



ligainan

Executive Summary

An evaluation study of Liga Inan in Manufahi and Likisá, Timor-Leste, 2014-2015

NATIONAL HEALTH INSTITUTE TIMOR-LESTE

Putting health in mothers' hands.



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Introduction

The Maternal and Children's Health (SMI - Saúde Materno-Infantil) program is a priority among the Timor-Leste government's key health services. One of the main objectives of this program is to decrease maternal and children's mortality rates in Timor-Leste. To support it, the Ministry of Health has developed various strategies to respond to the problem of high maternal and children's mortality rates. Some of these strategies include a five-year strategic plan to promote maternal and children's health, and the national strategic plan for the health sector from 2011-2030.

One of the components of these strategic plans is Liga Inan (or "Connecting Mothers" in English). Liga Inan is a collaboration between the Ministry of Health, Health Alliance International (HAI) and Catalpa International. The first phase of Liga Inan was implemented from 2012 until 2015 through a pilot program conducted in three districts (Manufahi, Likisá and Aileu). In June 2015 the Vice-Minister of Health, HE Dr. Ana Isabel Soares, MPH, PhD, recommended the SMI department - Health Ministry Central Services and the National Health Institute (INS) research department to conduct an evaluation study of the Liga Inan program with the purpose of providing recommendations to the Ministry on adoption and expansion of the Liga Inan program in all districts of Timor-Leste. The main objective of this study is to analyse the functioning, sustainability & benefits of the Liga Inan program which was implemented in Manufahi and Likisá in 2014.

Methodology

The national evaluation of the Liga Inan program consisted of a cross-sectional study combining different research methods, including document review, quantitative & qualitative research. This study analysed 7 official documents produced by the government and the Ministry of Health on the development strategy for the health system and the strategic plan for reproductive, maternal, newborn, children & adolescents' health. We also reviewed 18 documents on Liga Inan and its procedures.





Quantitative Study

A quantitative study was conducted in Likisá and Manufahi. The researchers designed and used a questionnaire to interview the participants. Before doing the interviews, the enumerators read an informed consent form to the participants. Only when the participants agreed to participate in the evaluation did we proceed with the interview. The results of the interview were entered into the database program prepared in Excel. The data was then tabulated and analysed with Excel. A total of 314 participants, from the municipalities of Manufahi and Likisá, were involved and interviewed in the study.

Qualitative Study

A qualitative study was conducted in Likisá and Manufahi in order to enrich the information collected in the Liga Inan evaluation study. Qualitative researchers, who were trained by qualitative research experts (external research consultants) from the United States Government, conducted 15 in-depth interviews with the manager of SMI, the director of SS (Sentru Saude - Health Centres), municipal health officers, district administrators and village chiefs. In one of the municipalities, the researchers also conducted two focus group discussions. One group's participants were pregnant women and the other's were their families (husbands, brothers/sisters and nephews/nieces).

The data collected through document review, quantitative research and qualitative research was triangulated with the objective of reaching comprehensive results. In order to attain these results, the Liga Inan evaluation research made use of a methodological framework of data analysis that considered the six building blocks of the World Health Organization (WHO) health systems' framework.

Results and Discussion

Quantitative Results

According to pregnant women participating in Liga Inan who were interviewed for this study...

1

87.6%

could read Liga Inan messages

2

75.2%

could understand Liga Inan messages very well

3

90.1%

followed the messages' recommendations

4

68.5%

attended more than 6 antenatal care appointments

5

58.9%

gave birth at a health facility

6

82.2%

were assisted by a health professional during childbirth

7

71.3%

used their own mobile phones to participate in Liga Inan

8

86%

had good access to mobile phone networks

9

58%

perceived Liga Inan to be the best information source on maternal and child health



Qualitative Results

The discussion of the results of the Liga Inan program evaluation study, using a framework of analysis based on the WHO six building blocks of health systems, allows us to evaluate the functioning, benefits and sustainability of this program as this study is delivered to the Health Ministry with the objective of adoption and dissemination of the Liga Inan program in all municipalities in Timor-Leste.

1.

Functionally, overall, the Liga Inan system worked well according to the six building blocks of the WHO's health systems' diagnostic, which was used as a framework of analysis in this research. The HAI coordination centre, working together with the Ministry of Health, performed well in their leadership and stewardship roles. Important elements of the stewardship role consisted of political framework integration, supervision, creation of regulations, system design, accounting, and the development of collaborations and partnerships.

2.

The Liga Inan program delivered health services that are exemplified by the following activities:

- a. increase the needs of the community for Liga Inan assistance and
- b. supply an integrated package of assistance. The integrated package of assistance was composed of 6 important activities:
 - Registry of pregnant mothers
 - Sending a total of 94 SMS automatically through the Liga Inan software to expectant mothers
 - Midwives sending additional messages about Integrated Service of Community Health (SISCa) activity timetables to all expectant mothers
 - A call back message service from pregnant women to midwives
 - Midwives' availability to call pregnant women 3 weeks before delivery
 - Pregnant women's ability to call midwives in emergency cases

Liga Inan provided service lines at different levels: national, municipal, administrative post, health post and the community level through local authorities.

Qualitative Results



3.

This evaluation study was not able to identify the number of staff necessary to implement the Liga Inan program in each district.

However, in general, health personnel may be divided in three groups:

- managers – his/her role is mostly at the central and municipal level, for example, the Liga Inan program manager, IT officer, SMI director, the district public health officer and the community health centre director
- operational personnel – midwives and doctors who work at community health centres and health posts that were part of the Liga Inan program for pregnant women
- local authorities, including municipal administrators, heads of administrative posts, village heads and hamlet heads.

4.

According to HAI and Catalpa International, the Liga Inan program is designed to use minimal infrastructure and logistical support.

Catalpa International is responsible for the investment decisions and their specifications, price and procurement, as well as investment options regarding equipment and technology for Liga Inan's software.

The data collected during the document review shows that Liga Inan is focused on the use of mobile telephone technology in order to share information to promote the health of pregnant women during pregnancy and delivery periods.



5.

The majority (**71%**) of pregnant women registered in Liga Inan have their own mobile phones. A previous study concluded that **82%** of pregnant women used their own mobile phone to receive SMS from Liga Inan.

6.

The results of this research show that expectant mothers received maternal and children's health information mostly (**64%**) from the Liga Inan program in comparison to other information sources.

During its implementation, the Liga Inan program received adequate funding from USAID and DFAT. According to Catalpa International (2016), in the final cycle of the grant Liga Inan supported a total of **25,149** pregnant women with a total cost of **US\$61,841** per year.



Benefits and Sustainability

Benefits

The results of this evaluation study and other previous studies conclude that the Liga Inan program provided benefits to expectant mothers, their husbands, the community and health professionals. Liga Inan sent a total of **94** SMS messages twice a week with information, depending on an expectant mother's due date and health condition. These messages helped expectant mothers access health information and represented an important reference for them and their family to ensure that the mothers and their newborns were healthy.

After registering in Liga Inan, the majority of expectant mothers' perceptions about healthy behaviours changed significantly during their pregnancy and after childbirth. This study concluded that the majority of pregnant women registered in the Liga Inan program (**92%**) knew how to read the messages that were sent to them and **95%** understood those messages. Liga Inan helped these women to call their midwives whenever they faced emergency problems. According to pregnant women who used this service, when they experienced sickness or problems such as bleeding, they would call their local midwife who would respond with an SMS message. Sometimes, a midwife would visit them at their home.

Liga Inan is of great use for midwives since communication and connection with their patients is facilitated. They feel that they have better control over pregnant women's health, and their motivation and perception of self-worth is increased as they are able to accompany their patients. The results are almost the same as the results from the previous study conducted by researcher Gina Barnabee in the district of Manufahi in 2015. Liga Inan's biggest advantage is to provide access to information for communities in rural and remote areas. Liga Inan also supports the families and communities of pregnant women to understand healthy behaviours that pregnant women in their families and communities should follow.

Sustainability

Sustainability refers to the ability of Liga Inan to continue its operations in the Ministry of Health without external technical and financial support. This study was not able to identify the duration of the functioning of Liga Inan's connection software nor estimated price when the service required replacement or maintenance. According to Catalpa International, in the final cycle of the grant, Liga Inan registered and provided support to a total of **25,149** users with a total cost of **US\$61,841** per year. Catalpa estimated that a **US\$3** cost per pregnant women after the grant finished would ensure the sustainability and cost rationality for the Ministry of Health. In spite of the argument that the Liga Inan is cost-effective, according to which the program has an initial high cost but will be cost-effective in the long-term, this has not yet been demonstrated through a consistent study (a cost-effective analysis). Until now the Ministry of Health has not yet publicised the total funds allocated to the SMI program and this may have a negative impact for the SMI's current operational costs.

Recommendations

- 1** **We recommend** the Ministry of Health, in particular the SMI department, to adopt and incorporate the Liga Inan system as part of integrated assistance for maternal and children's health
 - 2** **We recommend** the Ministry of Health's health promotion department to adopt and integrate the Liga Inan system into general health promotion assistance and health information systems
 - 3** **We recommend** establishment of a hand-over team to integrate the Liga Inan system into the Ministry of Health and to continue to use the experience and technical support from HAI and Catalpa International
 - 4** **We recommend** the incorporation of Liga Inan's operational costs in the annual budget of the maternal and children's health program, health promotion and health information systems
 - 5** **We recommend** the INS's research department to conduct a study about the integration of the program in the Ministry of Health's activities of health promotion, health information systems, and SISCa and home visits programs
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