



GAIA Villages Impact Report

Traditional Authority Mabuka, Mulanje District, Southern Malawi

The GAIA Villages program operated in “MGC-A Villages” from May 2010 to April 2013. MGC-A villages were funded by GAIA’s first Major Gifts Campaign and by a gift from Winifred Holzman and Paul Dooley. MGC-A villages included the Nsona Villages, funded by St. Luke’s Darien, CT, and Naluso Village, funded by African Children’s Mission of Church of the Redeemer Bryn Mawr, PA.

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Executive Summary

The Global AIDS Interfaith Alliance (GAIA) works in the southern African nation of Malawi, one of the poorest countries in the world with one of the highest burdens of disease. Eighty percent of the nation's population lives in rural villages as subsistence farmers. Eleven percent of the adult population is HIV positive and 770,000 children are AIDS orphans. **GAIA Villages** is a three-year community-based health program to prevent and treat common health problems in communities affected by HIV/AIDS. GAIA trains and supports local female Community Caregivers who connect rural villagers to health care and focus on four key areas: *Orphan Care and Education, HIV Prevention and Health Education, Home Based Care, and Community Development*. GAIA implements the program in groups of 20 villages. Program activities are monitored monthly, and outcomes are evaluated through impact surveys conducted before, during, and after the program.

This report describes results from the first impact evaluation for a group of 20 GAIA Villages assisted between 2010 and 2013. The evaluation results attest to profound improvements in health literacy, health seeking behaviors, and HIV testing rates, improvements which GAIA Community Caregivers facilitate and see taking place in their villages every day. Among women surveyed, **comprehensive knowledge of HIV/AIDS prevention, transmission, and treatment** increased significantly by 20% and **comprehensive knowledge of malaria** increased by 10% during the three year program. By 2013, 96% of women surveyed reported they had been tested for HIV, compared with 70% in 2010, and 92% believed their communities were open to HIV testing, compared with 67% in 2010. Six-in-ten women reported modern contraceptive use in 2013, compared with four-in-ten in 2010. One in four households fostered at least one orphan during the program period and by the end 87% of orphans being fostered were in school. More than half of women surveyed knew of an HIV support group operating in their village when GAIA's program concluded.

GAIA is a 501(c)(3) non-profit organization founded in 2000 by The Reverend Dr. William Rankin and neurosurgeon Dr. Charles Wilson of the University of California, San Francisco in response to the AIDS epidemic in Africa. GAIA's mission remains to provide basic health services, targeting prevention, care and support in African communities affected by HIV, AIDS, tuberculosis and malaria. GAIA's philosophy is to employ Malawian staff, utilize local knowledge, and mobilize local support as it assists communities in developing their own effective and lasting responses to HIV/AIDS and related diseases. GAIA is led by three main principles: **Empowering Communities, Raising the Status of Women, and Building Healthcare Capacity**; these principles inform our three core programs: *the Nursing Scholarship Fund, the GAIA Elizabeth Taylor Mobile Health Clinics, and GAIA Villages*.

GAIA villages currently operates in 40 villages in Mulanje District, Malawi and has impacted 156 villages across southern Malawi since 2003.

Background

It is estimated that nearly one million of Malawi's 15 million citizens are HIV positive and more than 770,000 children have been orphaned by AIDS. In 2012, 46,000 people died from the disease and life expectancy is only 54 years. The epidemic places great stress on already impoverished rural communities where 80% of the population lives. Villages can be remote, located far from doctors, nurses, and hospitals and lack of transportation makes it difficult access care.

To prevent the spread of HIV and other communicable diseases and to improve community health, GAIA developed the **GAIA Villages Program** -- a grass-roots, community-based approach to preventing and treating common health problems in communities affected by HIV/AIDS. Village women, known as Community Caregivers (CCGs), are at the heart of the intervention, and its success depends on their involvement. GAIA employs four village women in each village for this role. These women are selected by the community, trained and supervised by our local GAIA staff and given a modest stipend for their work. The stipend and training they receive empower them socially and economically to become agents of change in their communities in four key program areas: *Orphan Care and Education, HIV Prevention and Health Education, Home Based Care, and Community Development*. To monitor progress made and impact on the community, GAIA surveys villages prior to implementing the intervention (baseline), one year after services start (midline), and after the completion of the three-year program (endline).

Villages are grouped into cohorts of 20 for program implementation. Data for each cohort is collected by external evaluators to assess program outcomes. One such group of 20 villages, named MGC-A villages in Traditional Authority Mabuka, Mulanje District, began service in May 2010 and concluded in April 2013. In these villages, baseline data was collected in February 2010. The midline survey was collected in May 2011 and the endline survey was collected in June 2013. For each survey, a representative sample of village women was randomly selected from the 20 village population and included different individuals in each unless a woman was selected more than once by chance. Table 1 below shows the total number of households surveyed each year.

TABLE 1
Number of surveys collected

Survey	n
Baseline	507
Midline	513
Endline	528
Total	1548



GAIA Villages

GAIA launched the GAIA Villages program in 2003 with one million dollars in seed funding from Bill and Melinda Gates Foundation.

Since 2003, the program has been replicated in six additional groups of villages, serving a total of 156 villages and approximately 200,000 villagers living in Southern Malawi's Zomba, Blantyre, Mulanje, and Phalombe Districts.

Demographic Characteristics of Survey Respondents

Women are the target population of the villages intervention and the most able to describe the health of their households. Evaluators administered three surveys to women to capture data on key health outcomes for themselves and their families. The average age of respondents was 30, but ages ranged from 13 to 80. Seventy-seven percent of respondents were married and the average household size was five members. The average education level of respondents was quite low at 4.5 years and 45% were literate. Respondents in these villages were either Christian or Muslim. Seventy percent were ethnically Lomwe, the most common ethnicity on the Malawi-Mozambique border, and spoke Chichewa.

Despite a rapid increase in cell phone use in rural areas of Malawi and Africa in general, in the villages surveyed, cell phone ownership was relatively low at the beginning of the program: 31% of households reported ownership. There was no significant change by the end of the program, when 32% of respondents reported ownership. Of those who did not own a cell phone, roughly two-thirds said they had access to one shared by family or friends. Nearly all respondents reported having ever gone to a health facility to seek care for themselves or their families. Of those, 70% walked to their nearest health facility and 26% travelled by bike. For those who walked, they travelled on average 1.5 hours to reach a health care facility, but many in remote villages reported walking two hours or more each way to seek care for themselves or a sick child. These responses were similar in all three survey waves.

Orphan Care and Education

Through GAIA Villages, Caregivers register eligible orphans to receive supplies and school fees in order to improve enrollment, lower the educational gender gap, and increase school completion.

Nearly one-quarter of households surveyed in MGC-A villages foster orphans (n=359/1458) (Table 2). At midline and endline, 90% and 87% of orphans were in school (this information was not collected at baseline). Primary reasons respondents reported for orphans leaving school were: age, lack of school fees or supplies, or disinterest in attending school. A respondent may have reported disinterest if their children were needed to farm the family garden, help earn income for the family, or if they did not believe attending school would impact the child's economic or social opportunities. GAIA provides supplies, including a school uniform (required to attend school), basic clothes -- underwear, shirt, and pants -- school notebooks and pens, and soap and lotion to orphans, all of which have proven to have a significant impact on the number of children in these villages who are able to attend school.

TABLE 2
Question: How many children do you foster in this household?

# of children	Households		
	Baseline	Midline	Endline
1	57	66	50
2	35	34	32
3	10	15	15
4	8	7	8
5	4	5	0
6	3	3	2
7	0	2	2
8	0	1	0
n	117	133	109

Of those who reported children with fever in the previous two weeks, 90% from all three surveys described seeking care for the child's illness. There was no significant difference in the number seeking care in each survey wave, but administration of medication was significantly timelier by the end of the program. At the endline survey, 91% of respondents who obtained medicine for management of fever administered medication within two days of onset, and significantly more (29%) administered it the same day (Table 3). This suggests that GAIA health talks on caring for children with illness -- particularly fever, a symptom of malaria, which is a leading cause of death in children under five -- may be improving health behaviors in these villages.



A MALE SECONDARY SCHOOL ORPHAN RECEIVES A NEW UNIFORM, SOAP, AND BODY LOTION DURING AN ORPHAN CARE SUPPLIES DISTRIBUTION

There was a slight improvement in the number of households seeking care for a child's cough from baseline to endline – rising from 68% to 74% - and no improvement in the number of households seeking care for diarrhea – remaining nearly the same, 78% to 77%.

TABLE 3

Question: How long after onset of fever did the child take medication?

Response	Baseline	Midline	Endline
Same day	49%	49%	78%*
Next day	38%	44%	16%
2 days after the fever	8%	5%	5%
3 days after the fever	3%	1%	1%
4 or more days after fever	1%	1%	0%
n	186	148	171

* denotes a statistically significant change from the prior survey

Thirty-eight percent of respondent households (n=73) reported being direct beneficiaries of the Orphan Care and Education Program. Table 4 shows the numbers of households that reported receiving each of the orphan care program supplies.

TABLE 4

Question: Did your household receive any of the following orphan care items from GAIA?

Item	Yes
A blanket	88%
Hygiene supplies (soap/lotion)	96%
Clothing	89%
Uniform	66%
School supplies(pens/notebooks)	86%
Supplemental food	12%
Secondary school tuition	7%
n	73

HIV Prevention and Health Education

Through village health talks, door-to-door counseling and community dramas, GAIA encourages HIV testing and prevention, while decreasing stigma, and teaches signs and symptoms of common diseases to improve village health.

The four primary sources of health information for survey respondents in all three survey waves were: government community health workers, health facilities, the radio, and chief/village gatherings.

GAIA defines comprehensive knowledge of HIV as the ability to 1.) reject two commonly held misconceptions about the ways that HIV is transmitted: mosquito bites and casual contact with a positive person, 2.) demonstrate knowledge that one can reduce risk of acquiring HIV by always using condoms, and 3.) identify that it is possible for a healthy looking person to have HIV. At baseline, 54% had comprehensive knowledge of HIV. This improved significantly ($p<0.000$) at midline to 66% and at endline ($p<0.007$) to 74% (Table 5).

Comprehensive knowledge of malaria transmission, prevention, and treatment is defined as demonstrating knowledge that 1.) malaria is transmitted by mosquito bites, 2.) sleeping under a bed net reduces transmission, and 3.) fever is the primary symptom of malarial infection. Comprehensive knowledge of malaria increased significantly ($p<0.000$) from baseline to midline, from 67% to 81%, and did not change significantly from midline to endline. (Table 5)

TABLE 5

Percentage of Respondents with Comprehensive Knowledge of HIV and Malaria

	Baseline	Midline	Endline
Comprehensive HIV knowledge	54%	66%*	74%*
Comprehensive Malaria knowledge	67%	81%*	77%
n	507	513	528

* denotes a statistically significant change from the prior survey

There was a significant ($p<0.000$) increase in the number of villagers reporting having ever been tested for HIV from baseline to midline, and from midline to endline. At baseline, 70% of villagers reported having ever been tested, compared with 89% at midline and 96% at endline. At baseline, the primary reason villagers reported going for testing was advice from a health facility (64%), whereas during midline and endline the primary reason (34% and 42% respectively) was that they were tested as part of the government's new opt-out testing program for pregnant women during antenatal care visits. Many more villagers were tested because they were "just curious" to know their results during midline and endline (31% and 43%, compared with 16% at baseline) perhaps reflecting decreased stigma surrounding HIV testing. See Table 6 below for all responses.

TABLE 6

Question: What convinced you to go for HIV testing?

Response	Baseline	Midline	Endline
Advice or information from a health facility	64%	20%	3%
Advice or information from the radio/newspaper	2%	1%	0%
Advice or information from NGO	1%	1%	1%
A relative or friend	1%	1%	0%
Frequently sick	3%	9%	8%
Tested as part of antenatal care	5%	34%	42%
Just curious	16%	31%	43%
Spouse not faithful	0%	0%	2%
Other	8%	4%	1%
n	350	455	504

After one year of health education, 92% of respondents thought members of their community were very or somewhat willing to be tested for HIV, up significantly from 67% at baseline. Respondents at endline who knew of an HIV support group in their village were significantly more likely (91% for those who knew of a support groups compared with 77% for those who did not) to think that the community was willing to be tested.

More women reported using contraceptives by the end of the three-year intervention. The percentage of respondents reporting contraceptive use increased significantly ($p<0.007$) from 44% to 53% between baseline and midline surveys and from 53% to 61% between midline and endline surveys.



VILLAGERS PERFORM A DRAMA ABOUT MOSQUITO NETS AND MALARIA PREVENTION.

Home-Based Care (HBC)

GAIA Caregivers facilitate care for ill villagers, referring them to health facilities and aiding with household chores to reduce morbidity and mortality in remote villages and to reduce the number of children orphaned by communicable or preventable diseases.

There were few households with family members who had been sick for more than two months in any of the three survey waves ($n < 23$). There was also no statistically significant change in the number of respondents with ill family members receiving outside assistance with care as seen in Table 7.

TABLE 7

Question: Do you receive any assistance with care of ill household members?

	Baseline	Midline	Endline
No	55%	41%	35%
Yes	45%	59%	65%
n	20	17	23

During the endline survey, respondents were asked about GAIA-specific home-based care patients. Twenty-six respondents reported having a family member assisted by GAIA (10 were sick for less than two months, accounting for the lower n above). On average, home-based care patients were in care for eight months, but this ranged from less than one month to 36 months – the entire length of the GAIA program. Patients were visited on average twice per week, with a range of between one to four visits per week.

Community Development

GAIA supports community development through HIV support groups, youth clubs and income generating activities, like goat husbandry, to empower people living with HIV, prevent new youth HIV infections, and generate income for individuals to invest in sustaining long-term health.



SENIOR PROJECTS OFFICER ALICE BVUMBWE HELPS VILLAGE CHILDREN PUMP WATER FROM A BOREHOLE

When asked if they knew of an HIV support group operating in their village, only 15% of respondents knew of one during the baseline survey. This percentage (Table 8) improved by the end of the intervention, however, there was a sizeable decrease between midline and endline surveys. These findings have motivated GAIA to redouble efforts to support people living with HIV in current and future village groups and ensure the activities undertaken are appropriate and effective in helping individuals living with HIV live well.

TABLE 8

Question: Are there any support groups for people with HIV in this community?

Response	Baseline	Midline	Endline
Yes	15%	73%*	56%*
n	484	488	502

* denotes a statistically significant change from the prior survey

When asked specifically about GAIA-directed support groups during the endline survey, 19 respondents (11%) out of 172 reported being members, and most reported the support groups meeting less than once per month. The number of village women reporting the presence of a youth club in their village decreased after the start of the intervention, from 51% to 24%. Most youth groups conducted sporting activities for boys and girls or drama activities as seen in Table 9. Eight percent of respondents reported that their family members had participated in GAIA-sponsored youth groups that met on average once per month.

TABLE 9

Question: What do youth clubs in these areas do?

Response	Baseline	Midline	Endline
Sports for boys	80%	30%	63%
Sports for girls	67%	21%	58%
Singing or musical groups	20%	7%	10%
Discussion or debate groups	6%	27%	18%
Art groups	2%	1%	8%
Drama clubs	35%	49%	49%
Gardening or agriculture groups	5%	11%	12%
Vocational training groups	2%	2%	8%
n	201	25	119

At the end of the villages program, 31% of respondents reported receiving one to four goats from GAIA. Of those, 27% reported passing their goats on successfully to the next beneficiary, 58% still had the original goats and 14% had their goats stolen or die. Of those who reported being direct beneficiaries of any GAIA program, 72% received a bed net from GAIA during the intervention. Fifty-one percent of endline survey respondents also reported that their village had access to a bicycle ambulance, and of those, 78% reported knowing at least one person who had used the bicycle ambulance for emergency transport.

Conclusions

The survey evaluations of GAIA's work in MGC-A villages documents the positive improvements in key outcomes such as health literacy, health seeking behaviors, and HIV testing attitudes and testing rates. Results will be used to improve program performance in future village groups, emphasizing program aspects that fell short of expectations, such as HIV support group and youth club participation. Findings encourage GAIA to continue the significant progress achieved in increasing awareness of HIV, reducing stigma surrounding HIV testing and for those living with HIV, and improving health-seeking behaviors. Continuing to support orphans and children in school to increase their academic and economic opportunities and empower them to take charge of their health remain priorities for GAIA moving forward.