# HEALTH AND HEALTHCARE IN SOIBADA

An observational report



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Friends of Soibada ABN: 31 133 277 056 Medical and Health Projects Observations in Soibada July 2022

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#### Introduction

This report presents the findings of a primarily observational examination of the state of health care and health care provision in the remote district of Soibada, Timor Leste. This report is intended for members of the Friends of Soibada committee, volunteers, health and medical professionals and companies, and committee members in Soibada. This report must remain freely accessible to members of the public. All efforts have been made to ensure that there is no data within this report that could be used to identify a patient or breach confidentiality requirements.

During July 2022, several volunteers travelled to Timor Leste. Five committee members as well as other volunteers formed the group. The committee members included: Tamara Sloper-Harding (charity founder), Olivia Scully (schools and education), Kerry Goodrick (craft and women's groups), Armelle Harding (youth), and Elijah Thomson (medical and health). This report reflects the observation taken by Elijah Thomson during this period and is concerned with the health-related components of Soibada and Soibada's community functioning.

This report is intended to be used as a guide to future committee members when designing health and medical related projects. This report should be used to guide reflections and to ensure that the 'Friends of Soibada' charity can track progress made regarding the state of Health and Medicine in Soibada. This report also presents a list of requests from the health care professionals in Soibada regarding materials, processes, and infrastructure which they believe are integral to the functioning of their health system. The request list is based on interviews performed in July 2022 and should therefore be updated annually or bi-annually to reflect current needs in Soibada.

The report centres around observations taken at four different medical centres throughout Soibada and its four different Sucos. Centro Saude de Soibada, is the central health and medical centre located in Manlala suco and reports directly to the Ministry of Health. Centro Saude de Soibada also has a maternity clinic adjacent to the main medical building. The maternity clinic is reported on separately despite being part of Centro Suade de Soibada. Also reported on was Tasi Fatin health post, Manu Fahi health post, and Salau health post.

The authors of this report have taken considerable effort to minimise the incorporation of bias. However, the authors, as humans, do understand that subjectivity cannot be removed entirely and must not deny that bias, to some degree, will influence the presentation of this data. Furthermore, much of this data was collected through interviews with the health care professionals present at the four health posts. Due to the language barrier, much of the data had to be translated to English directly from Tetun or from Tetun to Portuguese to English. It is likely that the interviewee's initial intention in some remarks was lost in translation to English. Despite this, every effort was made to identify personal and subjective remarks from health care professionals in Soibada regarding their clinics, the state of the health care system in Soibada, and more broadly, Timor Leste.

# Health clinic, Health Posts, and Maternity <u>Centre</u>

## Centro Saude de Soibada

Observation date: 22/7/22

Location: Manlala

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 <sup>&</sup>lt;sup>1</sup> Centro Saude de Soibada – photo by Nicholas Fiennes
 <sup>2</sup> Laboratory – photo by Nicholas Fiennes

#### Introduction

Centro Saude de Soibada, or more simply Medical Centro, is the central health care facility in Soibada. It is the medical facility with the most services available and which serves the most people. The other smaller health posts may send critically ill patients who cannot be managed at the health post to Centro Saude de Soibada to be stabilised or transported to another health care facility with more capabilities. Medical Centro also serves as the central point of medical data collection, taking monthly health reports covering health presentations and prevalence data as well as requests for equipment and medications. Medical Centro will send these data sheets and request forms to the ministry of health in Dili for processing.

Medical Centro consists of a central compound offering general consultation with a medical officer (MO), paediatric consultation room, medication room, administrative room, and triage room. Medical Centro is the only medical infrastructure in Soibada with a maternity clinic, although many births occur in the separate sucos, any difficult births or births from the areas proximal to Manlala utilise the maternity clinic. The maternity clinic was the first facility where hygiene baby bags were implemented.

The chief of Manlala is Mr João Baptista Alves

The chief of Centro Saude de Soibada is Mr Simplicio De Jeseus Alves

#### Observation

Name of clinic: Centre Saude de Soibada

**Pop Serving:** between 3500-4000 people over the entirety of Soibada, 100-300 people of Manlala.

**Demographic:** Mothers and paediatrics are the most common presentations

- Coryzal symptoms
- Gastritis/Abdominal pain
- Pruritis
- Infection
- Asthma
- Bronchitis

Number of people seen in clinic daily: Between 8-15 daily.

**Number of beds:** 4 in the Medical Centro, 8 in the maternity clinic.

**Suco/s Serving:** Manlala and the other distant sucos of Tasi Fatin, Manu Fahi, Salou. Serves as a facility for which illnesses are escalated to if they cannot be managed in health posts.

#### **Medical Professionals**

**Doctor** Dr Boaventura Sarmento Dr Raemuda

Nurses x 2

Midwife Midwives x 2

Allied

Pharmacist x 1

Public health x 2

Pathology workers x 2

#### Services Offered

A = applicable, NA = Not applicable

#### Consultation with MO-A

#### Laboratory - A

Laboratory capability as follows:

- Hb
- Hep B
- HIV
- Malaria
- Dengue
- TB sputum

#### After Hours Capability - A

Clinic usual work hours: 0830-1400

Patients can phone the nurse or doctor in the event of an emergency 24/7

#### Pharmacological - A

Adrenalin	Lidocaine
Amoxicillin	Magnesium Supplement
Carbamezapine	Metoclopramide
Cloxacillin	Omeprazole
Diclofenac	Oxytocin
Erythromycin	Paracetamol
Furosemide	Prednisolone
Gentamicin	Salbutamol
Griseofulvin	Spironolactone
Hydrochlorothiazide	Trimoxazole
Hydrocortisone	Valproic acid
Hysoscine butylbromide	Zinc Sulphate
Ibuprofen	

#### Capability

Triage - A

There is a central room following the entry where doctors rapidly assess the patient, and a small amount of documentation is completed. As a reflection of what was observed by the authors, waiting times prior to MO review appeared to be low, with most patients seen by a MO within minutes.

#### General adult consultation - A

Most prevalent illnesses

- Hypertension
- Respiratory illness

#### Maternity - A

See Soibada Maternity clinic, pg. 14

#### Family Planning - A

A family planning room is present in the maternity clinic. It was explained that the aim of this program, which has been running for >10 years, is to encourage safe planning around conception and family building. Doctors and midwives have presented information on leaving gaps of at least two years in between children to ensure that parents can provide sufficiently for children.

It was explained that the aim is not to encourage a reduction in birth rates, but to encourage consideration of timing relevant to having children.

Rates of births and pregnancies have increased since the program was introduced. There has not been a concomitant rise in mortality amongst children.

There is not enough data to draw correlations or causations between the number of children born and malnutrition rates amongst neonates and infants.

#### Paediatric – A

Main issues

- Coughing
- Headaches
- Coryzal symptoms

#### Suture and laceration repair - A

Iodine is utilised for cleansing of wounds

Current state of procedural utensils:

- Have been using the same forceps, tweezers, scissors, and other suture equipment for seven years.
- Cleaning in a high pressure, high temperature steel pot. Autoclave present although not functional.
- Utensils appear to be in worse condition within the health centre in comparison with maternity clinic. The maternity clinic has a stock of some new/sterile metal utensils (forceps, clamps, speculum etc).

#### Venepuncture and intravenous fluids replacement therapy - A

Fluids available:

- Hartmanns solution
- Normal saline 0.9%
- Glucose solution 5% and 10%

#### $\underline{Nebuliser-A}$

- Nebuliser present in the main clinic, attached to a large oxygen tank.
   Approximately 5 L.
- Nebuliser is also found in the maternity clinic. This was provided for by UNICEF

#### Oxygen - A

- Oxygen tank with volume of 5 L in Centro Saude de Soibada.
- No oxygen in the maternity clinic, they currently wheel down a large oxygen container from Centro.



#### **Vaccination**

- COVID 19
- Bacille Calmette-Guerin



- Poliomyelitis
- Rotavirus
- Measles and Rubella
- Diphtheria, Tetanus, Pertussis
- Hep B
- Inactivated poliomyelitis
- Diphtheria and Tetanus

#### **Other capabilities**

- Catheter
- Guedel
- Burette
- Suction
- Doppler
- Post-partum haemorrhage kit

#### Administration

Administration completed by the Doctor, Nurse, Midwife, Pharmacist, or Public Health representative following consultation with the patient.

Information covering:

- Suspected disease process,
- Treatment offered including medications and procedures,
- Age of patient
- Patient name

Administrative processes also include catalogues of equipment and the formation of equipment requests.

#### Reporting of data to ministry of health

Compiled data and equipment requests are sent to Manlala and then on to Dili for approval by the Ministry of Health. It is the job of Centro Saude de Soibada to compile the monthly reports from all other health posts (including Centro Saude de Soibada) into a formal report to be sent to the ministry of health in Dili.

A similar process occurs monthly for the procurement and replacement of pharmacological products. Requests for medicines are sent to Manu Tutu. Requests for other supplies, including medical utensils, are sent to Dili. The chief reports that equipment is supplied by the government a few times a year although this is sporadic.

Non-Governmental Organisations (NGO's) also contribute to the machines, utensils, and infrastructure available to the Centro.

The chief of Medical Centro reports that there is minimal communication between the Ministry of Health and Centro Saude de Soibada.

The Ministry of Health has developed 24 health programs which must be reported on monthly by the clinic, these include: malaria, dengue, common transmissible diseases (influenzas and other respiratory viruses), malnutrition, and common non-transmissible diseases.

A discussion with the chief revealed no firm health care policy or health care goals produced by the Ministry of Health which are used to guide the provision of care apart from these 24 health programs.

#### Sanitation and waste disposal

#### Sharps container – A

• Several sharps containers throughout the facility

#### Sharps disposal and disposal of medical waste - A

- Sharps disposal is completed through the burying of potentially infectious wastes and sharps.
- Medical waste is incinerated in an open fire.

#### Autoclave - NA

- Autoclave is non-functional
- A high pressure, high temperature steam pot is used to clean metal utensils for repetitive use.

#### Refrigeration - A

#### Washing machine - A

Access to water – A in maternity clinic, NA in Centro clinic.

High pressure, high temperature pot for equipment sterilisation – Photo by Nicholas Fiennes



- Centro Clinic
  - o No access to a water source currently
  - o UNICEF has funded the creation of a large water collection system outside the Centro clinic. It is expected to be completed in one month (August 2022).
- Maternity clinic
  - Access to a 500L water tank which is filled by the water collected in the gutters on the posterior of the maternity clinic.
  - o The water is not suitable for drinking.

#### Electricity - A

Formal electricity via power lines

#### PPE - A

- Masks
- Gloves
- Gowns

#### **Emergency**

There are no emergency protocols in place.

A code blue (cardiac arrest) is managed as follows:

- CPR initiated
- Transferred to Dili national hospital

The following service/equipment is available for an emergency:

- CPR trained personnel
- Bag valve mask
- Guedel
- Adrenalin
- Suction
- Oxygen

In the event of a severe medical event, there is no ECG, no defibrillation or cardioversion, and no ventilatory support. There are no haemodynamic supportive medications available except for adrenalin.

From discussion with medical professionals and local officials, it appears that all cases of cardiac arrest have led to death in Soibada.

#### Comments:

- There are three beds in Centro Saude de Soibada in a front room which serves as Triage as well as emergency room.
- Observation suggests that Centro Saude de Soibada has the most adequate access to resources out of the surrounding health posts.

#### Requests from Medical staff

Medical Clinic – in order of priority

1. Stethoscope – 10-12 pieces	2. Sphygmomanometer
3. Doppler for foetal heartbeat	4. Glucose kit
5. Cholesterol kit	6. Ophthalmologist for consultation

# Soibada Maternity Clinic

Observation date: 27/7/22

Location: Manlala

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<sup>&</sup>lt;sup>3</sup> Maternity Clinic – Photo by Nicholas Fiennes

#### Introduction

The maternity clinic is attached to Centro Saude de Soibada. It is a relatively large building with multi-bed capabilities for birthing. The maternity clinic serves as the central women's and children's health facility in Soibada. Although Tasi Fatin and Manu Fahi have small birthing capabilities at the health post, birthing women are transported to the Maternity Clinic in Manlala if complications at birth arise. The health professionals who operate the maternity clinic also report that most new births are registered in the central maternity clinic soon after delivery in the smaller health posts and in the community.

#### **Observation Notes**

Name: Centro Saude de Soibada – Maternity Clinic

Location: Manlala

Population serving: peri-natal and post-natal women and neonates of Manlala and broader sucos.

#### Capability

**Medical Professionals** 

- 2 x Doctors
- 2 x Midwives

#### Data collected at birth

- Baby weight
- Circumference of limbs and head
- Length of limbs and torso
- Finger stick blood glucose
- Vital signs

#### Number of births per month

• <10 births a month.

#### Number of deaths

- Reported ~ 1 death of neonate per year
- Reported that this is mostly due to a delay in seeking out medical professionals in the event of a delayed labour.
- Reported that this also stems from the rural position of some mothers during labour who cannot drive to the clinic or get assistance from medical professionals in a reasonable time.

#### Number of malnourished births annually

- Rates of malnutrition were not discussed
- A passing comment indicated that malnutrition rates had decreased although it was still widespread.

#### Breastfeeding rates

- Reported that every mother breast feeds infants until the age of 6 months.
- Education provided to mother regarding ensuring neonate/infant is fed colostrum and no other milk or foods in this interim.
- Many women are breastfeeding up to two years.
- It is reported that this is dependent on the access to resources within the community to feed the mother.
- Rates of breastfeeding amongst mother's declines after 6 months in Soibada generally but remains very high (in the 90<sup>th</sup> percentile) past the 6 month point in Manlala.

#### Data collected/procedures performed at birth

- Glucose
- Weight
- Baby dimensions
- Vaccinations
  - o Refer to the vaccination section of 'Centro Saude de Soibada' for a list of vaccines given, pg. 11.
  - o Vaccinations given to children per the advice of WHO
  - o Timeline for vaccination as follows:
    - Birth -> BCG, HEP B, OPV
    - Month 1  $\frac{1}{2}$  -> Penta 1, OPV
    - Month 2 ½ -> Penta, OPV
    - Month 3 ½ -> Penta, OPV, IPV
    - Month 9 -> SE
    - Year 1 ½ -> DPT, BR
    - Year 6 -> Dr

#### Percentage of community births occurring in clinic as opposed to private residence

• Births occurring within the clinic as opposed to private residence within 90<sup>th</sup> percentile per reports from the Chief of Centro Saude De Soibada.

#### Hygiene kits

- Hygiene kits are provided by friends of Soibada and are bags filled with the following:
  - o Hand-knitted blanket
  - o Soap
  - o Lotion
  - o Baby clothes
  - o Days for girls' menstruation kit
  - o Menstrual tracking bracelet
  - o Gift for mothers often a small lotion or perfume
- Hygiene kits were introduced to encourage women to present to the maternity clinic when in labour. The doctors identified that women were unfamiliar with the maternity clinic and therefore were less likely to present for peri-natal and post-partum care.
- Hygiene kits were used to encourage women into the maternity clinic.
- The midwives collect the following data:
  - o Name of mother
  - o Area of Residence

- o Place of Birth
- o Pregnancy number
- o Baby weight and health data
- The forms related to the baby bags have been completed well, although there are many gaps within the forms and the baby bags were not dispersed amongst all maternity areas in the health posts.
- The data is inconclusive as to whether the baby bags made any difference in the number of women giving birth in the maternity clinic versus the number of women giving birth at home.
- More data is needed in this area.
- The baby bags did provide mothers with sanitary equipment and clothing for which to care adequately for their new child.

#### Comments

- The maternity clinic is relatively large.
- It has a room for general health check-ups for women and babies.
- There is a room for family health planning.
- There is a room for the administration of vaccines with a fridge.
- There is a back room with five beds which can serve as a birthing area. There are two birthing beds and one neonatal radiant heat bed which is non-functionable.
- There are two post-partum-haemorrhage kits.
- The maternity clinic is supported by UNICEF.
- The maternity clinic could benefit from more regular cleaning as well as an extension of guttering to include the front of the maternity clinic.

#### Requests

Oxygen	Nebuliser
Hygiene kits	

# Health post – Tasi Fatin Observation date: 19/7/22

Location: Tasi Fatin



<sup>&</sup>lt;sup>4</sup> Tasi Fatin Health Post – Photo by Nicholas Fiennes

#### Introduction

Tasi Fatin is a small mountainous village located 40-50 minutes from Manlala in Soibada. Access is by one road which is unsealed and is often obstructed by landslides. There is one school in Tasi Fatin which serves 25 students of primary age. There is one health post in Tasi Fatin which has one doctor, one nurse and one midwife. Tasi Fatin has a large group of women who developed a craft cooperation that developed into a union where money is lent and returned with interest.

The Chief of Tasi Fatin is Mr. Gjoao

#### Observation

Name of clinic: Tasi Fatin

Population serving: approximately 300

Demographic: mostly children presenting with respiratory illness.

Number of people seen per day: 4-10 people

Number of beds: 2

Suco serving: Tasi Fatin

#### **Medical Professionals**

Doctor Dr Gilson Alves

Nurse x 1 nurses

Midwife x 1 midwives

Allied No other clinicians or health staff

#### Services Offered

A = applicable, NA = Not applicable

Consultation with MO - A

Laboratory – NA

Closest laboratory is in Centro Saude de Soibada, a 40-50 minutes' drive away and is often obstructed in the rainy seasons due to landslides and poor road access.

After Hours Capability – A

0800 - 1700

Phone nurse if emergency 24/7

Pharmacological – A

Aluminium	Amoxicillin
Bromohene	Captopril
Co-trimoxazole	Didofenac
Dipropionate	Erythromycin
Griseofulvin	Ibuprofen
Metronidazole	Nystatin
Omeprazole	Omeprazole
Paracetamol	Prednisolone
Salbutamol	Si Sulfadiazine
Vitamin A	Vitamin supplement
Zinc suphate	

#### Capability

#### Triage - NA

Tasi Fatin has a very small clinic consisting of one main room for treatment.

#### General adult consultation - A

Most prevalent illnesses

- Hypertension
- Respiratory illness

#### Maternity - A

One midwife

Data collected at birth

- Baby weight
- Doppler
- Medications

Number of births per month

• 1 birth a month

Number of deaths at birth

- Nil deaths reported before or after the opening of the health post
- Reported that there have been less adverse events associated with childbirth since there was better medical assistance supplied to the people of Tasi Fatin after the health post was opened.

Number of malnourished births annually

- About 10 malnourished neonates born annually
- Weights are usually 2-3kg

#### Breastfeeding rates

- Reported that every mother breast feeds infants until the age of 6 months
- Rates of breastfeeding amongst mother's decline following this point but remains very high (in the 90<sup>th</sup> percentile) past the 6 month point in Tasi Fatin.

Data collected/procedures performed at birth

- Glucose
- Weight
- Hepatitis B
- Polio

Percentage of community births occurring in clinic as opposed to private residence

• Reported that all community births have occurred in clinic since 2016

#### Paediatric - A

Main issues

- Coughing
- Headaches
- Coryzal symptoms

#### Suture and laceration repair - A

Iodine utilised for cleansing of wounds

Current state of procedural utensils:

- Have been using the same forceps, tweezers, scissors and other suture equipment for the last seven years.
- Cleaning with alcohol solution
- Scissors broken
- Evidence of blood stains on equipment

#### Venepuncture and intravenous fluids replacement therapy - A

Fluids available

- Hartmanns
- Normal saline 0.9%
- Glucose solution 5 and 10%

Nebuliser - NA

Oxygen - NA

#### Other capabilities:

- Catheter
- Guedel
- Buerrete

#### Administration

Administration completed by a Doctor, Nurse, or Midwife following consultation with a patient. Information covering:

- Suspected disease process,
- Treatment offered including medications and procedures,
- Age of patient
- Patient name

Administrative processes also include catalogues of equipment and the formation of equipment requests.

#### Reporting of data to ministry of health

Compiled data and equipment requests are sent to Centro Saude de Soibada in Manlala and then sent on to Dili for approval by the Ministry of Health.

The Nurse spoken to at the facility reports receiving new equipment approximately once a year. They do not always receive all equipment requested and often do not receive an acknowledgement of equipment requests.

#### Sanitation and waste disposal

#### Sharps container - A

#### Sharps disposal - A

 Sharps disposal is undertaken through the burying of potentially infectious wastes and sharps.

#### Autoclave - NA

- Cleaning performed through soaking of instruments in alcohol scrub.
- 5.25% NaClO also utilised for equipment cleansing

#### Washing machine - NA

• Materials cleaned in water with soap and hung in the sun.

#### Access to water - A

- Reports supply is always enough
- Water has not been treated and is not drinkable

#### Electricity - A

- Nil formal electricity source, i.e. power lines
- Receive electricity via solar panels (as of July 2022)

#### PPE - A

- Masks
- Gloves poor stock

#### **Emergency**

There are no emergency protocols in place.

A code blue (cardiac arrest) is managed as follows:

- CPR initiated
- Transferred to Centro Saude de Soibada
- Transferred to Mana tutu or Dili

The following service/equipment is available for an emergency:

- CPR trained personnel
- Bag valve mask
- Guedel

In the event of a severe medical event, there is no ECG, no defibrillation or cardioversion, no haemodynamic supporting medications, and no ventilatory supports. There is no oxygen in Tasi Fatin (there is one large cylinder in Medical Centro).

#### Comments

There is a poor supply of new medical equipment to Tasi Fatin.

The medical doctor in Tasi Fatin has approval to go between Dili and Tasi Fatin for family reasons and is therefore not always present at the clinic.

If the road between Manlala and Tasi Fatin is obstructed, no further support can be offered to Tasi Fatin health post if needed.

#### Requests from Medical staff - Tasi Fatin specific

-1		
Digital Scale	Stethoscope	
Bandage	Blood pressure cough	
Scalpel	Nebuliser	
Oxygen		

# Health post - Manu Fahi Observed: 19/7/22

Location: Manu Fahi



<sup>&</sup>lt;sup>5</sup> Manu Fahi Health Post – Photo by Nicholas Fiennes

#### Introduction

Manu Fahi is a moderate sized Suco positioned between Tasi Fatin and Manlala. It is positioned in a valley next to a flowing stream. It has one primary school with >100 students. There were many community leaders present for health, education, and youth. Each house looked well maintained with neat gardens.

The chief of Manu Fahi is Mr. Domingos Cruz de Silva

#### **Observations**

Name of clinic: Manu Fahi health post

**Population serving:** approximately 300-400

**Demographic:** Older people presenting with an array of illnesses including respiratory and

cardiovascular illnesses.

Number of people seen per day: per day 2-8, per month approx. 50

Number of beds: 4

Suco serving: Manu Fahi

Doctor: Dr Eugemia Cruz da Silva, 1 doctor

Nurse: one full time, one helper nurse

Midwife: No midwives

Other:

One public health official

- Receive list of presentations and afterwards give medications to ill people, family planning, integrated health (vaccination).
- Compile data from presentations

#### Services Offered

A = applicable, NA = Not applicable

#### Consultation with MO - A

#### Laboratory - A

Offer Malaria sputum swab rapid test

Offer Tuberculosis swab

Closest laboratory in medical centro approx. 15 minutes' drive

#### After Hours Capability - A

0800 - 1700 normal hours

Phone nurse if emergency 24/7

#### Pharmacological - A

Adrenalin 1mg/ml	Alprendazole
Aluminium hydroxide	Amoxicillin
Captopril	Carbamazepam

Clotrimazole	Co-trimoxazole
Doxycyline	Erythromycin
Folic acid	Grisenrol
Griseofulvin	Hydrochlorothiazide
Hydrocortisone	Ibuprofen
Lidocoaine	Multivitamin
Oxytocin	Paracetamol
Prednisolone	Zinc sulphate

#### Capability

#### Triage – A

Emergency room present which may serve with triage capacity if necessary.

#### General adult consultation - A

Most prevalent illnesses

- Fever
- Respiratory
  - o One case of TB present in community in the year, sent to Manu Tutu where pressurised room/fumigation is available
- Coryzal symptoms
- Asthma: most prevalent amongst the elderly

#### Maternity - A

No midwife

Number of births per month

• 1 birth a month – approximately 12 per year.

Number of deaths

- Zero deaths in the community in 2022.
- Reports safer with clinic functional in community with health professional assistance, prior to this, community members had to travel to another maternity clinic.

#### Facilities

- One maternity bed
- Large bed for prolonged stay
- Posters for health promotion

#### Breast feeding rates

• Reported that every mother breast feeds infants until the age of 6 months

Data collected/procedures performed at birth

- Glucose
- Weight

#### **Immunisations**

- Comprehensive vaccination program in Manu Fahi
- Vaccine fridge operational and at appropriate temperature
- Vaccines available
  - Bacille Calmette-Guerin (BCG) protect against serious TB (TB meningitis and miliary TB)
  - o Hepatitis B
  - o Measles Mumps Rubella
  - o Diphtheria
  - o Tetanus
  - o Pertussis

Percentage of community births occurring in clinic as opposed to private residence

- Reported that all community births have occurred in clinic since 2009.
- Reported that community members solely utilise the maternity clinic for births.

#### Paediatric - A

Main issues

- Diarrhoea
- Fever
- Coryzal symptoms

#### Suture and laceration repair - A

Iodine utilised for cleansing of wounds

Current state of procedural utensils:

- Equipment utilised appears several years old although still in functional condition.
- Cleaning with alcohol solution.

#### Venepuncture and intravenous fluids replacement therapy - A

Fluids available

- Hartmanns
- Normal saline 0.9%
- Glucose solution 5 and 10%

Nebuliser – NA

Oxygen - NA

#### Other capabilities

- Catheter
- Buerrete
- Family planning room

#### Family planning

- Family planning room located in clinic.
- Reported reasonable use by community

• Evidence of posters displaying types/methods of contraception

• Evidence of public health posters in relation to food requirements of pregnant

mothers and children through early childhood.

 Following a discussion with a Public Health representative, it was reported that birth rates have increased in recent times

 no clear reason identified.



#### Administration

Administration completed by Doctor, Nurse, public health representative following consultation with patient. Information covering:

- Suspected disease process,
- Treatment offered including medications and procedures,
- Age of patient
- Patient name

Administrative processes also include catalogues of equipment and the formation of equipment requests.

#### Reporting of data to ministry of health

Compiled data and equipment requests are sent to Centro Saude de Soibada and then sent on to Dili for approval by the Ministry of Health.

Reports that receive equipment once a year.

They do not always receive all equipment requested and often do not receive an acknowledgement of equipment requests.

#### Sanitation and waste disposal

#### Sharps container - A

#### Toxic waste and sharps disposal - A

- o Sharps disposal is undertaken through the burying of potentially infectious wastes and sharps.
- o Burying completed at back of facility
- o Some burning of wastes

#### Autoclave - NA

o Cleaning performed through soaking of instruments in alcohol scrub.

#### Washing machine - NA

o Materials cleaned in water with soap and hung in the sun.

#### Access to water - A

- o Reports supply is always enough
- o Water has not been treated and is not drinkable

#### Electricity - A

o Formal electricity supply afforded by power line connection

#### PPE - A

- o Mask 4 x box
- o Gloves 4 x box
- o Gowns

#### **Emergency**

There are no emergency protocols in place.

A code blue (cardiac arrest) is managed as follows:

- CPR initiated
- Transferred to Centro Saude de Soibada
- Transferred to Mana tutu or Dili

The following service/equipment is available for an emergency:

- CPR trained personnel
- Bag valve mask
- Emergency room with equipment specific to laceration repair

Most common emergency presentation includes motor vehicle accidents (from motorbike). Usually, injuries are managed in the emergency room at the health post. If injuries are too severe, the patient is transferred to Centro Saude de Soibada or Manu Tutu.

In the event of a severe medical event, there is no ECG, no defibrillation or cardioversion, no haemodynamic supporting medications, and no ventilatory supports. There is no oxygen in Manu Fahi (there is one large cylinder in Medical Centro).

#### Comments

The level of hygiene present at Manu Fahi was of a high standard.

A fridge was present in the facility allowing for adequate refrigeration of vaccines and expirable products.

No midwife was present despite having a dedicated maternal health and birthing area. Doctors managed delivery.

Medications were signed out when they were given to patients.

#### Requests from Medical staff – Manu Fahi specific

Nebuliser	Oxygen
Suction machine	Glucose test

### Health Post – Salau

Observation date: 24/7/22

Location: Salau

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<sup>&</sup>lt;sup>6</sup> Salau Health Post – Photo by Nicholas Fiennes

#### Introduction

Salau health post is a small clinic in Salau, Soibada. It has one bed and no maternity opportunities. Despite this, it is well equipped with medical professionals and appears to be well maintained. It was positioned on a large field with the school directly adjacent.

#### Observation

Name of clinic: Salau Health Post

Pop Serving: 721

Demographic: Varied presentation – majority presentations was children and older persons.

• Respiratory infection

Dermatitis

Diarrhoea

Hypertension

Number of people seen in clinic daily: 7-10 per day

Number of beds: 1

Suco Serving: Salau

#### **Medical Professionals**

Doctor Dr Odete Soares Alves

Nurse Angelicia Da C Sarmento

Midwife Eva Guterres Soares

Allied Adelia Maria Da Silva (Assistant nurse)

Anastasia Da Costa (Public health)

#### Services Offered

A = applicable, NA = Not applicable

#### Consultation with MO-A

#### Laboratory - A

Laboratory capability as follows:

Malaria

Other tests must be completed in Centro Saude de Soibada.

#### After Hours Capability - A

0830-1700

Phone doctor if emergency 24/7

#### Pharmacological - A

Acvelovir	Albendazole	Aluminium hydroxide

Amoxillin	Azithromycin	Bromhexine HCl
Captopril	Child minerals (2 mo- 2yrs)	Clotrimazole
Cloxacillin	Co-trimoxazole	Diclofenac
Doxycyline	Erythromycin	Griseofulvin
Hyoscine butybromide	Ibuprofen	Isoniazid/rifapentine
Lidocaine	Oxytocin (one amp given following birth)	Paracetamol
Salbutamol oral	Valproate	Vit A
Zinc sulphate		

#### Capability

#### Triage - NA

Salau is more like a traditional medical clinic, where people present and wait to see the doctor. They may have their vital signs taken by the nurse and some basic medical assessments prior to being seen by the medical doctor.

#### General adult consultation - A

Most prevalent illnesses

- Hypertension
- Respiratory illness

#### Maternity - A

One midwife

Data collected at birth

- Weight
- Circumference
- Vaccination
- Height

Number of births per year

- 7-10 births a year
- There are no births that occur in the clinic. The clinic does not have the capability for birthing and the medical team will present to the private house in the event of a birth.

#### Number of deaths

- 2017 was the last death amongst a newborn
- The newborn was transferred to Dili but did not survive

Number of malnourished births annually

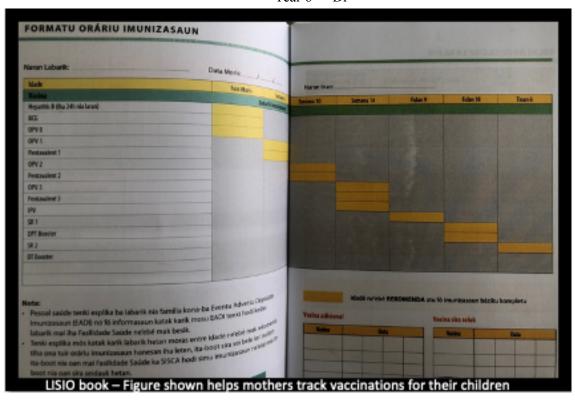
- Rates of malnutrition were not discussed
- A passing comment indicated that malnutrition rates had decreased although it was still widespread.

#### Breastfeeding rates

- Reported that every mother breast feeds infants until the age of 6 months.
- Education is provided to mothers emphasising the need to feed neonates/infants colostrum and no other milk or foods in this interim.

#### Data collected/procedures performed at birth

- Weight
- Baby measurements (head, arm, leg, waist circumference)
- Vaccinations
  - Vaccinations given at birth; ampules are transported with a doctor to private residence where it is given.
  - o Parents are also given a children's book LISIO book which helps them keep track of timelines relevant to vaccinations. The book also contains important information regarding what to feed the children and development and growth milestones. The author had not seen this book in other Sucos.
  - o Timeline for vaccination as follows:
    - Birth -> BCG, HEP B, OPV
    - Month 1  $\frac{1}{2}$  -> Penta 1, OPV
    - Month 2 ½ -> Penta, OPV
    - Month 3 ½ -> Penta, OPV, IPV
    - Month 9 -> SE
    - Year 1 ½ -> DPT, BR
    - Year 6 -> Dr



Percentage of community births occurring in clinic as opposed to private residence

- All births occur at private residence
- The health post is not suitable for safe delivery per MO.

#### Family Planning - A

A family planning room is present in the maternity clinic. It was explained that the aim of this program, which has been running for >10 years, is to encourage safe planning around conception and family building. Doctors and midwives have presented information on leaving gaps of at least two years in between children to ensure that parents can provide sufficiently for children.

The Midwife and MO report that with the introduction of family planning, the rates of birth amongst the Salau community had decreased. The family planning service, called Service Integrado Saude Community (Integrated Service of Community Health), was introduced by the ministry of health to decrease birthing rates. Medical professionals teach partners family planning principles (spacing between births) and introduce contraceptive methods (condoms, implanted devices, etc.).

#### Paediatric - A

Main issues

- Coughing
- Headaches
- Coryzal symptoms

#### Suture and laceration repair – A

Iodine utilised for cleansing of wounds

Current state of procedural utensils:

- Have been using the same forceps, tweezers, scissors, and other suture equipment for several years.
- Cleaning with alcohol. Autoclave was present but not functional The author discussed the possibilities of repair, but the Doctor responded that this was dependent upon the government.

#### Venepuncture and intravenous fluids replacement therapy – A

#### Fluids available

- Hartmanns
- Normal saline 0.9%

#### Nebuliser – A

- Nebuliser present in main clinic provided for by government
- Usually nebulise NS and salbutamol.

#### Oxygen - NA

#### Vaccination

- BCG
- Measles + Rubella
- DTP
- Polio
- Diphtheria + tetanus
- Hep B
- Rotavirus
- Poliomyelitis

#### Other capabilities

- Catheter
- Manual doppler
- Birthing kit although needs to be replaced

#### Administration

Administration completed by a Doctor, Nurse, Midwife, Pharmacist, or Public Health representative following consultation with a patient.

Information covering:

- Suspected disease process,
- Treatment offered including medications and procedures,
- Age of patient
- Patient name

Administrative processes also include catalogues of equipment and the formation of equipment requests.

#### Reporting of data to ministry of health

Compiled data and equipment requests are sent to Centro Saude de Soibada and from there are sent onto Manu Tutu and Dili.

The doctor in Salau Health Post reported that communication and requests for equipment are rarely acknowledged and rarely fulfilled. Although, the doctor did report that some requests had been fulfilled (e.g. nebuliser).

Non-Governmental Organisations (NGO's) also contribute to the machines, utensils, and infrastructure available to the Centro.

There is evidence that the ministry of health has directed health posts to engage in priority health actions through collecting data and providing information regarding many diseases including: malaria, malnutrition, dengue and more.

A discussion with the medical offer revealed no other firm health care policy or health care goals produced by the Ministry of Health which are used to guide the provision of care.

#### Sanitation and waste disposal

#### Sharps container - A

• Several sharps containers throughout the facility

#### Sharps disposal and disposal of medical waste - A

• Sharps disposal is undertaken through the burying of potentially infectious wastes and sharps.

#### Autoclave - NA

- Autoclave is non-functional
- Alcohol is used

#### Refrigeration - A

• Vaccination fridge

#### Washing machine - NA

#### Access to water - A

• 1100L tank at the posterior of the health post. There is another tank at the front of the health post which is non-functional. This tank could be repaired.

#### Electricity - A

• Formal electricity via power lines

#### PPE – A

- Masks
- Gloves
- Gowns

Reported to have a sufficient supply of the above.

#### Emergency

There are no emergency protocols in place.

A code blue (cardiac arrest) is managed as follows:

- CPR initiated
- Transferred to Dili national hospital
- There is no defibrillator

The following service/equipment is available for an emergency:

- CPR trained personnel
- Bag valve mask
  - o Paediatric BVM is not functional
- Adrenalin

In the event of a severe medical event, there is no ECG, no defibrillation or cardioversion, no haemodynamic supporting medications, and no ventilatory supports. There are no haemodynamic supporting medications available.

From discussion with medical professionals and local officials. The doctor reported two episodes of cardiac arrest (one due to motor vehicle accident and the other due to electrocution). CPR was initiated on both patients and there was return of spontaneous circulation in both patients. They were transferred to Dili with successful rehabilitation.

#### Comments

#### **Medical Centre:**

- There are three beds in Centro Saude de Soibada in a front room which serves as Triage as well as emergency room.
- Observation suggests that Centro Saude de Soibada has the most adequate access to resources out of surrounding health posts.

#### **Maternity Centre**

- There is one bed within the health centre.
- There are two separate rooms within the main building
- A conjoined building is adjacent to the clinic and is where the medical professionals sleep

#### Requests from Medical staff

#### <u>Medical Clinic – in order of priority</u>

Glucose test	Bag valve mask – Paediatric
Suction	Doppler
Birth kit	Autoclave

### Summary of requests for medical equipment

1. glucose	2. nebuliser
3. oxygen	4. stethoscope
5. sphygmometer	6. doppler
7. hygiene kit	8. suction

Others requests include: Cholesterol kit, ophthalmological consult, digital scale, bandages, scalpel, bag valve mask (paed), autoclave

After review, the equipment that can be sourced with great likelihood is the stethoscopes, sphygmometer and glucose kits. We have chosen to focus on the stethoscopes and sphygmometers as

they are a one time payment and last for years as opposed to the glucose kits which require regular replenishment. The oxygen and nebuliser are important requests that we hope to look into in the future although currently access to this equipment and medication is difficult and is best done by the resident health care organisation or the Ministry of Health.