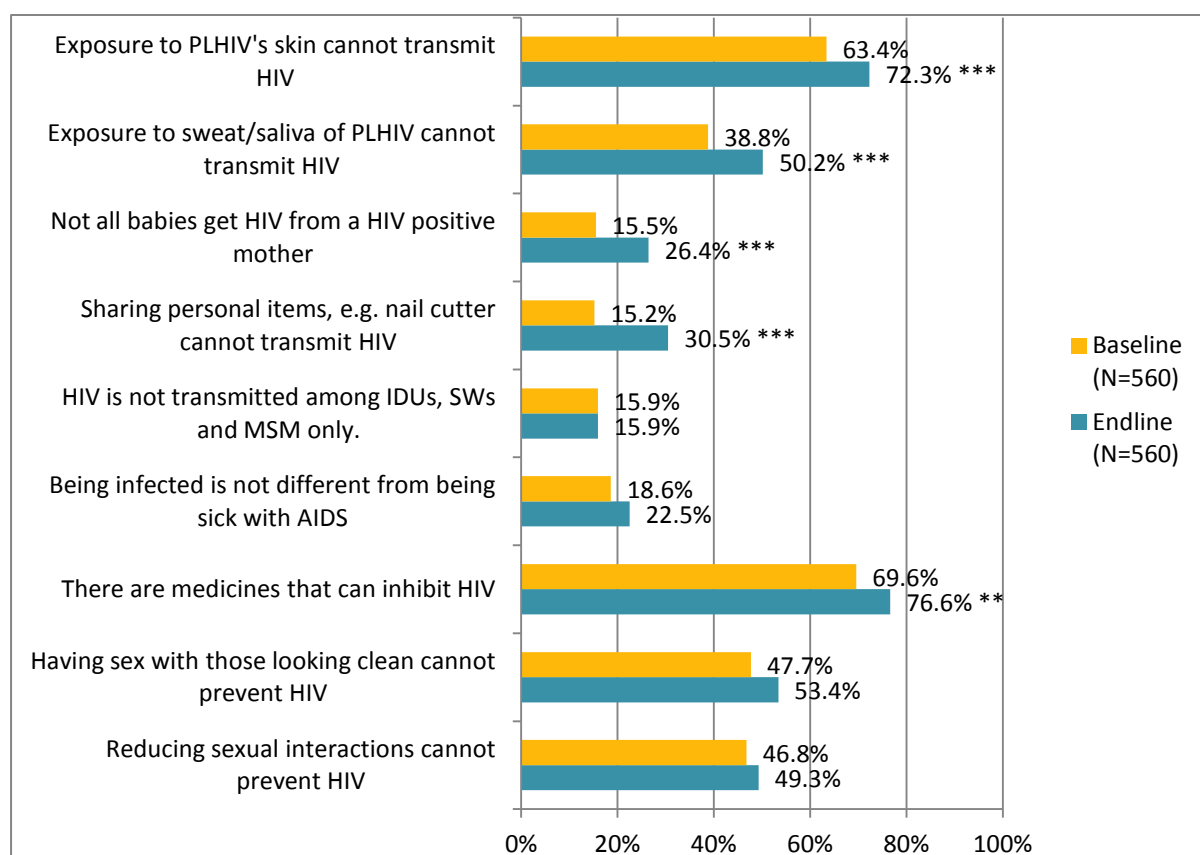
7.2 HIV/AIDS Knowledge

The community survey found significant changes in many of the questions measuring HIV knowledge, as seen in Figure 7.3. These included the questions about personal contact with PLHIV, mother-to-child transmission, and AIDS treatment drugs. The overall knowledge score of community members increased significantly from baseline to endline, 3.3 to 4.0 on a scale of 0 to 9 ($p < .00$). Respondents to the qualitative study also commented on the increase in knowledge of community members in program communities.

The level of HIV knowledge of community members has been recently increased and important community members become more aware about HIV prevention. For example, I never carried a condom with me before as I felt being judged by others. But now I am more comfortable to carry a condom and other young people in the community are also more comfortable to request condoms. (Community leader)

I was afraid before as I believed (from what I heard before) that having a haircut at the same shop with PLHIV or using a nail cutter with PLHIV will cause HIV infection. But now I do not fear anymore, because I understand clearly about how HIV can be transmitted to others.

Figure 7.3: Community knowledge of HIV at baseline and endline



***p<.001, **p<.01, *p<.05, +p<.10

The qualitative study also highlighted the success of the Funfair edutainment activity for improving the level of HIV knowledge of the community through enjoyable and memorable approaches. The Funfair included activities such as quiz games, darts and role plays. Each Funfair received a high level of participation from community members including youth, the district health office, the Tambon Administration Office (TAO) and the municipality. Participants receive both knowledge and entertainment at the same time, with prizes and food provided to participants as important components. Most people interviewed strongly emphasized that Funfair is an outstanding strategy as part of the HIV campaign.

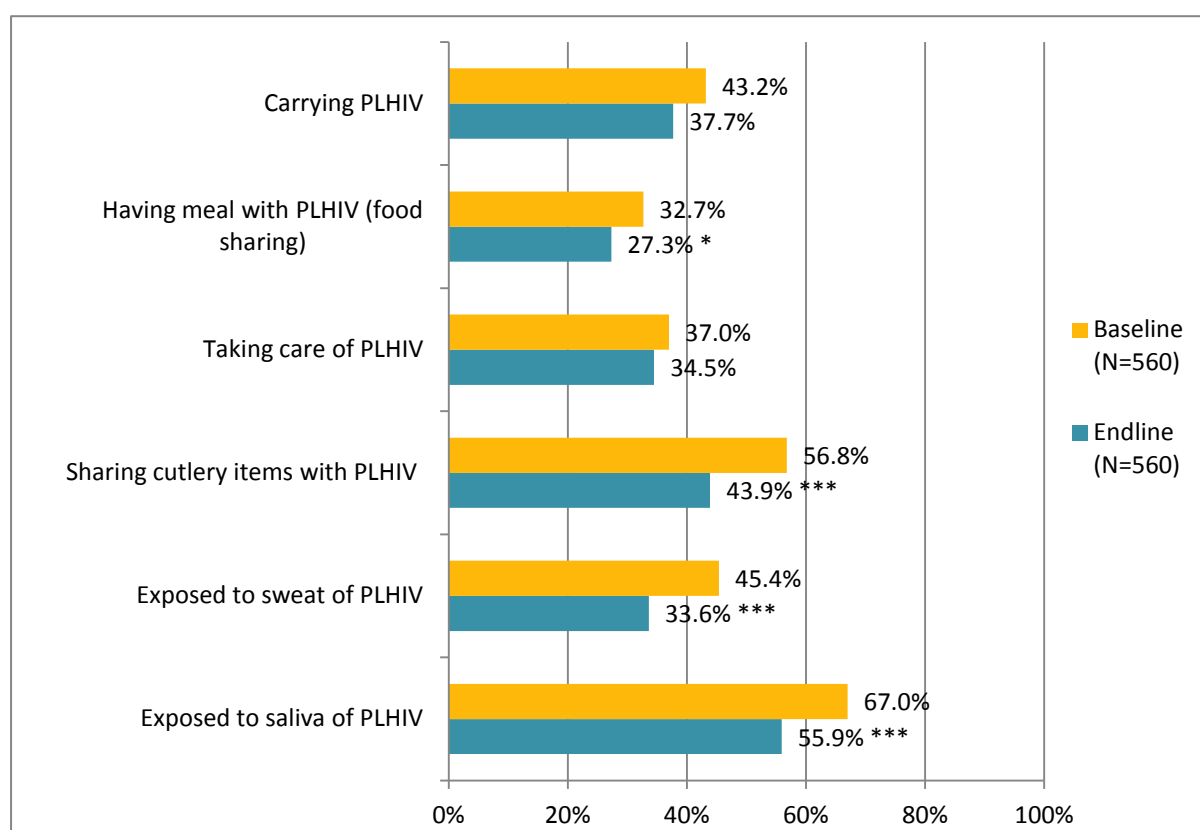
Funfair is an activity raising participation from considerable numbers of people. They like the quiz game and are happy to receive a prize. Amazingly if the audience cannot give the correct answer, they will go around learning from the exhibition board or discussing with their friends to get the answer. (PPP committee member)

7.3 Fear-driven, Value-driven and Enacted Stigma

Community members were asked about different aspects of stigma and discrimination using the same items that were used in the baseline survey. As seen in Figure 7.4, fears of contracting HIV through casual contact declined significantly among community members. Scores on the overall fear-driven stigma scale declined from 0.470 to 0.388 (p<.00) (not shown). The qualitative interviews also provided insight about how fear-driven stigma declined in the PPP communities.

Before I felt uncomfortable being friends with PLHIV. If I saw PLHIV, I will try to go in another direction. But after I joined and conducted HIV activities myself I learned and now understand that PLHIV are just normal as we are. They have the capacity to work and contribute to the community. We now sit and eat food together. One PLHIV is also a member of the VDB committee. When community members observe the relationship between buddies and PLHIV, they have an increased level of acceptance and understanding towards PLHIV. (VDB committee member).

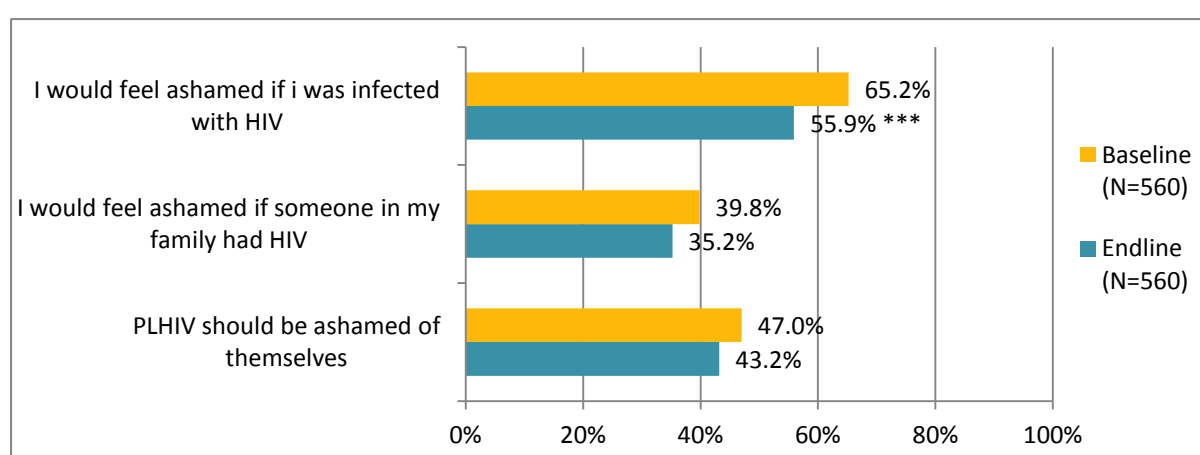
Figure 7.4: Change in community members' fear of HIV transmission



***p<.001, **p<.01, *p<.05, +p<.10

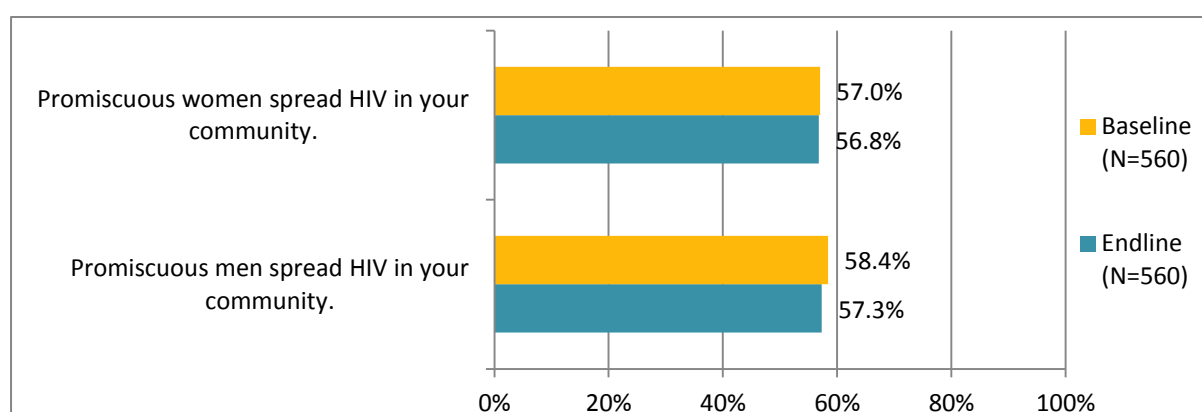
Other types of stigma examined in the community survey include value-driven stigma subscales of shame and blame. Though all the shame items declined from baseline to endline, only one item declined significantly: community members were less likely to say they would feel ashamed if they contracted HIV (Figure 7.5). However, the overall shame scale did decline significantly (from 0.507 to 0.448, $p<.01$). Agreement with the two blame statements, relating HIV to promiscuity, stayed virtually the same as at baseline, as did the overall blame scale (from 0.577 to 0.571, $p=.82$) (Figure 7.6). Previous research has shown that shifting attitudes associated with blame is difficult because it is deep-rooted and changes in these attitudes may require more time and more one-on-one interactions.

Figure 7.5: Change in community members' agreement with shame statements



***p<.001, **p<.01, *p<.05, +p<.10

Figure 7.6: Change in community members' agreement with blame statements



***p<.001, **p<.01, *p<.05, +p<.10

The qualitative study found that the community-based clubs, whether VDB or PPP, were more successful in reducing stigma, for two reasons. One is that it was more convenient and feasible for these clubs to conduct more frequent HIV/AIDS campaign activities in the community. But also, the model of 'living and working together as normal' between PLHIV and non-PLHIV can be observed clearly by the community when the club is based there. The qualitative study also found the rural programs to be more effective, as the culture of rural community (where people are relatives of each other) was a primary factor. The study revealed that the VDB and community-based PPPCs were likely to be operated sustainably, leading to a better result in increasing quality of life of PLHIV and reducing stigma and discrimination

In the past when PLHIV purchased stuff from my shop, I just never touch or get close to him. I can talk to him, but I did not feel comfortable talking with him. After the project, I feel more comfortable talking with him. (Community member)

Community members have learned from the project how to provide mutual support between PLHIV and non-PLHIV. It can say that the project has reduced a gap of such two

groups through several activities promoting living and working together as normal between two groups. (Community leader)

Respondents to the qualitative study said that implementing the PPP project in the community has created an environment for community members to talk and learn more about HIV/AIDS, which is not normally discussed in routine life. However, HIV/AIDS campaign activities enable community members including young people to discuss about HIV/AIDS prevention and also to learn to accept PLHIV. This environment has created a sense of understanding that HIV infection may happen to anyone, therefore PLHIV should not feel ashamed, and likewise others should also accept PLHIV.

PLHIV were viewed as bad or promiscuous people before. But community members now understand better that HIV infection does not mean those infected are promiscuous, since they now learn that for some woman who just stay at home and have sex with her husband only may also get HIV infection. PLHIV who take a good care of themselves can sometimes live longer than others. Since this message has been delivered to community members regularly, the level of stigma and discrimination in the community is reduced. (VDB committee member)

8. Impact Analysis

As described in the methodology section, multivariate analysis was conducted to examine whether exposure to the project had a significant impact on change in the key outcomes of interest. Key independent variables are as follows:

- 1) For the stigma models, whether the respondent personally knows someone living with HIV is a measure of proximity to the disease. It is assumed that by personally knowing someone who is living with HIV like a family member, close friend, or colleague, an individual is less likely to have stigmatizing attitudes and behaviors. This is one of the key tenets of the PPP program.
- 2) For the stigma models, knowledge of HIV transmission, prevention, and care is presumed to reduce stigma. It is measured by an index of correct responses to nine questions that range from basic to in-depth knowledge.
- 3) For all models, the intervention model is used as an independent variable to investigate whether some models were more effective than others. The project model interventions examined were: 1) PPPC model in urban areas; 2) VDB club model in rural areas; and 3) PPPC model in rural areas. A measure of whether the PPPC was community- or hospital-based was also included.
- 4) For all models, exposure to project interventions are examined separately; but also the 'dosage' of the intervention exposure is measured by combining participation in four project interventions: monthly HIV activities conducted by VDBs/PPPCs or 'campaigns', IEC materials (drama, poster, or pieces of paper presenting key messages), PPPC or VDB meetings on banking days, and the Funfair event.

All the models are controlled for respondent characteristics including sex, marital status, age, education, personal income, occupation, and media exposure to HIV messaging. The results are described below.

8.1 PLHIV

Unfortunately the small number of PLHIV who were interviewed at both baseline and endline (N=95) precluded doing extensive impact analysis on this sample. Multivariate analyses were conducted: (1) to show significant changes between baseline and endline on all project outcomes; and (2) to explore if exposure to the program was significantly related to changes between baseline and endline. For the first analysis the outcomes that changed significantly over time were disclosure of HIV status, self-isolation (internalized stigma), fear of stigma from family/friends and the community, self-esteem/self-efficacy, and quality of life.

No significant change was found for the regression models of disclosure, the stigma scales, or self-esteem/self-efficacy. For quality of life, as seen in Table 8.1, the type of model that the PLHIV was exposed to had a significant impact. Belonging to a rural PPPC had the most positive impact on quality of life, followed by the urban PPPC and finally the VDB. This may be a reflection of the fact that PLHIV in rural areas had more interaction with community members in participating in the interventions, and thus greater improvement in their well-being as a result. There was no significant impact on quality of life for whether the PPPC was community-based or hospital-based. None of the other measures of exposure (contact with the buddy; material support from the buddy; attending monthly meetings; participation in HIV campaigns or Funfair; or exposure to IEC materials) had any significant effect on quality of life.

Table 8.1: Results of linear regression of level of exposure to project activities on Quality of Life, PLHIV Survey

	β coef.	s.e.	signif.
Gender			
Male	ref		
Female	-0.060	0.10	
Marital Status			
Single/divorced/widow	ref		
Married	-0.268	0.10	**
Age			
15-39	ref		
40+	-0.118	0.11	
Education			
None/primary/secondary	ref		
University/BA/MA	-0.516	0.19	**
Income (continuous)	0.008	0.00	*
Baseline Quality of Life score	0.484	0.09	**
Implementation model			
PPP club in rural area	ref		
VDB in rural area	-0.592	0.17	**
PPP club in urban area	-0.246	0.12	+
Hospital based club			
no	ref		
yes	0.054	0.11	

Constant	2.593	0.39
R ²		0.486

***p<.001, **p<.01 *p<.05 +p<.10

8.2 Buddy

Like the PLHIV sample, the buddy survey contained a small number of cases; only 75 were interviewed at both baseline and endline. Multivariate analysis was conducted on the outcome measures which changed significantly between baseline and endline, which include: HIV knowledge, fear-driven stigma and shame-driven value-driven stigma. In the base model, sociodemographic variables measured at endline were included as control variables along with the outcome variable measured at baseline. In the next models, non-significant control variables were dropped and measures of exposure were added one by one.

Table 8.2 presents the results for HIV knowledge for buddies interviewed at both baseline and endline. The results show that participating in PPP project activities, discussing HIV/AIDS with the PLHIV partner, and participating in HIV campaigns in the community were significantly related to increases in the HIV knowledge score. Other measures of participation such as frequency of talking to the PLHIV partner, providing material support to the partner and exposure to IEC materials were not significantly related. These findings indicate that direct participation with the PPP project and specific discussions about HIV with the partner had the greatest impact on HIV knowledge for buddies.

Table 8.2: Results of linear regression of level of exposure to project activities on HIV Knowledge score, buddy survey

	β coef.	s.e.	signif.
Base model			
Education			
None/primary	ref		
Secondary/university/BA/MA	0.822	0.48	+
Baseline HIV knowledge score	0.287	0.11	*
Constant	4.506	0.59	**
R ²			0.135
Exposure measures added singly to base model			
Ever talked to buddy about HIV			
No	ref		
Yes	1.185	0.19	*
R ²			0.190
Participation in disseminating HIV knowledge to community			
No	ref		
Yes	0.933	0.52	+
R ²			0.172
Number of types of exposures to PPP project (0-4)			

	β coef.	s.e.	signif.
<i>Including IEC, meetings, trainings, campaigns, funfair</i>	0.361	0.18	*
R^2			0.182
<i>Independent variables found to be not significant: implementation model (VDB/PPP); community based model (yes/no); exposure to radio drama (yes/no); exposure to slips of paper messages (yes/no); frequency of talking to buddy (daily/less often); giving material support to buddy (yes/no); conveyed HIV knowledge (yes/no).</i>			

***p<.001, **p<.01 *p<.05 +p<.10

Using the same type of analysis, many of the exposure measures were found to be significantly related to the decrease in shame-related value-driven stigma (Table 8.3). Participating in HIV campaigns, seeing a poster, hearing a radio drama, seeing the slips of paper messages all were related to lower shame scores at endline. The number of types of exposures—including participating in activities and exposure to IEC—also was significantly related, indicating that being exposed to a variety of program activities was important.

Table 8.3: Results of linear regression of level of exposure to project activities on shame-related value-driven stigma, buddy survey

	β coef.	s.e.	signif.
Base model			
HIV knowledge score	-0.026	0.01	
Baseline fear-driven stigma	0.279	0.67	**
Constant	0.208	0.69	**
R^2			0.261
Exposure measures added singly to base model			
Ever saw poster			
No	ref		
Yes	-0.009	0.00	*
R^2			0.305
Ever heard radio drama			
No	ref		
Yes	-0.008	0.01	*
R^2			0.287
Ever saw slips of paper messages			
No	ref		
Yes	-0.011	0.19	*
R^2			0.310
Participation in disseminating HIV knowledge to community			
No	ref		
Yes	-0.119	0.05	*
R^2			0.327

	β coef.	s.e.	signif.
Number of types of exposures to PPP project (0-4)			
<i>Including IEC, meetings, trainings, campaigns, funfair</i>	-0.037	0.02	*
R ²			0.311
<i>Independent variables found to be not significant: knowing someone with HIV (yes/no); implementation model (VDB/PPP); community based model (yes/no); frequency of talking to buddy (daily/less often); talked about HIV with buddy (yes/no); giving material support to buddy (yes/no); attended PDA training (yes/no); conveyed HIV knowledge (yes/no); attended Funfair (yes/no).</i>			

***p<.001, **p<.01 *p<.05 +p<.10

8.3 Family

Multivariate regression analysis was conducted among the family members interviewed at endline (N=149) for those outcome measure that improved significantly from baseline to endline. The same type of limited regression analysis was used, as conducted on the buddy dataset. Though the same family members were not all re-interviewed at baseline, a variable measuring the average outcome score for all family members interviewed within the same community at baseline was included as a proxy control.

For HIV knowledge, first sociodemographic characteristics of family members were added as control variables, but none were found to be significant. Variables measuring the type of PPP model and exposure to the PPP program through participation in meetings, campaigns, the Funfair, or exposure to IEC materials were also not significantly related to increased knowledge. A variable measuring the number of types of exposures was also not significant. Exposure to other types of media information on HIV/AIDS was also not significant.

Table 8.4 shows the regression results for fear-driven stigma among family members. None of the sociodemographic variables were found to be significant and were therefore were dropped from the model. Community-level fear at baseline was also not significant, but HIV knowledge significantly reduced fear based-stigma. Knowing someone with HIV was not related to fear for family members; nor was the type of PPP model that the family member of the respondent participated in. Several of the measures of exposure were found to be significant: exposure to any IEC materials, participation in HIV campaigns and attending a Funfair. The number of types of exposure was also significant in reducing fear. Thus for family members, those who showed a greater level of commitment and participation in the program showed greater reductions in fear-related stigma.

Table 8.4: Results of linear regression of level of exposure to project activities on fear-driven stigma, family survey

	β coef.	s.e.	signif.
Base model			
HIV knowledge score	- 0.046	0.01	**
Baseline community fear-driven stigma	0.235	0.29	
Constant	0.208	0.69	**
R ²			0.194
Exposure measures added singly to base model			
Ever saw any IEC materials			
No	ref		
Yes	-0.172	0.00	**
R ²			0.240
Participation in disseminating HIV knowledge to community			
No	ref		
Yes	-0.082	0.04	*
R ²			0.221
Participation in Funfair			
No	ref		
Yes	-0.104	0.04	**
R ²			0.227
Number of types of exposures to PPP project (0-4)			
Including IEC, meetings, trainings, campaigns, funfair	-0.048	0.01	**
R ²			0.249
<i>Independent variables found to be not significant: knowing someone with HIV (yes/no); implementation model (VDB/PPP); community based model (yes/no); saw poster; heard radio drama; saw slips of paper; attended PPP meeting;</i>			

***p<.001, **p<.01 *p<.05 +p<.10

Regression results for the domain shame under value-driven stigma also showed that the number of types of exposure was important for family members, as was participation in the HIV campaigns (Table 8.5). For blame-related stigma, no significant results were found.

Table 8.5: Results of linear regression of level of exposure to project activities on shame-related value-driven stigma, family survey

	β coef.	s.e.	signif.
Base model			
HIV knowledge score	- 0.039	0.01	**
Baseline community shame-driven stigma	-0.072	0.34	
Constant	0.420	0.10	**
R ²			0.109

	β coef.	s.e.	signif.
Exposure measures added singly to base model			
Participation in disseminating HIV knowledge to community			
No	ref		
Yes	-0.087	0.04	*
R ²			0.133
Number of types of exposures to PPP project (0-4)			
Including IEC, meetings, trainings, campaigns, funfair	-0.035	0.02	+
R ²			0.130
<i>Independent variables found to be not significant: knowing someone with HIV (yes/no); implementation model (VDB/PPP); community based model (yes/no); saw poster; heard radio drama; saw slips of paper; attended PPP meeting; attended funfair</i>			

***p<.001, **p<.01 *p<.05 +p<.10

8.4 Community

The community dataset included N=560 cases, and so full regression models were analyzed, as discussed in the methodology section.

Fear-Driven Stigma

Table 8.6 shows the results of linear regressions of level of exposure to project activities on fear-driven stigma. Model I shows the beta coefficients and 95% confidence intervals of main predictors on fear-driven stigma, net of respondent characteristics and baseline average of fear at the community level. When compared to PPPC model in rural areas, fear of HIV transmission among respondents living in areas where the PPPC model was implemented in urban areas (-6.10; 95%CI: -9.87 : -2.33), and the VDB model in rural areas (-3.76; 95%CI: -6.45: -1.08) scored significantly less on the fear-driven scale. When the model was re-run with PPPC model in urban areas as the reference category, no significant difference was observed in fear scores to VDB model in rural areas.

Table 8.6: Results of linear regression of level of exposure to project activities on fear-driven stigma, community survey

Characteristics	Model I		Model II	
	β coef.	(95% CI)	β coef.	(95% CI)
Gender				
Male	ref		ref	
Female	1.37	(-0.36: 3.10)	1.37	(-0.36: 3.10)
Marital Status				
Single/divorced/widow	ref		ref	
Married	0.21	(-2.01: 2.42)	0.18	(-2.04: 2.40)
Age				
15-29	ref		ref	
30-39	-1.70	(-4.68: 1.28)	-1.65	(-4.64: 1.34)

Characteristics	Model I		Model II	
	β coef.	(95% CI)	β coef.	(95% CI)
40-49	-0.82	(-4.00: 2.35)	-0.74	(-3.92: 2.44)
50+	0.32	(-2.79: 3.43)	0.32	(-2.81: 3.44)
Education				
None/primary	ref		ref	
Secondary/hs/vocation	-1.77	(-3.89: 0.36)	-1.79	(-3.94: 0.35)
University/BA/MA	-2.96	(-6.48: 0.56)	-2.87	(-6.40: 0.65)
Occupation				
Farmer	ref		ref	
Small business owner	-1.63	(-4.62: 1.36)	-1.59	(-4.59: 1.41)
Private/Government employee	0.05	(-3.56: 3.67)	0.11	(-3.51: 3.72)
Factory worker/casual labor	-2.15	(-4.82: 0.52)	-2.12	(-4.80: 0.56)
Student	2.17	(-2.64: 6.98)	2.23	(-2.60: 7.06)
Housewife/no occupation	-2.62	(-5.62: 0.38)	-2.50	(-5.55: 0.55)
Income				
<3000	ref		ref	
3000-4999	0.58	(-2.19: 3.35)	0.63	(-2.16: 3.42)
5000-6999	-1.16	(-3.98: 1.65)	-1.19	(-4.03: 1.66)
7000+	-1.78	(-4.47: 0.90)	-1.75	(-4.46: 0.95)
Exposure to HIV messaging				
TV	1.24	(-1.15: 3.64)	1.21	(-1.19: 3.62)
Radio	-0.31	(-2.17: 1.54)	-0.30	(-2.15: 1.56)
Newspaper	-0.22	(-2.04: 1.59)	-0.19	(-2.00: 1.62)
Posters	-1.84*	(-3.65: -0.02)	-1.86*	(-3.68: -0.04)
Personally know a PLHIV				
no	ref		ref	
yes	-2.47**	(-4.37: -0.57)	-2.42**	(-4.34: -0.51)
HIV/AIDS Knowledge				
0-3 correct responses	ref		ref	
4-9 correct responses	-4.66***	(-6.30: -3.02)	-4.71***	(-6.35: -3.07)
Implementation model				
PPP club in rural area	ref		ref	
PPP club in urban area	-6.10**	(-9.87: -2.33)	-6.22**	(-10.01: -2.44)
VDB in rural area	-3.76**	(-6.45: -1.08)	-3.89**	(-6.59: -1.19)
Baseline Fear†				
Low community-level fear	ref		ref	
High community-level fear	-2.23	(-5.04: 0.58)	-2.27	(-5.09: 0.55)
Intervention exposures				
None or one	ref			
Two	-0.99	(-2.96: 0.98)		
Three or four	-2.97**	(-5.38: -0.55)		
Intervention exposures				
None or one			ref	
Two			-0.98	(-2.95: 0.98)
Campaign/VDB or PPP club/IEC			-2.86	(-6.82: 1.10)
Campaign/Fun fair/IEC			-4.18**	(-7.74: -0.63)
Four			-1.70	(-6.44: 3.04)

Characteristics	Model I		Model II	
	β coef.	(95% CI)	β coef.	(95% CI)
Constant	62.79***	(56.81: 68.76)	62.86***	(56.83: 68.89)

***p<.001, **p<.01 *p<.05 +p<.10

Notes: †Baseline community fear is the average score of fear at baseline in each community surveyed. Across all communities, the score ranged from 44.5 to 54.1. Low community-level fear represents average scores less than 50, while high community-level scores and 50 and above.

As hypothesized, respondents who reported that they personally know someone living with HIV scored significantly less on the fear scale when compared to those who did not know someone (-2.47; 95% CI -4.37:-0.57). Higher HIV/AIDS knowledge at endline also predicted lower fear on the scale. Respondents who answered 4-9 correct questions scored 4.66 (95%CI: -6.30:-3.02) points lower on the fear scale than respondents who answered less than four questions correctly. In terms of intervention exposure, the effect of participating in three or four intervention activities significantly reduced fear on the scale by close to 3 points (95% CI: -5.38:-0.55) when compared to no intervention exposure or exposure to exactly one. This indicates that a combination of intervention types is necessary that reinforces information to reduce fear.

Model II examines the combination of the three interventions that were responsible for reducing fear of HIV transmission. No respondents reported exposure to the following combination of activities: VDB or PPPC meetings and Funfair and IEC, therefore it does not appear in the model. From Model II, the intervention combination that was significantly contributed to reducing fear of HIV transmission was the campaign, Funfair, and IEC materials. Respondents who participated or were exposed to these three interventions scored 4.18 points (95% CI: -7.74: -0.63) less on the fear scale when compared to respondents who participated in exactly one or none of the interventions.

Value-Driven Stigma

Table 8.7 presents the linear regression models of intervention exposure on the shame scale, which showed significant change from baseline to endline. The analysis is controlled by baseline shame, calculated as an average score of community-level shame at baseline. In Model I it is seen that, as with the fear scale, respondents who personally know someone living with HIV (-1.94; 95% CI: -3.86:-0.02) and with high knowledge of HIV/AIDS prevention, care, and treatment (-4.71; 95% CI: -6.35: -3.07) scored significantly less on the shame scale. Moreover, respondents who reported exposure to at least three interventions scored 3.39 points (95% CI: -5.86: -0.93) lower on the shame scale than those exposed to exactly one intervention or none.

Table 8.7: Results of linear regression of level of exposure to project activities on shame, community survey

Characteristics	Model I		Model II	
	β coef.	(95% CI)	β coef.	(95% CI)
Gender				
Male	ref		ref	
Female	-2.25**	(-4.00: -0.50)	-2.17*	(-3.92: -0.41)
Marital Status				
Single/divorced/widow	ref		ref	

Characteristics	Model I		Model II	
	β coef.	(95% CI)	β coef.	(95% CI)
Married	1.62	(-0.64: 3.87)	1.72	(-0.53: 3.98)
Age				
15-29	ref		ref	
30-39	1.48	(-1.55: 4.51)	1.38	(-1.66: 4.41)
40-49	0.93	(-2.30: 4.15)	0.99	(-2.25: 4.22)
50+	3.33*	(0.16: 6.50)	3.45*	(0.27: 6.63)
Education				
None/primary	ref		ref	
Secondary/hs/vocation	-0.57	(-2.75: 1.60)	-0.50	(-2.69: 1.70)
University/BA/MA	-1.06	(-4.64: 2.53)	-0.81	(-4.40: 2.78)
Occupation				
Farmer	ref		ref	
Small business owner	1.16	(-1.88: 4.21)	1.42	(-1.64: 4.47)
Government employee	2.28	(-1.40: 5.95)	2.35	(-1.32: 6.02)
Factory worker	0.02	(-2.70: 2.73)	0.19	(-2.54: 2.91)
Student	-2.22	(-7.10: 2.66)	-1.96	(-6.86: 2.94)
Housewife/no occupation	-1.18	(-4.24: 1.88)	-0.95	(-4.06: 2.16)
Income				
<3000	ref		ref	
3000-4999	-1.16	(-3.97: 1.66)	-0.92	(-3.75: 1.91)
5000-6999	-1.23	(-4.08: 1.62)	-0.96	(-3.85: 1.94)
7000+	-3.56*	(-6.28: -0.84)	-3.48*	(-6.22: -0.74)
Exposure to HIV messaging				
TV	1.72	(-0.72: 4.16)	1.85	(-0.59: 4.30)
Radio	0.68	(-1.20: 2.56)	0.63	(-1.25: 2.52)
Newspaper	-0.96	(-2.80: 0.88)	-1.00	(-2.84: 0.84)
Posters	-2.76**	(-4.61: -0.91)	-2.69**	(-4.55: -0.84)
Implementation model				
PPP club in rural area	ref		ref	
PPP club in urban area	-2.17	(-4.89: 0.55)	-2.04	(-4.78: 0.69)
VDB in rural area	-2.23	(-4.82: 0.37)	-2.51	(-5.12: 0.10)
Personally know a PLHIV				
no	ref		ref	
yes	-1.94*	(-3.86: -0.02)	-1.78	(-3.72: 0.15)
HIV/AIDS Knowledge				
0-3 correct responses	ref		ref	
4-9 correct responses	-4.71***	(-6.35: -3.07)	-3.73***	(-5.40: -2.06)
Baseline Shame†				
Low community-level shame	ref		ref	
High community-level shame	1.77	(-0.63: 4.17)	1.88	(-0.53: 4.29)
Intervention exposures				
None or one	ref			
Two	-0.80	(-2.81: 1.22)		
Three or Four	-3.39**	(-5.86: -0.93)		
Intervention exposures				
None or one			ref	

Characteristics	Model I		Model II	
	β coef.	(95% CI)	β coef.	(95% CI)
Two			-0.88	(-2.89: 1.14)
Funfair/Campaign/VDB or PPP			0.60	(-7.84: 9.04)
Funfair/Campaign/IEC			-4.73**	(-8.35: -1.11)
Campaign/VDB or PPP/IEC			-1.11	(-5.13: 2.90)
Four			-5.76*	(-10.59: -0.94)
Constant	55.83***	(50.35: 61.31)	55.23***	(49.70: 60.75)

***p<.001, **p<.01 *p<.05 +p<.10

Notes: †Baseline community shame is the average score of shame at baseline in each community surveyed. Across all communities, the score ranged from 43.0 to 57.0. Low community-level shame represents average scores less than 50, while high community-level scores and 50 and above.

In Model II we ran the analysis to assess the combination of interventions that were reducing shame. As with fear-driven stigma, the results indicate that participation in the Funfair plus exposure to a campaign and to IEC materials significantly reduced shame. Respondents who reported participation and exposure to these three interventions scored 4.73 points (95% CI: -8.35:-1.11) lower on the shame scale when compared to respondents exposed to only one intervention or none. These were the same interventions that we found influenced the fear scale. Exposure to all four interventions is also associated with lower levels of shame in that respondents scored 5.76 points (95% CI: -10.59: -0.94) lower when compared to respondents exposed to none or only one intervention. This suggests that programs with less resources can focus on three interventions only – funfair, IEC materials, and campaign.

HIV knowledge

The results of the regression on HIV knowledge are found in Table 8.8. The type and location of the PPP model was again found to be significant; those living in communities with VDB clubs or in urban communities with PPPCs were more likely have increased knowledge than those in rural communities with PPPCs. The number of types of exposure was also important; knowledge increased for those with two exposures or especially with three or four exposures. Further analysis to identify the types of activities with the greatest impact did not show significant results.

Table 8.8: Results of linear regression of level of exposure to project activities on HIV knowledge, community survey

Characteristics	β coef.	s.e.	signif.
Gender			
Male	ref		
Female	0.331	0.15	*
Marital Status			
Single/divorced/widow	ref		
Married	-0.338	0.20	+
Age			
15-29	ref		
30-39	0.753	0.26	**
40-49	0.625	0.28	*
50+	0.808	0.27	**

Characteristics	β coef.	s.e.	signif.
Education			
None/primary	ref		
Secondary/hs/vocational	0.775	0.19	**
University/BA/MA	1.123	0.30	**
Personally know a PLHIV			
no	ref		
yes	0.481	0.17	**
Implementation model			
PPP club in rural area	ref		
PPP club in urban area	0.495	.22	*
VDB in rural area	0.509	.23	*
Intervention exposures			
None or one	ref		
Two	0.111	.18	
Three or four	0.522	.22	*
Constant	2.207	0.33	**
R ²			.092

***p<.001, **p<.01, *p<.05, +p<.10

9. Summary and discussion

Both the qualitative and quantitative data show significant change in key outcomes among PLHIV, buddies, their families, and the project communities. A summary of quantitative findings for PLHIV is shown in Table 9.1. Many of the outcome measures were shown to change significantly by the time of the endline survey. These include increased disclosure of HIV status, reduced self-isolation and fear of stigma from family and the community, increased self-esteem/self-efficacy and increased quality of life. It is interesting that PLHIV reports of their own feelings about stigma and their well-being showed significant change while their reports of experienced discrimination did not. Since the fear of discrimination is usually found to be higher among PLHIV than the actual discrimination experienced, the program seems to have resulted in increasing the ability of PLHIV to feel more comfortable in their communities. This was achieved through the buddy partnership as well as the community campaigns. The multivariate analysis did not find significant relationships between participation in the program and change in the disclosure and stigma measures, but the small number of cases limited the analysis. For quality of life, type of program model was found to be significantly related: VDB participants and PPC urban club members were more likely to report increased quality of life. The qualitative findings also provide background on the reasons that the community-based programs, particularly VDB, provide greater contact between buddies and PLHIV and a greater ability for community members to perceive PLHIV 'working and living together as normal.'

Table 9.1: Summary table for PLHIV analysis

PLHIV	Significant Change	Relationship to exposure (Multivariate analysis)
Disclosure of status	**	n.s.
Internalized stigma		
Self-isolation	*	n.s.
Coping ability		

Fear of stigma		
Family	**	n.s.
Community	**	n.s.
Discrimination		
Family isolation		
Family abandonment		
Community discrimination		
Self-esteem/self-efficacy	**	n.s.
Quality of life		
Overall	*	Significantly related to the type of model: VDB and urban PPP clubs more effective than rural PPP
Physical	**	na
Social		na
Psychological	*	na
Environmental		na

***p<.001, **p<.01, *p<.05, +p<.10, n.s. not significant

The buddy survey also found significant changes in HIV knowledge, fear-driven and value-driven stigma among the HIV-negative partners by the time of the endline survey. The community-based program models were found to be more successful in maintaining buddies' participation in the program in the qualitative survey, as it was difficult for buddies to join the activities when they live in different communities. Multivariate analysis showed that buddies' discussion of HIV/AIDS with their PLHIV partner, participation in HIV informational campaigns, and the number of types of exposures to the program were significantly related to increased HIV/AIDS knowledge among buddies. The IEC materials were particularly effective in reducing shame-related stigma for buddies, as was the number of types of exposure.

Table 9.2 Summary table for buddy, family and community multivariate analysis

	Buddy		Family		Community	
	Significant Change	Relationship to exposure	Significant Change	Relationship to exposure	Significant Change	Relationship to exposure
HIV Knowledge	**	➤ Discussing HIV/AIDS with PLHIV partner ➤ Participating in HIV campaigns ➤ Number of types of exposures	**	n.s.	**	➤ Implementation model (PPP urban, VDB more effective than PPP rural) ➤ Number of types of exposures
Fear-driven stigma	n.s.	na	*	➤ Participating in HIV campaigns ➤ Participation in Funfair ➤ Saw any IEC material ➤ Number of types of exposures	**	➤ Implementation model (PPP urban, VDB more effective than PPP rural) ➤ Number of types of exposures
Value-driven stigma						
Shame	**	➤ Participating in HIV campaigns ➤ Seeing poster ➤ Hearing radio dramas ➤ Seeing slips of paper messages ➤ Number of types of exposures	*	➤ Participating in HIV campaigns ➤ Number of types of exposures	*	➤ Number of types of exposures
Blame	n.s.	na	**	n.s.	n.s.	na

***p<.001, **p<.01, *p<.05, +p<.10, n.s. not significant

Family members of PLHIV and buddies also saw increases in their HIV knowledge, and in the stigma measures. Multivariate analysis showed that the number of types of exposure were most important for both increasing knowledge and reducing fear-driven stigma and shame. Finally, the community survey had significant change in HIV knowledge, fear-driven stigma and value-driven stigma. Multivariate analysis showed that increases in HIV knowledge was significantly related to the PPP model and to the number of types of exposures to the program. The qualitative study also outlined how having a variety of platforms for IEC and for participation in program activities added to the strength of the program. The decrease in fear-driven stigma was also related to the PPP model and the number of types of exposure, while a decrease in value-driven stigma regarding shame associated with PLHIV was significantly related to the number of types of exposure. These multivariate results, along with the explanatory power of the qualitative data, provide clear evidence that the program was successful in reducing stigma for PLHIV in their communities.

10. Recommendations

1. Both the qualitative and quantitative evidence suggest that **VDBs and PPPCs should be based in one local community**. To replicate the PPPC and VDB models to other areas, both advantages and disadvantages of each model should be considered thoroughly. The community-based model can build a higher level of participation for the general population and reduce HIV/AIDS stigma and discrimination toward a larger group, compared to the hospital-based PPPC model. However, the hospital-based PPPC model can reach a larger group of PLHIV, and is appropriate for those PLHIV who do not want to take the risk of disclosing their HIV status.
2. A **combination of various interventions** is recommended to reinforce information to reduce fear and shame. The best results were found among those who were exposed to a variety of program activities and messages
3. The **schematic framework** of addressing internalized (self) stigma among PLHIV, and then moving to people around PLHIV and community members to address external stigma and discrimination, was an important thematic concept for the program.
 - a. Campaigning on HIV/AIDS stigma and discrimination should **not only be focused on stigma and discrimination of people around PLHIV, but also on self-stigmatization of PLHIV**. The results indicate that the two efforts together—Increasing self-esteem and reducing self-stigma of PLHIV, along with reducing HIV/AIDS stigma and discrimination among people around PLHIV—lead to an **overall increased quality of life** among PLHIV.
 - b. Interventions should be firstly implemented on continuous basis among PLHIV, their intimate friends, buddies (HIV negative loan recipients), family members of PLHIV and community leaders. In this way **people surrounding PLHIV can act as change agents for the wider community**. To become an effective change agent, these primary target groups should be equipped with knowledge and information related to HIV/AIDS, awareness of stigma as well as discrimination, and especially with skills to transfer information to others.
4. A **longer implementation timeline is recommended**. Although the program yielded positive changes, there is still room for improvement in some areas. Extending the project period longer than two and a half years would ensure sustainable positive results, with strengthened management of PPPCs and VDB and continued participation of key target groups.
5. The results point to some program areas that could be **improved and strengthened**.

- a. **Further research on approaches to reduce self-stigmatization of PLHIV** should be conducted. The study showed a high degree of self-stigmatization among PLHIV, especially among PPPC members based in urban areas who are extremely sensitive about their HIV status. Besides investigating the types of interventions that can reduce self-stigmatization, the research should examine ways to increase self-esteem and self-confidence among PLHIV
- b. Greater effort should be made for **capacity building among HIV negative loan recipients (buddies)** on providing mental support to PLHIV and disseminating HIV knowledge to others. Most PLHIV stressed that the type of support they want most is mental or psychological support, but buddies need to be provided with skills to provide this support and awareness of PLHIV's feelings. In addition, to perform the PPP role of disseminating HIV knowledge effectively, HIV negative loan recipients should be able to convey information to others effectively.
- c. The program should focus on developing the community's in-depth HIV knowledge and how to analyze risk behaviors. In addition, it is important to also address stigma to at-risk populations such as sex workers and MSM. Only 16% of community members understand that HIV is not transmitted within these risk groups only. Causes of blame stigma (believing that PLHIV are promiscuous) should also be analyzed further to tackle it more effectively.

References

- Brouard, P. & Wills, C. 2006. *A Closer Look: The Internalization of Stigma Related to HIV*. USAID.
- Cohen, J. 1988. *Statistical Power Analysis for the Behavioral Sciences*. 2nd ed. Hillsdale: Lawrence Erlbaum Associates.
- DeVellis, R.G. 2003. *Scale Development: Theory and Applications*. 2nd edition. Thousand Oaks: Sage Publications Inc.
- Jain, A., Richter, K., Nuankaew, R., Mongkolvibolpol, N., & Singhapoom, S. 2009. *Baseline Study for the Positive Partnership Program, Phase II at PDA in Thailand*. Bangkok: Pact Thailand.
- Kalichman, S.C., DiMarco, M., Austin, J., Luke, W. & DiFonzo, K. 2003. Stress, Social Support, and HIV-Status Disclosure to Family and Friends Among HIV-Positive Men and Women. *Journal of Behavioral Medicine* 26(4):315-332. DOI: 10.1023/A:1024252926930
- Leickness, C.S., Kalichman, S., Strebel, A., Cloete, A., Henda, N. & Mqeketo, A. 2007. Internalized stigma, discrimination, and depression among men and women living with HIV/AIDS in Cape Town, South Africa. *Social Science & Medicine* 64(9):1823-1831.
- Lorig, K., Stewart, A., Ritter, P., Gonzalez, V., Laurent, D., & Lynch, J. 1996. *Outcome Measures for Health Education and Other Health Care Interventions*. Thousand Oaks: Sage Publications.
- Nyblade, L., Hong, K.T., et al. 2008. *Communities Confront HIV Stigma in Viet Nam: Participatory Interventions Reduce HIV Stigma in Two Provinces*. Washington, D.C.: International Center for Research on Women; Hanoi: Institute for Social Development Studies.
- Rosenberg, M. 1965. *Society and the Adolescent Self-Image*. Princeton, New Jersey: Princeton University Press.
- Sakthong, P., Schommer, J.C., Gross, C.R., Sakulbumrungsil, R. and Prasithsirikul, W. 2007. Psychometric properties of WHOQOL-BREF-THAI in patients with HIV/AIDS. *Journal of the Medical Association of Thailand* 90(11): 2449-60.
- Silpakit, O. and Silpakit, C. 2003. Thai version of a health-related quality of life instrument for epilepsy. *Neurological Journal of Southeast Asia* 8:103–107A.
- Tanzania Stigma-Indicators Field Test Group. 2005. Measuring HIV stigma: Results of a Field-test in Tanzania. 2005. Washington, D.C.: Synergy.
- UNAIDS. 2007. The Positive Partnerships Program in Thailand: Empowering People Living with HIV. Geneva: UNAIDS Best Practice Collection.**

Appendix

PLHIV Endline Questionnaire

Code P _____

A1. Type of area: 1. Urban 2. Rural

Section 1: General Information

Demographic

[100] Gender 1. Male 2. Female

[101] Marital status: 1. Single 2. Married/having partner 3. Divorced
4. Widow 5. Other, specify.....

[102] Education:

- | | |
|---|--------------------------|
| 0. No education/did not finish primary school | 5. Vocational diploma |
| 1. Primary school | 6. Undergraduate diploma |
| 2. Secondary school | 7. Bachelor's degree |
| 3. High school | 8. Master's degree |
| 4. Vocational certificate | 9. Doctoral degree |

[103] Total number of members in your household _____ persons (including yourself)

[104] Do you have children?

0. No
1. Yes _____ person(s) (only those alive)

[105] Do you live with your family currently?

0. No
1. Yes → 105a) with whom do you live? (Able to answer more than one answer)
1. Spouse 2. Child(ren) <15 yrs. 3. Child(ren) 15 and over
Parents 5. Brothers 6. Sisters

4.

B. Program Participation

Section 2: Economic and Business Information

[201] What business(es)/occupation(s) do you do?

	[201.1] Main Business (Select one only)	[201.2] Secondary Business (Can select more than one)
Farmer	1	1
Vending/Retailing	2	2
Private employee	3	3
Factory worker	4	4
Casual laborer	5	5
Government/state enterprise employee	6	6
Student	7	7
No occupation/housewife	8	
Other, please specify		
Other, please specify.....		

[202] Average monthly income

[202.1] Your own income only (from all occupations)	_____ Baht
[202.2] Total household income (from all family members)	_____ Baht

[203] Do you have savings currently?
 0. No
 1. Yes → Amount _____ Baht

[204] Do you have **debt(s)** currently?
 0. No (skip to Q. 207)
 1. Yes from which source:

	[204.1] Loan Sources	Total (Baht)	Interest Rate (%)
1.	Village Development Bank (through PPP), PPP club	_____	_____
2.	Other formal sources such as a cooperatives, village fund, saving group	_____	_____
3.	Informal loan e.g. a merchant, a loan provider	_____	_____

[205.1-3] [206.1-3]

[207] Currently how much you monthly contribute for your **family expenses** such as food, clothing, child education, and other household expenses? _____ Baht (recheck with Q. 202)

[208] Currently how much are you monthly responsible for **your own health care or related expenses** (such as transportation to a hospital)? _____ Baht (recheck with Q. 202)

[209] How much do you know and understand the following areas of business?

Business Skill	Very much	Much	Moderately	Little	Very little
[209.1] Business planning	5	4	3	2	1
[209.2] Preparations for production/business implementation for maximum benefits	5	4	3	2	1
[209.3] Capital and expense control for reasonable profit	5	4	3	2	1
[209.4] How to keep track of revenue and expenses from business	5	4	3	2	1
[209.5] How to proceed simple accounting	5	4	3	2	1
[209.6] How to select product for sales/how to make good quality/attractive products, to attract the your customers	5	4	3	2	1
[209.7] How to seek the markets/ marketing channels to increase sales	5	4	3	2	1
[209.8] Customer satisfaction skills	5	4	3	2	1

[210a] In the last 6 months, have you made any changes to your product/services?

0 No

1 Yes → [210b] How much did you change it?

- 0. Not at all
- 1. Somewhat
- 2. Moderately
- 3. Quite much
- 4. Very much

[210c] Did this change improve your business?

- 0. Not at all
- 1. Somewhat
- 2. Moderately
- 3. Quite much
- 4. Very much

[211] How often do you keep records of business revenue and expense?

- 0. Never
- 1. Occasionally
- 2. Often
- 3. Consistently

Section 3: Care and Treatment, and Disclosure of HIV Status

[301] **Currently** do you take **ARV** medication?

0. No

1. Yes → When did you start taking ARV medication? Month____ year____ [302.1-2]

[302] **Currently** do you have **opportunistic infection(s)**?

0. No (skip to Q. 304) 1. Yes

[303] Currently do you take opportunistic infection medication?

0. No 1. Yes

[304] Apart from PPP staff and your loan buddy, have you told anyone else that you are HIV positive?

0. Not at all 1. Yes

[305] Have you told your current spouse/partner that you are HIV positive?

1. Yes 2. No 3. Do not have current spouse/partner

[306] Have you told your former spouse/partner that you are HIV positive?

1. Yes

2. No → Because

- 1. Don't want to know 2. Don't have any contact currently
- 3. Former spouse/partner's 4. Other specify____

[307] Have you told your mother that you are HIV positive?

1. Yes

2. No → Because

- 1. Don't want to know 2. Don't have any contact currently
- 3. Former spouse/partner's 4. Other specify____

- [308] Have you told your father that you are HIV positive?
1. Yes
 2. No→Because
 1. Don't want to know
 2. Don't have any contact currently
 3. Former spouse/partner's
 4. Other specify_____
- [309] Have you told your kid(s) that you are HIV positive?
1. Yes→
 1. Your kids age <15
 2. Your kids age 15 and over
 2. Both
 2. No→Because
 1. Don't want to know
 2. Don't have any contact currently
 3. Do not have any kid age <15
 4. Do not have any kid age 15 and over
 5. Other specify_____
- [310] Have you told your sister(s) that you are HIV positive?
1. Yes
 2. No→Because
 1. Don't want to know
 2. Don't have any contact currently
 3. Do not have any sister
 4. Other specify_____
- [311] Have you told your brother(s) that you are HIV positive?
1. Yes
 2. No→Because
 1. Don't want to know
 2. Don't have any contact currently
 3. Do not have any brother
 4. Other specify_____
- [312] Have you told your relatives that you are HIV positive?
1. Yes
 2. No→Because
 1. Don't want to know
 2. Don't have any contact currently
 3. Other specify_____
- [313] Have you told your friends that you are HIV positive?
1. Yes
 2. No→Because
 1. Don't want to know
 2. Don't have any contact currently
 3. Other specify_____
- [314] Have you told your neighbors that you are HIV positive?
1. Yes
 2. No→Because
 1. Don't want to know
 2. Don't have any conversation
 3. Other specify_____
- [315] Have you told your community members that you are HIV positive?
1. Yes
 2. No→Because
 1. Don't want to know
 2. Don't have any conversation
 3. Other specify_____
- [316] Would you advise PLHIV who is not symptomatic to disclose his/her status?
1. Keep the status confidential by not disclosing to anyone even family members (*skip to Part 4*)
 2. Disclose to someone → (*Continue Question 317*)

(Ask this question with only those who answer “disclose to someone”)

[317] If answering “disclose to someone”, who would you advise PLHIV to disclose to? (Able to answer more than one answer)

- | | |
|--|--------------------------------|
| 1. Current spouse/partner | 2. Former spouse/partner |
| 3. Mother | 4. Father |
| 5.1 Child/children age <15 | 5.2 Child/Children age 15+ |
| 6. Sister(s) | 7. Brother(s) |
| 8. Other relative(s) | 9. Friend(s) |
| 10. Neighbor(s) | 11. Other community members |
| 12. Village development bank committee members | 13. PPP club committee members |
- Other, please specify..... [317.1-14]

Section 4: Fear of Stigma and Discrimination

In the past 6 months do you have **fear** to the following statements as a result of your HIV status?

Statements	Fear	Not fear
Family, relatives, and friends		
[401] Fear of exclusion from your family to have meals alone, or use a different set of food containers and cutlery from family members'	1	2
[402] Fear of isolation from your family to stay in a separate room or outside the house (but in the same compound)	1	2
[403] Fear of being isolated by your family (still live in the same house)	1	2
[404] Fear of being ignored/abandoned by your family members	1	2
[405] Fear of being ignored/abandoned by your spouse/partner	1	2
[406] Fear of being no longer visited or less frequently visited by relatives	1	2
[407] Fear of being no longer visited or less frequently visited by friends	1	2
Community		
[408] Being gossiped about	1	2
[409] Being treated differently from other community members	1	2
[410] Being checked out to see how you are	1	2
[411] Lost trust/respect from community members	1	2
[412] Rarely have someone to talk to/communicate with/hang out	1	2
[413] Being denied community gatherings and events such as weddings, funerals, social meetings, and ceremonial events	1	2
[414] Lost customers to buy food you make or sell	1	2
[415] Lost customers to buy produce/goods you sell	1	2
[416] Being denied/lost a job	1	2
[417] Your children/grand children are discriminated against; for example, not allowed to play with other kids in the community	1	2
[418] Being teased, insulted, or sworn at	1	2
Health Service Providers		
[419] Being given poorer quality health services	1	2

Section 5: Enacted Stigma (Discrimination)

In the past 6 months have you ever **experienced** the following incidents as a result of your HIV status?

Incidents	Yes	No
Family, relatives, and friends		
[501] Been excluded from your family to have meals alone, or use a different set of food containers and cutlery from family members'	1	2
[502] Been isolated from your family to stay in a separate room or outside the house (but in the same compound)	1	2
[503] Been isolated by your family (still live in the same house)	1	2
[504] Been ignored/abandoned by your family members	1	2
[505] Been ignored/abandoned by your spouse/partner	1	2
[506] Been no longer visited or less frequently visited by relatives	1	2
[507] Been no longer visited or less frequently visited by friends	1	2
Community		
[508] Been gossiped about	1	2
[509] Been treated differently from other community members	1	2
[510] Been checked out to see how you are	1	2
[511] Lost trust/respect from community members	1	2
[512] Rarely have someone to talk to/communicate with/hang out	1	2
[513] Been denied community gatherings and events such as weddings, funerals, social meetings, and ceremonial events	1	2
[514] Lost customers to buy food you make or sell	1	2
[515] Lost customers to buy produce/goods you sell	1	2
[516] Been denied/lost a job	1	2
[517] Your children/grand children are discriminated against; for example, not allowed to play with other kids in the community	1	2
[518] Been teased, insulted, or sworn at	1	2
Health Service Providers e.g. doctor, nurse		
[519] Been given poorer quality health services	1	2

Section 6: Internalized (Self) Stigma

In the past 6 months have you ever **done** the followings as a result of your HIV status?

	Yes	No
[601] Avoid attending school classes, drop out of school, or deny scholarship(s)	1	2
[602] Not apply for a job or deny job promotion	1	2
[603] Spend less time with your family	1	2
[604] Decide not to get married or have a sexual partner	1	2
[605] Decide not to have children or have more children	1	2
[606] Avoid traveling out of town or abroad	1	2

In the past 6 months have you ever had the following **thoughts/feelings** as a result of your HIV status?

	Yes	No
[607] Want to isolate yourself from your family	1	2
[608] Not feel like meeting friends or contact friends less frequently	1	2
[609] Not want to socialize or meet others	1	2
[610] Feel as if your work ability has reduced	1	2
[611] Feel as if your ability to cope with problems in life has reduced	1	2

Section 7: Self-Worth and Self-Efficacy

The following statements are about **your level of confidence in the past 6 months on support seeking**. Please select the most suitable and realistic level of confidence you have on each statement.

	Strongly confident	Confident	Unconfident	Strongly Unconfident
[701] Get family and friends to help you with the things you need (such as household chores, shopping, cooking, or transportation)	4	3	2	1
[702] Get emotional support (such as listening or talking over your problems) from friends and family?	4	3	2	1
[703] Get emotional support (such as listening or talking over your problems) from community resources <u>other than</u> friends or family?	4	3	2	1

The following statements are about **your thoughts/feelings in the past 6 months**. Please select your most suitable and realistic answer for each statement.

	Strongly confident	Confident	Unconfident	Strongly unconfident
[704] I think I'm worthless for my family	4	3	2	1
[705] I am proud that I am useful for my community	4	3	2	1
[706] I can perform activities/do things just like others	4	3	2	1
[707] I don't have anything to be proud of	4	3	2	1
[708] I am unable to stand on my own feet	4	3	2	1
[709] My family won't have any financial problem even without me	4	3	2	1
[710] I am proud that I can help provide income to my family	4	3	2	1
[711] I feel guilty that I can't provide financial support to my family	4	3	2	1

Section 8: Quality of Life

Instruction: Please assess yourself in the **past 2 weeks** and answer the following questions by selecting the level that is most suitable and realistic.

Question Statements	Very much	Much	Moderately	Little	Not at all
[801] Are you satisfied with your health now?	5	4	3	2	1
[802] Do you have enough energy to perform work or activities during a typical day?	5	4	3	2	1
[803] Are you satisfied with your sleep?	5	4	3	2	1
[804] How would you rate your satisfaction in your life such as being happy, peaceful and hopeful?	5	4	3	2	1
[805] How well do you concentrate on your work?	5	4	3	2	1
[806] How satisfied are you with yourself?	5	4	3	2	1
[807] Are you able to accept your physical appearance?	5	4	3	2	1

[808] Are you satisfied that you can perform regular daily activities?	5	4	3	2	1
[809] Are you satisfied with your ability to perform work as usual?	5	4	3	2	1
[810] Are you satisfied with your ability to socialize and make friends as usual?	5	4	3	2	1
[811] Are you satisfied with support or help from your friends?	5	4	3	2	1
[812] Do you feel that your daily life is secured and stable?	5	4	3	2	1
[813] Are you satisfied with the condition of your current house?	5	4	3	2	1
[814] Do you have enough money to spend as necessary?	5	4	3	2	1
[815] Are you satisfied that you can acquire necessary health services?	5	4	3	2	1
[816] How much do you keep abreast of news and information necessary for your life?	5	4	3	2	1
[817] Are you able to rest or relieve your stress?	5	4	3	2	1
[818] Is the environment you live in good for your health?	5	4	3	2	1
[819] Are you satisfied with the way you travel or commute?	5	4	3	2	1
[820] Do you feel that your life is meaningful?	5	4	3	2	1
[821] Are you able to travel or commute by yourself?	5	4	3	2	1
[822] Are you satisfied with the relationships among your family members?	5	4	3	2	1

Section 9: Exposure to Project Interventions

[901a] In the past 12 months, have you participated in any of the Postive Partners Project (PPP) activities? (Spontaneous)

0. No (*Skip to Q. 901c*)

1. Yes

[901b] Could you tell me about the activities? (Probe: anything else?) (circle all activities that are mentioned)

PPP activities	Spontaneous
VDB/Club meeting	1
HIV/AIDS campaign activities such as condom distribution...	2
Attended Population & Development Association training	3
Joined with Fun Fair Event	4
Others specify_____	5

[901c] In the past 12 months, have you ever participated in the following activities? (Read each activity out loud. Respondent is allowed to provide multiple responses.) (Prompted)

Interviewer: if respondent answered question 901b, then ask only those activities that they did not mention. If respondent mentioned all activities then skip to Q902.

PPP activities	Prompted
VDB/Club meeting	1
HIV/AIDS campaign activities such as condom distribution, ...	2
Attended Population & Development Association training	3
Joined with Fun Fair Event	4
Others specify _____	5
<i>Never participated</i>	6

[902] In the past 12 months, have you ever seen the following posters? (Able to provide multiple answers)

Interviewer: Show poster one at a time until complete all 13 posters

List of Posters	Yes	No	Not sure
1. Help PLHIV to be ready for returning to society	1	2	3
2. Though living with HIV, but not being social burden	1	2	3
3. Blame, Eyesight, Posture	1	2	3
4. PLHIV like us, sharing meals not being infected	1	2	3
5. Mother being aware of the fact, receive ARV during pregnancy	1	2	3
6. Types of career do not help if having risk behavior.	1	2	3
7. Care and treatment, ARV adherence	1	2	3
8. Living with HIV is still valuable, not consider yourself as disability.	1	2	3
9. Living with HIV, but not to suffer with it.	1	2	3
10. Forgive them whoever dislike you	1	2	3
11. No concern about, No distraction, No distress	1	2	3
12. Open our mind and help them open their mind, all can live happily	1	2	3
13. Don't judge anyone else by your own notion	1	2	3

[903a] In the past 12 months, have you heard radio dramas about PLHIV through the community broadcasting? (Spontaneous)

0. No (*Skip to Q. 903c*)

1. Yes

[903b] If so, please tell me about the story you heard? (Spontaneous)

1. _____
2. _____
3. _____
4. _____
5. _____

[903c] In the past 12 months, have you ever heard the following radio dramas? (Able to answer more than one answer)

Interviewer: turn on CD of radio drama one story at a time (not longer than 1 min./story) until complete all 11 stories (Prompt)

List of Radio Dramas	Yes	No	Not sure
1. Living with HIV without being shameful	1	2	3
2. Blame on PLHIV means to shorten their life	1	2	3
3. Care about your words, posture expressing to PLHIV	1	2	3
4. Understanding of AIDS 1	1	2	3
5. Understanding of AIDS 2	1	2	3
6. PLHIV are valuable, being able to work and solve the problems	1	2	3
7. PLHIV must be confident on your self-worth	1	2	3
8. PLHIV should understand, realize, and accept the situation	1	2	3
9. Don't hastily decide to what others do	1	2	3
10. Abandon (anxieties) for love, encourage yourself	1	2	3
11. Together, jointly reduce S&D	1	2	3

[904a] In the past 12 months, have you ever seen strip of paper like this with caption about HIV/AIDS or PLHIV written on it ? *Show the sample of paper strip as used in the campaigns*

0 No → skip to 904c

1 Yes:

[904b] What messages have you seen/read about? (Spontaneous)

1. _____
2. _____
3. _____
4. _____
5. _____

[904c] In the past 12 months, have you ever read the following messages on those slips of paper, as shown in this card? (Able to answer more than one answer)

Interviewer: Hand message card to respondent, read out one by one (Prompted)

List of Messages	Yes	No	Not sure
1. Being infected with HIV/AIDS is not shameful	1	2	3
2. PLHIV have rights as normal people	1	2	3
3. PLHIV are still valuable, being able to work and contribute to social	1	2	3
4. PLHIV able to recognize HIV status but need to all worries	1	2	3
5. PLHIV need to be open-minded person, don't think by self that others dislike you	1	2	3
6. For those dislike PLHIV, forgive them	1	2	3
7. PLHIV should love and encourage themselves before requesting from others	1	2	3

Section 10: Buddy's Roles

[1001] **In the past 6 months**, how often have you talked to your buddy?

1. Less than once in a month
2. About once in a month
3. 2-3 times a month
4. About once a week
5. More than once a week
6. Every day

[1002a] **In the past 6 months**, have you ever talked about HIV/AIDS to your buddy?

- 0 No → skip to 1003 1 Yes:

[1002b] **In the past 6 months**, how often have you talked about HIV/AIDS to your buddy? (*Recheck with Q. 1001- equal or less frequency than Q. 1001*)

1. Less than once in a month
2. About once in a month
3. 2-3 times a month
4. About once a week
5. More than once a week
6. Every day

[1003a] **In the past 6 months**, Have you received any financial or material support from your buddy?

- 0 No → skip to 1003c 1 Yes:

[1003b] What type of support did you receive? (Multiple responses are okay)

- | | | |
|--------------------------|------------|------------------------------------|
| 1. Health care | 2. Finance | 3. Occupation |
| 4. Clothes | 5. Food | 6. Taking care of family member(s) |
| 7. Others (specify)_____ | | |

[1003c] Why did you not receive any support?

[1003d] **In the past 6 months**, have you received any emotional or moral support from your buddy?

0. No 1. Yes

[1003c] **In the past 6 months**, have you received support from your buddy for disseminating HIV knowledge in the community?

0. No 1. Yes

[1004a] **In the past 6 months**, have you contributed any financial or material support to your buddy?

0. No → skip to 1004c 1. Yes:

[1004b] What type of financial or material support did you contribute?

- | | | |
|--------------------------|------------|------------------------------------|
| 1. Health care | 2. Finance | 3. Occupation |
| 4. Clothes | 5. Food | 6. Taking care of family member(s) |
| 7. Others (specify)_____ | | |

[1004c] Why did you not contribute any financial or material support to your buddy?

1. _____

2. _____

3. _____

[1004d] **In the past 6 months,** have you contributed any emotional or moral support to your buddy?

0. No because _____

1. Yes

[1004e] **In the past 6 months,** have you contributed disseminating HIV knowledge in the community?

0. No because _____

1. Yes

[1005] Do you and your buddy have better relationship since joining the project ?

0. No because _____

1. Yes

Thank You

Buddy Endline Questionnaire

Code B _____

A1. Type of area: 1. Urban 2. Rural

Section 1: General Information

Demographic

[100] Gender: 1. Male 2. Female

[101] Marital status: 1. Single 2. Married/having partner 3. Divorce
 4. Widowed 5. Others: (please specify) _____

[102] Education:

0.	No formal education	5.	Vocational diploma
1.	Primary school	6.	Undergraduate diploma
2.	Secondary school	7.	Bachelor's degree
3.	High school	8.	Master's degree
4.	Vocational certificate	9.	Doctoral degree

[103] Number of family members in a household (including you): _____ persons

[104] Main occupation) Only one answer)

1	Famer	6	Government/state enterprise employee
2	Vending/Retailing	7	Student
3	Private employee	8	No occupation/housewife
4	Factory worker	Other (please specify):	
5	Casual laborer		

[105] Average income per month

[105.1] Your income (from all sources)	_____ Baht
[105.2] Household income	_____ Baht

[106] How long have you approximately lived in this village/community?

All my life _____ years _____ months (if less than a year)

Section 2: HIV/AIDS Knowledge

Please tell me whether you agree or disagree with the following statements (*Read out each statement*)

	Agree	Dis-agree	Not sure
[201] Being exposed to skin of PLHIV will make you get infected	1	2	3
[202] Being exposed to sweat or saliva of PLHIV will make you get infected	1	2	3
[203] All babies will definitely get HIV if their mother is living with HIV	1	2	3
[204] Sharing personal items, such as nail cutter, toothbrush with PLHIV will make you get infected	1	2	3
[205] HIV/AIDS is transmitted within a group of IDU, F/MSW and MSM only.	1	2	3
[206] Being HIV infected is <u>not</u> different from being sick because of AIDS	1	2	3
[207] Nowadays, there are more varieties of medicine that can inhibit HIV	1	2	3
[208] Having sex with the ones who look clean can prevent getting HIV	1	2	3
[209] Reducing the number of sexual interact can prevent getting HIV.	1	2	3

Section 3: Fear of HIV/AIDS Transmission

Please tell me if you are worried or have fear about **yourself contracting HIV** in response to the following statement.

	Have fear	Do not have fear
[301] Being exposed to saliva of PLHIV	1	2
[302] Being exposed to sweat of PLHIV	1	2
[303] Having meal with PLHIV (food sharing)	1	2
[304] Using the same plate , spoons and forks with PLHIV	1	2
[305] Sharing personal items such as nail cutter, toothbrush with PLHIV	1	2
[306] Share a bedroom with PLHIV	1	2
[307] Taking care of PLHIV	1	2
[308] Carrying PLHIV	1	2
[309] Buying vegetable or fruits from PLHIV who are <u>not showing</u> signs/symptoms	1	2
[310] Buying vegetable or fruits from PLHIV who are <u>showing</u> signs/symptoms	1	2
[311] Consuming food cooked by PLHIV who are <u>not showing</u> signs/symptoms	1	2
[312] Consuming food cooked by PLHIV who are <u>showing</u> signs/symptoms	1	2

Please tell me if you are worried or have fear about **your children contracting HIV** in response to the following statement.

	Have fear	Do not have fear
[313] Your child playing with children living with HIV/AIDS	1	2
[314] Your child playing with PLHIV's children	1	2
[315] Your child studying with teacher living with HIV/AIDS	1	2

Section 4: Stigma and Discrimination - Individual

Do **YOU** agree or disagree with the following statements?

	Agree	Disagree
[401] PLHIV should be ashamed of themselves	1	2
[402] I would feel ashamed if someone in my family had HIV/AIDS	1	2
[403] PLHIV are promiscuous	1	2
[404] It is the promiscuous men who spread HIV in your community	1	2
[405] It is the promiscuous women who spread HIV in your community	1	2
[406] HIV is a punishment from god (in Thai: result of bad Karma)	1	2
[407] I would feel ashamed if I was infected with HIV	1	2
[408] HIV is a punishment for bad behavior	1	2
[409] PLHIV are to be blamed for bringing disease to the community	1	2

Section 5: Awareness of PLHIV stigma

[501] Have you ever heard about PLHIV stigma?

- 0. Never (*skip to question 601*)
- 1. Yes

[502] What do you think “PLHIV stigma”, is/are? (*Please do not read the answers*) circle all that apply

- 1. Separation PLHIV from others
- 2. Feeling of PLHIV being different from general people; look strange from normal people
- 3. Treating to PLHIV differently from general people
- 4. Fear, being careful, or avoid to interact or touch PLHIV
- 5. Blame on PLHIV such as insult, detest, blame that getting HIV infected is wrong, ashamed.
- 6. Gossip about
- 7. Have feeling PLHIV are bad such as being sex workers, drug users, or having inappropriate sexual behavior
- 8. Not respect or rely on PLHIV
- 9. Do not have good attitude to PLHIV such as dislike, do not want to associate with
- 10. PLHIV have feeling of hating themselves such as feeling worthless, misconduct
- 11. Respondent unable to explain or incorrectly explain
- 12. Don't know
- 13. Others (specify) _____

Section 6: Exposure to HIV/AIDS information

[601] In the past 12 months, from what sources have you been exposed to HIV/AIDS information?
(Read out each answer)

0	Not exposed at all	6	Community broadcasting
1	TV	7	Training
2	Radio	8	Board/bulletin
3	Newspaper	9.	PDA staff
4	Leaflet/ brochure/ free books	Others (specify)	
5	Poster		

[602] In the past 12 months, have ____ (*ask one by one*) ____ talked with you about HIV/AIDS?

		Yes	No
[602.1]	Your family members	1	2
[602.2]	Your friends	1	2
[602.3]	Your neighbors	1	2

Part 7: Exposure to project interventions

[701a] In the past 12 months, have you participated in any of the Positive Partners Project (PPP) activities? (Spontaneous)

0. No (*Skip to question 701c*)

1. Yes

[701b] Could you tell me about the activities? (Probe: anything else?) (circle all activities that are mentioned)

PPP activities	Spontaneous
VDB/Club meeting	1
HIV/AIDS campaign activities such as condom distribution...	2
Attended Population & Development Association training	3
Joined with Fun Fair Event	4
Others specify_____	5

[701c] In the past 12 months, have you ever participated in the following activities? (Read each activity out loud. Respondent is allowed to provide multiple responses.) (Prompted)

Interviewer: if respondent answered question 701b, then ask only those activities that they did not mention. If respondent mentioned all activities then skip to question 702.

PPP activities	Prompted
VDB/Club meeting	1
HIV/AIDS campaign activities such as condom distribution...	2
Attended Population & Development Association training	3
Joined with Fun Fair Event	4
Others specify_____	5
<i>Never participated</i>	6

[702] In the past 12 months, have you ever seen the following posters? (Able to provide multiple answers)

Interviewer: Show posters one at a time until complete all 13 posters

List of Posters	Yes	No	Not sure
1. Help PLHIV to be ready for returning to society	1	2	3
2. Though living with HIV, but not being social burden	1	2	3
3. Blame, Eyesight, Posture	1	2	3
4. PLHIV like us, sharing meals not being infected	1	2	3
5. Mother being aware of the fact, receive ARV during pregnancy	1	2	3
6. Types of career do not help if having risk behavior.	1	2	3
7. Care and treatment, ARV adherence	1	2	3
8. Living with HIV is still valuable, not consider yourself as disability.	1	2	3
9. Living with HIV, but not to suffer with it.	1	2	3
10. Forgive them whoever dislike you	1	2	3
11. No concern about, No distraction, No distress	1	2	3
12. Open our mind and help them open their mind, all can live happily	1	2	3
13. Don't judge anyone else by your own notion	1	2	3

[703a] In the past 12 months, have you heard radio drama about PLHIV through the community broadcasting?

0. No (*Skip to question 703c*) 1. Yes

[703b] If so, please tell me about the story you heard?(Spontaneous)

1. _____
2. _____
3. _____
4. _____
5. _____

[703c] In the past 12 months, have you ever heard the following radio dramas? (Multiple answers)

Interviewer: turn on CD of radio drama one story at a time (not longer than 1 min./story) until complete all 11 stories (Prompted)

List of Radio Dramas	Yes	No	Not sure
1. Living with HIV without being shameful	1	2	3
2. Blame on PLHIV means to shorten their life	1	2	3
3. Care about your words, posture expressing to PLHIV	1	2	3
4. Understanding of AIDS 1	1	2	3
5. Understanding of AIDS 2	1	2	3
6. PLHIV are valuable, being able to work and solve the problems	1	2	3
7. PLHIV must be confident on your self-worth	1	2	3
8. PLHIV should understand, realize, and accept the situation	1	2	3
9. Don't hastily decide to what others do	1	2	3
10. Abandon (anxieties) for love, encourage yourself	1	2	3
11. Together, jointly reduce S&D	1	2	3

[704a] In the past 12 months, have you seen strip of paper like this with caption about HIV/AIDS or PLHIV written on it? *Show the sample of paper strip as used in the campaigns*

0. No → skip to 704c 1. Yes

[704b] What messages have you seen/read about? (Spontaneous)

1. _____
2. _____
3. _____
4. _____
5. _____

[704c] In the past 12 months, have you ever read the following messages as shown in this card? (Able to answer more than one answer)

Interviewer: Hand message card to respondent, read out one by one (Prompt)

List of Messages	Yes	No	Not sure
1. Being infected with HIV/AIDS is not shameful			
2. HIV/AIDS like general disease, able to look after			
3. Getting HIV infected is different from HIV/AIDS patient.			
4. PLHIV have rights as normal people			
5. We should not blame PLHIV as not good, promiscuous persons			

6. We should not blame PLHIV as being social burden			
7. We should express dislikes to PLHIV with verbal, sight, and posture			
8. We should treat PLHIV as our family members			
9. HIV/AIDS is not transmitted within specific groups, all have opportunity getting infected			
10.Touching, hugging, sweat, saliva, meal sharing, sharing toothbrush /nail cutter are not causing HIV/AIDS infection			
11.Only few babies getting HIV/AIDS infected from mother			
12.Having ARV during pregnancy help reducing HIV/AIDS			
13.infection rate of infant			
14.Chance of becoming AIDS patient reduce if receiving care and treatment and ARV adherence			
15.PLHIV are still valuable, being able to work and contribute to social			

Section 8: Buddy Role Performance

[801] **In the past 6 months**, how often have you talked to your HIV positive buddy?

1. Less than once in a month
2. About once in a month
3. 2-3 times a month
4. About once a week
5. More than once a week
6. Every day

[802a] **In the past 6 months**, have you ever talked about HIV/AIDS to your HIV positive buddy?

0. No → skip to 803a 1. Yes

[802b] **In the past 6 months**, how often have you talked about HIV/AIDS to your HIV positive buddy?
(Recheck with Q. 801- equal or less frequency than Q. 801)

1. Less than once in a month
2. About once in a month
3. 2-3 times a month
4. About once a week
5. More than once a week
6. Every day

[803a] **In the past 6 months**, have you received any financial or material support from your buddy?

0. No → skip to 803c 1. Yes

[803b] What type of support did you receive? (Multiple responses are okay)

1. Health care 2. Finance 3. Occupation 4. Clothes
5. Food 6. Taking care of family member(s) 7. Others (specify)_____

[803c] Why did you not receive any support?

1. _____
2. _____
3. _____

[803d] **In the past 6 months,** have you received any emotional or moral support from you buddy?

0. No 1. Yes

[803e] **In the past 6 months,** have you received support for disseminating HIV knowledge in the community

0. No 1. Yes

[804a] **In the past 6 months,** Have you contributed any financial or material support to your HIV positive buddy?

0. No → skip to 804 1. Yes

[804b] What type of financial or material support did you contribute?

1. Health care 2. Finance 3. Occupation 4. Clothes
5. Food 6. Taking care of family member(s) 7. Others (specify)_____

[804c] Why did you not contribute any financial or material support to your HIV positive buddy?

1. _____
2. _____
3. _____

[804d] **In the past 6 months,** have you contributed any emotional or moral support to your HIV positive buddy?

0. No 1. Yes

[804e] **In the past 6 months,** have you contributed disseminating HIV knowledge in the community?.

0. No 1. Yes

[805] **In the past 6 month** have you conveyed messages or knowledge regarding HIV/AIDS to others?-

0. No (*Close the interview*) 1. Yes

[806] **In the past 6 month** how often did you convey messages or knowledge regarding HIV/AIDS to others?

1. Less than once in a month
2. About once in a month
3. 2-3 times a month
4. About once a week
5. More than once a week
6. Every day

[807] **In the past 6 months,** Who did you convey messages or knowledge regarding HIV/AIDS to?
(Multiple answers)

1. My family members
2. PLHA's family members
3. Neighbors
4. Other people in my village/community
Other, Specify_____

Thank You

Community/Family Member Endline Questionnaire

Name: _____ Surname: _____

Address: house number _____ Moo: _____ Village: _____

Sub-district: _____ District: _____ Province: _____

PDA Center: _____

Date of Interview: _____ Time: _____ minutes

Interviewer: _____

A1. Type of area: 1. Urban 2. Rural

Section 1: General Information

Demographic

[101] Gender 1. Male 2. Female

[102] Age _____ years Year of Birth: _____

[103] Marital status: 1. Single 2. Married/having partner 3. Divorce
4. Widow 5. Other: (please specify) _____

[104] Educational level

0.	No formal education	5.	Vocational diploma
1.	Primary school	6.	Undergraduate diploma
2.	Secondary school	7.	Bachelor's degree
3.	High school	8.	Master's degree
4.	Vocational certificate	9.	Doctoral degree

[105] Number of family members in a household (including you): _____ person (s)

[106] Main occupation) Single answer)

1	Farmer	6	Government/state enterprise employee
2	Vending/Retailing	7	Student
3	Private employee	8	No occupation/housewife
4	Factory worker	Other (please specify): _____	
5	Casual laborer		

[107] Average income per month

[107.1] Your own income (from all sources) _____ Baht
[107.2] Household income _____ Baht

[108] How long have you approximately lived in this village/community?

___All my life___ years _____ months (if less than a year)

Section 2: HIV/AIDS Knowledge

Please tell me whether you agree or disagree with the following statement (*read out each statement*)

	Agree	Dis-agree	Not sure
[201] Being exposed to skin of PLHIV will make you get infected	1	2	3
[202] Being exposed to sweat or saliva of PLHIV will make you get infected	1	2	3
[203] All babies will definitely get HIV/AIDS if their mother is living with HIV	1	2	3
[204] Sharing personal items, such as nail cutter, toothbrush with PLHIV will make you get infected	1	2	3
[205] HIV/AIDS is transmitted within a group of IDU, F/MSW and MSM only	1	2	3
[206] Being HIV/AIDS infected is not different from being sick because of AIDS	1	2	3
[207] Nowadays, there are more varieties of medicine that can inhibit HIV	1	2	3
[208] Having sex with the ones who look clean can prevent getting HIV	1	2	3
[209] Reducing the number of sexual interact can prevent getting HIV/AIDS	1	2	3

Section 3: Fear of HIV Transmission

Please tell me if you are worried or have fear about **yourself contracting HIV** in response to the following statement.

	Have fear	Do not have fear
[301] Being exposed to saliva of PLHIV	1	2
[302] Being exposed to sweat of PLHIV	1	2
[303] Having meal with PLHIV (food sharing)	1	2
[304] Using the same plate , spoons and forks with PLHIV	1	2
[305] Sharing personal items, such as nail cutter, toothbrush with PLHIV	1	2
[306] Share a bedroom with PLHIV	1	2
[307] Taking care of PLHIV	1	2
[308] Carrying PLHIV	1	2
[309] Buying vegetable or fruits from PLHIV who are not showing signs/symptoms	1	2
[310] Buying vegetable or fruits from PLHIV who are showing signs/symptoms	1	2
[311] Consuming food cooked by PLHIV who are not showing signs/symptoms	1	2
[312] Consuming food cooked by PLHIV who are showing signs/symptoms	1	2

Please tell me if you are worried or have fear about **your children contracting HIV** in response to the following statement.

	Have fear	Do not have fear
[313] Your child playing with children living with HIV/AIDS	1	2
[314] Your child playing with PLHIV's children	1	2
[315] Your child studying with teacher living with HIV/AIDS	1	2

Section 4: Stigma and Discrimination - Individual

Do YOU agree or disagree with the following statements?

	Agree	Disagree
[401] PLHIV should be ashamed of themselves	1	2
[402] I would feel ashamed if someone in my family had HIV/AIDS	1	2
[403] PLHIV are promiscuous	1	2
[404] It is the promiscuous men who spread HIV in your community	1	2
[405] It is the promiscuous women who spread HIV in your community	1	2
[406] HIV -is a punishment from god (in Thai: result of bad Karma)	1	2
[407] I would feel ashamed if I was infected with HIV	1	2
[408] HIV is a punishment for bad behavior	1	2
[409] PLHIV are to be blamed for bringing disease to the community	1	2

Section 5: Awareness of PLHIV stigma

[501] Have you ever heard about PLHIV stigma?

0. Never (*skip to section 6*) 1. Yes

[502] What do you think “PLHIV stigma”, is/are? (*Please do not read the answers*) circle all that apply

1. Separation PLHIV from others
2. Feeling of PLHIV being different from general people; look strange from normal people
3. Treating to PLHIV differently from general people
4. Fear, being careful, or avoid to interact or touch PLHIV
5. Blame on PLHIV such as insult, detest, blame that getting HIV infected is wrong, ashamed.
6. Gossip about
7. Have feeling PLHIV are bad such as being sex workers, drug users, or having inappropriate sexual behavior
8. Not respect or rely on PLHIV
9. Do not have good attitude to PLHIV such as dislike, do not want to associate with
10. PLHIV have feeling of hating themselves such as feeling worthless, misconduct.
11. Respondent unable to explain or incorrectly explain
12. Don't know
13. Others (specify)_____

Section 6: PLHIV S& D experience in community

[601] Do you personally know someone living with HIV or AIDS?

0. No (*Skip to question 603*) 1. Yes

[602] How is this person related to you? (Multiple answers)

1. Mother	7. Child
2. Father	8. Other Relative
3. Sister	9. Friend
4. Brother	10. Neighbor
5. Husband	11. Other people in community
6. Wife	12. Other Specify_____

[603] Are there **any PLHIV** in your community?

0. No *(skip to question 701)*

1. Yes

[604] **In the past 12 months**, have you known/heard that someone has experienced the following because they were known to have, or suspected of having HIV/AIDS?) *Read out each statement(*

	Yes	No	Don't know
Family, relatives, and friends			
[604.1] Been excluded from your family to have meals alone, or use a different set of food containers and cutlery from family members'	1	2	3
[604.2] Been isolated from your family to stay in a separate room or outside the house (but in the same compound)	1	2	3
[604.3] Been isolated by your family members(still live in the same house)	1	2	3
[604.4] Been ignored/abandoned by family members	1	2	3
[604.5] Been ignored/abandoned by spouse/partner	1	2	3
[604.6] Been no longer visited or visited less frequently by relatives	1	2	3
[604.7] Been no longer visited or visited less frequently by friends	1	2	3
Community			
[604.8] Been gossiped about	1	2	3
[604.9] Been treated differently from other community members	1	2	3
[604.10] Been checked out to see how they are	1	2	3
[604.11] Lost trust/respect from community members	1	2	3
[604.12] Rarely have someone to talk to/communicate with/hang out	1	2	3
[604.13] Been denied community gatherings and events such as weddings, funerals, social meetings, and ceremonial events	1	2	3
[604.14] Lost customers to buy food PLHIV make or sell	1	2	3
[604.15] Lost customers to buy products/goods PLHIV sell	1	2	3
[604.16] Been denied/lost a job	1	2	3
[604.17] PLHIV's children/grand children are discriminated against; for example, not allowed to play with other kids in the community	1	2	3
[604.18] Been teased, insulted, or sworn at	1	2	3

Section 7: Exposure to HIV/AIDS information

[701] **In the past 12 months**, from what sources have you been exposed to HIV/AIDS information?
(*Read out each answer*)

0	Not exposed at all	6	Community broadcasting
1	TV	7	Training
2	Radio	8	Board/bulletin
3	Newspaper	9	PDA staff
4	Leaflet/ brochure/ free books	Others (specify)	
5	Poster		

[702] **In the past 12 months**, have ____ (*ask one by one*) ____ talked with you about HIV/AIDS?

	Yes	No
[705.1] Your family members	1	2
[705.2] Your friends	1	2
[705.3] Your neighbors	1	2

Section 8: Exposure to project interventions

[801a] In the past 12 months, have you participated in any of the Positive Partner Project (PPP) activities? (Spontaneous)

0. No (*Skip to question 801c*) 1. Yes

[801b] Could you describe the activities? (circle all that apply)

PPP activities	Spontaneous
VDB/Club meeting	1
HIV/AIDS campaign activities such as condom distribution...	2
Joined with Fun Fair Event	4
Others specify _____	5

[801c] In the past 12 months, have you ever participated in the following activities? (Read each activity out loud. Respondent able to provide multiple answers)

Interviewer: if respondent answered question 801b, then ask only those activities that they did not mention. If respondent mentioned all activities then skip to question 802.

PPP activities	Prompted
VDB/Club meeting	1
HIV/AIDS campaign activities such as condom distribution...	2
Joined with Fun Fair Event	4
Others specify _____	5
<i>Never participated</i>	6

[802] In the past 12 months, have you ever seen the following posters? (Multiple answers)

Interviewer: Show poster s; one poster at a time until complete all 13 posters (Prompted)

List of Posters	Yes	No	Not sure
1. Help PLHIV to be ready for returning to society	1	2	3
2. Though living with HIV, but not being social burden	1	2	3
3. Blame, Eyesight, Posture	1	2	3
4. PLHIV like us, sharing meals not being infected	1	2	3
5. Mother being aware of the fact, receive ARV during pregnancy	1	2	3
6. Types of career do not help if having risk behavior.	1	2	3
7. Care and treatment, ARV adherence	1	2	3
8. Living with HIV is still valuable, not consider yourself as disability.	1	2	3
9. Living with HIV, but not to suffer with it.	1	2	3
10. Forgive them whoever dislike you	1	2	3
11. No concern about, No distraction, No distress	1	2	3
12. Open our mind and help them open their mind, all can live happily	1	2	3
13. Don't judge anyone else by your own notion	1	2	3

[803a] In the past 12 months, have you ever heard a radio drama about PLHIV through the community broadcasting on the community speakers?

0. No (*Skip to question 803c*) 1. Yes

[803b] If so, please tell me what story about you ever heard? (Spontaneous)

1. _____
2. _____
3. _____
4. _____
5. _____

[803c] In the past 12 months, have you ever heard the following radio dramas? (Able to answer more than one answer)

Interviewer: turn on CD of radio drama; one story at a time (not longer than 1 min./story) until complete all 11 stories

List of Radio Dramas	Yes	No	Not sure
1. Living with HIV without being shameful	1	2	3
2. Blame on PLHIV means to shorten their life	1	2	3
3. Care about your words, posture expressing to PLHIV	1	2	3
4. Understanding of AIDS 1	1	2	3
5. Understanding of AIDS 2	1	2	3
6. PLHIV are valuable, being able to work and solve the problems	1	2	3
7. PLHIV must be confident on your self-worth	1	2	3
8. PLHIV should understand, realize, and accept the situation	1	2	3
9. Don't hastily decide to what others do	1	2	3
10. Abandon (anxieties) for love, encourage yourself	1	2	3
11. Together, jointly reduce S&D	1	2	3

[804a] In the past 12 months, have you ever seen strip of paper like this with caption about HIV/AIDS or PLHIV written on it? *Show the sample of paper strip as used in the campaigns*

0 No → skip to 804c

1 Yes:

[804b] What messages have you seen/read about? (Spontaneous)

1. _____
2. _____
3. _____
4. _____
5. _____

[804c] In the past 12 months, have you ever read the following messages as shown in this card? (Able to answer more than one answer) (Prompted)

Interviewer: Hand message card to respondent, read out one by one

List of Messages	Yes	No	Not sure
1. Being infected with HIV/AIDS is not shameful	1	2	3
2. HIV/AIDS like general disease, able to look after	1	2	3
3. Getting HIV infected is different from HIV/AIDS patient.	1	2	3
4. PLHIV have rights as normal people	1	2	3
5. We should not blame PLHIV as not good, promiscuous persons	1	2	3
6. We should not blame PLHIV as being social burden	1	2	3
7. We should express dislikes to PLHIV with verbal, sight, and posture	1	2	3
8. We should treat PLHIV as our family members	1	2	3
9. HIV/AIDS is not transmitted within specific groups, all have opportunity getting infected	1	2	3
10.Touching, hugging, sweat, saliva, meal sharing, sharing toothbrush /nail cutter are not causing HIV/AIDS infection	1	2	3
11.Only few babies getting HIV/AIDS infected from mother	1	2	3
12. Having ARV during pregnancy help reducing HIV/AIDS infection rate of infant	1	2	3
13. Chance of becoming AIDS patient reduce if receiving care and treatment and ARV adherence	1	2	3
14. PLHIV are still valuable, being able to work and contribute to social	1	2	3

Thank You