

An Evaluation

**Community-Based Psychosocial
Intervention for HIV-Affected Children
and their Caregivers:
Evaluation of The Salvation Army's
Mama Mkubwa Program in Tanzania**

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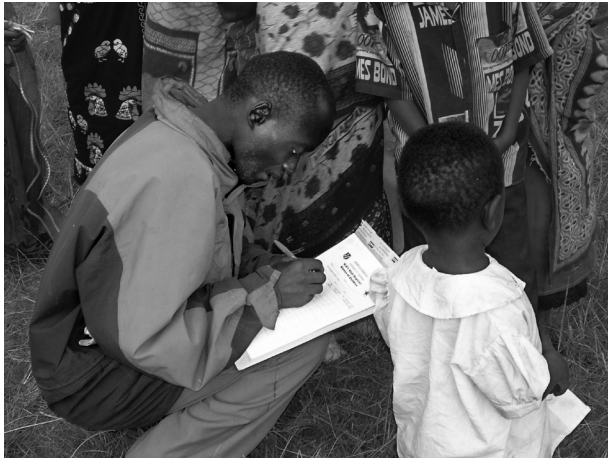
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Acronyms

AIDS	acquired immune deficiency syndrome
HIV	human immunodeficiency virus
MVC	Most vulnerable children
OVC	orphans and vulnerable children
PLWHA	people living with HIV and AIDS
SDQ	Strengths and Difficulties Questionnaire
USAID	U.S. Agency for International Development

Introduction



Mama Mkubwa volunteer Eliud White records attendance at a kids' club meeting.

MEASURE Evaluation photo by Megan Littrell

In sub-Saharan Africa, an estimated 12 million children aged 17 and younger have lost one or both parents, mainly due to the HIV/AIDS epidemic.¹ Tanzania alone is reported to have an estimated 1.2 million orphans. In addition, several million other children live with chronically ill and dying parents or caregivers, and others are living with HIV/AIDS themselves. These situations have exposed children to various life threats including dire household poverty, hunger, stigma and discrimination, abuse, and psychological problems. Despite recognition of the magnitude of these challenges, there is little evidence to guide programs designed to address the needs of, and to improve the well-being of, orphans and other children made vulnerable (OVC) by HIV/AIDS.

To address this knowledge gap, MEASURE Evaluation, using U.S. President's Emergency Plan for AIDS Relief funds from the U.S. Agency for International Development (USAID), evaluated four programs targeting OVC — two in Kenya and two in Tanzania. The main purpose of these program evaluations was to find out what program interventions work and which do not work in terms of improving the well-being of children aged 8-14 and their caregivers in households and communities most affected by HIV/AIDS.

This report presents the post-test findings from an outcome evaluation of the Mama Mkubwa community-centered psychosocial support program implemented by the Salvation Army, Tanzania Command, that provides assistance to OVC and their families and communities.² In addition, the paper discusses the programmatic implications of the findings for program implementers and policy-makers to help them make informed decisions on how to meet OVC needs and reduce their vulnerabilities.

Intervention Model

In response to the growing needs of OVC and their families, The Salvation Army (TSA), Tanzania Command, started implementing the Mama Mkubwa program in March 2002, in Mbeya region, Mbeya Rural District, Tanzania. The main goals of the program are to strengthen community-based responses to meet the needs of OVC and provide psychosocial support to OVC.² To accomplish these objectives, the TSA Mama Mkubwa program employs two key intervention strategies (see intervention strategies, below).

It is also noteworthy that this evaluation has not covered all of the program intervention components of the Mama Mkubwa program. Other activities include income generating activities and livelihood skills for youth, and referrals for other complementary services.²

The Mama Mkubwa Program Key Intervention Strategies

Engaging Mama Mkubwa volunteers to provide community-based psychosocial support

The Salvation Army program aims to mobilize, train, and provide ongoing technical support to community-based Mama Mkubwa (a Swahili term meaning “big aunt”) volunteer committee teams, which in turn provide psychosocial support to OVC and their families in the community. Each Mama Mkubwa committee team is made of 10 to 30 volunteers who attend a four-day training provided by TSA. The training for these community counselors covers topics pertaining to psychosocial support, community counseling techniques, and guidance in the implementation of kids’ clubs. The volunteer committees identify vulnerable children and families in their communities and visit them regularly in the children’s homes to provide psychosocial and other practical support. Each volunteer is expected to visit eight to 10 assigned homes once a month to counsel OVC and their caregivers; provide educational support, such as homework assistance and encouragement to school-age OVC; offer HIV-prevention education; and provide referrals for other specialized services. Volunteers also conduct sensitization and mobilization meetings in the broader community.

Running kids’ clubs

The trained Mama Mkubwa volunteers also create and run kids’ clubs that are open to all children and youth in the community, with assistance from TSA program staff. Kid’s clubs meetings are held on average twice a week and two Mama Mkubwa volunteers facilitate 25 to 27 children in a kids’ club. Although, kids’ club meeting agendas may vary by committee, the general focus is to provide psychosocial and emotional support to children; promote school attendance and provide homework assistance; reduce social isolation; and reduce stigma and discrimination. Kids’ club activities include recreation (e.g., plays, traditional dances, and songs); peer and community counseling; and other activities aiming to enhance social skills.

Methods

Overview

Our strategy was to collect data on program characteristics through a case study, and from children and their primary caregivers through interviews and surveys. The case study was conducted in mid-2006 to help explain how the program operates in terms of its intervention strategies, approach to working with the community, beneficiary selection process, services provided to beneficiaries, and provide details of other program activities. Methods for the case study included document review, observation, and in-depth interviews.² In addition, initial efforts were made to ensure the participation of OVC stakeholders and experts at local and global levels in the evaluation process and to make sure that there was consensus regarding study objectives and other expectations. Consultations started with a meeting involving USAID, other international donors, and OVC experts to review study objectives and study design including sampling, set priorities relating to OVC programs' information needs, have their buy-in, and help identify and select sites and programs for the evaluation study. This was followed by the development of the research protocol and data collection tools.

Study Setting

The study was conducted in Mbeya region located in the southwestern part of Tanzania. The region has a population of 2 million³ comprised mostly of subsistence farmers. It is administratively divided into eight districts: Chunya, Mbarali, Mbozi, Rungwe, Kyela, Ileje, Mbeya Urban, and Mbeya Rural. Mbeya Rural and Ileje districts are among the poorest in the region, with 31% of the population reported to be living below the poverty line in 2005.⁴ In 2004, Mbeya region also had the highest HIV and orphan prevalence rates in the country (13.5% and 17.4%, respectively) in Tanzania.⁵ This program evaluation took place in Ilembo ward in Mbeya Rural district.

Study Design

We applied a post-test study design to evaluate the effect of exposure to the TSA/Mama Mkubwa program interventions on child and caregiver outcomes. The subjects in the study sample were randomly selected from a list of children on the kids' club registry obtained from TSA staff. Children aged between 8 and 14 years and their caregivers were selected for this study. The study focused on this particular age-group because children within this age-range constitute the majority of those enrolled in the OVC programs. For example, 1,500 children of a total of 2,240 (67%) on the kids' club registries were aged 8-14 years. The study examined the differences in outcomes between those children or caregivers who were either exposed to Mama Mkubwa volunteer home visits or kids' clubs interventions in the past year and those not exposed. In addition, children's exposure to varying intervention intensities was assessed, where possible.

Ethical Considerations

Before data collection, ethical approvals for the research protocol and data collection instruments were obtained from a Tulane University institutional review board in the United States and from the National Institute for Medical Research and the Commission for Science and Technology in Tanzania. Other ethical procedures, including protocols for consent, referrals, and confidentiality were also put in place before data collection started. All potential respondents were informed at the study's outset that their participation was voluntary and did not affect their eligibility to receive services from the program, and their verbal consent for participation was obtained. Caregivers provided consent for themselves and their children. Assent was also acquired from children themselves, using child-friendly language

to support their understanding. If consent was given, the interviewer signed the consent form for the participant. To maintain confidentiality, identifying information was removed prior to data entry and only unique numerical identifiers were used.

Data Collection

Four questionnaires were developed, field-tested, and administered to each OVC household to collect data on the household schedule (roster and other socio-economic factors), caregiver demographics, child characteristics (aged 8-14 years), and child well-being from both the perspective of the child and that of the child's caregiver. Up to two children per household could be included. From June to September, 2007, interviews were carried out with 487 OVC households (78.5% of 620 approached). A total of 564 OVC aged 8-14 years (81.0 % of those approached), and 488 of their caregivers were successfully interviewed.

Analysis

The objective of this program evaluation was to determine whether or not an intervention strategy, specifically home visits from Mama Mkubwa and kids' club participation, resulted in expected outcomes for children and their caregivers. As a result, we examined the outcomes of those exposed to the interventions and those who were unexposed.

We examined 12 child and caregiver outcome variables that are summarized in the following domains: psychosocial well-being of caregivers, three indicators; psychosocial well-being of children, three indicators; child-caregiver relationship, one indicator; stigma and discrimination, one indicator; child and caregiver's access to basic needs and rights, four indicators (i.e., child's access to education, two indicators; legal protection outcomes, two indicators). Many of these outcome measures were scales, and a Cronbach's coefficient alpha of 0.60 or higher was considered acceptable.

Descriptive analyses were conducted to compare the unadjusted means and percentages among those exposed and unexposed to the interventions for each study outcome. The relationships between intervention variables and study outcome measures were assessed using one-way analysis of variance and chi-square tests for continuous and categorical outcomes, respectively. If the relationship was significant ($p < 0.05$), further analyses were conducted to assess whether these differences persisted after controlling for other confounding variables (multivariate analysis) using linear or logistic regression, as appropriate. The control variables for caregiver-level analyses were age; marital status (married, widowed, or other); caregiver's reported chronic illness (for three or more months in past year); household poverty status (wealth assets index); ever attended school; and number of children living in the household (three or fewer, more than three). In the child-level analyses, we controlled for child characteristics including age, gender, orphan status (non-orphan, maternal, paternal, or double), relationship to caregiver (mother, grandmother, or other), and number of different homes the child had lived in the past year.

Study Strengths and Limitations

The key strength of this study design was that it yielded immediate data on program effects. In addition, the non-experimental study design, such as was applied here, is considered more ethical as in no instance were services withheld from children or their caregivers (thus, overcoming one of the ethical criticisms in program evaluations). This is because the study sample of children was comprised of those receiving services (the "exposed" group), and a comparison group of those who were able to access the same services in the community, but had not yet done so (the "unexposed" group).

However, the post-test study design is also a major limitation that one should be aware of when interpreting the results of this evaluation. The

absence of baseline data makes it impossible to make conclusions concerning change in outcomes resulting from program exposure. Therefore, the differences seen between those who were exposed and unexposed to the intervention strategies cannot be definitively attributed to the program intervention. Nonetheless, it was expected that the children in the sample were roughly equivalent in characteristics, except for intervention exposure, since they were all drawn from the same community — Ilembo ward. Further, potential socioeconomic and demographic differences between exposed and unexposed individuals were adjusted for in the analyses.

Another related limitation concerns selection bias. Initially, we assumed that all those children in the kids' club registry books had exposure to TSA program interventions; however, many of them reported being “unexposed” in the past year, possibly out of choice (suggesting that differences

may have already existed between those who self-selected to participate and those who did not; or, alternatively, those who chose to receive services may have had an increased need for these interventions and may have been worse-off at the start of the intervention with respect to the outcomes of interest). On the other hand, they may have already been better off on the outcomes measured in this study. For instance, perhaps only certain children with needs were referred to the kids' clubs.

It is also noteworthy that this evaluation has not considered the possibility of other programs operating in the same area as The Salvation Army's Mama Mkubwa program. Furthermore, this study focused on evaluating the effects of interventions provided to children aged 8-14 years and their caregivers, leaving out other program beneficiaries who may be benefiting as well.

Results

Sample Description

Tables 1 and 2 present the demographic and background characteristics of the children and their caregivers included in the analysis.

Table 1 presents the demographic and socioeconomic characteristics of the 488 caregivers interviewed in Mbeya, Tanzania. Results show that the mean age of caregivers in the sample was 41.4 years and the majority were female (90.8%). About half of caregivers had attended school (53.3%) and (53.9%) were married or living with someone as if married, while (36.9%) were widowed. One out of every three caregivers (29.7%) reported being sick for (at least) three months of the past year — a proxy for an HIV-related illness. The average number of children in the households was 3.4 and most caregivers (57.6%) reported caring for three or fewer children. Most caregivers (59.1%) were living in poor households (i.e., living in the two lowest wealth quintiles, with two or fewer assets), 19.5% were living in medium wealth households, and 21.5% were relatively well-off (in the two highest quintiles).

Household wealth status was assessed using a wealth index derived from a composite measure on a household’s ownership of selected assets including television, radio, bicycles, paraffin lamp, telephone, household living conditions including roof type, and water source and sanitation facilities).⁶ The household living conditions considered were whether the family had a better roof type (iron sheets and tiles), a latrine or toilet, electricity, used coal or paraffin for cooking, and whether they get safe drinking water (from a tap, borehole, or protected well). Each item or good-living condition was given a score of 1 if “yes” and 0 if “no.” The cumulative score for each household were divided into five quintiles (lowest number signifying fewer items owned and hence poorest and highest score indicative of richest households relative to all other households surveyed). In

addition, household vulnerability related to food insecurity was assessed. Food insecurity was assessed using the Household Food Insecurity Access Scale, a nine-item scale designed to measure the prevalence and severity of household food insecurity, developed by USAID’s Food and Nutrition Technical Assistance Project.⁷ Results show that a majority of caregivers (86.3%) live in moderately to severely food insecure households.

Table 1. Description of Caregivers in Sample

Factor	Percent (N=488)
Gender	
<i>male</i>	9.2
<i>female</i>	90.8
Age group (years)	
<i>under 30</i>	17.2
<i>30 to 49</i>	58.4
<i>50 and older</i>	24.4
Mean age = 41.4	
Ever attended school	
<i>yes</i>	53.3
Caregiver ill 3 months in past year	
<i>yes</i>	29.7
Caregiver marital status	
<i>married/living with someone</i>	53.9
<i>widowed</i>	36.9
<i>other</i>	9.2
Number of children in household	
<i>3 or fewer</i>	57.6
<i>more than 3</i>	42.4
Mean = 3.4 children	
Household wealth status	
<i>poorest (1 or no assets)</i>	27.5
<i>poor (2 assets)</i>	31.6
<i>middle (3 assets)</i>	19.5
<i>rich (4 assets)</i>	11.9
<i>richest (5 or more assets)</i>	9.6
Household food security status	
<i>food secure</i>	9.6
<i>mildly food insecure</i>	4.1
<i>moderately food insecure</i>	41.4
<i>severely food insecure</i>	44.9

Table 2 presents the demographic characteristics of 564 children in the study sample. The sample contained roughly equal numbers of boys and girls. The mean age for the children was 11.7 with a higher proportion (58.9%) aged 12-14 years, and 41.1% aged 8-11 years.

Two-thirds of these children had lost one or both parents, distributed as single maternal orphans (14%), single paternal orphans (26.6%), and double orphans (25.6%). Slightly over half of sampled children (52.6%) had their biological mothers as their primary caregivers. Also, 14.2% of the children reported living in more than one home in the past year, indicative of disruptions in the child's life especially following the deaths of both parents. This was shown in an analysis conducted to examine the relationship between orphan status and number of homes the child lived in the past year, revealing that indeed such disruptions were most prevalent among double orphans and lowest among single paternal orphans (16.7% and 10.2%, respectively).

Table 2. Description of Children in Sample

Factor	Percent (N=564)
Gender	
<i>male</i>	50.5
<i>female</i>	49.5
Age group (years)	
8 to 11 (<i>mid-childhood</i>)	41.1
12 to 14 (<i>adolescence</i>)	58.9
Mean age = 11.7	
Child's orphan status	
<i>non-orphan</i>	33.7
<i>single maternal orphans</i>	14.0
<i>single paternal orphans</i>	26.6
<i>double orphans</i>	25.6
Number of homes child has lived in	
<i>one</i>	85.8
<i>two or more</i>	14.2
Caregiver relationship to child	
<i>mother</i>	52.6
<i>grandmother</i>	15.4
<i>other</i>	31.9

Program Exposure

Figure 1 displays the distribution of children and caregivers by those who have never heard, just heard about, or received any of the key interventions implemented by TSA Mama Mkubwa program in Mbeya. Of the 564 children aged 8-14 years in the sample, 56.6% reported that they had never heard of a kids' club for children their age, 17.3% had heard of the kids' clubs but had not attended, and 26.1% (n=147) had heard and attended a club meeting, either in the community or at school. In addition, 38.5% of children reported never having heard about Mama Mkubwa in their community, 32.2% had heard of the program but had not received a home visit, and 29.3% (n=165) had heard of the program and had received a home visit by a Mama Mkubwa volunteer. Of the 488 caregivers in the sample, 45.9% have never heard of a Mama Mkubwa, 27.0% had heard of the program but not received a home visit, and 27% (n=132) had received a home visit by a Mama Mkubwa volunteer.

In summary, only around one-quarter of the children drawn from kids' club registries reported having participated in this program intervention strategy and a large number reported that they had never heard of this initiative in their community. Similarly, nearly a half of the caregivers of these children had never heard of a Mama Mbukwa volunteer or team, as only a quarter reported having ever received a home visits. Based on this information, the children and caregivers were grouped into "exposed" (heard and received home visit or attended a kids' club) and "unexposed" (those who have never heard of the interventions or had heard about them but had not been visited and had not participated in any of the interventions).

Children and caregivers exposed to the program interventions were expected to have their psychosocial needs met, and provided with other practical support (i.e., material, school supplies). Table 3 shows that the majority of caregivers who reported receiving a home visit from a Mama

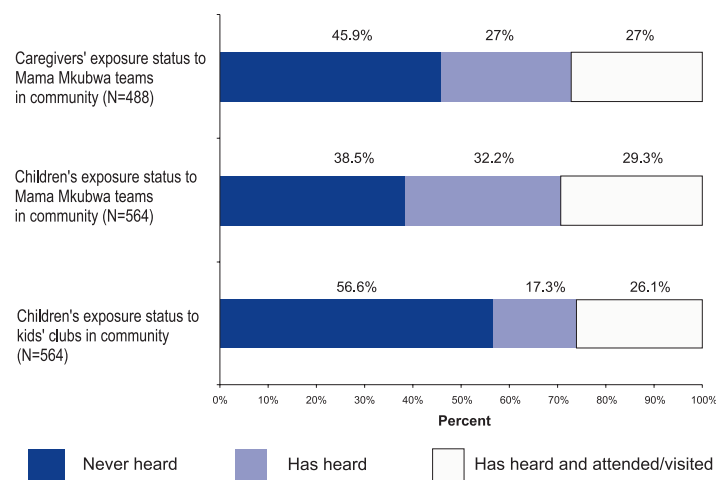


Figure 1. Percentage of children and caregivers exposed to key interventions.

Mkubwa volunteer (n=132) were visited fewer times a year (once in three months or less often, 64.4%). On average, they all reported receiving six visits in the past year. When caregivers were asked if Mama Mkubwa volunteers visit often enough, only about half of them (52.3%) agreed that the volunteer visit frequency was sufficient. The mean length of time the Mama Mkubwa volunteer was reported to stay at the house on a visit was 46 minutes. Nevertheless, about 85% of caregivers indicated satisfaction with Mama Mkubwa's supportive services. Caregivers also reported having received or learned some skills from Mama Mbukwa home visitors. Seventy-two caregivers had received training from Mama Mkubwa volunteers with the majority (about 78%) reporting training on counseling, 13% reporting training on OVC/most vulnerable children (MVC) care issues, and 10% reporting training on providing psychosocial support.

Of those children whose homes were visited by a Mama Mkubwa volunteer (n=165), approximately 84% agreed that Mama Mkubwa gives them good advice (Table 4). Like their caregivers, children agreed that they trusted the Mama Mkubwa volunteer (90.3%). Similar to caregivers, slightly more than half (60%) of visited children agreed that the volunteer visits them enough.

Table 3. Percent Distribution of Caregivers by Intervention Exposure and Intensity

	Percent
Caregiver reported receiving a home visit by a Mama Mkubwa volunteer (N=132)	
Length of home visits	
<i>less than 30 minutes</i>	24.2
<i>30 minutes</i>	37.1
<i>longer than 30 minutes</i>	38.6
Average minutes per visit = 46.3	
Volunteer visiting frequency	
<i>once a week or more</i>	9.1
<i>once per 2 weeks</i>	5.3
<i>once a month</i>	16.7
<i>once per 2 months</i>	4.5
<i>few times a year or less</i>	64.4
Average visits per year = 6.4	
Caregiver perceptions concerning quality of services provided by the volunteer	
<i>satisfied with what volunteer does during the visit</i>	84.8
<i>agrees volunteers visit often enough</i>	52.3
<i>trusts Mama Mkubwa</i>	93.9
<i>volunteers seem in a rush to leave</i>	34.8
Caregivers reported skills/training received from Mama Mkubwa (N=72)	
Caregiver received training on	
<i>psychosocial support</i>	9.7
<i>counseling</i>	77.8
<i>OVC/MVC care issues</i>	12.5

Regarding the kids' club exposure (n=147), only 21% of the children who attended a club meeting reported attending twice a week, as recommended by the program. One-quarter reported attending once a week and about one-third (32.7%) reported attending less than once a month. It is worth noting that about (36.7%) of the children reported that the first time they attended a kids' club was later than 2006 — less than six months ago relative to the data collection time (indicating a short period of intervention exposure).

Table 4. Percent Distribution of Children by Intervention Exposure and Intensity

	Percent
Child reported having attended at least one Kids club meeting in community or school (N=147)	
Number of times child attended a kids' club	
<i>twice a week (as expected)</i>	21.1
<i>once a week</i>	25.2
<i>two or three times a month</i>	21.1
<i>less than once a month</i>	32.7
First time the child started attending a kids' club meeting	
<i>two or more years ago (2005 or before)</i>	7.5
<i>one year ago (2006)</i>	55.8
<i>less than a year ago (2007)</i>	36.7
Children who reported a home visit by a Mama Mkubwa volunteer (N=165)	
Children who agreed that	
<i>Mama Mkubwa visits often enough</i>	60.0
<i>they trust Mama Mkubwa</i>	90.3
<i>volunteers give them good advice</i>	83.6

Effects of Program Interventions on Child and Caregiver Outcomes

Effects of home visiting on caregiver's psychosocial and HIV-prevention outcomes — Four measures were considered to assess the program effects on caregivers' psychosocial well-being (positive, negative, marginalized feelings, and perceived community stigma) and one to assess the HIV-prevention behavior (tested for HIV or not).

Positive and negative feelings were captured with two sub-scales extracted from the psychological domain of the World Health Organization's Quality of Life instrument to measure caregivers' psychological health.⁸ Each subscale contains four items inquiring about how satisfied the respondent is with certain aspects of his or her life. The positive feelings' subscale (alpha=0.67) assessed caregivers' feelings using responses to how much they enjoy life, how much they experience positive feelings in their life, how positive they feel about the future, and whether they generally feel content. Caregivers' negative feelings (alpha=0.76) was assessed with responses to the extent to which any feelings of sadness or depression interfere with the caregiver's everyday functioning; how much do feelings of depression bother the caregiver; how worried the caregiver feels; and how often does the caregiver have such negative feelings as despair, anxiety, or depression. Items in both subscales were scored on a scale of 1 to 5, where 1 represents "not at all" and 5 is "an extreme amount." A mean score for each subscale was calculated, where higher scores on each of them were indicative of more positive perceptions of quality of life (negative subscale items were reverse-coded).

The marginalization feelings scale⁹ (alpha=0.72) is made of five items assessing perceptions and feelings of being marginalized including whether people speak badly about them or their family, make fun of their situation and would rather hurt them than help them, whether they feel isolated from others in the community, and whether they feel no one cares about them. Items were scored 1 to 4, where 1 is "strongly agree" and 4 represents "strongly disagree," and higher scores indicate higher marginalization.

Caregivers who were visited in their homes by a Mama Mkubwa volunteer had slightly better emotional health (i.e., more positive or less negative feelings) and felt less marginalized compared to those who were not visited by a Mama Mkubwa volunteer. The groups' mean

scores for positive feelings were 2.34 and 2.31; 3.04 and 2.98, when using the positive and negative subscales, respectively; and marginalized feelings scores were 2.35 and 2.42 for those with a home visit and with no home visit, respectively (Figure 2). However, as described earlier, the main function of Mama Mkubwa volunteers during home visits is to provide practical skills training to caregivers on psychosocial support and OVC/care issues. Thus, further analysis was conducted to examine whether caregivers who reported having received any of these trainings (N=72) had better emotional health using the three measures.

Results show that those who reported a training in any psychosocial, counseling, and OVC/care felt less marginalized than those who were not trained (mean scores 2.27 and 2.43, respectively, Figure 3). Even after controlling for confounders, the significant effects of caregiver training on their marginalization feelings persisted. However, Mama Mkubwa training had no effect on the other two emotional feelings measures.

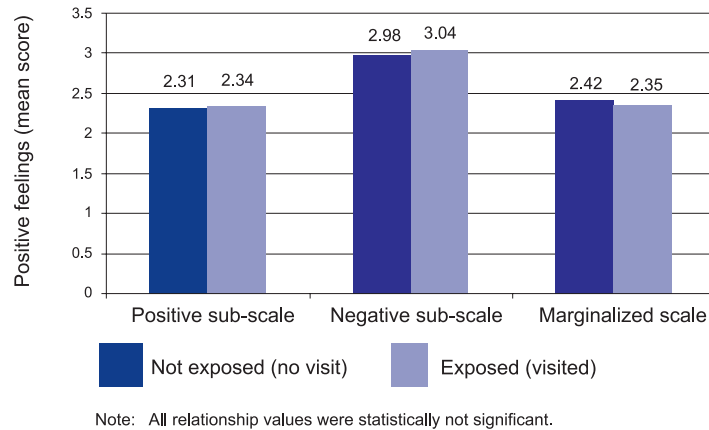


Figure 2. Relationship between a Mama Mkubwa home-visit status and caregiver’s emotional feelings, using three outcome measures.

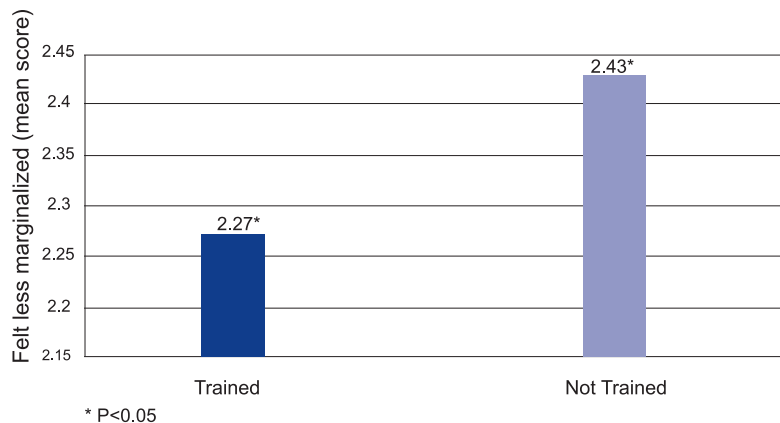


Figure 3. Association between marginalized feelings and caregiver training.

Caregivers’ perceived negative community attitudes towards HIV-affected families were assessed using a new three-item scale (alpha=0.54) on whether the community rejects orphans, whether the community rejects families affected by HIV/AIDS, and whether people are jealous of the services given to orphans and families affected by HIV and AIDS. The possible scores ranged from 1 to 4, with higher scores indicating more perceived community stigma and discrimination towards HIV-affected families. The inter-rater reliability of the scale was low and unacceptable. Further, analysis using individual items was conducted and results show that only the “community rejects orphans” item was significantly associated with home visiting. Caregivers exposed to home visiting were more likely to feel that the community does not reject orphans than those not visited (mean scores of 2.0 versus 2.2 respectively, $p < 0.05$, Figure 4). This association persisted even after

controlling for other confounding variables. However, no significant association was found between home visits and whether the community rejects families affected by HIV/AIDS; or home visits and whether people were jealous of the services given to orphans and families.

HIV/AIDS prevention behavior outcome for caregivers was assessed using caregivers’ responses to whether they had ever been tested for HIV/AIDS. Figure 5 shows that a higher proportion of caregivers who received a home visit by a volunteer had been tested compared to those who had not received a home visit. After controlling for other confounding factors, the significant relationship between receipt of a home visit and HIV testing persisted. Adjusting for other confounders, caregivers who were visited by a Mama Mkubwa volunteer were twice as likely to be tested for HIV as those who were not visited (Exp (B) =2.14).

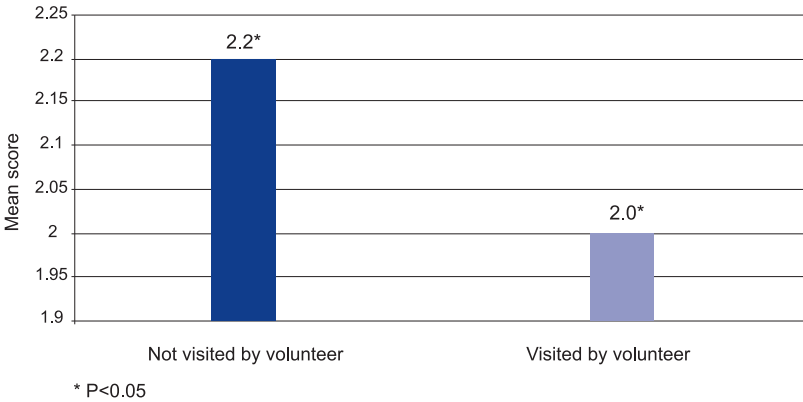


Figure 4. “Community rejects orphans” response among caregivers, compared by home visit by Mama Mkubwa volunteer.

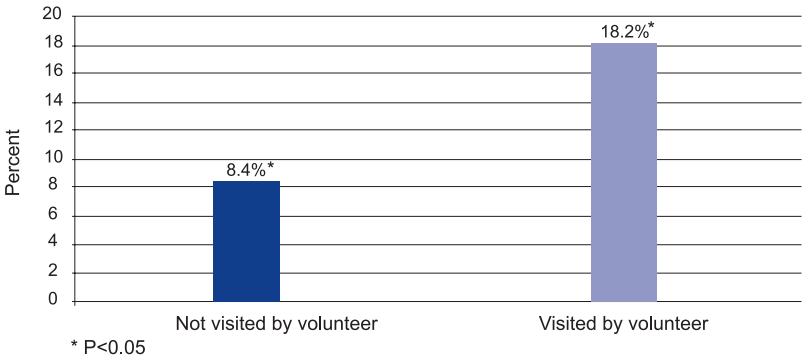


Figure 5. Percentage of caregivers tested for HIV, compared by home visit by Mama Mkubwa volunteer.

Effects of home visiting and kids’ clubs on the caregiver-child relationship — Feelings towards the child¹⁰ were assessed using caregivers’ responses to four items (alpha=0.76) about each child under their care: whether the child was much harder to take care of than most children; if the child does things that really bother them a lot; if the child takes up more of their time than expected; and if they feel angry with child. The items were scored 1 to 4, where 1 indicated “strongly agree” and 4 represented “strongly disagree.” Higher mean scores represent better feelings among caregivers towards the children in their care. Caregivers of children who attended a kids’ club meeting had negative feelings (less positive feelings) towards their children compared to those caregivers whose children had never attended (2.97 versus 3.13 respectively, Figure 6). This relationship was statistically significant even after controlling for other confounding factors (p=0.02). This finding was interesting and was explored further by examining if caregiver’s feelings towards orphans (one or both biological parents dead) were different

from those with at least one biological parent alive, irrespective of program exposure. Bivariate analysis was conducted to examine the association between orphan status of child and caregivers’ feelings towards the child. Results show that orphan status was significantly associated with the feelings their primary caregivers have towards them. Indeed orphan-caregivers had a lower level of positive feelings towards the children under their care than those of non-orphan-caregivers (i.e., children with both parents), regardless of their kids’ club exposure status. Those caring for maternal orphans expressed the most negative feelings towards the child (lowest mean score 2.93, Figure 6), followed by those caring for paternal orphans (3.04), double orphans (3.13), and those caring for non-orphans (3.15). The negative effect of kids’ club participation on their relationship with their primary caregiver persisted even after controlling for other demographic variables. However, a volunteer home visit had no significant effects on the caregivers’ feelings towards child.

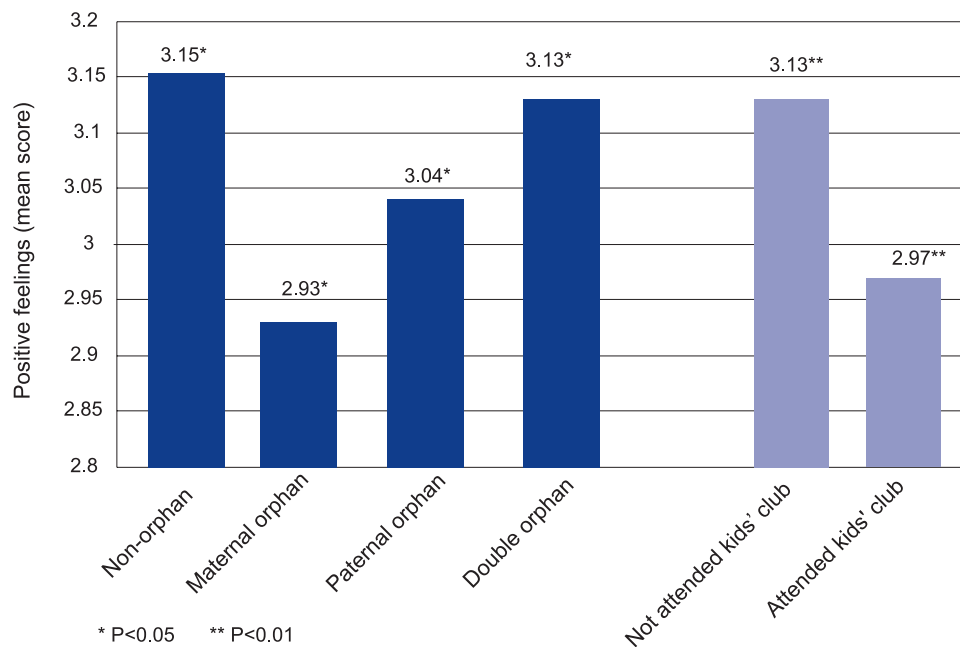


Figure 6. Caregiver’s positive feelings towards child, compared by child’s orphan status and kids’ club participation.

Effects of home visiting and kids’ clubs on children’s HIV-prevention knowledge — HIV knowledge for children was assessed using two outcome indicators based on their HIV prevention knowledge using responses to two questions: “Have you ever heard of HIV/AIDS?” (yes/no); and an open-ended follow-up question about how HIV infection can be prevented, with probing to list all the prevention methods they knew. The correct responses covered three HIV-prevention related topics: transmission, prevention, and risky behaviors. Any correct response, such as having one sex partner, avoiding prostitutes, using a condom, or abstaining from sex, was scored as 1. The responses were aggregated to get a total score for each child, for a possible index score of 0 to 9. Higher index scores reflect higher HIV prevention knowledge. Results show that a higher proportion of the children who received home visits from a Mama Mkubwa volunteer had heard of HIV/AIDS, compared to those not visited (74% versus 64%, respectively, Figure 7). After controlling for the other confounding factors, children who were visited were about one and a half times (Exp B=1.6) more likely to have heard of HIV/AIDS than those that were not exposed to this intervention. In addition, a higher proportion of children who had attended a kids’ club meeting had heard of HIV/AIDS compared to those children

who had not attended a kids’ club meeting in the community or at school (77% versus 62%, respectively, Figure 7). This relationship persisted after adjusting for other confounding factors. The children who had attended a kids’ club were nearly twice (Exp B=1.9) as likely to report that they had heard of HIV/AIDS compared to those who had not attended a kids’ club.

Among those who had heard of HIV/AIDS (n= 374), only one-third of the children in the sample could identify at least one HIV prevention measure. As a result, HIV knowledge total score that was recoded as either 1 for those who knew at least one prevention method or 0 for those who reported none. Figure 8 shows that a higher proportion (41.8%) of children who were visited by a Mama Mkubwa volunteer knew at least one HIV prevention method compared to those who had not been visited (30.6%). After controlling for the other confounding factors, visited children continued to be more knowledgeable about HIV — they were about one and a half times (Exp B=1.6) more likely to report at least one way someone can avoid HIV/AIDS compared to those that were not exposed to this intervention. Kids’ club participation had no significant effect on the children’s knowledge about HIV prevention methods.

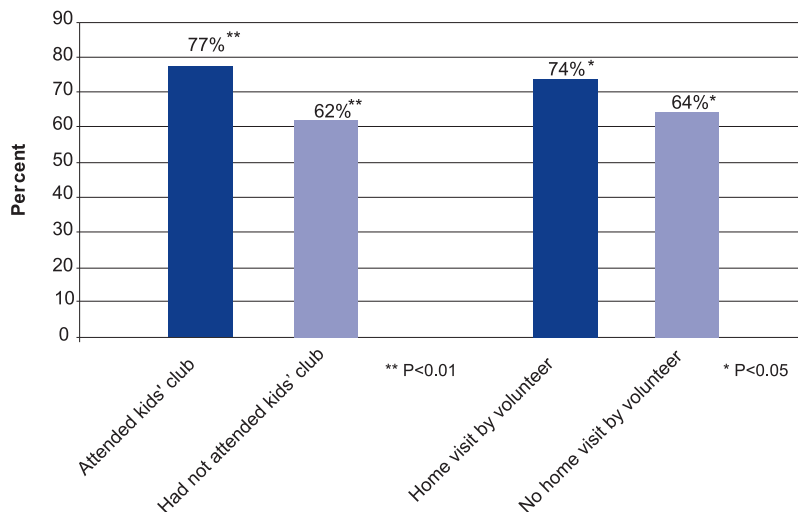


Figure 7. Percentage of children who had heard about HIV/AIDS, compared by intervention exposure.

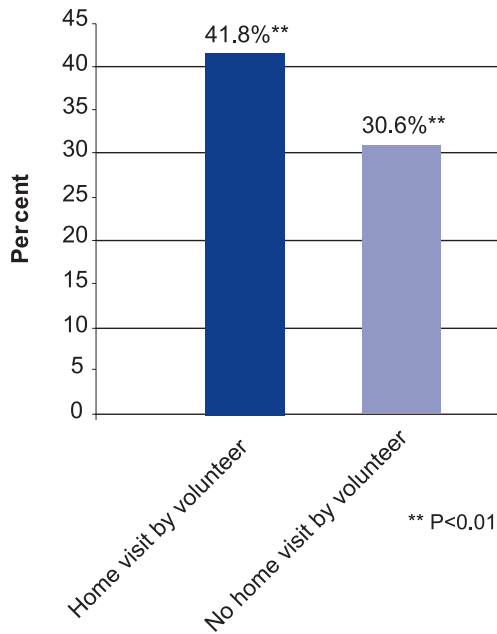


Figure 8. Percentage of children who could name at least one HIV prevention method, compared by volunteer home visit.

Effects of home visiting and kids’ clubs on children’s educational and legal protection outcomes — The child’s educational outcomes were assessed using two indicators: “child is still attending school” and “child is regularly attending school.” Regular school attendance was assessed using the number of school days the child missed in the week preceding the survey or the week before school holidays (if a child was on holiday). The findings show that almost all children in the sample were still attending school (about 98%) regardless of their program exposure status. In addition, neither home visiting nor kids’ clubs had an effect on regular school attendance.

Legal protection outcomes were assessed using two indicators: “caregiver has designated an alternate caregiver for child in case something happens and they can no longer care for the child” and “whether the child has a birth certificate (national identification document).” Figure 9 shows that a higher proportion of children (40.7%) who participated in kids’ club meetings had a birth

certificate compared to those not exposed (31.6%). These differences persisted after controlling for confounding factors (p=0.05). However, a volunteer home visit was not associated with a child having a birth certificate. In addition, neither volunteer visiting nor kids’ club participation had an effect on designating an alternate caregiver for the child.

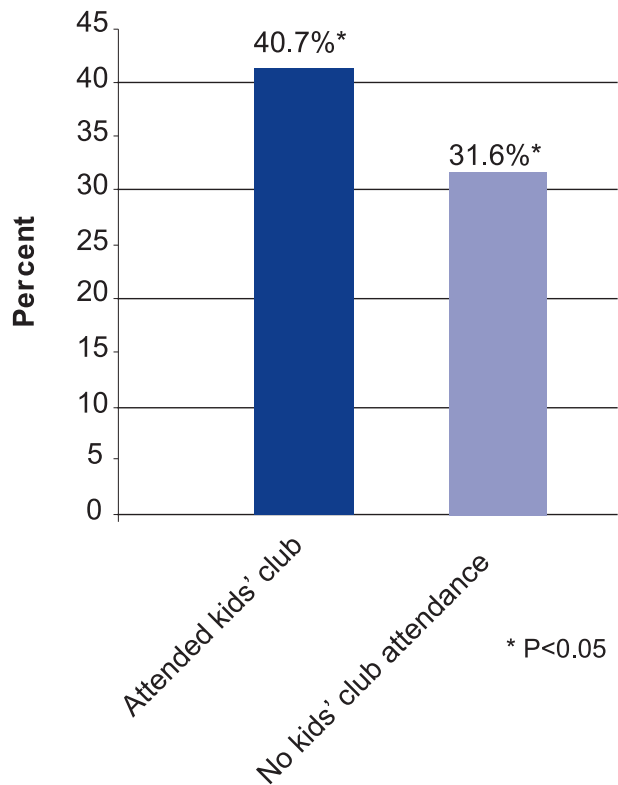


Figure 9. Percentage of children with a birth certificate, compared by kids’ club attendance.

Effects of home visiting and kids’ clubs on the psychosocial well-being of children — Child psychosocial well-being was assessed using four multidimensional indicators: two subscales of the widely-used Self-Esteem Questionnaire youth instrument (family-related and global or self-worth self-esteem subscales)¹¹ and two subscales from the Strengths and Difficulties Questionnaire (SDQ) usually used to measure different dimensions of child behavior (emotional symptoms and pro-social behavior).¹²

The global self-esteem subscale measures a child's attitudes towards self and has eight items (alpha=0.65): whether the child is happy with the way he or she can do most things; whether the child sometimes thinks he or she is a failure; whether a child is happy with himself or herself as a person; whether the child is the kind of person he or she want to be; whether the child often feels ashamed of himself or herself; whether the child likes being just the way he or she is; whether the child is as good a person as he or she wants to be; and whether the child wishes he or she had more to be proud of. Each item was scored on a four-point scale ranging from 1 for "strongly disagree" to 4 for "strongly agree," with reverse coding for the opposite items. A higher mean score indicates more positive self-esteem. Home visiting was found to have significant effect on children's global self-esteem (self-worth and self-image). Children who reported a Mama Mkubwa volunteer visit had significantly higher self-esteem mean score compared to those not visited (mean scores of 2.57 and 2.52, respectively, Figure 10). After controlling for other confounding factors, the relationship was still statistically significant. Kids' club participation had no effect on children's self-esteem.

The family-related self-esteem subscale assesses the child's perception regarding his/her family's favorable or unfavorable attitudes toward them. It has six items (alpha=0.76): whether the child is happy about how much his or her family likes the child; whether the child feels he or she is too much trouble to the family; whether the child feels he or she gets into too much trouble at home; whether he or she feels acceptable about how important he or she is to the family; whether the child feels he or she gets along as well as he or she would like to with the family; and whether the child feels the family pays enough attention to him or her. The analysis showed no significant effect of the interventions (volunteer home visits and kids' club participation) on a child's family-related self-esteem scores.

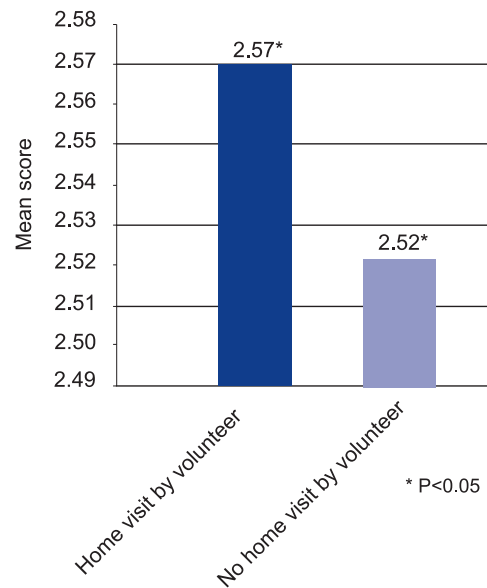


Figure 10. Children's mean global self-esteem score, compared by volunteer home visit.

The child's emotional problems subscale assesses the child's negative attributes using five items (alpha=0.53): whether a child complains of headaches, stomach aches, or feeling sick; seems worried; is unhappy, depressed, and tearful; is nervous in new situations or loses self-confidence; and has many fears or is easily scared. For these data, the internal consistency of this subscale was low (alpha=0.53) and, as such, further analysis was conducted to examine whether a significant relationship between the individual items and each intervention. No significant effects were observed.

Pro-social behavior was assessed using the positive SDQ five-item subscale (alpha=0.60): whether the child is considerate of other people's feelings; shares toys, pencils, and food with other children; tries to help if someone is hurt, upset, or sick; is kind to other children; and offers to help adults or children. Each item was scored from 0 to 2 with a possible cumulative score ranging from 0 to 10, where higher scores indicate more cooperative and desirable behavior. Results show no significant

differences in social behavior between children who were exposed to a home visit or kids' club meeting and those who were not exposed.

Effects of home visiting and kids' clubs on social support networks of OVC — We assessed children's social support networks using three measures: adult support, social isolation, and perceived community stigma.

Adult support¹³ was assessed using a four-item, 4-point scale where responses of 1 represented "strongly disagree" and responses of 4 indicated "strongly agree," with a mean score range of 1-4 and higher scores indicative of more adult support. The items were whether the child had an adult in the child's life that the child trusted to offer him or her advice, whether the child had an adult who would go with him or her to authorities, whether the child had an adult in his or her life who comforted the child, and whether the child had an adult in his or her life that the child can always depend upon ($\alpha=0.71$). Neither Mama Mkubwa's home visits nor participation in kids' club had a significant effect on children's perception of adult support.

Children's feelings of social isolation were measured by five items ($\alpha=0.76$) derived from the KIDSCREEN social acceptance subscale (bullying), which evaluates children's feelings of social isolation.¹⁴ The items were how often the

child plays alone because he or she feels that no one wants to play with the child, how often the child reports other kids picking on him or her, whether the child has been afraid of other girls or boys in the past four weeks, whether other girls and boys made fun of the child, and whether other girls or boys had bullied the child in the past four weeks. A five-point scale ranging from "never" to "always" was used to rate each item, with a mean score derived and a higher score indicating more social isolation. Children whose households were visited by a Mama Mkubwa volunteer had a relatively lower mean score (1.9) indicative of fewer social isolation feelings, compared to those children who were not visited (mean score of 2.0). The differences were marginally statistically significant ($p=0.08$). However, with other variables held constant, these slight differences disappeared. The child's participation in a kids' club meeting had no significant effect on feelings of social isolation.

A child's perceived negative community attitudes towards HIV-affected families were assessed using the three-item scale described earlier for caregivers. The marginal inter-rater reliability of the scale ($\alpha=0.56$) was considered unacceptable; thus, individual scale items were used in the analysis. However, for any of these items, no statistically significant associations were found in relation to home visiting or kids' club participation.

Discussion and Conclusions

This program evaluation has generated important information that could be used to inform program development and planning in efforts to provide care and support effectively to OVC and their families. The findings from this study show mixed program effects on outcome measures, including the psychosocial well-being of OVC and caregivers.

Receipt of a Mama Mkubwa volunteer home visiting was positively associated with children's global self-esteem, HIV knowledge, and, to a lesser extent, reduced social isolation feelings. In sum, the children who were visited had more positive attitudes towards themselves, fewer feelings of social isolation, and higher HIV knowledge compared to those who were not visited. Nonetheless, Mama Mkubwa home visits had no significant effects on children's feelings of adult support, or their perceptions of community attitudes towards HIV-affected families. In addition, volunteer home visits had effects on caregivers' HIV prevention behavior (HIV-testing), and had limited or non-significant effects on their psychological outcomes. While the effects on caregivers' psychosocial outcomes were non-significant, this program may have potential for positive and significant effects with some intensity. Consistently, caregivers who were visited had slightly, although insignificant, higher psychological outcomes (more positive/less negative feelings and fewer expressions of social marginalization) compared to those who were not visited. These findings might be a reflection of the low intensity of the home visits (little exposure). Training of caregivers by volunteers could be used as a proxy indicator for the intensity of exposure. Results revealed that those caregivers who had received training on psychosocial, counseling, and OVC care issues felt significantly less marginalized, suggesting that providing skills training during home visits was key to improved psychosocial well-being. Also, of the 132 caregivers whose

households were visited by Mama Mkubwa, about 85% reported that they were satisfied with what Mama Mkubwa does for them, but only about half (52%) agreed that Mama Mkubwa volunteers visit them often enough. Also, about 35% of caregivers agreed that the volunteer seemed to be in a rush to leave when they visit them. Another explanation for the effects seen on the psychosocial well-being of children and not adults is that volunteers may focus on counseling children, while neglecting the psychosocial needs of caregivers. These results suggest that the Mama Mkubwa strategy has potential to result in promising outcomes for both caregivers and children if the frequency of home visits were increased and the scope of caregiver training and attention were expanded to address caregiver needs, including OVC care tips.

Findings concerning the relationship between the kids' club intervention strategy and OVC outcomes were interesting. The analysis revealed that two-thirds of children served by The Salvation Army (i.e., those in their registers) through their kids' club programs were orphans compared to the orphan prevalence rate of 13.5% to 17.4 % in the region. Since the kids' clubs are organized and open to all community children, it was surprising to find that the clubs attracted disproportionately more orphans and seemingly vulnerable children (children who live in poor and food-insecure households). This result reveals that even though the kids' club meetings are open to all community children, those appearing in their book registers are disproportionately the most vulnerable children, which may be construed as positive (i.e., addressing the greatest need); or this could be a reflection of unintended negative effects, such as stigma and discrimination for attendees arising from the way the program is implemented. For example, why are so many non-orphans uninterested or not registered to attend kids' club meetings? It could be because they associate these clubs with orphans and other

children affected by HIV. Further research is needed to help understand this phenomenon of why children attend or do not attend kids' clubs and, among those who actually do attend, how they first heard about the club.

In view of the fact that all the names of children in the sample were obtained from the existing kids' club registry books, it was surprising to find that less than half of the children in the intervention site had never heard of a kids' club. According to TSA staff, a list was made of community children who had registered or attended at least one of the kids' clubs meetings. There were no clear explanations as to why this may have been the case. Perhaps the registry book was outdated or some of the children were registered by parents, volunteers, or friends without their knowledge in anticipation of future attendance. It could also be that the volunteers themselves registered the children to make their program look good. The children may also be attending such meetings but did not remember or know that the meetings are known as kids' clubs per se. However, efforts were made during the pretesting of the survey tools to ensure that this question was asked correctly and, as a result, questions involving community and school kids' club meetings were included to capture these possible scenarios.

Another surprising finding was the relationship between caregivers and the children under their care and kids' club attendance. Results showed that caregivers of children who had participated in a kids' club had significantly less positive feelings towards the child compared to non-attendees. This finding was unexpected, suggesting that perhaps caregivers, especially for orphans, may be unsupportive of the child's participation in the kids' club meetings. This may be an unintended negative consequence of the program and requires further investigation.

Also, children's participation in the kids' club had minimal effects on their psychosocial well-being. Kid's club attendance was expected to improve children's self-esteem, their social skills, and reduce stigma towards orphans and people living with HIV. However, the program showed no significant effect on these outcome measures. Results suggest that the intensity of the program is low (i.e., children's attendance was sporadic). For instance, the majority of children (64%) who had attended a kids' club meeting reported that they only attended a few times a year, when the program was designed to be attended twice per week. Further, it may be that the program emphasis and curriculum/agenda may not be addressing these issues or that the Mama Mkubwa volunteers may not be properly trained to deal effectively with these issues during kids' club meetings. These findings are important and call for urgent attention by OVC program managers to re-examine the intervention in terms of volunteer training (i.e., ensure all are trained before convening a kids' club meeting), the frequency of meetings (i.e., what is the optimal number of meetings per month or year?), program objectives, expected results, and the content of their activities.

It is also important to note that even with this low level of kids' club attendance there were significant effects in other outcome areas. For example, kids' club attendance was statistically significant and positively associated with HIV knowledge and having a birth certificate. These results suggest that the community kids' clubs are a suitable forum for discussing HIV prevention with children, particularly in cultures where caregivers may not talk about HIV with their children. However, we have no proper explanation as to why most of kids' club participants had a birth certificate compared to non-participants.

Programmatic Implications

Mama Mkubwa home visits were most effective on HIV prevention outcomes. The Mama Mkubwa volunteer home visits were significantly associated with increased HIV knowledge among OVC and improved HIV prevention behavior among caregivers. Programs aimed at HIV prevention should find ways to increase coverage and the frequency of volunteer home visits, offer HIV-prevention education to encourage counseling and testing, and increase HIV knowledge in HIV-affected communities. Having a trained adult volunteer visit a household to offer counseling and HIV education to household members should be encouraged and supported.

Mama Mkubwa counselors also need to provide psychosocial support to caregivers. The home-visiting intervention was associated with better self-esteem for children, but did not have any significant effects on caregivers' psychosocial well-being. We recommend that program managers strengthen psychosocial support services for caregivers by training and encouraging volunteers to focus not only on the needs of children, but also on the psychosocial well-being of the caregivers. This could involve developing a comprehensive training for volunteers to counsel and provide other psychosocial support services effectively to caregivers. (About 10% of caregivers reported that they were trained on psychosocial support. The home-visiting approach should therefore focus on the family, and not only individual children.)

Kids' club participation decisions should involve caregivers. Results from this evaluation showed that caregivers of children who attend kids' club meetings were more likely to harbor negative feelings towards the children under their care. Thus, programs should take into account and ensure that caregivers are involved in the decision-making processes concerning their children's time, such as their participation in a kids' club. For example, caregivers should

be involved in designing the kids' club program and scheduling the best meeting days and times. Program managers should also make a concerted effort in helping caregivers understand the benefits of children's participation in kids' club meetings. This may help improve the regularity of children's participation and perhaps even caregivers' feelings towards the children under their care, helping to build good relationships within the family.

Ensuring data quality, including keeping accurate beneficiary lists with regular checks and updates, is critical for program management. This study revealed that the majority of children who were listed in TSA program registration books reported that they had never heard of a kids' club for children in their community or school. We recommend the development of a process of validating program data quality on a regular basis, to help ensure that an accurate beneficiary list (electronic, if possible) is maintained. This list of beneficiaries could also be linked to documentation of resulting outcome changes from any program support services.

Conduct client or beneficiary satisfaction surveys as part of regular program monitoring. This evaluation revealed that kids' club attendance was sporadic and attracted a disproportionately large number of the most vulnerable children in the community even when these forums are open to all community children. Therefore, conducting formal or informal client surveys regularly will help program staff to understand why some children choose to attend while others do not, and how children first hear about the kids' clubs; and to solicit ideas as to how these forums could be made most attractive to other children. This would also help promote acceptance and ownership of these interventions among community children.

Strengthen the psychosocial aspects of the kids' club intervention strategy. Although the Mama Mkubwa program's main focus was to support

and improve children's psychosocial well-being through kids' clubs, evaluation results show that this intervention strategy had limited effects on children's psychosocial outcomes. There could be several explanations as to why this was the case, including limited volunteer training in these important areas and short or infrequent intervention exposure. Nonetheless, we suggest that concerted efforts be made to make sure that all Mama Mkubwa volunteers are trained in these issues and are supported to run effective kids' club meetings. In addition, programs should ensure that kids' club curricula, agendas,

and activities incorporate psychosocial messages and address other related issues including how to reduce community stigma and discrimination, and helping children develop their social support networks and make friends, self-esteem, and life skills. The messages can be integrated into already popular kids club's activities such as plays, traditional songs, and dance. The finding that the kids' club participation led to improved HIV knowledge for OVC should provide a guideline for incorporating other messages into the program.

References

1. United Nations Children's Fund (UNICEF). *Africa's Orphaned and Vulnerable Generations: Children Affected by AIDS*. New York, NY: UNICEF; 2006.
2. Littrell M, Thurman T, Chatterji M, Brown L. *A Case Study: Mama Mkubwa Psychosocial Program*. Chapel Hill, NC: MEASURE Evaluation; 2007.
3. The United Republic of Tanzania. *2002 Population and Housing Census* [Web site]. Available at <http://www.tanzania.go.tz/census/mbeya.htm>.
4. The Research and Analysis Working Group (R&AWG). *Poverty and Human Development Report 2005*. Dar es Salaam, Tanzania: R&AWG; 2005.
5. Tanzania Commission for AIDS (TACAIDS), National Bureau of Statistics (NBS), ORC Macro. *Tanzania HIV/AIDS Indicator Survey, 2003–2004*. Calverton, MD, USA: TACAIDS, NBS, and ORC Macro; 2005.
6. Rutstein SO, Johnson K. *The DHS Wealth Index. DHS Comparative Reports No. 6*. Calverton, MD, USA: ORC Macro; 2004.
7. Coates J, Swindale A, Bilinsky P. *Household Food Insecurity Access Scale (HFIAS) for Measurement of Household Food Access: Indicator Guide, Version 3*. Washington: Food Nutrition Technical Assistance Project, Academy for Educational Development; 2007. Available at www.fantaproject.org/downloads/pdfs/HFIAS_v3_Aug07.pdf.
8. WHOQOL-HIV Group. Preliminary development of the World Health Organization's Quality of Life HIV Instrument (WHOQOL-HIV): analysis of the pilot version. *Soc Sci Med*. 2003;57:1259-1275.
9. Thurman TR, Snider L, Boris N, Kalisa E, Mugarira E, Ntaganira J, Brown L. (2006). Psychosocial support and marginalization of youth-headed households in Rwanda. *AIDS Care*. 2006;18(3): 220-229.
10. Lugaila TA. *A Child's Day: 2000 (Selected Indicators of Child Well-Being)*. Current Population Reports, P79-89. Washington: U.S. Census Bureau; 2003.
11. Dubois D, Felner R, Brand S, Phillips R, Lease AM. Early adolescent self-esteem: a developmental-ecological framework and assessment strategy. *J Res Adoles*. 1996;6(4):543-579.
12. Goodman R. Psychometric properties of the Strengths and Difficulties Questionnaire (SDQ). *J Am Acad Child Adoles Psych*. 2001;40:1337-1345.
13. Boris N, Thurman TR, Snider L, Spencer E, Brown L. Infants and young children living in youth-headed households in Rwanda: implications of emerging data. *Infant Mental Health J*. 2006;27(6), 584-602.
14. The KIDSCREEN Group Europe. *The KIDSCREEN Questionnaires. Quality of Life Questionnaires for Children and Adolescents*. Handbook and CD ROM. Lengerich, Germany: Pabst Science Publishers; 2006.

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