



நல ஒளி

Nala Oli Volunteer Handbook







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Nala Oli - Volunteer Handbook Guide

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Nala Oli Volunteer Programme Overview

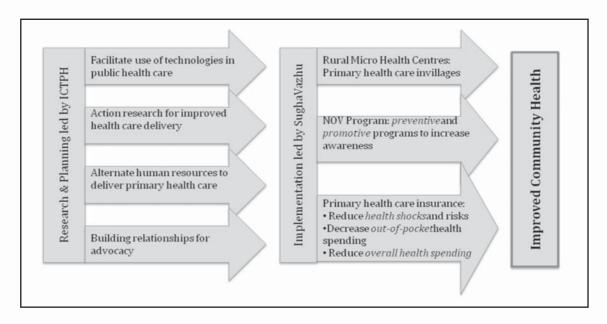
A. Introduction

This handbook has been developed as a user's manual for Community Health Workers (CHWs) trained by the IKP Centre for Technologies in Public Health (ICTPH), called Nala Oli Volunteers (NOVs). ICTPH currently has a team of approximately 57 NOVs in each of its three villages in the Thanjavur District, being 20 in Karambayam, 17 in Nattuchalai and 20 in Allakudy. It briefly explains the roles and responsibilities of NOVs in the ICTPH programs and describes key health concepts. It is to be used as a reference and should be carried by the NOV at all times while she is on work.

B. About ICTPH

ICTPH is a not-for-profit organization that strives to improve health by providing free and equitable health care to underserved rural populations of India. ICTPH aims to uplift health care in the villages and rural areas by studying new ways of delivering primary health care, focusing on research, spreading awareness and using technology. Below is a representation of ICTPH's primary care model.

Figure 1. ICTPH's Primary Care Model



ICTPH currently is focusing on three villages in the Thanjavur district, namely Allakudy, Karambayam and Nattuchalai villages. They were selected based on the following criteria: population size, distance from village to town, site of a local KGFS branch, income level and health service availability, such as presence of a Primary Heath Centre and pharmacy. A baseline survey was conducted in each village to understand current health status, health spending and to help identify areas to focus ICTPH's programs. All three villages already have existing Public Health Centres (PHCs), which are run by the government. ICTPH aims to complement and part-supplement services provided by the PHCs, but we do not aim to substitute them in any way.



C. Structure of India's Public Health System

The Health system in India is divided into three parts: (1) the national level, (2) the state level, and the (3) local level. At the **national** level, the government sets public policy, standards for care, and creates guidelines for health targets. Several specific programs are planned at the national level, including maternal and child health (MCH), immunization, family welfare, tuberculosis, malaria, and HIV/AIDS. The **state** level government is responsible for the health of its people and is in charge of providing medical services and health services. At the **district** level, national health programs are implemented and specific tasks are carried out including primary health centre (PHC) supervision, curative and preventive services, family planning, communicable diseases, sanitation, control of epidemics and school health. The functioning of the public health system at the local level (block level and below) is described in detail below.

100,000 Population **BLOCK** 100 Villages LEVEL HOSPITAL Family planning, health communication, environmental health and laboratory services 30,000 population PHC LEVEL 30-40 Villages Curative, preventive, promotive health services, Family Welfare services. SUB HEALTH CENTRE LEVEL 5000 population 5-6 villages Maternal & child health, anemia, family welfare, nutrition, immunization, diarrhea control, communicable disease control, deworming, health communication 1000 population VILLAGE LEVEL - VILLAGE HEALTH COMMITTEE 1 village

Village health interventions and programs, health education, community mobilization

Figure 2. India's Public Health System at the Local Level



Nala Oli Volunteer Programme Overview

A. About Community Health Workers

Characteristics of a Community Health Worker

Community health workers should be members of the communities where they work, selected by the communities, and should be responsible to the communities for their activities. CHWs should be supported by the health system but not necessarily a part of its organization, and have shorter training than professional health workers.

CHWs are typically married women between the ages of 20 and 45 years. She can be young or old, literate or illiterate. What is most important is that she be a member of her community who is in good standing, and who can understand and respond to local cultural norms and customs in order to ensure the community's acceptance. A CHW is not necessarily an educated expert, but one who should be trusted by the public, and skilled at planning, helping and communicating with others in the local language.

Roles of a Community Health Worker

In the late 1970s, the government of India established a national scheme that aimed to provide one CHW for every 1000 population in order "to provide adequate healthcare to rural people and to educate them in matters of preventive and promotive health care" (WHO, 2007). CHWs raise awareness of health issues and provide basic health advice. They may plan how to handle local health problems and complications based on specific observations they have made in their communities. In the past, CHWs have provided information on many health issues including maternal and child health, tuberculosis (TB) care, malaria control, HIV/AIDS care and treatment of acute respiratory infections. Specific tasks might include improving food security and nutrition, immunization, community rehabilitation, diarrhoea management, environmental health and sanitation, treatment of skin diseases and the collection of basic health information in communities, including recordkeeping and referrals. These tasks are performed in many different combinations and with different degrees of breadth and depth.

B. ICTPH's Nala Oli Program

ICTPH initiated a community health program in its pilot villages of Thanjavur to raise community awareness of health issues and to increase the health-seeking behaviour of the community. We have named our community health workers "Nala Oli Volunteers" (NOV),

which means "the light of wellbeing". The goal of the Nala Oli Volunteer program is to transfer knowledge and skills on health and empower the community to improve the quality of life of every individual. Over time, we expect the health and wellbeing of the community to improve, household spending on health needs to be reduced and local hospital admissions to decrease. ICTPH has selected 57 NOVs from three villages to date.

Criteria for selection of Nala Oli Volunteers

One NOV was selected per hamlet (covering about 40-60 households). The following criteria guided the selection of our NOVs:

- Resident of the hamlet
- Able to read and write the local language (education level completed is not a formal criteria)
- ◆ Preferably female and middle-aged (between ages of 25-40)
- + Has at least one child of their own and children being above the age of 5 years
- Able to comfortably communicate one-on-one and in groups to share information with the community

In each village, the village board was included in determining the NOV selection and training processes.

Tasks of a Nala Oli Volunteer

The main tasks of a NOV are to mobilize the community, increase awareness of health issues, identify basic illnesses based on signs and symptoms, refer patients to the clinic, and follow up patients for compliance with treatments.

The NOV will be trained and expected to:

- Maintain a registry of every household containing basic information, including births, fertility and deaths
- Visit her designated households at least once within each two-week period
- → Document all significant encounters and interactions with her designated households
- Identify risk factors and warning signs of common diseases
- Understand the health service options available in the community at ICTPH's Rural Micro Health Clinics (RHMCs) and government services such as the Sub-Centre or Primary Health Centre (PHC)
- * Refer community members based on their symptoms to the appropriate health service
- → Follow-up community members who have been referred and check on their compliance with treatments
- Work with the Auxiliary Nurse Midwife (ANM) in the local Sub-Centre. ANMs are excellent resources of training and education
- Use their creativity in sharing health information, such as organizing plays, songs, and dance performances





Training program for Nala Oli Volunteers

ICTPH's training programme for NOVs takes place in three phases:

Phase 1

- Introduction to ICTPH
- Overview of the NOV Program's goals and objectives
- ◆ Tasks of the NOV
- Introduction to national and state health programs and services
- Basic anatomy and physiology
- Overview of community education and advocacy tools with methods

Phase 2

- → Mapping their local community
- Identifying major local health issues
- → Training on the Management Information System (MIS)

Phase 3

In Phase three, the NOVs are trained to carry out a disease-specific intervention in their own village. An *intervention* is an effort to promote good health behaviour like physical exercise or to prevent or reduce harmful health behaviours, such as promoting tobacco smoking cessation or discouraging the use of illicit drugs or excessive drinking.

Career path of the NOVs

The continued professional development of NOVs is important to ICTPH. Over time, some NOVs will have the opportunity to become master trainers. As master trainers they will be responsible for training new NOVs, acquiring more skills, experience and responsibility in the process. Ongoing education and development opportunities may also include attending seminars, completing short courses or participating in exchange programs with another state or country.

Relationships between the program personnel

The two Field Coordinators are responsible for arranging the logistics of the programs and liaising with key persons in villages. The four Nursing Officers are responsible for training, evaluating and supervising the NOVs, in addition to the nurses' medical tasks. The 57 NOVs will carry out specific interventions and general health awareness as described above.

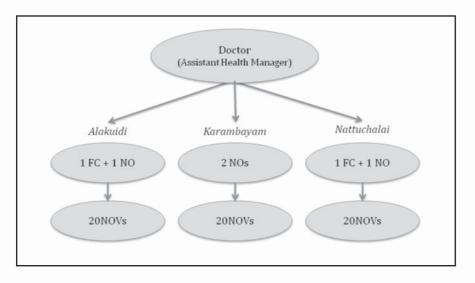


Figure 3. Personnel Organogram

Plan in each village

The three villages will have customized interventions focusing on local disease patterns that were observed in epidemiological surveys, qualitative studies, PHC data and informal interactions with the community. Two Rural Micro Health Clinics (RMHC) and one Information Centre will operate in the villages. One RMHC, located in Allakudy, will focus on high quality, affordable primary care provided by a doctor and by nurses under a doctor's supervision. NOVs in Allakudy will focus on hygiene, behaviour modification to prevent and manage a number of health issues, and on referral to the RMHC. The second RMHC, located in Nattuchalai, will work on health promotion and disease prevention for cardiovascular conditions, diabetes, uncontrolled hypertension and high cholesterol. The nurse will follow protocols to diagnose, manage and treat these conditions, referring other health issues to the PHC. The NOVs in Nattuchalai will focus on behaviour modification, simple diagnosis and management and timely referral. In Karambayam, an Information Centre will operate with a staff of one Nursing Officer and one Field Coordinator. Here, the NOVs will work with local authorities and the community to improve waste disposal and drinking water, with support from the Nursing Officers.

Data Collection

Nala Oli Volunteers will collect information from households that can be used to monitor the health of the community, track patients' compliance with treatments, and to plan and improve appropriate health interventions.





The Family Folder

The NOV will collect information to complete a family folder for each household. Each family will have a card summarizing their basic social, demographic and economic information. NOV are taught how to collect information on each member of the family during the Phase 1 training. An example of a completed family folder is below. The persons listed in this example are fictitious.

Family Folder

Household No.	Door No.	Individual No.	Person Name	Real HH*	DOB** (D/M/Year)	Sex	Marital Status
1	1/140	1	Gopinath Swami	НН	11/10/1964	М	M
1	1/140	2	Lakshmi Swami	W	04/05/1968	F	М
1	1/140	3	Sangeetha Swami	D1	07/11/1990	F	UM
1	1/140	4	Narayanan Swami	S1	09/21/1995	М	NE

^{*}Relationship to Head of Household (HH), **Date of Birth (DOB)

The person listed on line 1 should be the Head of the Household (HH). The rest of the persons should be written in their birth order. For date of birth, please enter the day, month, and year of birth. Codes for the following columns are as follows:

Code	Relationship to head of household
W	Wife [If 2 or more wives, write as W1 & W2]
S1	First son [If 2 or more wives, write as S1W1, S1W2 and so on]
D1	First daughter [If 2 or more wives, write as D1W1, D1W2 and so on]
S2	Second son [If 2 or more wives, write as S2W1, S2W2 and so on]
D2	Second daughter [If 2 or more wives, write as D2W1, D2W2 and so on]
M	Head of Household's Mother
F	Head of Household's Father
В	Head of Household's brother
S	Head of Household's sister
MIL	Head of Household's Wife's Mother
FIL	Head of Household's Wife's Father
BIL	Head of Household's Wife's Brother
SIL	Head of Household's Wife's Sister

CODE	SEX
М	Male
F	Female

Code	Marital Status
M	Legally Married
UM	Unmarried
W	Widowed
D	Legally Divorced
S	Legally Separated
NE	Not eligible*

^{*}Males less than 21 years and females less than 18 years are not legally eligible for marriage



Managing Information

The information NOVs collect in the Family Folder will be stored in a Management Information System (MIS). An MIS is important for planning and monitoring, and can be used to:

- + Prepare monthly, quarterly, half yearly and annual reports
- Periodically provide up-to-date information needed for monitoring and achieving the project objectives
- Facilitate bottom-to-top and top-to-bottom information flow in order to make timely decisions

Follow up of clinic patients

In the villages that have an operating RMHC, patients will be tracked with the help of electronic health records. NOVs will follow up with clinic patients that live in their work area to see whether they follow the prescribed treatments. NOV performance in these tasks, for example the percentage of patients visited in their homes or number of patients returning to the RMHC for a return visit, will be evaluated over time.

A patient follow-up example:

"Amudha", an NOV in Nattuchalai, noticed that a villager "Kavya" in her area had symptoms of diabetes. She talked with Kavya and advised to go for a check-up at the Heart-Sugar clinic. Kavya went to the clinic and was diagnosed as having diabetes. The doctor prescribed tablets. The nurse taught Kavya how to check her blood sugar, educated her on life style modifications associated with exercises and food habits and advised her to come back for check-ups. Now Amudha visits Kavya's home every few weeks to see whether she is following the treatment prescribed, and Amudha reports back to the clinic on any difficulties that Kavya has.



Healthy Communities

Communicating for

A. Healthy Communities

Health is a state of total "physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 1948). Human health is determined by a variety of social, environmental and economic factors. A community is a group of people sharing a characteristic in common, such as a physical place (village, state or nation), religion, language, culture, or occupation. In healthy communities, public, private, cultural, religious and social sectors all work together to create and improve the physical and social environments, enabling people to lead healthy lives and reach their full potential.

The qualities of a healthy community include:

- Clean and safe physical environment
- + Adequate access to nutritious foods, clean water and acceptable shelter
- + Adequate access to quality health care services for prevention and treatment
- Protection of the natural environment
- Responsible use of resources to ensure long term sustainability
- Wide participation of residents in decision-making
- ◆ Opportunities for learning and skill development

The health of a community is affected by physical factors, social and cultural factors, community organization and individual behaviours.

Figure 4. Factors affecting community health

Physical factors can include the geography, environment, community size, and industrial development.



Industrial pollution Farming methods

Social and cultural factors like traditions, beliefs, religion, economy and socioeconomic status can help people and communities form healthy or unhealthy habits





How the community organizes its resources influences how well it is able to tackle problems of community health

Self-help groups and the village panchayats are two different ways to organize people in the community



Individual behaviour is essential to community health.

Handwashing helps keep people around you healthy, too

Disposing of waste properly helps protect the health of the whole community





B. Community Strengths and Needs

All communities have strengths and needs. Needs Assessment is a systematic process to study the difference between what is and what should be in a community. In your role



Figure 5. Mapping the Community

as a Nala Oli Volunteer, you will be helping to take stock of areas where your community has untapped resources and areas that need action – starting by drawing a village map.

A **village map** is a map drawn by the people of the village that shows the borders of the village, all of the houses, all facilities (like schools and health clinics) and major infrastructure (like roads and water pumps). The village map puts both the strengths and weaknesses of the community's infrastructure in one picture.

The village map will also be used to:

- + Provide a unique number to each house, household, family and to individuals
- ◆ Decide how many and which houses should be taken care of by each NOV
- ◆ Identify the target households that NOVs will provide with services, creating accountability for each NOV
- Identify which residents are permanent or temporary and the reason, for example living with blood relatives for a shorter or longer period of time

C. Communicating for Behaviour Change

Behaviour Change Communication (BCC) is a process for sharing information and skills with target audiences in order to influence them to adopt specific healthy behaviours. This strategic process works at multiple levels to support healthy living, addressing individuals but also households, organizations, communities, and health systems as appropriate. BCC



programs craft influential messages that respond to people's concerns and use behavioural theory to clearly define specific, achievable objectives for change.

In order to adopt a health behaviour, it is important for the person to have the correct **information**, the right **skills** to carry out the action, **believe** that they can do it and to **expect** that it will benefit them. As a BCC "change agent", Nala Oli Volunteers can work with community members to increase their awareness, help them to develop skills they need,

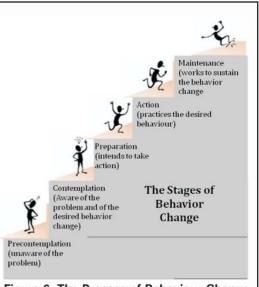
and to understand and address barriers that might prevent them from adopting a healthy behaviour.

Behaviour Change Communication is carried out using different channels to convey the information and to help impart knowledge, skills, attitudes and beliefs.

- Interpersonal channels rely on direct contact between the messenger and the receiver. The channels include one-to-one communication, group teaching, short talks, and counselling and telephone hotlines.
- Mass media channels can efficiently reach large audiences and often have a more general target in mind. These channels include radio or television messages, billboards, newspapers and magazines, public advertisements and internet (online) material.
- Community channels include rallies, public meetings, local-only media like community radio stations and local newspapers.

Information Education & Communication (IEC) materials are tools use to help to convey the important messages in a Behaviour Change Communication strategy. The materials that you use will depend on the health problem that you are addressing, the target audience that you are communicating with, and social situations that might encourage or discourage the healthy behaviour. When choosing an IEC vehicle (or way to package the message), it is important to think about how the community likes to receive information.

- Do they listen to the radio, watch television, or read newspapers?
- How much time do they spend using each medium (listening to the radio, for example?)
- ♦ Who do they perceive as credible sources of information? Doctors? Village leaders? their peers?
- ◆ Do people pay attention more closely to one media over another; for example, do people prefer radio talk shows to public service advertisements?



The IEC tools can come in many formats:

- Display print: flash cards, posters, brochures, handbills, wall paintings
- Circulating print: newspapers, magazines, newsletters
- Audiovisual: radio programs, videos, public service announcements
- The arts: songs, dance, skits, storytelling and street theatre





- 1. Identifying and understanding the health issue
- 2. Understanding the audience and possible program participants
- 3. Choosing clear communication, behaviour change and program objectives
- Preparing key messages for your specific audiences 4.
- 5. Choosing communication methods
- 6. Involving local leadership in planning and implementation
- 7. Choosing the site or sites for the program
- 8. Implementing the program
- Evaluating the program



Nala Oli - Volunteer Handbook Guide



Health Information

A. Human Body Basics: Organ Systems, Anatomy and Physiology

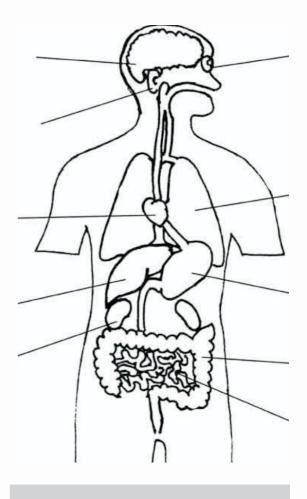
The Brain and Spinal Cord (Nervous System) – The brain is shaped like a cauliflower and weighs 1.5 Kg, divided into 2 halves. The spinal cord is the continuation of the brain stem and has 31 pairs of spinal nerves, which control activities in our arms, legs, and trunk.

Symptoms of problems include seizures (fits); weakness on one side of the body, change in a person's thinking and/or being unconscious.

The Thyroid gland sits on either side of the windpipe (trachea). Swelling of thyroid gland is more common in women and is seen in the front of the neck. Any swelling in the front part of the neck is considered a thyroid problem until proven otherwise.

The Heart and Blood vessels (Cardiovascular System) - The heart is located on the left side of the chest. The heart is divided into 4 chambers, 2 on the right and 2 on the left sides. The veins bring blood to the right side of the heart, which pumps it to the lungs for oxygen. The blood with oxygen goes back to the left heart. The heart then pumps the blood to all parts of the body. The heart receives its own blood supply through the coronary arteries. A blockage in the coronary arteries causes chest pain or heart attack. Stiffness in the blood vessels or too much cholesterol in the blood can cause high blood pressure.

Name the body parts



The Lungs (Respiratory System) -

The body has 2 lungs inside our ribcage. We bring air to our lungs though the windpipe or trachea. The lungs have small air sacs called alveoli. The function of the lungs is to change the blood with no oxygen for blood with oxygen. Oxygen is breathed in and carbon

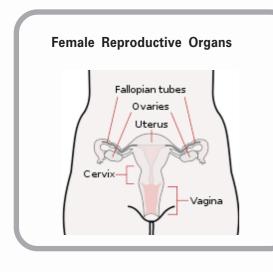
dioxide is breathed out. Oxygen is part of our fuel for our activities. Tuberculosis is a disease that affects our lungs. Smoking can cause lung cancer and health problems with both our heart and lungs.

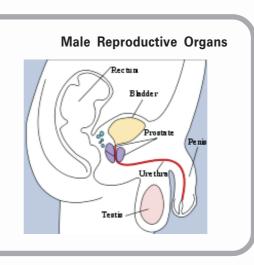
The Kidneys (Renal System) – Kidneys are 2 bean shaped organs inside our abdomen, in the flanks. The main function of the kidney is to filter or remove waste products from our blood. The average amount of urine produced by an adult in a day is 1.5 liters. Diabetes and high blood pressure are 2 diseases that can harm our kidneys.

The Gastrointestinal (GI) System –The GI system starts at the mouth and ends at the anus. Parts include the mouth, esophagus (food tube), the stomach, intestines, liver, appendix and rectum. Food taken into our mouth is digested into the stomach, nutrients are absorbed in the small intestine, water is absorbed in the large intestine and waste materials are removed through the anus. Problems of the liver can cause jaundice and ulcers can affect the stomach. Diarrhea is a problem affecting many parts of the GI system. Inflammation of the appendix is known as appendicitis.

The Reproductive System – The reproductive organs of the male are the 2 testes. The testes live in a sack called the scrotum. The main job of the testes is to produce sperm to fertilize the eggs of a woman.

The reproductive organs of the female are the uterus (womb), 2 ovaries and 2 fallopian tubes. Once a month, the ovaries produce and release an egg (ovum). If the ovum is met by a sperm, it is called fertilization. A fertilized ovum implants into the uterus and becomes a fetus. The uterus carries the fetus until it is born. If the egg or ovum is not fertilized it is disposed of through the menstrual cycle. Tubectomy is a sterilization procedure to tie or cut the fallopian tubes to prevent pregnancy.









B. Reproductive Health and Family Planning

Every year, one half million women die because of problems with pregnancy or childbirth or unsafe abortion. Many of these deaths could be prevented by family planning. Family planning can prevent dangers from pregnancy that are in women too young, too old, too close together and too many.

Women under age 17 are more likely to die in childbirth because their bodies are not fully grown. Their babies are at higher risk of dying the first year. Older women face more danger in child bearing especially if they other health problems or have had many children. Pregnancies should not be too close. A woman's body needs time to recover between pregnancies.



Questions for you and your partner to ask when choosing a family planning method:

- → How well does it work to prevent pregnancy?
- → How well does it work to prevent sexually transmitted infection?
- ♦ How safe is it?
- → How easy is it to use?
- ♦ How much does it cost?
- ◆ Are there side effects?

	T		1	T	r
At PHC?	Family Planning Method	Protection from pregnancy	Protection from STIs	Possible side effects	Important Information
~	Condom for men	★★★ Very good	6000		More effective when used with spermicide and lubricant (liquid to wet the condom)
X	Condom for women	★★ Good	6000		Less effective when the woman is on top of the man during sex
Х	Diaphragm (with spermicide)	★★ Good	SOME		Most effective when used with spermicide
X	Spermicide	★ Some	SOME	Skin allergy	More effective when used with another method like diaphragm or condom
•	Hormonal methods (family planning pills, patch, injections, implants)	★★★ Best	NONE	Nausea, headaches, changes in monthly bleeding	These methods may be dangerous for women with certain health problems. Consult with a health worker.
X	Sex without intercourse	★ Some	None		Couples may have a hard time sticking to this method
X	The mucus method	★★ Good	None		To use this method correctly, a woman must understand when she is fertile.
Х	Breastfeeding (during the first 6 months only)	★★ Good	None		To use this method, she must give her baby only breast milk, and her monthly bleeding must not have returned yet.
Х	Pulling out (withdrawal)	★ Some	SOME		More effective when used with another method like spermicide or diaphragm
•	IUDs (intrauterine device, coil)	★★★ Best	None	Heavy and painful monthly bleeding for some women	This method can be dangerous for women with certain health problems. Consult a health worker.
V	Sterilization	★★★ Best	None		Women or men will not be able to have babies after this operation.





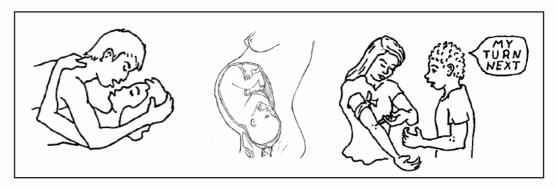
Reproductive Health Problems

HIV/AIDS:

Ways in which HIV spreads:

- SEX with someone who has HIV/AIDS
- From mothers to their babies during pregnancy, soon after birth or through breastfeeding
- ◆ Using the same needle or syringe as a person who has HIV, like through unsafe injections
- Receiving blood transfusion from someone who has HIV

HIV does not spread by holding hands, casual kissing, hugging, sharing food or utensils, public toilets, mosquitoes or donating blood.



HIV/AIDS Prevention

- Preferably have sex with one partner who only has sex with you
- Condom for males
- ◆ Use a condom if you or your partner has sex with anyone else
- → Do not have sex with someone who has risk behaviors such as having many sex partners, a commercial sex worker or persons who are on intravenous drugs through sharing
- Treat all sexually transmitted infections early
- → Do not get an injection unless you know the needles and equipment are sterilized
- Make sure equipment for tattooing piercing, acupuncture and any cutting are boiled or sterilized before use
- ◆ If possible, do not accept a blood transfusion unless it has been tested for HIV and Hepatitis

Get tested - Know your HIV status

If you find yourself having risky sexual behaviors, or having to go through a blood transfusion without screening the blood for HIV, or having to use unsterilized needles or piercing instruments, you should go in for an HIV test at the nearest Voluntary Counseling and Testing (VCT) Centre. HIV tests must be repeated three times at intervals as guided by the VCT Centre, in order to be certain of the test result.

- ◆ If someone has HIV: He/she should go for spaced out continuous
 CD4 testing as per his/her physician's advice and register with
 an Anti Retroviral Therapy Clinic (ARTC). He/she could also
 associate with a Positive Network Group near their residing area
 to know more about how to 'live positive' with HIV.
- If HIV+ and pregnant, please inform the doctor during her antenatal care. There is a medicine named Nevaripine that can prevent giving HIV to the baby.
- If a pregnant woman has HIV, she can continuously protect her baby by taking her physician' advice on breastfeeding and on seeking alternate food for the baby while she is into post-natal care.





Other Sexually Transmitted Infections

Other Sexually Transmitted Infections (STIs) can cause problems with the reproductive organs. Illness may be diagnosed by their signs and symptoms, like discharge or drainage from the vagina or penis, sores in the area or swollen bumps, and abdominal pain. Some infections have no symptoms at all. Types of sexually transmitted infections can be treated and cured with antibiotics. You need to get the medicine and guidance for prescription for accurate treatment from your health provider. Types of these infections include Gonorrhea, Syphilis, Chlamydia, Chancroid, Lymphogranuloma Venereum, and Donavanosis (Granuloma Inguinale). Syphillis is mostly asymptomatic and can only be checked with a VDRL (Venereal Disease Laboratory Test).

Causes of Cancer

The direct causes of cancer are not always known, but some things do make us at risk to get cancer:

- Cigarette smoking or use of smokeless tobacco can increase our risk for cancer of the cervix, lung, mouth or tongue
- ◆ Some cancers are caused by virus infections. Hepatitis B virus can cause liver cancer. Human Papillomavirus can cause cervical cancer and other types of reproductive cancers
- Exposure to some medications if used incorrectly, chemicals found in pesticides, dyes or paints and solvents can increase our risk for cancer too

Healthy living can prevent cancer

- ◆ Do not smoke or chew tobacco or products with tobacco
- ◆ Eat well, exercise and avoid alcohol

Finding cancer early can save your life, because when cancer is found early it can be treated successfully. To find out if you have cancer requires testing – often there are no signs or symptoms of the cancer.

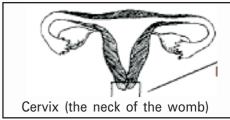


Reproductive Cancers

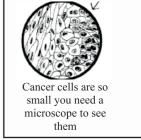
◆ Cancer of the breast, womb and cervix (the neck of the womb) are the most common types of cancer in women.

Cervical Cancer

Cervical cancer is caused by infection with a virus called the Human Papillomavirus (HPV). Many people get HPV in their lives with no illness. For some women, the infection causes cancer.



Risk factors: smoking or using tobacco products, sexually transmitted infections, young age at first birth, having had many children, being infected with HIV, started having sex at a young age, and sex with many partners (or having a partner who has had sex with many partners)



- There are no symptoms of early cervical cancer. If you are at high risk you should get tested. Finding the cancer early can save your life. When cervical cancer is found early it can be successfully treated
- ◆ To find out if you have cancer requires testing. Often there are no signs or symptoms. The PHC can check for cervical cancer using a test (visual inspection of your cervix or a pap test)
- If you have vaginal bleeding that is not during your menses or abnormal discharge from the vagina that does not go away with treatment, go to the PHC for testing



Breast Cancer

Breast Cancer occurs more commonly in women who:

- ♦ Are older than 50
- ♦ Women whose mother, sister or grandmother had breast cancer

Signs of Possible Breast Cancer – go check by a health care provider right away:

- Hard painless lump, in one breast that may feel like it has jagged edges
- Painful swelling in the armpit
- Redness of the breast skin or a sore that does not heal
- The skin on the breast may look rough and bumpy or pitted like the skin on an orange



- A nipple that changes how it looks, it pulls in or turns out
- Bloody or tan colored nipple discharge
- Rarely breast pain but if it is new, not going away or associated with any lump or discharge, check

Women should do breast self-exams once a month to feel for changes in the skin or lumps.

C. Immunization

Ways to Protect from Sickness: Immunizations

Immunization Schedule, State of Tamil Nadu

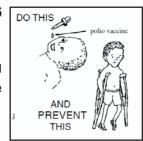
Vaccine Name	Timing Given	Prevents what disease?	Way administered
BCG & OPV	At birth or within 15 days	BCG: Tuberculosis OPV: Polio	BCG: injection OPV: oral
DPT, Hepatitis B&OPV	- 6th weeks (45 days)- 10th weeks (75 days)- 14th weeks (105 days)	DPT: Diptheria, Pertussis & Tetanus Toxoid Hepatitis B OPV: Polio	DPT: injection Hepatitis B: injection OPV: oral
Measles	9th months (270 days)	Measles	Measles: injection
DPT booster & OPV	16-24 months	DPT: Diptheria, Pertussis & Tetanus Toxoid OPV: Polio	DPT: injection OPV: oral
DT	5 years	Diptheria & Tetanus	DT: injection
ТТ	10 years (1 dose)16 years (1 dose)Pregnant women(2 doses given one month apart)	Tetanus Toxoid	TT: injection





Vaccines or Immunizations protect our children (and us) from 6 killer diseases:

Tuberculosis – An infection of the lungs that causes a long lasting cough. A single BCG vaccine is given at birth or at one month to protect the baby from Tuberculosis.



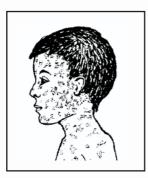


Diphtheria – is a bacterial infection of the throat that can make it hard to drink or swallow and breathe.

Whooping Cough – is another bacterium that causes a cough that can have a high funny sounding noise.



Tetanus – is bacterial infection often passed to the child if the delivery of the baby or the cutting of the umbilical cord is done in an unclean way. Vaccinate at 6, 10, and 14 weeks. Again at 18 months.



Measles – The sickness starts with a fever, red watery eyes, watery nose and a cough, then spots or a rash. A vaccine at 9 months protects the child from getting measles.

All these illnesses that have vaccines and others like diarrhea, HIV, flu and scabies are called Communicable diseases. These are illnesses that can be passed on or given to another person, this is called transmission. Many illnesses are prevented by breastfeeding, immunizations and personal hygiene and home and village sanitation.

Mosquitoes and water are also sources of infection that is passed to a human and are called vectors. Illnesses like Tuberculosis, Diarrhea, HIV, Measles, Flu, scabies and Malaria are all communicable diseases.

D. Communicable Disease: An example using diarrhea

What causes diarrhea? Usually a germ like a virus or bacteria causes changes in the stomach and intestinal lining that result in frequent watery stools or diarrhea. The danger of diarrhea is dehydration. Dehydration means that the body has put out more water and fluids than it has taken in. Any child with watery diarrhea is in danger of losing too much body fluid and becoming dehydrated.

Two immediate actions are to be sure to give the child fluids in small amounts, but very frequently, sipping every 5 minutes.

Wash your hands frequently, especially after caring for the child and before you eat.

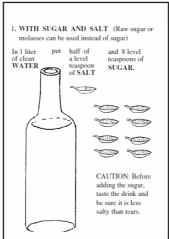
How to make oral rehydration liquid

With sugar and salt: take one liter of clean water, do not waste time boiling the water. Add to one liter ½ treason of salt and 8 teaspoons of sugar. OK to add coconut water or mashed ripe banana.

Taste the liquid; it should not be saltier than your tears.

For babies: Breastfeed often and before any other fluids, it is the BEST rehydration drink. Ok to give sips of the rehydration liquid. If vomiting is a problem continue to give frequent sips.

- Seek help anytime if the child is getting worse or if the diarrhea continues longer than 4 days.
- Seek help if signs of dehydration
- Seek help if the face or feet swell
- Seek help if there is any blood in the stool
- Seek help if the person was very sick, or very weak or malnourished before the diarrhea began





E. Non-Communicable Diseases

Non-communicable diseases are sicknesses or problems with health that cannot be passed or spread to another person. They usually are due to a problem or imbalance within our body. You cannot pass these sicknesses on to another person. Examples of non communicable diseases or diseases you cannot pass to another person are high blood pressure (BP) – also called hypertension, diabetes, heart disease, depression or mood problems, and cancer.

There are some people who are at risk, which means that it may be easy for them to get non communicable diseases like diabetes, heart disease or high blood pressure. These sicknesses can be prevented by healthy eating, not smoking or chewing tobacco products and avoiding alcohol.

Signs of heart problems



Anxiety and difficulty in breathing after exercise; asthma-like attacks that get worse when the person lies down (cardiac asthma)

A rapid, weak or irregular pulse

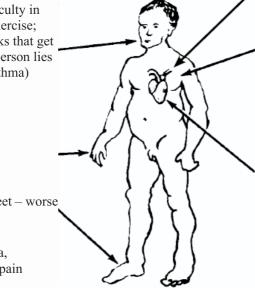
Swelling of the feet – worse in afternoons

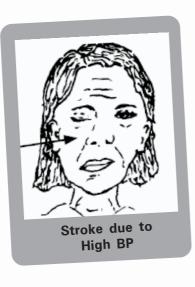
In women: nausea, clamminess, jaw pain

Sudden, painful attacks in the chest, left shoulder or arm that occur when exercising and go away after resting for a few minutes (angina pectoris)

Shortness of breath without exercise, unexplained tiredness, weakness, dizziness

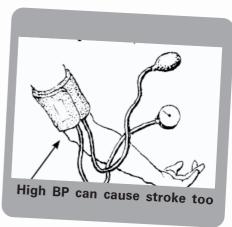
A sharp pain like a great weight crushing the chest; does not go away with rest (heart attack)







Diabetes



Diabetes can cause damage to many organs in your body.

Signs of Diabetes

- ♦ Unexplained weight loss
- Being thirsty and urinating more than usual
- A change in your vision
- Numbness or tingling in fingers or toes
- Sores on your feet or legs that do not heal
- Skin rashes
- Vaginal yeast infections in women or yeast infections of the glans in men

Eye damage

Heart attack

Kidney damage

Impotence

Difficulty passing urine

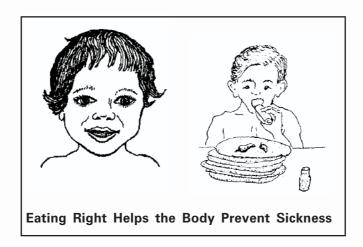
Numbness and reduced blood supply to feet



Diabetes affects your heart and blood vessels, your kidneys, your eyes and your brain. Diabetes makes you more at risk for heart problems, stroke, blindness and kidney failure.

F. Nutrition

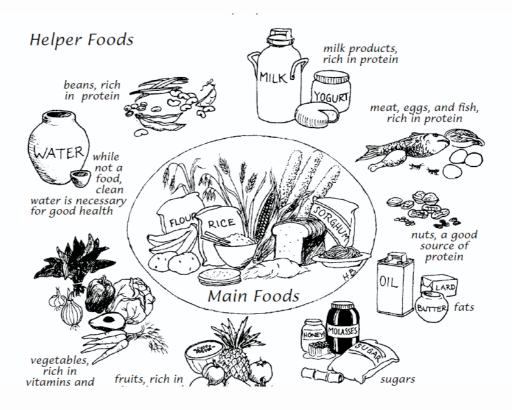
Good nutrition means eating well, eating enough food and a balance of foods. Good food is needed for a person to work hard, grow well, and stay healthy. Many common sicknesses can become serious from not eating enough food.



How to Eat Well: Main food and Helper foods.

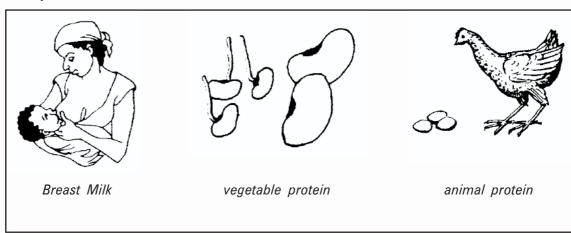
Our **main** food, rice, usually gives our bodies most of the energy it needs but not everything to keep us healthy. **Helper** foods are needed. This is very true for growing children, women who are pregnant or breastfeeding and people who are sick.





Helper foods are called **GO Foods** and **Grow Foods** because they give us energy and build our bodies up. Helper foods are also called **GLOW foods** because they give us lots of minerals and vitamins. These foods are the orange, yellow and red fruits and vegetables and the dark green leafy vegetables.

Examples of Go foods and Grow foods



Examples of Grow Foods



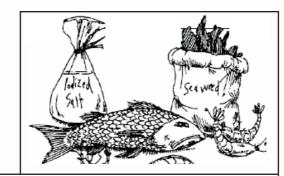
Yellow fruits and vegetables like yams, mangos, papaya and dark leafy green vegetable like curry, cilantro leaves. Dark yellow and green leafy vegetables and some orange fruits are high in vitamin A.

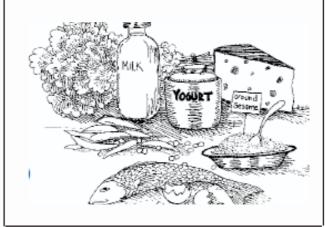
The easiest way to get enough iodine is to use iodized salt instead of regular salt. Or you can eat some of these foods (either fresh or dried):

- Fish and Shellfish (like shrimp)
- ◆ Eggs
- ♦ Onions
- ◆ Seaweed

These foods are rich in calcium:

- ♦ Milk, curd, yogurt
- Cheese
- ◆ Ground sesame
- Bone meal
- ◆ Green leafy vegetables
- ♦ Almonds
- ♦ Beans, especially soy
- Shellfish
- ◆ Lyme (carbon ash)





Folic acid (folate)

The body needs folic aced to make healthy red blood cells. Lack of folic acid can lead to anemia in women and severe problems in newborn babies. So getting enough folic acid is especially important during pregnancy. Avoid cooking food for a long time. This destroys folic acid and other important vitamins.





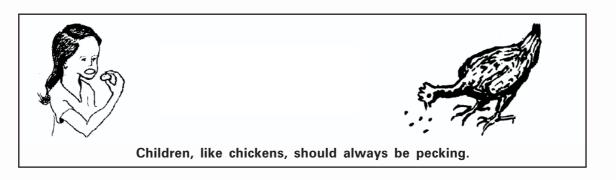
Good sources of folic acid are:

- Dark green leafy vegetables
- ♦ Whole grains
- Mushrooms
- Liver
- Meats
- ♦ Fish nuts
- → Peas and beans
- ◆ Eggs



Eating Right Helps the Body Prevent Sickness

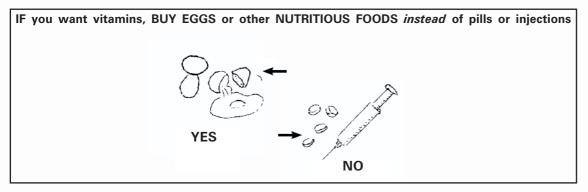
Feed your child more often when the child is sick, too thin, not growing well or very young. Feed the child 5 times each with snacks between meals.



To meet her energy needs, a child would need to eat this much boiled rice. If the child's belly fills up before her energy needs are met, the child will become weak and thin. But she needs only this much rice when some vegetable oil is mixed in. Also ADD high energy helper foods, such as the oil from vegetables or nuts, like peanuts, groundnuts, and sesame or pumpkin seed.



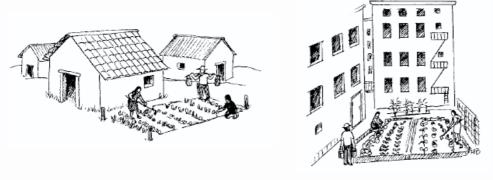




Some ways people can improve their nutrition

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Family and community gardens



Rotation of crops

Every other planting season, plant a crop that returns strengths to the soil – like beans, peas, lentil, peanuts or some other plant with seeds in pods (legumes and peas).



This year maize.



Next year beans.

Try to grow a variety of foods. That way, even if one crop fails there will still be something to eat.

Choosing healthy foods

For a snack when I am hungry I can choose a fruit like an apple, banana, orange, mango or papaya instead of bhajji or vadai

When I am thirsty and want a drink I can choose water instead of soda, cola or sharbat

Eating high sugar and high fat foods only on special festival days or special occasions helps keep me healthy.

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Things to avoid in your diet

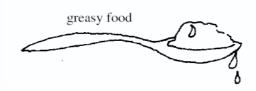
Tobacco, smoking and smokeless tobacco and alcohol of all kinds











Too much fried or greasy foods

Avoid fried snacks like vadai and bhajji

Cook food only in small amounts of ghee or coconut oil. If possible, AVOID Vanaspati oil.

Avoid eating sugary sweets & foods

Reduce the amount of sugar in your chai or kappi

Don't eat a lot of biscuits and packages crackers with "transfat"









G. Sanitation: Keeping Ourselves, Our House and Our Village Clean

Hygiene to Avoid Many Sicknesses

We can stop many sicknesses before they start by keeping ourselves, our homes and our village clean. Keeping clean is an important way to prevent many infections of the whole body. Personal cleanliness (or hygiene) and public cleanliness (or sanitation) are both important.

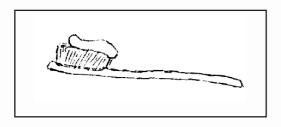
Personal Hygiene:

Always wash your hands with soap when you wake up in the morning, after having bowel movement, and before eating. Wash your hands after you cough or sneeze.

Bathe frequently in hot weather or if you have been sweating and working hard.



Wash your clothing frequently and dry clothes well in the sunlight to kill eggs and insects that might land on wet fabrics.



Brush your teeth every day and after eating sweets. If you do not have a toothbrush and toothpaste rub your teeth with salt or baking soda. Do not use paan, beetle nut, sevel or tobacco products to brush your teeth. These smokeless tobacco products make you at risk for cancer of the mouth and tongue.

Wear shoes or slippers always. Hookworm is a kind of worm that in our environment can enter our body through the bottom of our feet.



Bathe your children, change their clothes, and cut their fingernails. Germs and worm eggs often hide underneath long fingernails. Comb hair. Check for lice. Delouse as needed. Lice and fleas carry sickness.



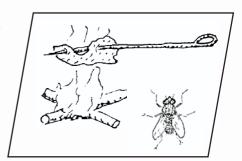
Do not spit on the floor, ground or roads. Spit can spread disease. When you cough or sneeze, cover your mouth with a tissue or cloth or use your shoulder sleeve. If you cough into your hands, then wash your hands.

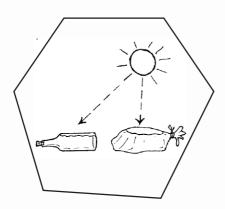






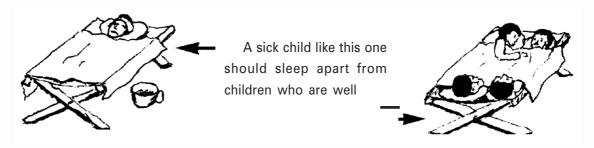
If cooking meat or fish, cook well so that no raw parts are inside. Raw pork and fish can carry diseases. Chickens carry germs that can cause diarrhea, wash your hands after preparing chicken before you touch other foods. Protect and cover food from flies. Flies carry germs too.

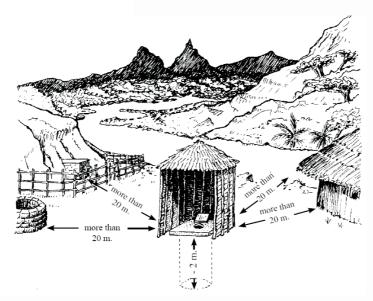




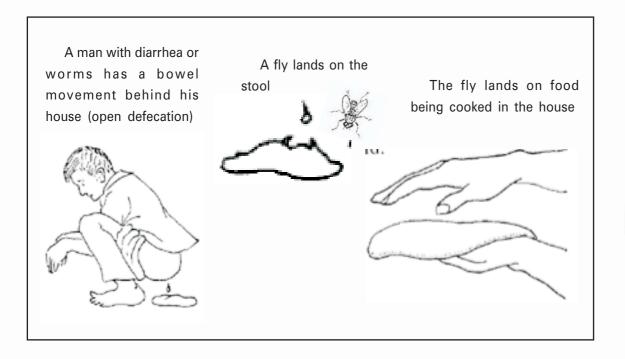
Ideally all water that does not come from a pure water source should be boiled, filtered or purified before drinking. Water can spread diarrheal diseases, typhoid, and hepatitis if it has those germs in it. A good low-cost way to purify water is to pour it into a clean and clear bottle and leave it in direct sunlight for at least 6 hours. If it is cloudy water, leave it in the sun for 2 days. This method will kill most germs.

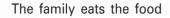
Prevention of passing sickness to others





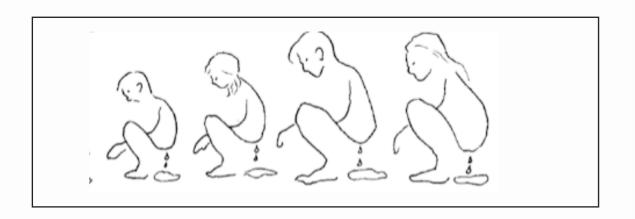
Closed latrines help to prevent passing on sickness







Soon, the whole family has diarrhea or worms



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H. Habits that Affect Health

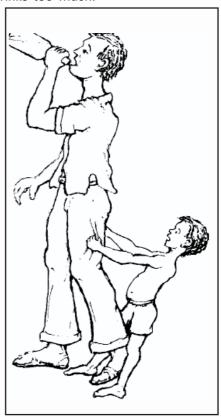
Drinking Alcohol

Alcohol if used in small amounts has been known to be safe and healthy. Too much alcohol or alcohol too often can lead to many health problems for the person who drinks, but also problems for the family of the person who drinks too much.

Too much alcohol makes all health problems worse especially diseases like high blood pressure, heart disease, and diabetes. Stomach ulcers can bleed, and a person can drink so much that the liver is damaged, a serious sickness called cirrhosis. Many accidents are a result of a person drinking too much.

Alcohol hurts the family and village in many ways. People who get drunk do things they might not do when they are sober. Drinking too much can cause unhappiness and fights – even violence against the ones they love most through the loss of judgment when drunk and the loss of self respect when sober.

Drinking is a problem not just for the individual but the whole community. A village that knows this can encourage the drinking person to make changes. If you are concerned about the misuse of alcohol in your community, help organize a meeting to discuss these problems and decide what actions to take.

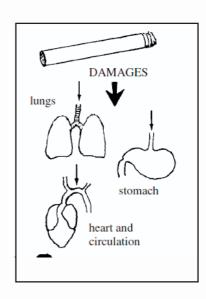


De-Addiction to alcohol can be done often with help of a sponsor or program.

Smoking and Smokeless Tobacco

There are many reasons why all forms of tobacco are dangerous to our health:

- Smoking and chewing increase risk for lung cancer, bladder cancer, and cervical cancer. 30% of all cancers are related to tobacco. Chewing tobacco in any form increases our risk for throat, mouth and tongue cancer. The more you smoke or the more you chew the greater the risk.
- Smoking causes you and your family to be more at risk of serious respiratory problems like emphysema, asthma and pneumonia.



- Simple respiratory infections can become more serious or even deadly in smokers. You are more at risk for getting Tuberculosis as a user of tobacco products
- 4. Smoking or chewing can make stomach ulcers worse
- Smoking or chewing can increase your risk for high blood pressure, heart attack and stroke
- 6. Smoking costs money. Even if you buy one cigarette at a time, or one pack of guptha, this adds up. If money for tobacco were spent on food instead, families and especially children could be healthier

Anyone interested in health should not use tobacco products and should encourage others not to smoke.







Acknowledgements

Material in this handbook has been adapted from several sources for the local context, based on the knowledge and experience of our staff and colleagues. We wish to acknowledge the following sources of content and illustrations:

- Burns, A. A., Niemann, S., & Metcalf, E. (2006). Where women have no doctor: A health guide for women. Berkeley, CA: Hesperian foundation.
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Nala Oli Volunteers improve Community Health by









 Linking people to Primary Health Centres



Ensuring continuous care





