



Liga Inan Program Preliminary Results

Follow-up Phone Calls with Enrolled Women
from Sub-district Same

August 2013





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HAI would like to thank Jessie Lopez for compiling this report and the Liga Inan Field Officers, Jacob Fernandes and Madalena Soares, for conducting the interviews.

For more information on the Liga Inan Project, please visit www.ligainan.org or send an email to info@ligainan.org.

Summary

Health Alliance International is implementing an mHealth project for pregnant women with Ministry of Health staff in Manufahi District. This report describes the results of interviews in Same sub-district of the initial experience of 48 women enrolled in the project, known as Liga Inan. The women enrolled in Liga Inan receive two text messages a week about healthy behaviors and planning during pregnancy, for delivery, and through six weeks postpartum. Three-fourths of women were contacted by mobile phone and others at community venues.

Women described positive experiences with the program: 96% of women reportedly found the program easy to access and 94% were satisfied with the program.

Participants found messages easy to understand and 71% of women said they were able to read messages independently. Results show that message content is being remembered and 35% of women discussed messages with others, exposing more people to key health advice.

Although a majority of findings are positive, the survey also revealed the possibility that the program may not be reaching women as consistently as expected: women can recall receiving only 47% of the messages that were sent during the previous month. Further investigation will be necessary to determine whether this gap is due to recall bias, or to some other issue such as undelivered messages through the service provider, Timor Telecom, cell signal coverage, phones not being turned on for the entire week, or other user error.

Survey results have been essential in understanding barriers women might encounter in accessing the program, and has highlighted hamlets where access to the program may be more difficult. Comments about the program were overwhelmingly positive, but some indicate areas that could be improved.

Program Background

The Liga Inan ("Mobile Moms") Program began in September 2011 when Health Alliance International (HAI) was awarded funding by USAID to implement a maternal and newborn care project in Manufahi District. The program aims to reduce maternal and neonatal morbidity and mortality by improving health and care-seeking behavior of pregnant women.

As of 2010, contact between midwives and pregnant women during antenatal care may be inadequate to reinforce the key health messages that should be provided during pregnancy: only 55% of women were receiving four or more antenatal care visits¹. A knowledge, practice, and coverage survey conducted by HAI in early 2012 indicated that the majority of women could not identify two or more danger signs during pregnancy or delivery, nor could they identify many dangers signs during the postpartum period related to their own or their newborn's health.

¹ 2009-10 Timor-Leste Demographic and Health Survey

To inform and remind women of key health behaviors during pregnancy and postpartum, Catalpa International designed an automated service with HAI that would allow the MOH to share important gestation-specific maternal health messages with mothers twice weekly. From registration through six weeks postpartum, mothers receive messages relevant to antenatal care, nutrition, importance of delivering with a midwife, danger signs, and care of the newborn. The Liga Inan program also allows midwives to send messages to pregnant women about health outreach events (known as SISCa) in the sub-district. To enable communication between pregnant women and their midwives, a Liga Hau ("Call Me") was also incorporated to allow mothers to send a messages to their midwife requesting that the midwife contact them with advice or information.

At the time of this analysis, the Liga Inan Program was only operating in the eight hamlets (suco) of Same Sub-district: Betano, Daisua, Grotu, Holarua, Letefoho, Rotutu, Tutuluro. The program and enrollment commenced in Same in February 2013, and an estimated 30% of pregnant women in Same are now registered in the Liga Inan Program². Training and enrollment has now commenced in two additional sub-districts of Manufahi, Fatuberliu and Alas, applying some of the lessons learned from this report.

The Same Sample

In order to learn more about the experience of women in this Program, 50 women were sampled who had enrolled during the first three weeks of the program (February 20-March 14). These women were all from the first sub-district to receive the Liga Inan Program (Same) and were sampled proportionate to the number of enrollments per suco. To ensure accurate representation of smaller suco that have fewer enrollments, a few additional women from Grotu and Tutuluro were included.

"Thank you Liga Inan Program because you help send health messages to us."

Dina, Monaco

Contacting the participants

Two Liga Inan Program Officers attempted to contact each woman on the survey list between 3 April and 25 April by phone, after women had been enrolled in the program at least one month. If a woman could not be contacted by mobile phone after three attempted calls on different days and at different times of day, the Program Officers attempted to contact women via SISCa posts or home visits.

Table 1 shows the number of women from each suco that were sampled and the method in which they were contacted. Thirty-eight women (76%) were reached by mobile phone, including two husbands who participated in the interview on behalf of their wives. Ten women (20%) could not be reached by Liga Inan staff on three or more occasions by mobile and were contacted in person. Of these, five women (10%) were met at SISCa, four women (8%) on a home visit and one woman was met at Centro Saude Same.

² Program enrollment data compared to Population Projections for 2013 from the MOH and National Statistics Directorate (2013)

Table 1: Method of contacting participants

Suco	Women sampled	Method of contact			Unable to contact
		Phone call	SISCa	Home	
Babulo	8	6		1	1
Betano	6	4	1		1
Daisua	8	3	4	1	
Grotu	4	4			
Holarua	5	4		1	
Letefoho	11	10		1	
Rotutu	4	4			
Tutuluro	4	3			1
Sub-district Total	50	38	5	4	2

Women from Daisua proved most difficult to reach by mobile phone. Liga Inan staff were unable to contact five of the eight women from Daisua via phone call, and subsequently four women were met at SISCa and one by home visit. Staff indicated that women in Daisua are particularly affected by inconsistent mobile phone signal coverage. This was evidenced during the survey when a majority of phone calls to women in Daisua would divert to the automated Timor Telecom message stating the mobile was outside of the coverage area. This information assists to understand why Daisua was most difficult to contact and also issues women in the suco may encounter with accessing program.

Staff noted that most women and husbands seemed happy to answer questions and discuss their experiences with Liga Inan staff. Three women were not able to talk for long: one woman was busy with her child, one was not feeling well and one was grieving the loss of her newborn child.

Accessibility

The accessibility of the program is measured by assessing the consistency and ease for women to access the program and the program to reach women. Responses have revealed some access barriers that women encounter from home, and also with the consistency of the Timor Telecom service. The percentages given are out of 48 respondents interviewed.

“My second pregnancy is different after Liga Inan’s interest in mothers and babies. With my first child I only went to the hospital for consultations, but now with my second child I want to give birth in a health facility because there is health staff and all equipment.”

Amelia, Holarua

Are women receiving messages?

Women were asked when they recalled receiving the most recent message from the Liga Inan service. Thirty women (63%) said they received a message within the two weeks prior to the interview, nine women (19%) more than two weeks prior to the interview and eight women (17%) could not identify a time frame. One woman sampled had not received a message due to the incorrect number being recorded when registering, and one woman stated she received the same message four times in one day. Although nearly 2/3 of women received one or more messages close to the time being interviewed, one-fifth of women had not received a message for 'a while'.

Table 2 presents findings from survey question 'How many messages have you received since enrollment?' and is then compared against the estimated amount of messages the women should have received in that time. Estimated messages received were calculated between each woman's enrollment dates to interview date, coupled with the knowledge that two messages are sent each week.

Table 2: Average number of messages recalled in the past month versus number of messages sent by system

Suco	Average number of recalled messages by women per suco	Average number of messages expected for women enrolled per suco	Percentage of messages received based on recall
Babulo	4.8 *	7.8	62%
Betano	4.4 *	7.8	56%
Daisua **	4.3	9.1	47%
Grotu	1.8 *	9.5	19%
Holarua	9.8	10.4	94%
Letefoho	5.2	9.9	53%
Rotutu	5.5	11.5	48%
Tutuluro	5.7	11.3	50%
Sub-district Same Total	5.2	8.7	60%

* One woman from each of these suco could not recall how many messages they had received since enrolling in the program. In order to calculate the suco average, each woman's number of received messages has been estimated at zero. This is a low estimation and therefore suco Babulo, Betano and Grotu would likely have a higher average of messages received since registration with the program.

**One woman from Daisua was enrolled using an incorrect number and therefore never received a message. She is therefore unaccounted for in this tally.

Overall, women recalled receiving an average of 5.2 messages in their first month in the Liga Inan program, a low figure when compared with the expected average of 8.7 per woman. The results vary across suco: in Holarua, women reported receiving close to the expected number of messages (94% of messages received), while women in Grotu reported receiving only 19% of messages sent. Women from the other six suco reported receiving between 47% and 62% of expected messages.

These results require more investigation. If women accurately recalled all messages received, then these figures suggest that 40% of messages sent were not received by women across the sub-district. The low sub-district average number of messages received and also one woman's account of multiple messages received in one day may suggest that there may be some problems with inconsistent service delivery, unclear messaging during socialization or enrollment about the number and timing of messages being delivered by the program, or other household barriers to mobile phone use.

We also suspect that our expectations of accurate recall during the 4-week period prior to our interviews might have been unrealistic and skewed our results to a lower total than expected. In future assessments, we will consider shortening the recall period to two weeks to determine whether women have received the expected two messages a week. If future results stay consistent, however, we will further investigate the cause of these gaps.

Ease in accessing the program

Overall, forty-six women (96%) reportedly found the program easy to access. Additionally, seven women (15%) provided insight into the barriers they had encountered to receiving the automated phone messages. Three women's phones are turned off regularly, two women's children often delete messages before they can read them, one woman's husband takes the mobile when he is away for work and one woman provided the wrong mobile number when enrolling.

With the exception of the one woman who was registered with an incorrect phone number, the explanations provided are all barriers in accessing the program that are confronted at the household level. There are ways to navigate around many of the barriers, such as that women can be informed that messages should arrive on Mondays and Thursdays. This may encourage women to be attentive of their mobile on days a message is due to arrive and therefore enable women to access the program more consistently.

During a visit to a SISCa event in Maurem (an area within Suco Daisua) in March, discussions between HAI staff and enrolled women revealed similar obstacles. Of the five women present at the mobile outreach event who had enrolled in the LI program a month previously, none had received any messages since registration. Barriers mentioned included one husband that had dropped their phone in the river after enrollment so it was unusable, one woman explained that she lives in an area with no signal and due to heavy rains had been unable to charge her phone that requires a solar charger, and two women live in a location with inconsistent mobile phone coverage and have to walk approximately one hour to get a signal³. Staff informed the women that messages should arrive on Mondays and Thursdays and they all agreed to try and access their mobiles on these days.

³ HAI staff notes

Recalling, Understanding and Sharing Message Content

Women report that information sent to them is being understood, shared and remembered, all of which are positive signs for the program. Survey findings state that comprehension of message content is high amongst women, a large majority of who can read messages independently. No women found the messages difficult to understand, and forty-five women (94%) stated that messages are easy to understand. This is supported by the high comprehension of message content demonstrated by SMS messages remembered by women.

Recalled messages

One question asked women to recall the last message they had received to determine whether incoming messages are corresponding with each woman's estimated week of pregnancy. For the most part it was difficult to match the answers provided with a message surrounding the estimated week of pregnancy. Understandably, women did not recall messages exactly as they were received, instead explained what information they remember and rephrased messages they recalled. All responses provided are consistent with one or more messages on the SMS list.

Thirty-one women (65%) recalled a message from the Liga Inan SMS list, twenty-eight women recalled a health message and three women recalled a program related message such as the welcome to program SMS. Nine women (19%) remembered a message about healthy pregnancy, including sleeping under a mosquito net, not smoking or drinking alcohol during pregnancy and taking vitamins during pregnancy. Seven women (15%) recalled a message about danger signs during pregnancy, six women (13%) remembered preparatory messages for birth, three women (6%) explained the benefits of giving birth in a health facility and one woman (2%) recalled a message related to newborn health. Two women recalled multiple messages related to healthy pregnancy.

- 65% of women recalled one or more messages
- 15% of women remembered dangers since during pregnancy
- 19% of women recalled a message about healthy pregnancy

Assistance to read messages and sharing message content with others

The respondents were asked if they require help to read the messages. Thirty-four women (71%) stated they read messages without assistance. Twelve women (25%) stated they received assistance to read messages: nine women (19%) had help from their husband/partner, two (4%) from adult members of the family, and one (2%) from a neighbor. Two women (4%) did not indicate if they received assistance to read messages.

Women were also asked whether they discuss information from messages with other people. Thirty-five percent of women reported that they had shared the messages they had received from the Liga Inan Program with their family or neighbors: ten women reported sharing with one other person and an additional seven women (15%) shared this message with multiple people. Husbands or partners were the most common person with whom women discussed messages (33%), followed by adult family members (15%), neighbors (4%), and children or friends.

Information shared with others included the importance of preparation before birth and the benefits of giving birth in a health facility where equipment is available and health staff are present. One woman said she gave her emergency contact details to her neighbor and one woman from Babulo said “I always read messages and explain to others that have not received the SMS yet”.

Results prove a high number of women read messages independently. This is consistent with 67% Tetum literacy rate of women in Same with children between 0-23 months of age⁴. Results also demonstrate that messages are being shared with others. Discussing information or asking for help to read messages is a positive means of reinforcing health information and increases the number of people exposed to the key health information. Another positive result evidenced by the telephone survey is that women are remembering key health information, a great outcome from the program.

Participant Evaluation of the Program

Participant feedback was mostly positive and shows women are confident with health facilities and midwives. Forty-six women (96%) were satisfied with the messages they received and forty-two women (88%) reported that they have had “no problems with the service”.

“The Liga Inan Program is a great help for us and has given me information about giving birth in a health facility.”


Monica, Daisua

Four women made recommendations, yet only one recommendation to the program was related to the program itself: one woman asked HAI to include more information about family planning. The remaining three recommendations, two from Daisua and one from Rotutu, asked for continued support with transport from the program because they live far from hospitals and Same Vila (these women are referring to the ambulance service in their sub-district). Five women (10%) expressed concern that their remoteness impacts their ability to access health care and they urged the program to assist them with accessing transport.

Twenty-two women (46%) commented on the program and all made positive remarks. Nine women (19%) feel the program supports them to access health staff and facilities for ANC’s or giving birth in a health facility. Six women (13%) are grateful for the Liga Inan Program because the program “cares for me during pregnancy”. Five women (10%) appreciate receiving health information and information about facilities being “fully equipped” with health professionals and resources. One woman is content the program is free to access so she doesn’t use her own money and one woman is happy the program has put her in direct contact with her midwife.

Interestingly, messages about the benefits of giving birth in a health facility resonated greatly in Daisua. Of eight women in Daisua, seven women expressed appreciation for the program because it assists them to give birth in a health facility or recalled the importance of giving birth in a health facility. The consistency of this message is encouraging given that women in this suco had one of the lowest percentages of message recall: even if they are not receiving all individual messages, they are clear on one of the most important concepts of this program.

⁴ HAI KPC Survey 2012



Five women commented about their midwives. Four women made positive comments about midwives: one woman said she is happy because she can contact her midwife directly if she encounters any problems, one woman was grateful for the treatment her midwife has provided, and two women were happy with the information their midwives had provided. Only one woman, from Grotu, expressed dissatisfaction: "I am not very happy because midwives are only in Same so it's difficult to go for check-ups." A midwife has been recently stationed in Grotu, so access in that suco is likely to improve.

Recommendations

Results indicate that some women are encountering household-level barriers in accessing their mobile phones to read Liga Inan program messages. Women would benefit from being informed that messages will be delivered on Mondays and Thursdays, and if they do not normally have their phones on at all times, they could turn them on those afternoons to receive their messages. This information can be promoted more regularly by midwives, perhaps by text message or could be displayed at health centers and discussed at SISCa events. These occasions would also be useful to encourage women to discuss the message content they receive with others, which would increase exposure of health messages.

It is also recommended that the program investigate the overall consistency and reliability of service provider, Timor Telecom, particularly in Manufahi district. This would help to establish how many messages women might be missing due to service delivery issues and reassess the expected delivery rate.

Future interviewing processes may benefit from re-phrasing questions. For example, to better establish whether messages are arriving consistently interviewers could ask 'How many messages did you receive last week?' and 'Do you receive two messages every week?', rather than asking 'When was the last message you received?'

Conclusion

Findings suggest that the program is providing valuable health information to mothers, who are appreciative of the regular advice provided. Key health information is being delivered and women are remembering the messages they receive. Over a third of women share the information with husbands, family members or a neighbor. The program appears to be successfully facilitating improved communication between mothers and their midwives, though further inquiry into this important issue is warranted. It is also recommended that HAI and Catalpa staff investigate further the reports of program messages that fail to be delivered and address barriers to messages delivery when possible, such as assuring that women are informed which days to expect text messages from the Liga Inan project.