

Self Care for Health

**A Handbook
for Community Health Workers & Volunteers**

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Foreword



Promotion of effective community participation and self-reliance of individuals for informed decision-making for health are among the basic tenets of primary health care. Unfortunately, interventions for community empowerment and capacity-building of individuals, families and communities for maintaining, improving and preserving health have received relatively less attention than interventions for curative care. Indeed, health services are increasingly devoting disproportionately higher resources for medical care. As a result, more cost-effective, preventive and health promotive interventions are receiving less attention.

The imbalance between curative care and preventive care needs to be corrected urgently, particularly in view of the emerging health challenges. The burgeoning load of noncommunicable diseases, the adverse health effects of climate change and urbanization and the ever increasing costs of medical care will be better addressed by working with individuals and communities to equip them to prevent these conditions. Further, people also need to be assisted to take measures individually when disease strikes. This becomes increasingly important as we are facing an epidemic of noncommunicable diseases, many of which demand life-long care.

Efforts to empower individuals and the community for self-care must be viewed as an essential component of universal health coverage and as a means to achieve health equity. If practised effectively, self-care can be an important tool in reducing health care costs and contribute towards reducing catastrophic expenditures on health. Potentially, the economic gains to individuals and societies will be immense. Further, appropriate self-care will have additional spinoff benefits like improvement in the rational use of medicines and reduction in the rate at which microbes are developing resistance to antibiotics.

Promotion of self-care needs policy direction and professional support within a country's social and cultural contexts. Health information needs to be demystified to make it easily understood and acceptable by the community. Skills in adult

education and communication need to be developed in health care providers to enable them to share health information with the people convincingly and with empathy. The vast amount of information available to the public, some of which may not be accurate, makes it imperative that health care providers help people to make informed choices based on scientifically accurate information. Thus, the role of community health workers and community health volunteers is crucial in promoting self-care.

This handbook essentially aims to provide basic, yet vital information to assist communities in understanding the concept of self-care and maintaining health. It also seeks to build the capacity of community-based health workforce to promote self-care. It addresses issues like what people need to do to remain healthy and what they can do to prevent and control common diseases prevalent in the South-East Asia Region. The book is by no means a complete or comprehensive book on community health as the subject area is very wide. However, it is hoped that Member countries will use the handbook as a tool to strengthen the training programmes of community health workers and volunteers. We would welcome and look forward to receiving suggestions for improvements in future editions of this handbook.



Dr Samlee Plianbangchang
Regional Director

Health and Self care



Health and Self care

Health

The World Health Organisation defines “Health” as “a state of complete physical, mental and social well being and not merely the absence of disease or infirmity”. This means that a person is considered ‘healthy’ when she/he is:

- * Physically fit
- * Mentally stable
- * Able to function peacefully and effectively in society
- * Able to perform daily functions at home and at work.
- * Able to live a socially and economically productive, satisfied life.

it is essential to understand that **‘health’ does not only mean not having an illness.** It is much more. Many Asian cultures believe that “health” means a “sound mind, in a sound body, in a sound family, in a sound environment”.

We should remember that for good health, it is important to ensure adequate attention is paid to the body, mind, family and environment.

The human body has a wonderful mechanism to maintain good health. If the person takes appropriate actions, he/she is less likely to fall sick. However, if illness does occur, proper management, including medical care where necessary, can help the body heal itself.

“Health” is a state of complete physical, mental and social well being and not merely the absence of disease or infirmity

The Human Body



There are essentially nine systems that are responsible for the structure and functions in the human body. The Circulatory and Respiratory Systems make oxygen and nutrients available to the entire body. The Digestive and Excretory Systems are responsible for making the nutrients available as well as for expelling out unwanted waste from the body. The Nervous and Endocrine Systems are principally involved in the coordination and control of the whole body. The Skeletal and the Muscular Systems support and enable the body to move. The Reproductive System concerns itself with procreation.

Respiratory System: Oxygen Delivery System

Our body constantly needs blood supply to deliver oxygen and nutrients to different organs of the body. This is done through the circulatory and respiratory systems. The heart, the lungs, and the blood vessels work together to make this happen. The respiratory (breathing) system consists of the nose, trachea, lungs, and diaphragm. Its primary function is to supply the blood with oxygen. When a person inhales, air enters the windpipe through the nose. The windpipe goes into the chest where it divides into two and goes into the right and left lungs. The air breathed in contains oxygen and this passes into the blood. Carbon dioxide (unclean air) in the body passes into the lungs and is breathed out. A normal adult breathes about 16 times and a child, about 20 times in one minute.

Circulatory System: Circle of Blood

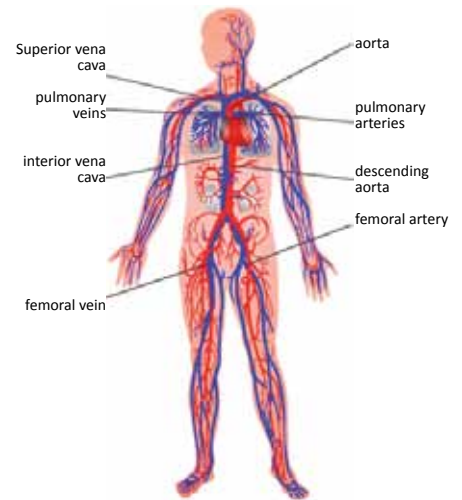
The circulatory system consists of the heart and the blood vessels. One of its most important functions is to supply oxygen to all the cells in the body. Every cell in the body requires oxygen to stay alive and the circulatory system must supply them with it. When we breathe in, the oxygen-rich blood is pumped through the heart to smaller and smaller blood vessels throughout the body. Carbon dioxide produced by the cells is absorbed back into the blood, which then returns to the lungs, is released out when we breathe out.

The human heart is pear-shaped, about the size of a fist and lies in the chest cavity between the lungs. It is responsible for supplying the body with oxygenated blood. Each time the heart beats; it exerts a pressure on the veins and arteries. This is called blood pressure. The heart is divided into four chambers – two on the right and two on the left. The right side gets blood from all parts of the body.

This blood is unclean as it contains carbon dioxide. The heart pumps this blood to the lungs. Carbon dioxide passes from the blood into the air in the lungs and is breathed out. The blood takes in the oxygen from the air breathed into the lungs. The clean blood (containing oxygen) enters the left side of the heart and is pumped to all parts of the body.

A second important function of the circulatory system is to supply all the cells in the body with nutrients and energy. After food is digested in the stomach, it moves through the intestines, where nutrients from food are absorbed into the bloodstream. The blood also absorbs glucose, an energy source, from the liver, which is the body's glucose distribution center. These nutrients and energy are then transported to all the cells of the body, in a manner similar to the transport of oxygen. Blood also absorbs the waste products made by cells, and transports them to the excretory organs for removal from the body.

In addition to nutrients and oxygen, the blood also carries around important disease-fighting cells. The organs of the immune system, such as the spleen, create many types of specialized cells that can kill foreign cells trying to invade the body. The circulatory system is responsible for transporting these cells from the immune system to all other parts of the body. During this circulation, blood passes through the kidneys, which filter much of the waste from the blood. Blood also passes through the small intestine and the liver. The liver filters sugars from the blood, storing them for later use.



Blood Cells

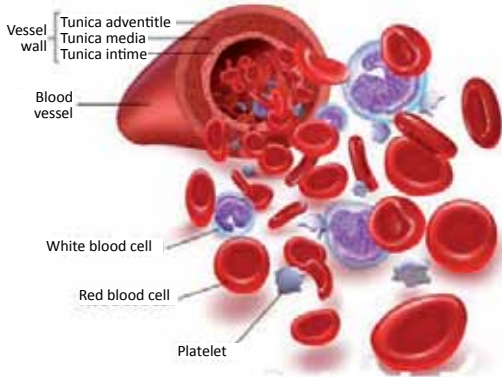
There are three different types of human blood and each has a different function.

* Red Blood Cells

Red blood cells perform the most important blood function. They are constantly traveling through our body delivering oxygen and removing waste. If they weren't doing this, our body would slowly die. Red blood cells contain haemoglobin, which is a vehicle for transporting oxygen and carbon dioxide.

* White Blood Cells: Battling Blood Cells

Whenever a germ or infection enters the body, the white blood cells snap to attention and race toward the scene of the crime. The white blood cells are continually on the lookout for signs of disease and when a germ appears, they attack it. Unless the number of the germ is overwhelming or is very strong, this action helps protect us from diseases.



* Platelets: Sticky Situations

The human body does not handle excessive blood loss well. Therefore, it develops ways of protecting itself. When sudden blood loss occurs, the blood platelets kick into action. Their sticky surface lets them, along with other substances, form clots to stop bleeding.

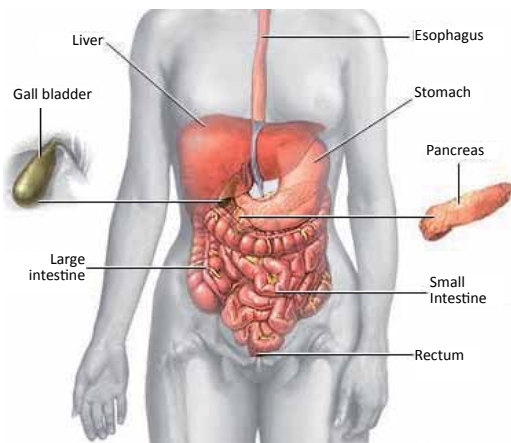
Digestive System

The digestive system is made up of the digestive tract - a series of hollow organs joined in a long, twisting tube from the mouth to the anus - and other organs that help the body digest and absorb food. Anything that we eat and drink must be broken down into smaller molecules of nutrients before they can be absorbed into the blood and carried to cells throughout the body. Digestion is the process by which food and drink are broken down into tiny particles so that the body can use them to build, nourish cells and provide energy. It involves mixing food with digestive juices, moving it through the digestive tract, and breaking down large molecules of food into smaller molecules. This process begins in the mouth, when we chew and swallow and is completed in the small intestine. Thoroughly chewing the foods aids the digestion process.

Organs that make up the digestive tract are the mouth, esophagus, stomach, small intestine, large intestine - also called the colon - rectum, and anus. Digestive juices are produced in the mouth, stomach, and small intestine to help digest food. After digestion and absorption, waste products are pushed out from the body as feces.

Excretory System

If we came to know that there is poison hidden in our houses, we would surely do everything possible to find and remove it from our homes. This is the function of the excretory system. This process of excretion involves finding and removing waste materials produced by the body.



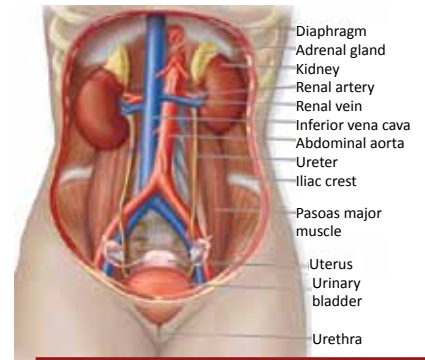
The primary organs of excretion are the lungs, kidneys, and skin. We have already learned that waste gases are carried by blood traveling through the veins to the lungs where respiration takes place. Liquid waste is removed from the body through the kidneys and urinary tract while solid waste such as feces is removed through the anus. Skin, hair, fingernails and toenails which are surface level wastes are removed through cutting.

Endocrine System

The Endocrine System comprises a number of glands that produce hormones with a varied array of vital functions. Hormones are chemical substances secreted by organs and are carried by the bloodstream to other organs or tissues.

One of the major tasks of hormones is to coordinate the activities of the organ systems. For example, when a person runs, the hormone epinephrine acts on the heart to increase its rate and force of contraction; it acts on the blood vessels to increase blood flow to the muscles and decrease the flow to the gastrointestinal tract. Hormones also help control body growth and metabolism; and maintain normal function of certain organs such as ovaries, womb, etc.

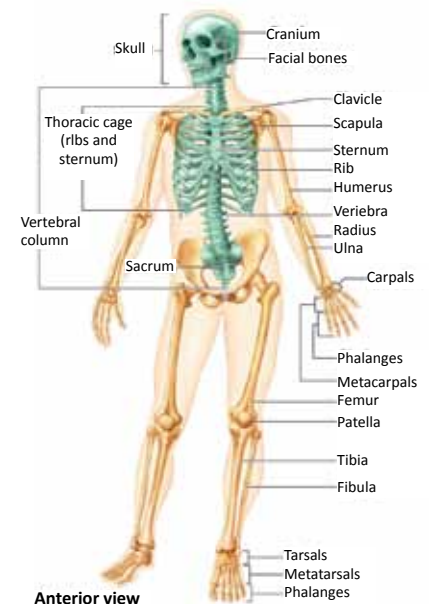
The Endocrine System has a large influence on the way we feel and act. In turn, our emotions and actions affect its functions too. This reciprocal relationship is crucial in maintaining our general well-being.



Skeletal System

The bones form the structure (skeleton) and shape of the body. There are 206 bones present in the human body. Some parts of the skeleton protect the soft organs. For example, the skull protects the brain; the rib cage and chest wall protects the heart and lungs. The skeleton has many joints formed by two bones connected by a special type of muscle. These joints allow the body to move and bend. The spine (the bones at the back of the body) is formed from many bones and keeps the body straight.

The spinal cord from the brain runs through these spinal bones and the nerves come out from between them to different parts of the body. The skeleton is covered by muscles and skin. The muscles are attached to the bones and help in the movement of the joints.



Muscular System

On an average, about 40% of our body weight is in the muscles. We have over 630 muscles that move us. Muscles often work in pairs so that they can pull in different or opposite directions to make the body move.

The muscular system is extremely important for two key reasons:

- * Muscles are the “engine” that our body uses to propel itself. Although they work differently than a machine or an electric motor, muscles do the same thing -- they turn energy into motion.

The nervous system controls the different organs and functions of the body. It works all the time to keep us alive

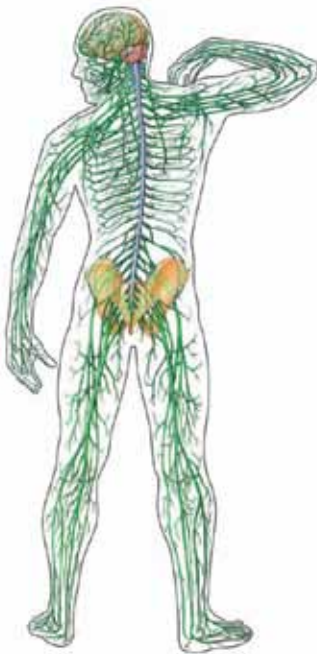
- * It would be impossible for us to do anything without our muscles. Absolutely everything that we conceive of with our brain is expressed as muscular motion. The only ways for a person to express an idea is with the muscles of the larynx, mouth and tongue (spoken words), with the muscles of the fingers (writing or the expressive movement of the hands” or with the skeletal muscles (body language, dancing, running, building or fighting, to name a few).

The muscles are long-lasting, self-healing and are able to grow stronger with practice. They do everything from allowing us to walk to keeping our blood flowing!

Some muscles are known as “voluntary” -- that is, they only work when we specifically tell them to. When we say something, swing a bat, or clap our hands, these are voluntary movements. Others like the contracting of the heart, the movement of the diaphragm so that we can breathe, or blinking of our eyes is automatic. These muscles move through signals from the nerves, and, in some cases, the brain, as well.

Nervous System and the Brain

The nervous system controls the different organs and functions of the body. It works all the time to keep us alive. There are two major divisions of the nervous system:



- * The central nervous system
- * The peripheral nervous system

The central nervous system consists of the brain and the spinal cord. The brain lies within the skull and controls body functions by sending and receiving messages through the spinal cord. Once messages leave the central nervous system, they are carried by the peripheral nervous system to the body.

The brain controls coordination of movements, balance, and posture. It also receives the sensations of pain, touch, and temperature from our bodies; it controls automatic body operations such as the heartbeat and blood circulation; it also controls hunger, thirst, and sexual desire. The brain is divided into two sides, left and right. Each side generally controls functions in the opposite side of the body. For example, the left brain governs movement of the right arm.

The peripheral nervous system includes the nerves branching from the brain and from the spinal cord. These nerves convey sensory messages from different

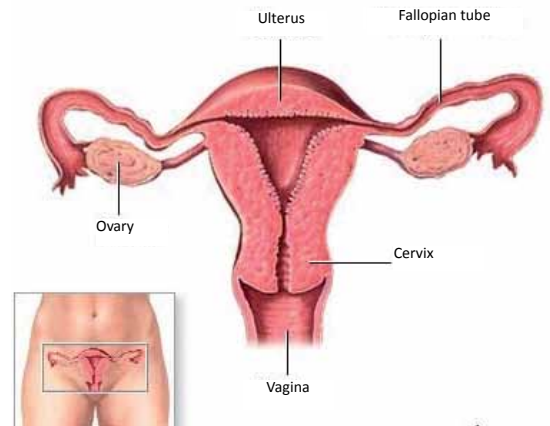
organs of the body to the central nervous system and transport reactions from the central system out to the body, where the organs can respond to the stimuli.

Reproductive System

The reproductive system is concerned with reproduction or producing a child.

The Female Reproductive System

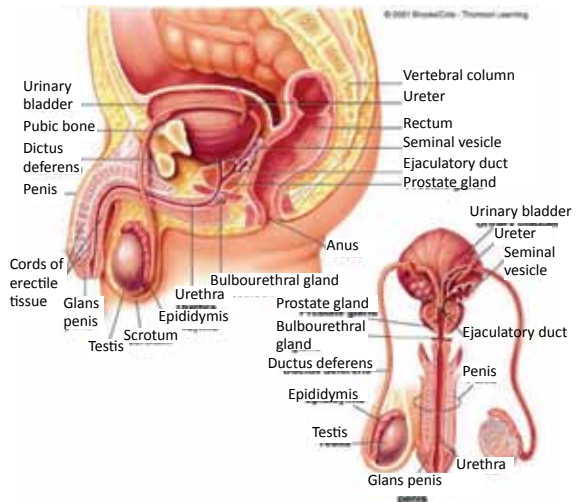
There are two ovaries in the female body – right and left. Each ovary has eggs (ovum - the female unit of reproduction) and is connected to the uterus by the fallopian tube. The lower part of the uterus is called the cervix, which opens into the vagina. When a girl reaches puberty, (becomes sexually mature) the ovary produces an egg every 28 days or once a month. This egg goes down the fallopian tube and enters the uterus. If there is no conception, the lining of the uterus comes off and the woman experiences bleeding, which is called “menstruation”.



The Male Reproductive System

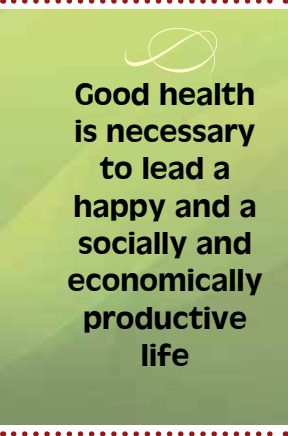
In men, there are two testes which contain sperm (the male unit of reproduction). Each testis is connected by a tube (vas deferens) to the penis (the male organ).

How does conception occur? If a man and woman engage in sexual intercourse during the time when the egg is released once a month, conception can occur. During intercourse, the man releases millions of sperms through the seminal fluid into the vagina. Even if just one tiny sperm successfully manages to enter the uterus to join with the egg, conception happens and the woman becomes pregnant.



Importance of maintaining good health

Good health is necessary to lead a happy and socially and economically productive life. It is also important to realize that people who are healthy fall sick less often. In today's times, "health truly is wealth" as one day's illness means loss of work and pay. A few days of illness can mean spending money for treatment, getting check-ups done and buying medicines. There is also the stress of having a sick person and the family's daily routine changes because of this situation.



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There are several major factors affecting good health and this includes personal and environmental factors.

Personal factors include genetic factors and behaviours. Genetic factors are basically passed on to us by our parents or grandparents. These include some of the heart diseases, diabetes mellitus, hypertension, some blood diseases such as thalassemia, etc. These factors can make a person ill either at birth or later in life.

Personal behaviours include health promotion and disease prevention. Health promotion means taking effective control of one's health by eating right, exercising, staying away from substance abuse and managing stress. Disease prevention includes personal hygiene, immunization and avoiding risky behaviours such as smoking, drinking or practicing unsafe sex, among others.

Environmental factors are surrounding conditions both within the house and outside the house in which one lives. These include cleanliness, ventilation, water drainage, garbage disposal, availability of safe drinking water and environmental sanitation. Water refers to water supply systems, which include sources of water, water treatment and transportation of water. Environmental sanitation includes the air we breathe, soil conditions, road conditions, traffic, order and cleanliness of the community.

We see, therefore, how our health is affected by our own behaviour and environment. What and how we eat, how we exercise, how we behave and manage our emotions are in turn linked with the environment we live in as well as socio-economic and geographic factors such as education, financial status, cultures, social habits, nature of occupation, etc.

Now, what can we do to keep ourselves, our families and our community in good health? Firstly, we must understand that good health is the right of all people. It does not matter who we are, where we live, or whether we are educated or not educated. But, having this right does not mean that we do nothing for ourselves; we have to take our health in our own hands.

There are three things we can do to maintain our health:

- 1) Take regular actions to stay in good health and take appropriate steps when we fall sick. If symptoms persist, we can seek help from health care providers. This is called "**self-care**".
- 2) As a citizen, advocate with the Government and other local agencies that provide the health services we need.
- 3) Use these health services responsibly.

What is Self Care?

WHO has defined “self care” as “the ability of individuals, families and communities to promote health, prevent disease, maintain health, and to cope with illness and disability with or without the support of a health-care provider”. The scope of self-care includes health promotion; disease prevention and control; self-medication, providing care to dependent persons; seeking hospital/specialist care if necessary; and rehabilitation including palliative care.

Let's understand what these words mean by using simple examples:

- * Health promotion activities include eating balanced meals, doing appropriate and adequate exercise/physical activities, and actively participating in social activities.
- * Disease prevention activities include children and pregnant women getting immunized against preventable diseases; observing personal hygiene such as washing hands; eating, storing and serving food hygienically, protecting our body from diseases; keeping our houses and environment clean, avoiding smoking, drinking and drugs; and having safe sex,
- * Self treatment/medication: using home remedies during sickness, such as taking fluids like ORS when having diarrhoea, taking a sponge bath, or paracetamol tablets during fever, etc.
- * Providing care to dependents : This includes taking care of those who cannot take care themselves, such as new borns and infants, young children, the elderly and those who are differently abled.
- * Seeking medical assistance: if fever, discomfort, pain or bleeding does not subside; going to health centre or hospital for professional treatment.
- * Rehabilitation: helping people with disability or having physical difficulties in the family/community to restore/retain their physical ability. This includes, but is not limited to, occupational rehabilitation, physical rehabilitation.



Remember!!

Factors conducive to good health:

- * A healthy lifestyle can prevent many illnesses or delay the onset and severity of existing ailments.
- * If the person maintains good health, he/she is less likely to fall sick. However, if illness does occur, self care with proper management, including medical care where necessary, can help the body heal itself.
- * With self-care, we can take charge of our health to a great extent and lead an active, healthy life!

Living a Healthy Life



Living a Healthy Life

Everyone wants to be strong and remain healthy throughout his or her life. Stamina, endurance and freedom from ailments can enable us to do all that we want to and also take care of ourselves effectively when necessary. But how does one work towards it? The three most important factors that can contribute to self-care and an overall healthy life comprise diet, exercise and state of mind or emotions. This chapter will discuss these and also provide general guidelines for the different stages of our lives.

Diet

A balanced diet includes foods that provide adequate energy and nutrients. It should include cereals, legumes/meat/fish, fruits and vegetables, milk and other dairy products, and oils. Good nutrition has many benefits:

- * It helps in the growth and development of expectant mothers, children and adolescents.
- * It increases energy, helps the body to fight illnesses and heal injuries.

An imbalanced diet can contribute to increasing the risk of anaemia, obesity, hypertension, heart disease, diabetes, stroke, osteoporosis (brittle bones), and some forms of cancers.

To understand the concept of diet better, foods can be divided into the following groups:

- * Cereals and potatoes (carbohydrates)
- * Fruits and vegetables (vitamins and minerals)
- * Milk and dairy foods (proteins and calcium)
- * Meat, fish, pulses/legumes (protein)
- * Oils (fats)

For a perfectly balanced diet, required proportions of each of the food groups include, 10-15% of proteins, 60-80% carbohydrates and 10-30% fats. Drinking

A balanced diet increases energy, helps the body to fight illnesses and heal injuries

water plays an important role in maintaining health. It is generally recommended that adults should drink at least 1800 – 2000 cc or 8 – 10 glasses of water per day.

Rice, wheat and other grains such as oats, maize, millet, vegetables such as potatoes and other starchy foods **are a source of energy**. They are also sources of fibre, calcium, iron and some vital vitamins.

Vegetables and fruits are a rich source of fibre, vitamins and minerals, which are needed to strengthen the body's immunity to fight diseases. It is important to eat a wide variety of vegetables and fruits.

Fats should be used in moderation. Only small amounts of fats are necessary for taste and for maintenance of the body. It is recommended that liquid fats such as mustard, sunflower, corn and groundnut oil should be used. Fats that are in solid form at room temperature, such as margarine and butter, are best avoided.

Dairy products such as milk, yoghurt and cheese are good sources of vitamin D, calcium, and protein. All these nutrients are necessary to build healthy bones and teeth. Milk has a high amount of fat, which is why skimmed milk (milk from which fat has been removed) is recommended.

Meats, fish, eggs, legumes/pulses, soya and nuts are major sources of protein, as well as iron, other minerals and vitamins. Many of the same nutrients are found in soyabeans and nuts. They are primarily responsible for building and repairing muscles and tissues as well as improving immunity.

Choosing foods from all the food groups each day and choosing a variety of foods within each food group will help the body meet its nutritional requirements. No single food can provide all the nutrients needed to maintain good health.

How is diet related to health?

Good health requires a balance of food, with adequate amounts of cereals, carbohydrates, proteins, fats, vitamins, minerals and physical activity. Overweight and obesity occur when lifestyle choices get out of balance — such as eating too much food, not getting enough physical activity, or having too much of one or more nutrients in the diet. On the other hand, if any of these items is not consumed in adequate quantities, a person can get under-nourished or get deficiency diseases such as anaemia, night blindness and so on.



Good health requires a balance of food, with adequate amounts of cereals, carbohydrates, proteins, fats, vitamins, minerals and physical activity.

Physical activity and exercise

Any bodily movement that requires energy expenditure such as playing, working, moving around, doing household chores and recreational activities is physical activity.

Exercise is a category of physical activity that a person does consciously to maintain physical and mental fitness. Adequate and regular physical activity at all stages of life is one of the most important things for remaining healthy. Adequate and age-appropriate physical activity and exercise helps to:

- * Control weight
- * Reduce the risk of hypertension and cardio-vascular diseases
- * Strengthen bones and muscles
- * Improve mental and emotional health
- * Improve balance and ability to perform daily activities, specially in older people; reduces the risk of falling in older adults;
- * Increase the chances of living longer.

With advanced information and other technologies, people tend to be more sedentary with not enough bodily movement. Availability of gadgets to perform household chores has reduced physical activity. People with sedentary lifestyles are at higher risk of having health problems such as diabetes, hypertension, heart diseases, muscle and joint problems. Therefore, it is important that people of all ages are physically active. However, to get maximum benefits, one needs to do moderate or vigorous exercise in addition to adopting an active lifestyle.



Moderate exercise means that while exercising, breathing is faster, heart rate is increased and one feels warmer. At this level of activity, the heart and lungs are being stimulated. This makes the person fitter. This level of exercise includes, for example, brisk walking, riding a bicycle, gardening and climbing the stairs.

Vigorous exercise means that while exercising, breathing will be much stronger and heart rate will increase rapidly. One would find it difficult to hold a conversation. This includes running, riding a bicycle uphill, strenuous sports such as tennis, basketball, football, etc.

People of different ages require different types and duration of exercise.

Children and adolescents should do moderate to vigorous exercise at least one hour everyday. Outdoor sports, walking or biking, rope jumping, running are good ways for children and adolescents to exercise. This enhances blood circulation, muscular fitness and bone health. It can also help reduce symptoms of anxiety and depression.

Adults should exercise, in addition to their regular physical activities, at least 30 minutes a day, 3-5 days a week. They can do any kind of exercise as per their physical condition. This will help improve respiratory and cardio-vascular fitness, muscular fitness, bone health and reduce the risk of diseases such as diabetes, hypertension, depression and even some forms of cancer.


- * Exercise is essential at all ages. The difference is only by time and type of exercise.
- * Exercise must be done daily in addition to other routine activities.
- * Modern life is making people sedentary. This is not good for health. We should look for opportunities for movement and exercise in our daily lives, for instance, using the staircase instead of lifts.
- * It is important to remember that exercise also helps in managing stress.

Senior citizens should also continue to make efforts to be as active as possible. As people get older, they should not become sedentary and continue to do small household chores and move about as much as possible. People with problems or joint pains should not let their condition restrict them. If they have been sedentary, they should start exercise gradually.

Those who have never done any exercise before could start with brisk walking for 10-15 minutes. This could be gradually increased, both in speed and time to attain the adequate level.

It is important to note that:

- * One should not exercise during fever or any other sickness.
- * One should stop exercising if there is a feeling of faintness, palpitation and excessive sweating.
- * Water should be drunk after exercise.


Exercise is essential at all ages. The difference is only by time and type of exercise

Emotional health

Emotions and health are closely connected. Those who are chronically ill or in stressful jobs should pay greater attention to their emotional health and thereby learn to manage stress.

Our emotions have a great effect on health. Body functions are disrupted and immunity is reduced if one is frequently in a bad mood or angry, under stress or easily upset. As a result, one is at risk of having diseases such as hypertension, heart disease, cancer, etc. Emotions are also related to health behaviours such as over eating, drinking, smoking, and drug abuse. Such habits cause many serious health problems such as diabetes mellitus, lung cancer, liver cancer, etc. Therefore, it is important to manage our emotions and mental state. Stress cannot be avoided but we need to foster good emotion and find a way to deal with tension negative emotions and consciously, make it a habit to get involved in activities which allow us to relax and destress.

This includes, for example:

- * Spending time with family members in fun activities.
- * Strengthening good relationships among family members and with neighbours.
- * Disciplining children to be responsible persons and to be respectful towards elders.
- * Practicing what one preaches. This helps in becoming a good role model for children.
- * Participation in community activities and religious activities.
- * Indulging in relaxation activities such as hobbies, meditation, listening to music, etc;
- * Developing a positive worldview
- * Discussing and solving problems in a positive and constructive manner.
- * Rest, sleep and relaxation
- * It is important to get adequate rest to let stress subside. Everyone must rest at the end of a day, get some time for leisure activities, to refresh, reenergise and prepare for the next day.
- * Doing fun things that we enjoy in our leisure time compensates us for the stress we experience in our daily lives, bringing some balance back into life. On an average, people need around six to eight hours sleep a night, depending on the person and his or her age). If we are regularly short of sleep, our concentration and productive capacity suffers and our energy levels decline. Therefore, rest has a key role in self care and good health.

Body functions are disrupted and immunity is reduced if one is frequently in a bad mood or angry, under stress or easily upset.

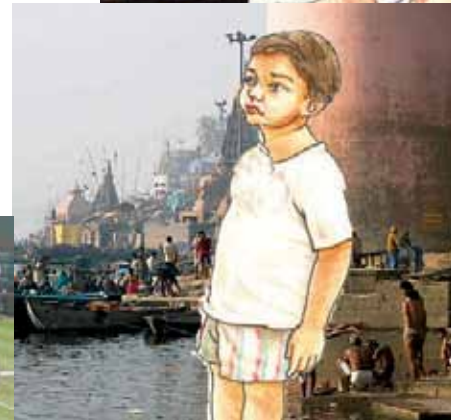
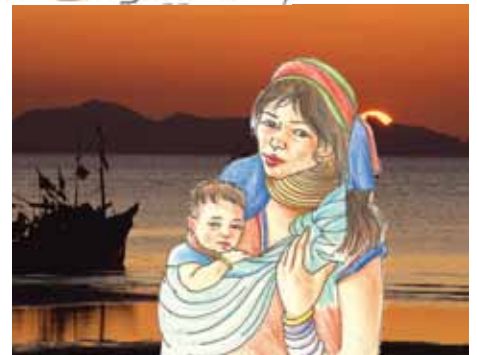


Keeping healthy through the different phases of life

All of us go through different phases in our lives. This section will briefly discuss what needs to be done to be healthy through each of these phases which bring with them changes as well as new responsibilities and challenges.

The different phases of human life are as follows:

- * Pregnancy and childbirth
- * Newborn: from birth to one month of age
- * Infancy birth to one year of age
- * Childhood: One to five years of age
- * Older child: 6-9 years
- * Adolescence: 10 to 19 years
- * Adulthood: 19-60 years
- * Old age: Over 60 years



Pregnancy and Childbirth

- * By the age of 20, girls and boys are usually physically and mentally mature for marriage. Each country in the region has a legal age for marriage. It is best to follow the rule.
- * After marriage, before planning a baby, it is advisable for the couple to get a health check up done to ensure both are in good health, with no underlying health concerns.
- * Pregnancy is a significant, yet normal condition in a woman's life during the reproductive phase (15-49 years). It should be seen as a natural function of the female body and not as an illness.
- * A normal pregnancy lasts usually for about 9 months or 40 weeks.
- * A woman should register with the health worker/hospital as soon as the menstrual period is missed. A full history and examination, with recording of weight and blood pressure, blood and urine examination would be done.
- * At least 4 visits must be made during the pregnancy for antenatal check up — 2 visits between 4th to 6th months, and 2 visits between 7th to 9th months. The first visit should be as early as possible.
- * Two Tetanus Toxoid (TT) immunization injections are given in the first pregnancy. In subsequent pregnancies, a single booster dose is necessary. In addition, a pregnant woman should take iron and folic acid tablets.
- * Diet must be nutritious to include extra milk and milk products, cereals, pulses/legumes, vegetables, fruits, oils, as one also has to eat for adequate growth of the baby. During the entire pregnancy period, the total weight gain should be about 10-12 kg.
- * Routine work should continue during pregnancy. At the same time, adequate rest, including 8 hours of sleep at night and at least 30 to 45 minutes during the day, is needed.
- * Tobacco use is a health hazard. Any form of smokeless or smoking tobacco is harmful both for the mother and baby. A traditional belief that smokeless tobacco helps in controlling nausea during pregnancy is false and misleading. Inhaling the smoke exhaled by other smokers is also harmful both for the mother and the baby.
- * Nausea or vomiting that is more pronounced in the morning, tender and sensitive breasts, unusual fatigue, frequent urination and emotional sensitivity are a normal phenomenon of pregnancy.
- * The mother should go to the hospital for investigation and treatment if there are any complications such as bleeding, headache, swelling of the feet during



pregnancy. A mother with diabetes or heart disease must have her delivery in a hospital.

- * The delivery should be conducted in a health facility. If that is not possible, then a skilled birth attendant should conduct the delivery.
- * After delivery, the mother must keep her private parts clean by washing with water after passing urine and stools.
- * Sexual intercourse is not advised after delivery for 6 weeks.

Newborn: Birth till two months of age

- * The baby's body should be wiped dry all over, especially the head, immediately after birth. The mother should hold the baby as soon as possible after birth as this helps in "bonding" between the mother and the baby.
- * The newborn must be kept warm.
- * The normal birth weight of a baby is 2.5 kg. A baby weighing less than 2.5 kg at birth will need special care and attention.
- * Exclusive breastfeeding is a MUST and should be started as soon as possible after the birth. Any other feed such as honey or water SHOULD NOT be given to the baby. The baby should be fed on demand day and night, normally every 2-3 hours. The mother should finish emptying one breast thoroughly before switching to the other breast. Next time, the mother should begin feeding



from the other breast first. While breastfeeding, the woman can take any posture, sitting or lying down, that is comfortable, using pillows or folded blankets under the back or the arms.

- * A bath is not necessary for the baby for the first two days as it washes away the protective coating on the skin. Subsequently, the baby may be bathed daily. Eyes, ears and private parts should be cleaned during the bath. The mouth should also be cleaned after every feed.
- * The umbilical stump must be cleaned and kept dry. Any oil/medicine should not be applied. If there is discharge from the umbilical cord, it is important to CONTACT THE HEALTH WORKER.
- * The baby must be immunized immediately after birth and it should be ensured that the health centre or hospital takes care of this.
- * Diet of the mother must be nutritious: extra milk and milk products, cereals, pulses/legumes, vegetables, fruits, oil, sugar. Extra amount of food must be eaten, so that the mother can regain her strength.
- * The family must consult the health worker if:

- * The mother is bleeding profusely.
- * The baby is not feeding properly.
- * The yellow colouration of the baby's eyes and skin does not disappear by the end of the first week.

- * Remember: **Planning a family:**
- * It is suggested that two children (regardless of the sex) make a healthy family.
- * The "spacing" between two children should be at least 2 years. It allows the mother to look after the older child and to regain her strength before another pregnancy.
- * For spacing, there are several temporary methods, implants and barrier methods such as oral contraceptive pills, intra-uterine device (IUD) and condoms.
- * If the family is complete, permanent methods can be used, such as vasectomy (for the man) or tubectomy (for the woman).

Infancy: Birth to one year of age

- * Breast milk is the BEST for all infants till the age of 6 months. It contains all the necessary nutrition for the infant. There is no need to give the infant water or any other milk.
- * Complimentary feeding (starting other food) along with breast milk is started after 6 months of age. The infant should be fed at least 5 times a day. Some foods that are eaten by the family can be given, but it has to be cooked till very soft and mashed before feeding. For example, if lentils are being cooked, then some amount can be taken out separately, cooked till it is very soft, then mashed and fed to the infant. No spices should be added to it, however, a little oil can be added. By the time the child is one year-old, he/she should be eating semi-solid food from the family kitchen. Top milk can also be given. Milk should be boiled and fed with a clean cup and spoon. Leftover milk should NOT be given to the infant. Feeding with a bottle is also not advisable as the bottle may not be properly cleaned. Water should not be added to the milk.
- * Cleanliness during cooking, before feeding and after cleaning the infant's stools is to be maintained.



- * Babies gradually grow physically and mentally. These steps of growth are called the “milestones”.
- * It is important to get the “Road to Health’ card or “Health Card” from the health worker. The card should be kept carefully and one must learn how to use it.
- * The infant is growing well if the weight increases regularly. Weight must be recorded every month.
- * If the weight does not increase in two months, the infant should be taken to the health facility. Immunisation schedule for the baby should be followed as advised.

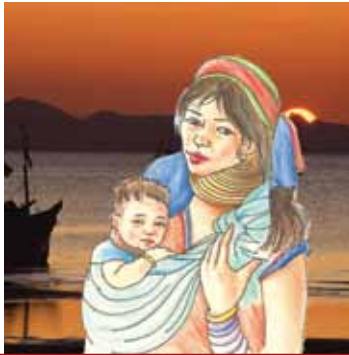


It is important that both the mother and the infant are clean and bathed regularly. If the weight is increasing and the infant is active, the quantity of food being given is adequate.

Childhood: One to under-five years of age

It is important that during these years in a child’s life, she/he remains healthy. This is also the time when healthy habits can be formed.

- * Breast feeding can continue till the age of two years.
- * The diet must contain cereals, milk and milk products, lentils, beans (eggs, meat if eaten by the family), vegetables, fruits, oil, sugar. The child should eat whatever is cooked in the family kitchen. She/he has to be given small feeds, totaling to at least 5 feeds a day, as the stomach is small.
- * Good eating habits include sitting in one place while eating, the mother being present, food being served by the mother, and when the child is encouraged to finish the food on the plate. Food must not be wasted.
- * Clean habits are: Washing the face, hands and feet, bathing and changing clothes.
 - Washing the hands before eating, after passing urine and stools.
 - Washing the mouth after every meal, brushing the teeth in the morning and at night before sleeping.
- * To encourage the child to learn, she/he should be sent to a school for under-five children. All countries in the region have play schools for this age group.
- * Immunisation schedule will continue at this stage and Booster doses are also given. The “Road to Health” card or “Health Card” should continue to be used.
- * The child has to be taught to respect elders and obey the parents. Good habits are best inculcated during this phase.
- * The environment in the home must be made safe and happy for the child. Kitchens, bathrooms, stairs are places where accidents can occur. Medicines,



house cleaning agents, pesticides and electric appliances etc. must be kept in safe places where the child cannot reach them.

Older Child: six to nine years

This phase begins when the child starts going to school at the age of 6 years till the age of 17 years. Children between 11 to 18 years are called “adolescents” and will be dealt with separately. Children between the ages of 6 to 11 years are also growing children and need the same attention as younger children. The need for nutritious diet, therefore, remains the same as before.

- * The quantity of food eaten is to be increased and good eating habits have to be maintained. The child should be encouraged to eat home food and not buy food from outside.
- * Formation of healthy habits should continue. The child should be able to keep her/himself clean under parental supervision.
- * Both girls and boys must be encouraged to study and continue in school till senior secondary. The parents must talk with their child to detect if the child is having any problem in school. Common problems are bullying by other children, teachers being very strict, difficulty in learning, etc. In view of increasing cases of child abuse, it is important for the parent to convey to the child that no one should touch her/him in a way that is not correct.
- * In many schools, a School Health Programme is conducted and children are examined at regular intervals. Parents must cooperate with this and see that their child gets a proper check-up and make efforts to follow clinical advice.
- * Physical exercise and play are important. The child must have time to play with other children.
- * The child has also to be taught to keep the environment in the home and outside the home clean. A healthy environment makes a healthy family.
- * Children also need to engage themselves in some household work to help the parents. Taking part in family religious activities, going out together for shopping, sharing enjoyable moments like story time or play time keeps them happy and within the family.
- * Accidents in the home and outside have to be avoided. The child has to be taught to cross roads safely and not to play on the roads.





Adolescence: 10 - 19 years

Adolescence is the age between 10 to 19 years. This is the time when changes occur in both girls and boys. Body changes occur due to increase in hormone (secretions of certain glands) levels in the blood, which results in body development, sexual development and emotional changes.

Adolescence in girls:

- * One of the first signs is that the breasts slowly develop from a small nodule to their full form.
- * Menstruation (monthly bleeding) starts during this phase. At first it may be small amounts and at irregular intervals. It gradually increases in amount; the bleeding may last for 2-5 days and comes regularly once a month. Once menstruation begins, the girl can become pregnant if she has sexual intercourse.
- * During menstruation girls have to maintain hygiene. They can use cotton pads or clean cloth and have to change as frequently as needed. The private parts must be washed whenever the pad is changed (if possible). Underwear should be changed as needed. Pads/cloth should be disposed by wrapping in paper or putting it in a bag and throwing into a dustbin.
- * The regular monthly blood loss can lead to loss of iron, making the girl pale (anemia). So a balanced diet for girls is very important.
- * Other changes include hair growth in the armpits and pubic region.
- * The hormones in the blood can cause changes in the skin. Pimples form on the skin and upper part of the chest. This is called "acne" and can be very stressful for the child.
- * Several emotional changes occur and this is a stressful time for a girl. She finds her body changing and has to manage menstruation. She becomes aware of boys and is attracted to them. She has to dress differently and the elders expect her to behave in a different manner. She also becomes aware about sexual intercourse.

Adolescence in boys

- * In boys, hair develops on the face, in the armpits and pubic region. The voice changes from childlike to a deeper tone.
- * Acne occurs due to hormonal changes, along with Development of the testis.
- * Emotional changes occur and this is a stressful time for the boy. He finds his body changing, becomes aware and is attracted to girls and sometimes to


older women. He becomes aware of sexual intercourse. He may masturbate. This is normal and does not cause any problems.

- * Some boys can also become aggressive towards family members and others. This is also the time when boys may try smoking or drugs under the influence of friends or seniors and may even be prepared to have sexual contact because they feel that they have grown up and should act mature. All these situations must be handled with sensitivity and care.

For both girls and boys

- * As girls and boys grow fast during adolescence, the diet has to be balanced to provide enough of energy. The food items can be the same as the family is taking, however, the quantity should be enough for normal weight gain.
- * As girls are prone to develop anemia if their diet is not balanced, they have to eat plenty of foods containing iron – green leafy vegetables, milk, meat (if non-vegetarian), eggs. Sometimes iron tablets may have to be taken.
- * For adolescents, daily exercise helps to maintain weight, strengthen the bones, muscles and joints. Participating in school and community sports helps build team spirit and also helps dealing with wins and losses.
- * Personal hygiene must be maintained.
- * The girl/boy must take part in the family activities and should be given some responsibility in the family. Taking part in religious activities with the family is also helpful in managing stress.
- * Good behaviour with others must be encouraged. Boys must be counseled about respecting women whereas girls should be taught to maintain their self respect and conduct themselves with dignity in any situation.
- * It is important that parents should counsel adolescents about the dangers of indulging in casual sex with known/unknown partners. This can lead to unwanted pregnancy and sexually transmitted infections including HIV. The principle of having sexual intercourse after marriage and remaining faithful to a single partner is the best way to stay free of these problems.
- * Counseling about the dangers of experimenting with smoking, alcohol, drugs which can lead to addiction, should also be done by both parents and teachers.

Adolescence is a very challenging and eventful phase with numerous changes that are physical, mental as well as emotional. Parents need to accept and understand the changes happening in their child. During this phase, care must be taken to see that communication between parents and children is kept open. It is better



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for parents to be the first and foremost information source than friends and outsiders.

Adults

Women:

In general an adult woman after marriage settles into her new home with her husband, has children, looks after her home and also, works outside the home to support the family. This is an active time in her life and she has to look after her health.

Her diet has to be nutritious including milk and milk products, cereals, lentils/pulses, vegetables, fruits, oils and sugar.

Regular physical exercise together with household duties will keep her weight in control, strengthen the bones and joints and help her control stress. Being faithful to a single partner protects her from sexually transmitted diseases and helps her to plan her family.

As the woman grows older (usually after the age of 40 years), menstruation begins to get irregular and then stops due to changes in the hormones. This is a natural change and is NOT an illness. The symptoms preceding menopause may include:



- * Irregular bleeding – the number of days decreases and bleeding does not occur every month.
- * “Hot flushes” – there is sudden feeling of heat and redness on the face and neck. There can be sweating, headache, irritability which lasts for a short time.
- * Less interest in sex.
- * Loss of fat on the skin, wrinkling.
- * Reduction in breast size .
- * Weaker bones (osteoporosis).
- * Frequent urinary infection.
- * Menopause being a natural change has to be understood and accepted as a normal body function in a woman’s body.

Men:

It is important for men to understand that having sex with multiple partners can lead to sexually transmitted diseases. It is better to be faithful to a single partner. Casual sex should be avoided.

While doing manual work, one should follow the instructions of the supervisor and use protective measures advised to prevent accidents. Men working with substances like chemicals, asbestos, lead must have regular health check ups.

- * Diet has to be adequate to maintain the body weight of the person depending

on the work done. Over-eating, eating the wrong type of foods with too much oil and fat and lack of physical activity can lead to obesity which is dangerous as a person gets older.

- * Regular exercise is needed even if a person has physical activity during work. It strengthens the muscles and bones, prevents increase of weight, is good for the heart and relieves stress.
- * It is best not to smoke, use tobacco or take drugs. tobacco products orally, taking drugs. If one has started, then it is essential to STOP immediately.

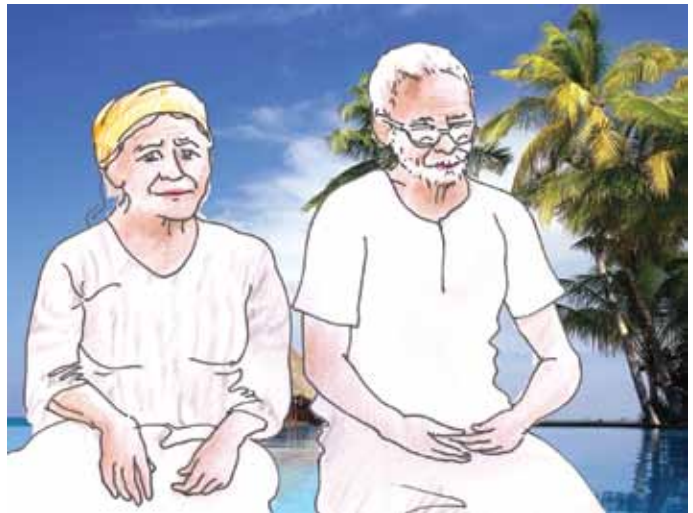
Both men and women have to:

- * Be aware that other diseases such as diabetes, high blood pressure (hypertension), heart disease can start at this age. Regular health checks will help in early diagnosis.
- * Cancers can occur at any age. Early detection means early treatment. The early warning signs (danger signals) for cancer are:
 - ◆ A lump or hard area in the breast.
 - ◆ A change in a wart or mole.
 - ◆ A definitive change in the digestive and bowel habits.
 - ◆ Persistent cough or hoarseness (change) in voice.
 - ◆ Excessive loss of blood during monthly bleeding, or bleeding between the dates.
 - ◆ Blood loss from any site.
 - ◆ A swelling or sore that does not get better.
 - ◆ Unexplained loss of weight.

Old age – the autumn of life

Old age starts from age of 60 years. From this phase onwards, the body starts slowing down even though a person may think that she/he is fully active. The cells in the body begin to degenerate and this leads to decrease in their function. This degeneration is a normal function. Therefore growing old is not an illness but a phase in our lives which has to happen to all people who live beyond 60 years. There is no medicine that can slow down this degeneration. What matters is how the person sees herself/himself as an elder.

- * A healthy elder who can look after herself/himself is a great support to the rest of



the family. It is advisable that she/he must stay with or nearby family members.

- * As always, the diet has to be nutritious. Extra milk is needed for senior citizens to help keep the bones strong. They may need to eat small quantities of food at least 5 times a day, so that they get the right quantity of food and nutrients. Plenty of green leafy vegetables (spinach) help prevent constipation.

In general, because of decreasing cells, brain function slows down. A person can:

- * Become forgetful. Remembers very well all that happened in childhood, but will not remember where she/he has left the spectacles. As the age increases, forgetfulness increases and can cause the person a lot of trouble.

- * Become irritable, depressed or emotionally unstable (sudden bouts of tears or happiness at different times).

- * Develop dementia where there is increase in forgetfulness; difficulty in performing daily routines such as cleaning teeth, dressing; difficulty in using correct words; and other such problems.

- * The elderly must keep active and continue doing what work they can. Reading, watching television, meeting together in groups and discussions keeps the mind active.

- * Eyesight decreases because of cataract or glaucoma (increase in the pressure of the eye). Hearing capacity gradually decreases. The teeth fall out as the gums lose strength. Eating becomes difficult and the person prefers softer foods. Such changes can be detected and the person helped through periodic health check-ups. For instance, cataract surgery can be done if needed. Glaucoma should be treated early so the person will not get blind. A hearing aid and dentures can be provided too as required.

- * Further, if the person has any disease such as diabetes, high blood pressure and heart disease, she/he has to continue with the treatment and follow up with the doctor.

- * The joints become stiff and painful and the bones too become thin and break easily even with a slight fall. Movement may sometimes be difficult and painful. The spine too becomes stiff making bending forward painful.

- * The pumping action of the heart and the action of the lungs decrease. There is difficulty in walking fast and also in breathing.

- * Senior citizens must continue with whatever exercise they were doing at a younger age. Exercise may be at a slower rate and for a shorter time, but they MUST exercise. Yoga, done gently, is very helpful as it exercises all the muscles and joints of the body. At this age, yoga must be done with the help of a trained teacher. The elderly must be careful to prevent accidents at home. A walking stick, if advised, must be used.



The elderly must keep active and continue doing what work they can. Reading, watching television, meeting together in groups and discussions keeps the mind active.

- * There is difficulty in eating the same amounts of food that she/he was used to. Distension and an uncomfortable fullness after eating a large meal can occur. Sometimes, constipation can also occur.
- * Kidneys and urinary bladder: The function of these parts slows down. The person can start passing urine many times in the day and night.
- * In men, the gland near the urinary bladder (prostate gland) becomes large and the person will have difficulty in passing urine. Sometimes, he may not be able to pass urine at all.
- * Urinary infections can occur in both men and women.

Regular health check ups are helpful in monitoring any sudden changes or detecting the onset of any serious ailments early.

People with special needs

There is another group of people who require special attention by the family and community. This group is mainly children/people who are not made the way everyone is. They may be mentally disturbed, physically differently abled or suffering from chronic diseases, needing to be constantly looked after or nursed. In this case, it is the family and community who need to make changes in order to help them live healthy lives.

The family has to accept that they have a member who is differently abled. It is their duty to look after the person with love and care, no matter the extra trouble and difficulty. It is also their responsibility to encourage and help them to be self-sufficient.

Today, facilities are available for schooling and training children who have physical disabilities and minor mental disturbances. The local government agency or the leader of the community can help in contacting these agencies to help these children chart their own way in the crowd.

Decorative flourish

The family and community need to make changes in order to help people with special needs live healthy lives

Once it is understood what happens during the different stages of life, it is easier to work towards a healthy life for oneself and the family.

Illness comes to everybody; no one can live without some illness. Good health helps in quickly overcoming minor illnesses.

Making simple changes in our lifestyle can prevent many illnesses. For example, not smoking/quitting will give protection against chronic lung disease and cancer; not chewing/stopping chewing tobacco will prevent mouth cancer; safe sex will protect a person from HIV.

There are some chronic diseases such as diabetes, blood pressure, which occur in people despite a healthy lifestyle, because there is a genetic factor involved - a parent or blood relative who has/had it. Understanding and learning to make the necessary changes helps the person face these challenges and lead a normal life.



Disease Prevention & Control



Disease Prevention & Control

Disease can be prevented or delayed to a large extent if the causes can be understood. This chapter will discuss how to prevent diseases as well as preventing them from progressing or getting worse. It will also provide information on what to do to prevent their spread. The next chapter will describe the steps, which individuals or communities can take when someone falls ill.

Diseases can broadly be divided into (a) communicable diseases (b) non-communicable diseases.

Some diseases such as common cold, malaria, tuberculosis and diarrhoea are caused by germs, which can spread from one person to another or from an animal to a person. As these diseases can be “communicated” from a person/animal to a healthy individual, they are called **communicable diseases**. The germs spread from an infected person to another, either by direct contact or indirectly through another medium. Indirect contact happens when germs from an infected individual are transmitted to a healthy person via infected materials such as water, food or air. The infection can also get transmitted when one comes into contact with infected inanimate objects such as toys, pencils, soiled linen, baby soothers and feeding bottles. There are other diseases, which spread via insects and animals such as mosquitoes, sand flies, flies, tics, cats and poultry.

Non-communicable diseases, on the other hand, are not infectious or communicable. They cannot be transmitted from one person to another. Cardiovascular diseases, diabetes, chronic respiratory diseases and cancers are examples of non-communicable diseases. These diseases are associated with modifiable risk factors such as tobacco use, inadequate physical activity, inappropriate diet and stress. Several non-communicable diseases are chronic and closely linked to family history. The treatment for non-communicable diseases can be lifelong and is expensive.

Simple steps followed every day to maintain cleanliness will help prevent many diseases

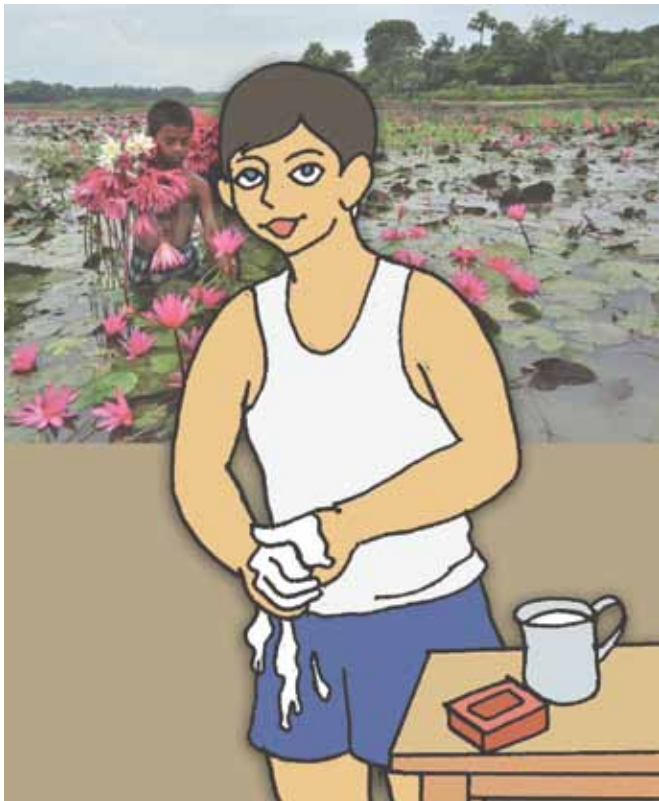
Disease prevention is better than cure

One of the most important and best ways to prevent oneself from getting infected with a disease or causing it to spread to others is by keeping ourselves, our environment and the food and water that we consume, clean. Simple steps followed every day to maintain cleanliness will help to prevent many diseases. The following sections will discuss these in detail:

Personal hygiene

Personal hygiene means keeping the body and all the external (outer) organs clean, starting from head to toe.

Hands and Nails: Hands and nails are important causes of infection in an individual and also for others. Dirty hands take germs to food, to children and to an individual's own mouth.



- * Nails should be cut short and cleaned while bathing.
- * Adults, especially mothers caring for children and those who cook food, should keep their nails short. Those with long nails must keep under the nails clean.
- * Hand washing is VERY IMPORTANT. The method to be followed for proper hand washing is:
 - ◆ Adequate water. Running water from tap is best. If water is stored in a utensil, the quantity MUST be adequate.
 - ◆ Use soap.
 - ◆ The hands should be rubbed well. It is important to clean the nails, between the fingers and on top of the hands. Soap should be washed off well and the hands dried with a clean cloth.
- * When do we HAVE to wash hands?
 - ◆ After using the toilet
 - ◆ When handling foods, before and after eating.
 - ◆ After caring for sick persons and small children.
 - ◆ When hands are dirty.
 - ◆ When arriving home from work or from outside.

Skin: The skin is important because it protects our bodies. Keeping the skin clean keeps a person healthy.

Simple ways of keeping the skin clean are:

- * Regular bathing at least once a day. Adults should pay special attention to clean in the folds of the skin – under the breasts, the armpits, the groin, between the toes. Adolescents (children between 11 and 18 years) should wash their faces more frequently to keep the skin clean, and free of oil to prevent pimples. The private parts of both men and women must be cleaned properly while the person is having a bath. Men should pull back the foreskin (prepuce) and clean the area. Boys must be taught to do this.
 - ◆ For infants, the mother should clean the folds in the neck. Milk runs down the neck while feeding and collects in the folds. This leads to infection.
 - ◆ One must wear clean clothes after taking bath.

Hair: Hair is considered a sign of beauty by all. But it has to be clean. How can this be done? Hair should be washed with soap or any other local cleaning agent once a week or more often, as needed. Combing hair at least two times daily will keep it clean. Children who go to school should comb their hair. Children should be checked for head lice.



Eyes: Eyes are one of the important sense organs of the body. They must be kept clean and healthy

- * Eyes should be washed daily with clean water. This should be done when washing the face.
- * It is important to protect the eyes from strong sunlight, wind or dust.
- * An infant's eyes should be cleaned with clean cotton balls soaked in clean water. Wash your hands before doing this.

Ears: Ears must be looked after and kept clean.

- * Ears must be cleaned when bathing. Ears can be cleaned with a cotton swab (a piece of cotton) wrapped round a blunt-edged small stick. One should not use sharp objects in the ears to clean them.
- * It is also important that ears be properly dried after a bath.
- * Exposure to loud noise including music can damage your hearing.

Mouth and Teeth: Clean mouth and teeth are important for health and for social reasons. Unclean mouth and teeth can give you bad breath. The teeth must be kept clean and gums massaged. This is important as the gums support the teeth. Hygiene of the mouth has to be maintained right from birth.

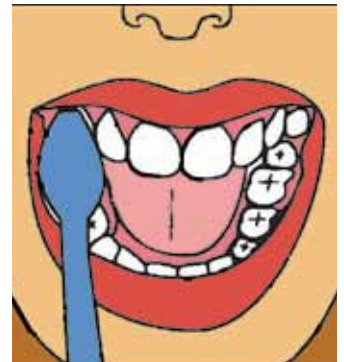
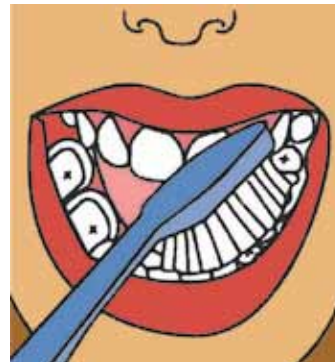
Infants and children

- * The mouth, tongue and gums must be gently wiped at least 2-3 times a day, using a finger wrapped with a soft, clean, damp cloth. This will prevent formation of white deposit seen on the tongue and mouth of infants taking milk.
- * When the teeth begin to appear, the gums should be gently massaged using clean finger with glycerin or a little vegetable oil.
- * Once the child is old enough, he/she should be taught to brush the teeth using a soft toothbrush with toothpaste or tooth powder after every meal and at night. The child can be taught to massage the gums with the fingers. Toothbrushes should not be shared.
- * Regular dental check-ups for children should be done to detect early tooth decay.
- * Children should not be allowed to eat too many sweets or starchy foods. These stick in the teeth and cause tooth decay.

Oral hygiene
is important
for health
and social
reasons

Adults

- * Adults must follow the same routine of brushing. They can also use traditionally accepted methods to keep teeth clean.
- * False teeth must be removed, cleaned, and stored in a clean container at night.

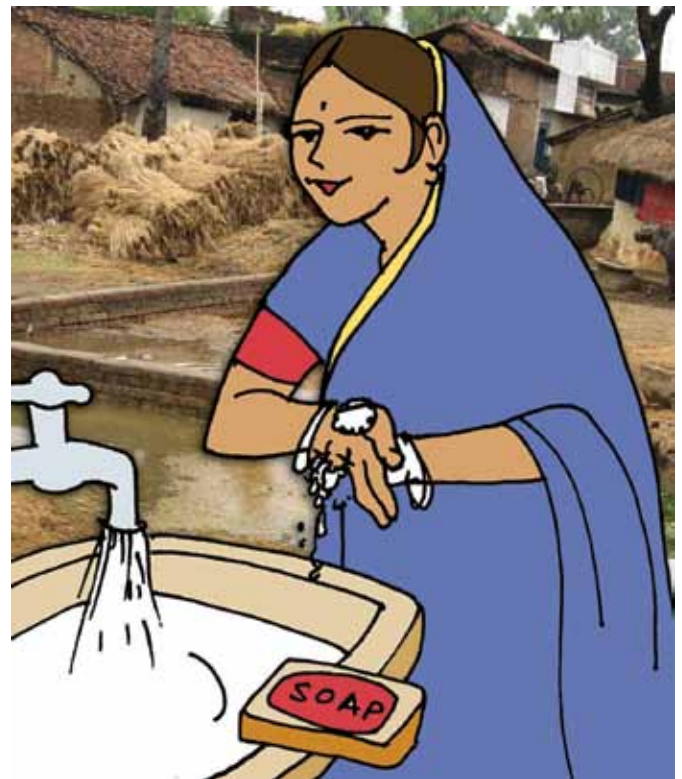


- * Children and adults should NOT initiate the use of any tobacco product, smoking or smokeless. These are hazardous as they can cause oral and other types of cancer.
- * Regular dental check-ups are advised as the person grows older.

Menstrual hygiene: Menstruation is the monthly bleeding from the vagina, which starts when a girl is around 11 years of age. The bleeding can last for 3-6 days and the amount varies from one girl to another.

During menstruation, a girl/woman must:

- * Keep herself and her genitals clean.
- * Use clean cotton cloth pieces or cotton pads to absorb the blood. Avoid using soiled cloth.
- * Change cloth/pads, depending upon the amount of bleeding.
- * Wash her private parts with clean water every time a change is made.
- * Wear clean underwear. Frequent changes may be necessary in case of stain.
- * Dispose used cloth/pad by wrapping it in paper into a dustbin. Soiled pads should not be disposed in the toilet or thrown simply anywhere.
- * Wash hands with soap and water after changing.



Keeping feet healthy

- * Feet should be kept clean and washed daily while taking a bath.
- * It is advisable to wear shoes when one is going out. Shoes that fit comfortably should be worn.
- * Feet should not be cramped or pushed inside fashionable but very uncomfortable shoes.
- * If one is diabetic or loses sensation in the foot, one should regularly examine feet for cuts and wounds. If there are cuts or wounds on the feet, seeking medical help immediately from health staff is important.

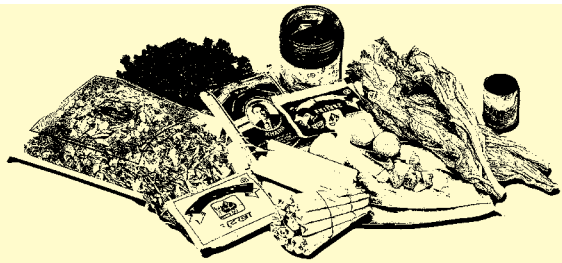
Sleeping: Ideally, 6-8 hours of sleep a day is necessary for adequate rest in adults and proper growth in children. While sleeping, it is important to avoid mosquito and insect bites. Bedrooms should be screened to prevent insects and mosquitoes. If the room is not screened, one should sleep under a mosquito net.

Coughing and Spitting: Cough can be dry or productive, which means that sputum is formed and brought out when one coughs. In both types, coughing sprays droplets from the mouth. This is not always visible, but the droplets contain the germs that have caused the cough. Other persons can get infected by the germs if they breathe it in. This can be prevented by covering the mouth with the hand or a clean cloth when coughing.

No one should spit. Often when sputum is formed and the person coughs, it comes into the mouth and has to be spat out. Sputum contains germs which can spread. It can cause disease to others who come in contact with it. Sputum should be spat into a closed tin which can be disposed in the dustbin. Outside the house, one should take care to cough into a tissue paper, which can be disposed in a dustbin.

Tobacco use kills:

- * All forms of tobacco, smoking or smokeless, are addictive and dangerous to health.
- * Smoking cigarettes and bidis causes lung cancer, which requires expensive, long-term treatment, is painful as well as traumatic.
- * Chewing tobacco products such as gutka and pan masala with tobacco are addictive. They cause cancer of the tongue, mouth, oesophagus and oral cavity. The community must be made aware of the harmful effects of tobacco use.
- * It is important to remember that it is never too late to stop, so tobacco use **MUST** be stopped immediately.



Alcohol use is hazardous to health:

Alcohol use is addictive and excessive use increases the risk of:

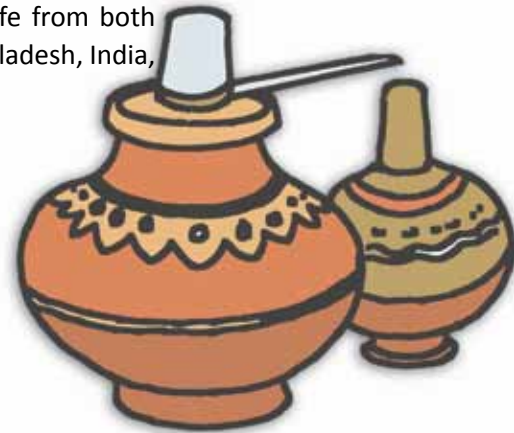
- * Violence against women
- * Accidents, falls and injuries
- * Risky sexual behaviour
- * Miscarriage and still births among pregnant women; birth defects among children
- * Chronic diseases, such as cancers, liver ailments, depression and suicides

Water hygiene

Unclean water and food have germs, which enter the body and lead to a number of diseases. Some of these are: diarrhoea, typhoid fever, cholera, hepatitis A (jaundice), food poisoning or intestinal worms. It is important to pay attention to water and food hygiene to prevent sickness..

Water that is used for drinking and cooking purposes must be safe from both germs and chemicals (arsenic and fluoride which is common in Bangladesh, India, Myanmar, Nepal, Thailand). This means it must be:

- * Taken from safe sources.
- * Collected in a clean manner.
- * Stored in a clean vessel.
- * Taken from the vessel in a hygienic manner (with clean hands).
- * Consumed in a hygienic way.



Common water sources

Public tap: Houses that share a public tap should keep the surrounding areas clean without any stagnant water. Taps should be kept closed when not in use.

Tap inside the house: Wherever available, tap water is preferable for drinking and domestic use. The water pipe, which brings the water to the house should be intact (not broken), have no holes and should not be leaking.

Bore Wells: The surroundings of the well should be clean, paved with bricks to prevent water collection outside the well. Wells should be covered and protected from animals. People should not be allowed to wash clothes and utensils close to the well. This is because the dirty water seeps into the ground next to the well wall and contaminates the well water. Toilets should be at least 100 meters away from the well and at lower ground level. The best possible way to draw water from a well is through a hand pump.

Rainwater: Households with a rooftop rainwater harvesting system, should ensure that the first rain is flushed off for about 15 minutes. Rooftops and gutters must be cleaned just before the rainy season. Tree branches that are over the roof should be cut off. It is also important to keep the rainwater storage tank tightly covered. A tap may be installed at the base of the tank to dispense water. Tanks should also be washed before the monsoon season.

Making water safe for use

In general, tap water is safe to use and there is no need to treat it at home. The safety can be verified from the water supplier, which is normally a government agency. Usually, people store water if the water supply is not continuous and/ or if the water collection point is outside the house. In cases where water is safe but the supply is not regular, it is very important to store it properly to prevent re-contamination of water..

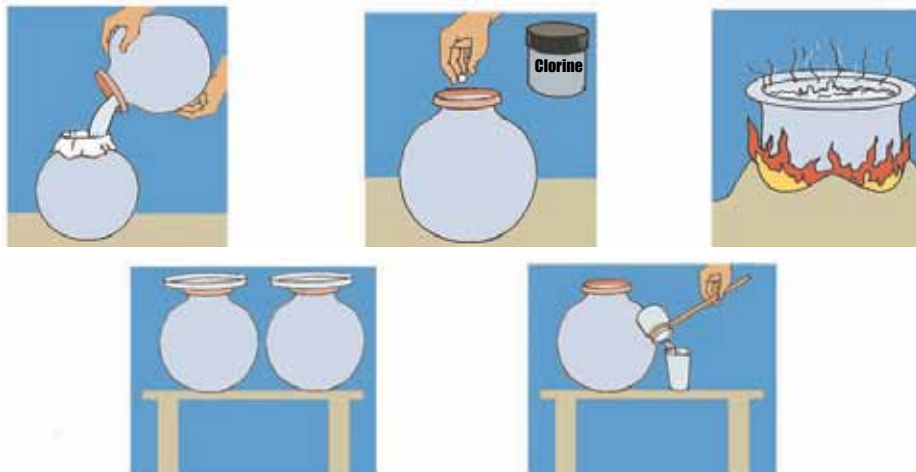
Care should be taken to ensure that the container which stores water is covered properly at all times

Storing water: A container that had milk or fruit juice in it earlier must not be used to store water. Milk protein and fruit sugars remain in the container and can cause bacterial growth when water is stored. Water can be stored in jerry cans, clay pots, buckets or plastic bottles. Care should be taken to ensure that the container is covered properly at all times. Still water, which stands for long periods, can be a good breeding place for mosquitoes. A proper, tight cover can prevent mosquito breeding.

Any container in which water is planned to be stored must first be properly cleaned with dish soap and water. It must be rinsed thoroughly. If possible, after washing, the container should be submerged in a solution of one teaspoon of non-scented liquid household chlorine bleach to every quart (or liter) of water (making sure the entire surface of the bottle comes in contact with the solution for a minimum of 15 seconds). The container must then be rinsed thoroughly.

If the safety of water is not clear, it is advised to treat it at home using any of the methods given below as appropriate:

Filtering: There are various water filters available in each country such as ceramic filters or biosand filters which are produced locally in some countries. Different types of commercial filters are also available. Filters need to be cleaned regularly



and for commercial filters, various parts to be changed as per the manufacturer specifications.

Boiling: There are many methods of purifying water, but the most efficient and feasible in household use is boiling. Boiling kills most types of disease-causing organisms and is the best purification technique. The method: Water should be boiled for 1 full minute and then allowed to cool. The water should come up to a full boil. If the place of residence is one mile above sea level, water should be boiled for 3 minutes more or longer.

Solar disinfection: Exposing water in disposable, clear plastic bottles to sunlight on the roof of a house or any raised flat platform for 8 hours during a sunny day, or for two days during cloudy days can render germs as inactive. Water should be consumed directly or transferred to a clean glass. To be effective, solar disinfection must be applied to clear water.


If water is turbid, it can be removed by filtering through a clean cotton cloth, such as a clean handkerchief or cloth and then allowing the water to settle for at least 30 minutes. The clear water can be further treated with solar disinfection or through chlorination.

Chlorination: This is the process of adding chlorine in liquid or tablet form to drinking water stored in a protected container. Chlorine is available in a variety of sources, including solid calcium hypochlorite, liquid sodium hypochlorite or NaDCC tablets. Any of these forms must be used as per instructions given with the package.

For people living in arsenic and fluoride-affected areas, one must check with the water supplier if the drinking water contains high concentrations of these chemicals. If one is using a private tube-well, it is important to test the water for these chemicals with the local laboratory. If the concentrations are high, this water should not be used for drinking and cooking. It can be used for washing clothes. One must use boiled/treated rainwater or surface water for drinking.

Water Storage and Retrieval

Water to be used for drinking and cooking should be stored in a clean, large-mouthed vessel. The vessel should be covered properly. For taking out water, a ladle with a long handle should be used and kept on the cover of the vessel for easy and ready access. One should be careful not to dip hands in the water for drinking or cooking. The ladle should be cleaned daily.


For people living in arsenic and fluoride-affected areas, one must check with the water supplier if the drinking water is safe

It is important to always drink water in a clean glass. If the hands are used for drinking, care must be taken to wash the hands with soap and water before drinking. Washing children's hands is very important. No one should be allowed to drink from the ladle.

FOOD HYGIENE

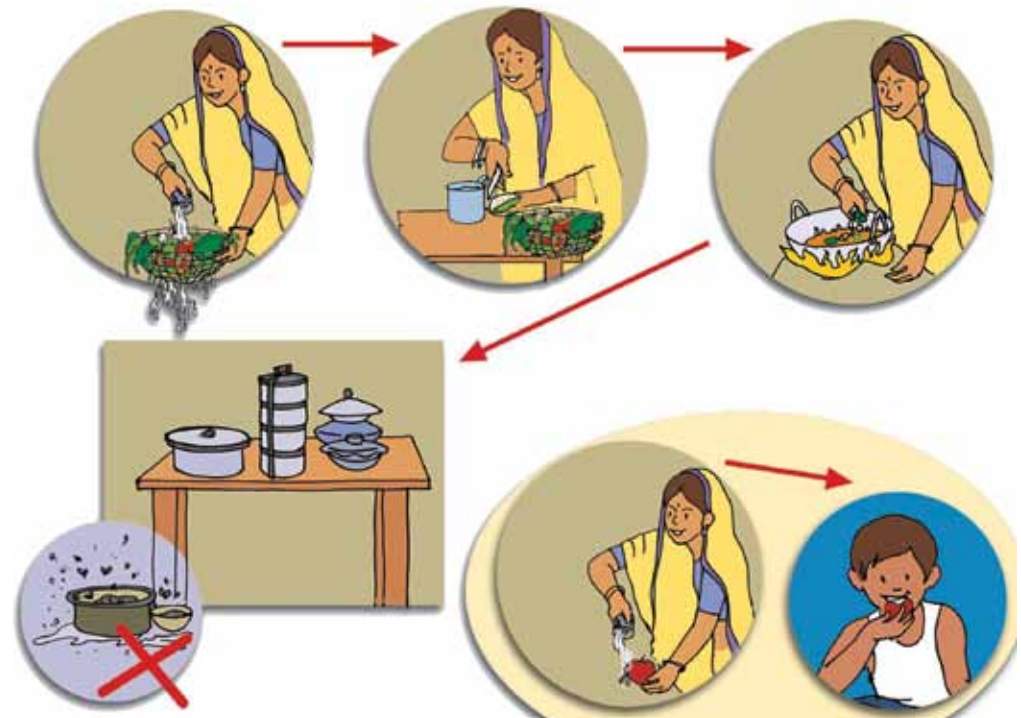
Important elements of food hygiene include cleanliness in preparing, cooking, storing, serving, and eating food.

Place of food preparation

- * The kitchen should be ventilated and kept clean. The area should be free of flies and other insects.
- * While cooking in an open verandah or in the open, it is best to cook in a clean area, away from dirt and animals. Food should always be covered and protected from flies.
- * The cooking surface should be kept clean before and after use.

Preparation of food

It is best to prepare fresh food everyday. Leftover food should be kept covered in a cool, dry and clean place. If available, a refrigerator can be used to store leftover food for the next day.



- * Fruits and vegetables need to be properly washed, preferably in running water; if washed with stored water, it should be washed at least two times. This is important when one eats them fresh. Vegetables should be washed before peeling and cutting.
- * Clean vessels should be used to cook food. Cooked food should be kept covered to prevent dust and flies from settling on the food.
- * Milk and milk products have to be consumed fresh as they can get spoilt very easily.
- * Fruit should be freshly cut and eaten. If cut fruit is to be consumed later, it should be covered properly to protect it from dust, flies and other contaminants.

Storing foods

Storing food in the wrong place or at the wrong temperature can lead to the growth of germs.

- * Cooked foods should be kept covered until they are served to protect them from dust, flies and contaminants.
- * Meat and meat products should be consumed fresh. In case they need to be stored, and there is no refrigerator available, they can be preserved via traditionally accepted methods such as salting and smoking.
- * Always check labels for guidance on where to store food.



If a refrigerator is available:

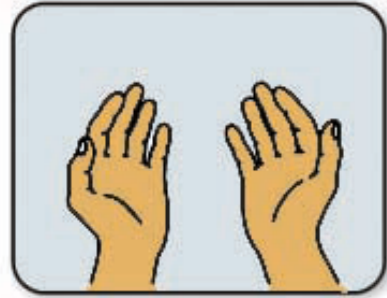
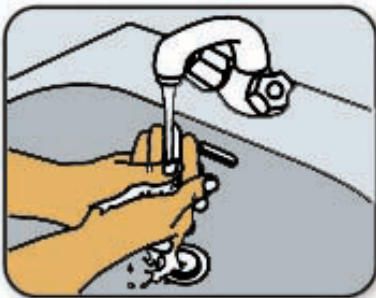
- * Fresh and frozen food must be stored in the refrigerator or freezer as soon as possible after it is bought from the shop. This is especially important if the weather is hot.
- * Raw meat should be stored in an airtight container at the bottom of the refrigerator. This is important to prevent the juices or blood dripping onto other food kept in the fridge.
- * Tins of food that have been opened should not be kept in the fridge. Food items must be taken out of the tin and transferred to a suitable airtight container instead.
- * If cooked leftovers need to be kept in the fridge, they must be allowed to cool to room temperature. Any leftovers must be used within two days.
- * Any food that has passed its use-by (expiry) date **MUST NOT** be used. Information about the date of manufacture and expiry is important.

Serving food

- * The area where people eat must be kept clean.
- * Utensils used for eating should be clean.
- * Food should be served with a spoon or ladle.
- * After the meal, the leftovers from the plates should be collected in a bag/paper and thrown in the dustbin.
- * Vessels should be cleaned after every meal, especially after the night meal.



Hands must be washed with soap and water before cooking, before eating, after eating and after cleaning the cooking area and the kitchen area.



ENVIRONMENTAL HEALTH

The environment to be discussed here includes the environment inside the house, the nearby surroundings, and the community in which people live. Household and community environment have great effects on human health.

Garbage thrown in open areas, wastewater and rainwater collected here and there creates an unhealthy environment. Such places are good breeding zones for flies and mosquitoes, which bring germs and cause serious diseases such as malaria, dengue fever and diarrhoea, among others.

Household environment has a big impact on health. A house where air cannot flow easily can cause respiratory or breathing problems. If water is not stored properly, it can lead to breeding of mosquitoes in the house and cause dengue fever, etc.

Therefore, it is important that families and communities keep the household and surrounding environments clean and green to prevent diseases and live a healthy life.



Household Environment Ventilation:

- a. There should be at least one window in each room of the house, if possible, to allow good air flow. Windows should be kept open for some time daily. In the cold weather, the room should be aired during the day and then closed in the evenings to keep it warm.
- b. Tobacco smoke is a health hazard. Smoking should not be allowed inside the house. Smoking inside the house pollutes the air and makes it unhealthy. Smoke inhaled by babies, children, pregnant women and all those who do not smoke is extremely harmful for health. Homes should be strictly smoke free.
- c. If there is a family member with tuberculosis, then it is best for everyone that she/he sleeps in a separate room or at least a separate bed, if possible.

Cooking stove. Kerosene oil or wood/coal (“chullah”) emits smoke when lit. This is harmful, especially for those with lung disease. The stove should be lit outside in the open air, and brought inside only after it stops smoking.

Toilets. Most houses in urban areas have a toilet attached to the house. In the villages, there may not be a toilet and the people use the fields. This can lead to worm infections when people go barefoot to the fields.

- a. It is best to construct a toilet in the house. There are many types of toilets which can be made, such as flush latrine, water-sealed latrine, pit latrine, etc. The local health staff or related government agency can be contacted for advice.
- b. The toilet should be kept clean. Adequate water should be available to flush and clean the toilet, whichever type it may be.
- c. Pit latrine should be built outside the house and kept clean by using water or ash.

Excreta of infants and children is equally harmful, therefore, nappies or soiled diapers should be washed off or disposed in the toilets and not thrown in the garbage or surrounding areas.

Solid waste: It is important to follow the principles of Reduce, Reuse and Recycle while managing solid wastes. If possible, we must try to segregate waste into different categories –

- * Biodegradable (kitchen and garden waste)
- * Those that can be recycled (PET bottles, plastic containers, glasses, plastic bags etc),
- * Recyclable and hazardous wastes (mobile phones, computers, batteries, printers, light bulbs, medicines etc).

Biodegradable wastes can be composted in a pit to produce manure if one has sufficient space, otherwise it can be given to the waste collector. One must try to reuse plastic bags, containers to the extent possible and send recyclable items to local agents. Batteries, electric CFL bulbs and electronic items containing toxic elements need to be disposed carefully by sending them to recyclers or to land-filling. Children should not be allowed to play with batteries or put them in their mouth. In rural areas, if one can't find waste collectors, one solution is to bury hazardous waste away from the village and far from any water source instead of throwing them in open areas.

Cleaning the house: It is essential to clean a house daily. The rubbish from the house and the kitchen should be collected in a plastic bag and put into a covered dustbin. Garbage should not be thrown outside the house, on stairways, in front of the neighbour's house, verandah or on the road.

To prevent the breeding of mosquitoes inside or outside, the following steps could be taken:

- a. All empty pots, utensils, empty tins, car or tractor tyres and anything in which water can collect, should be removed.
- b. Empty flower pots should be kept upside down.
- c. Water tanks and water storage utensils should be covered.
- d. Once a week, on a fixed day, room coolers should be emptied, the water tank dried and filled with fresh water.

Animal pens: Animal pens should not be built under or very close to the house. This is not a healthy practice since animals can transmit diseases.

External Environment

Keeping the area around the house and the roads clean is the responsibility of each member of the community. The best way to achieve this: working together with the neighbours and the community.

- * People should not throw rubbish in any public area and must stop others from doing so too. Keeping roads clean is the responsibility of the Village Council or the village governing authority, and the municipality in semi-urban areas. These bodies must ensure such cleaning on a daily basis.
- * Drains along the roads are for removing surplus water. Rubbish must not be thrown into them and neither should children be allowed to defecate in them. The drains should be cleaned regularly, especially before the rains. This will allow water to run freely and not collect in the drains. In case of water collection, the concerned authority must be contacted.
- * Areas where water has collected should be filled with mud. Area around wells, water taps and hand pumps should be cemented with proper drainage to prevent water collection.
- * There is usually a community dustbin built in each locality. The clearing and cleaning is the responsibility of the village council or municipality. The community should make sure that it is done regularly. Bleaching powder can be spread in and around the dustbin.



- * Each family should try to grow a tree or some plants, depending on the space available. Children can be taught to look after plants and tend to them.



Keeping the home environment and surroundings clean and healthy is every person's responsibility. This can be done only by working together as one community.

Prevention of accidents and injuries

Accidents at Home

Many types of accidents can occur at home. Most of them occur in children and elderly people. The common accidents are:

- * Fire and Burns
- * Poisoning
- * Suffocation
- * Drowning
- * Falling from a height/stairs
- * Slipping on a wet, uneven floor
- * Injuries from sharp objects

Fire and burns:

- * Children can burn themselves when they play with a match box, or a lighted candle or if there is a utensil with hot water on the ground. All such articles should be kept out of reach of children.
- * Women should wear fitting clothes and be careful while cooking or handling hot liquids.

Poisoning: Common poisons in households

- * Kerosene oil
- * Rat poison
- * Insecticides, pesticides
- * Medicines
- * Cleaning agents.
- * Acid used for cleaning

All these items should be kept out of reach of children; they are best stored in closed cupboards. Sometimes, floor-cleaning agents or insecticides are stored in ordinary bottles or in medicine bottles. **These bottles should** be correctly labeled and kept separately, so that the contents are not mistaken for other fluids. After use, the bottles should be returned to the storage place and not left lying around.

Suffocation:

- * Plastic bags are the most important cause for suffocation in children. They should be kept in a safe place out of reach of children.
- * In cold weather, people light a small fire in the room/courtyard at night to keep warm. The fire should be put out before going to sleep.

Drowning:

- * Toddlers can drown in a bucket of water, so they should not be left alone near a bucket of water or in the bathroom. The bathroom door should not be closed with a baby inside alone.
- * Young children going to swim should be under adult supervision. An adult who knows how to swim, how to rescue a drowning person, and who will stay close to the swimming area, should accompany them. Swimming should not be allowed in rivers or the sea during the rainy season.

Falling/slipping from a height/stairs:

- * Falling from the roof/terrace commonly occurs during kite flying season if the boundary wall is not built high enough. The roof should have a sufficiently high boundary wall.
- * Young children and elderly people can slip and fall down stairs. Stairs should have a railing to hold on to, children and the elderly should be helped when they are walking up or down the stairs.

Injuries from sharp objects: Knives and sharp objects can cause serious cuts and injuries. These objects must be kept in safe places away from children. Adults should use them carefully.

- * A common accident, which occurs among people working in farms, is with the fodder cutter while people feed in the fodder to be cut. The cutter has a protection for the blade but this is not used as it slows down cutting. As a result, workers can get seriously injured while loading the fodder. Children are also at risk as the fodder cutter is usually kept in the house. A blade protector must be used.



- * Agriculture workers must observe precautions while handling various implements and machines, and follow the instructions for machines.

First Aid



As mentioned earlier, no matter how careful we are, mishaps happen sometimes. Most people don't know what to do when someone gets injured. It is important that everyone should know what needs to be done when a person suddenly becomes sick or hurt .

This immediate help given to an injured or sick person is called First Aid.
It can:

- * Prevent the condition of the injured or sick person from getting worse
- * Save a life
- * Helps to keep the person comfortable till proper medical help is given

However, it is important to know when to give first aid and when not to. For example, one should give first aid in case of a small injury, such as a burn, a cut, a scratch or bruise. But if the person's condition looks serious, there is lot of bleeding or pain, or if the injury seems to be inside the body, it is best to get medical help.

What to do in case of a cut or scratch

- * One must wash one's hands well before giving first aid
- * If the cut or scratch is small, it should be washed with soap and plenty of water using cotton or clean cloth.
- * The wound should then be dried after which an antiseptic cream should be applied.

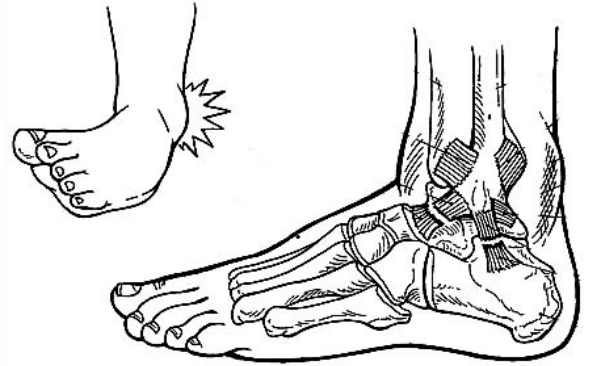
If the wound is deep and the bleeding is heavy, it should first be washed with soap and water and then, the aid giver can try and stop the bleeding. One way is to press down over the wound with a clean pad of cotton or cloth, till the bleeding stops. If the bleeding doesn't stop, a bandage called a "tourniquet" can be used.

It is a wide strip of cloth that is wrapped tightly around the cut two or three times and knotted. It should be kept in place till the patient reaches the doctor.

What to do in case of **sprains**

Sometimes, joints such as the ankle or wrist can get twisted. The joint gets swollen and may be quite painful. Children may sprain themselves while playing.

- * Ice should be applied immediately, if it is available, to reduce the swelling.
- * The joint should not be moved if possible, till medical help is reached.
- * A tight bandage should be wrapped around the sprained area to give support to the joint and prevent unnecessary movement.
- * It is advisable not to rub or massage a sprain. For relief from pain, one may take a painkiller such as *paracetamol* or *crocin*.



Nose Bleed

Bleeding from the nose is quite common in children or even in adults during summer. There are two important things to do when this happens.

- * A cloth wrapped in 1-2 ice cubes should be applied on the nose for some time.
- * A piece of cotton can be placed gently inside the nostril after smearing a little Vaseline around and just inside the nostrils.
- * Another method is to avoid bending forward or down. Instead the head and neck should be tipped back and rested on a pillow or the back of a chair for 10-15 minutes.
- * The nose can be pinched between the thumb and forefinger for about 7-10 minutes, while the person breathes through the mouth. This may be helpful to control and stop the blood flow as it will put pressure on the bleeding portion.

What to do in case of a poisonous snake or cobra bite

- * Since the poison can spread through the blood, the person should not be moved.
- * The body part, which was bitten, should be kept in a lower position than the heart.
- * A tight cloth or bandage can be tied tightly just above the bite to slow down the blood flow towards the heart. This can even save the life of a person.
- * The person should be taken to a hospital immediately for an anti-venom injection.

Road Accidents

Common causes of road accidents are:

- Fast-moving vehicles
- People running across the road or on the edge of the road
- Animals that wander along the road
- Roads in a bad condition
- Insufficient road lighting; traffic signals not working properly
- Traffic rules violations
- Drunk driving
- Using mobile phone while driving



Vehicle should be driven only at the age legally permitted.

Traffic rules should be strictly followed.

- * Correct signals should be given for turning or stopping at the correct time.
- * When driving a motorcycle or a scooter, the driver and the person sitting at the back should both wear helmets. The helmet should be properly fastened so that it stays on and protects the head if one falls off.
- * Only one passenger should be allowed to sit on the two-wheeler.
- * When driving a car, the driver and the person sitting in the front seat should wear seat belts. This prevents one from being thrown out of the car in an accident. Children should always sit on the back seat of the car with seat belt on.

- * One must not drive after having alcohol.
- * One must not use mobile phone while driving.
- * Roads should be crossed only when it is clear of traffic. Where displayed, people should cross on crosswalks.
- * Adults should hold the hands of children when crossing a road. Children should be taught to cross the road safely.
- * People should walk on the footpath. If there is no footpath, one should walk on the opposite side of on-coming traffic.
- * One should not get angry while driving on the road. **'Road rage' kills.**



Disaster preparedness and management

A “disaster” is an event that happens suddenly, without warning and involves large numbers of people. Disasters can be both natural and man made. Common natural disasters that we know are floods, earthquakes, landslides, gas leaks, fire, and tsunami.

No one can be fully prepared for these disasters. But they can make some preparations. People who live in disaster-prone areas should discuss with their family members and decide beforehand where to go and how to survive in such disasters. A survival kit that will help them survive during and after the disaster should be prepared and

kept in an easy-to-carry bag for each family member. The kit can be used at home or taken away in case of an evacuation. Such kit may include:

- * Water—(3-day supply for evacuation, 2-week supply for home)
- * Food—non-perishable, easy-to-prepare items (3-day supply for evacuation, 2-week supply for home)
- * Handy torch or flashlight
- * Extra batteries
- * First aid kit



- * Multipurpose tool
- * Sanitation and personal hygiene items
- * Copies of personal documents (medication list and pertinent medical information, proof of address, deed/lease to home, passports, birth certificates, insurance policies)
- * Mobile phones with chargers
- * Family and emergency contact information
- * Extra cash
- * Emergency blankets
- * Map(s) of the area

It is essential to discuss with community leaders to set up a warning system and to identify safe areas in the village that can be used as a shelter. In areas where flooding and landslides frequently or regularly occur, people should prepare themselves before the rains start. In case of floods, usually a flood warning is given by the Government agencies. People must listen to this and take corrective action. They will then have time to collect their belongings and leave safely.



What to do during an earthquake

Some earthquakes are actually foreshocks and a larger earthquake might occur sooner or later. It is important to, therefore, be alert and plan joint action with other community members.

- * If indoors, it is best to stay inside until the shaking stops and it is safe to go outside. Most injuries occur when people inside buildings attempt to move to a different location inside the building or try to leave.
- * One should DROP to the ground; take COVER by getting under a sturdy table or other piece of furniture; and HOLD ON until the shaking stops. If there isn't a table or desk near you, people can cover their faces and heads with their arms and crouch in an inside corner of the building.
- * It is important to stay away from glass, windows, outside doors and walls, and anything that could fall, such as lighting fixtures or furniture.
- * If outdoors, one should move away from buildings, streetlights, and utility wires and stay there until the shaking stops.

What to do during a Tsunami

- * Community members should listen to the radio and TV to learn if there is a tsunami warning when an earthquake occurs in or near a coastal area.
- * They should move inland to higher ground immediately and stay there.
- * If there is noticeable recession in water away from the shoreline, this is nature's tsunami warning and should be heeded. Members should move away immediately.
- * It is wise to stay away from flooded and damaged areas until officials say it is safe to return. Debris in the water can be a safety hazard to boats and people.



What to do in case of a cyclone

- * The community should be alert to changing weather conditions and listen to radio/TV for the latest information.
- * They should look for the following danger signs:
 - ◆ Dark, often greenish sky
 - ◆ Large hail
 - ◆ A large, dark, low-lying cloud (particularly if rotating)
 - ◆ Loud roar, similar to a freight train.
- * In case of approaching storms or any of the danger signs, they should be prepared to take shelter immediately.
- * If a tornado WARNING has been issued, it is ESSENTIAL to seek shelter immediately.



What to do during a Flood

- * One should disconnect all electrical appliances; turn off electricity and gas before leaving the house.



- * Personal hygiene especially washing hands should be maintained along with food and water hygiene as described earlier in this chapter (e.g. eating freshly cooked foods, boiling drinking water, wearing cloths that cover arms and legs).
- * Children should not play in or near the water.

Important :

A disaster occurs without warning. If preparation is done in advance, the community can help each other during the early days after the disaster until help and relief comes.

Immunization

Immunization is a process whereby a person is made immune to an infectious disease. This is typically done by giving the person a vaccine, which is a special kind of injection. Vaccines stimulate the body's own immune system (the system which protects the body against diseases) to protect the person against any infection or disease.

Immunization is a proven tool for controlling and eliminating life-threatening infectious diseases. The vaccination does not require any major lifestyle change.

Why immunization is Important

- * Certain diseases such as polio, tetanus, whooping cough, hepatitis, etc, can be prevented through immunization. They increase the ability of the person to fight targeted diseases.
- * For children, the benefits of immunization are seen when the vaccines are given at the proper age and in the correct doses. Some vaccines are given as a single dose, others as a course of two or more doses at regular intervals.

Immunization for children

All children must be immunized with the following vaccines:

- * BCG against tuberculosis
- * DTP against diphtheria, tetanus, and whooping cough

- * HepB against hepatitis B
- * Hib against Haemophilus influenza type B
- * Measles against measles
- * OPV against polio

Each country has its own immunization schedule based on WHO guidelines. When giving advice on immunization, please refer to the national immunization schedule.

What can happen after being vaccinated?

Just like any other drug, vaccines also can cause some unfavourable effects. Most of these are mild which include fever, pain, swelling and local redness at the site of injection. In situations where these events are serious, it should immediately be brought to the notice of the nearest qualified medical practitioner or health worker.

Immunization is effective when:

- * Given at the correct age.
- * Given as correct dose.
- * Booster doses are given at the ages as advised.

The health centre or hospital issues an Immunization Card to each child. The card has the date, the vaccines given on that date and the next date for vaccination. Parents should keep the card carefully as it is a very important health document.

Adult Immunization

As with children, adults can also benefit from immunization if the correct dose and schedule are followed. Listed below are some vaccines used in adults:

- * Hepatitis B vaccine given to any person who has not received it earlier, has high risk of getting infected by the disease, such as doctors, nurses, lab workers, and patients undergoing procedure such as repeated dialysis.
- * Rabies vaccine is given to people who have been bitten by a dog/monkey suspected to be having Rabies.
- * Tetanus vaccine is given to pregnant women to prevent tetanus in newborn babies and is used if a person has an injury and the wound has been suspected to be exposed to the tetanus.

Immunization
**is a proven tool
 for controlling
 and eliminating
 life-threatening
 infectious
 diseases**

If such a disease is detected, the person must take actions to ensure that they will not spread the disease

Epidemic situations

Sometimes infectious diseases suddenly occur in a large number of people in a community. This is called an “epidemic”. If such an incident happens, the health worker or the responsible authority must be notified immediately. The instructions given by the health workers or health authority must be followed.

Protection and control of communicable and non-communicable diseases that commonly occur in the region

There are certain communicable diseases such as TB of the lungs; influenza, diarrhoea, malaria, dengue haemorrhagic fever, etc. that can spread rapidly and greatly worsen health. If such a disease is detected, the person must take actions to ensure that they will not spread the disease to their family members and others in the community.

Certain non-communicable diseases such as diabetes mellitus, hypertension, heart and blood vessel diseases, cancer, etc are of long duration and expensive to treat. If a person has such a disease, then it is very important that he/she takes good care. Neglect could lead to complications. Uncontrolled diabetes can give rise to kidney failure, hypertension, infected wounds with the risk of losing a finger or leg. The affected person could even become blind. However, this doesn't mean that he/she cannot live a normal life. In fact, if the disease is properly controlled, the person can live a normal life. Anyone affected with a non-communicable disease can definitely hope a normal lifestyle by following the prescribed steps and restrictions to control the disease.

This part will discuss the steps needed to prevent and control communicable and non-communicable diseases.

Communicable Diseases

Tuberculosis (TB)

This is a disease caused by a germ which can affect any part of the body such as lungs, intestines, bones and joints, glands or reproductive organs (uterus) in women. TB of the lungs can be transmitted to others as the patient has the germ in the sputum, which, if transmitted to anyone in close contact, will result in the person being infected with TB lungs as well.



The affected person usually has:

- * Persistent cough ejection of sputum.
- * Low-grade continuous fever.
- * Blood in the sputum.
- * Chest pain.
- * Loss of appetite, loss of weight.

If a person shows such symptoms for 2-4 weeks, then she/he has to be tested for TB and confirmed by the health staff. THERE SHOULD BE NO DELAY. The sooner the diagnosis is made, the sooner the treatment can start and the person will be cured.

What should be done if one is diagnosed with TB lungs by a health staff?

Doctor's advice must be strictly followed

- * After beginning treatment, even if one feels well, it is advised not to stop or change medicines, unless the doctor suggests so.
- * One must not change the medicine or increase/decrease the dose. ONLY the doctor can make these changes. If the medicines are not taken regularly and in the correct doses, the germ slowly stops responding to the medicines and it becomes very difficult to cure the person.
- * After treatment begins, some side effects may be experienced. These generally disappear over a period of time. If severe or persistent, the doctor should be consulted. The treatment should not be stopped under any circumstance.
- * After starting the treatment, the sputum will be tested as per advice of the doctor. It may be free of the germ but this does not mean the person is cured. The treatment must be continued as advised by the doctor.
- * One should eat nutritious healthy diet, there is no food restriction.
- * Those who smoke should stop smoking immediately and avoid being exposed to second-hand smoke.



How to control spread of the disease

The sputum of the sick person contains the germ that can be transmitted to others through the air. To prevent others from getting the disease, the following steps must be taken:

- * Mouth must be covered with a cloth while coughing to prevent the spread of the germ into the air.
- * After coughing, the sputum must be spat into a container with a lid, which must be cleaned daily by filling it with boiling water and closing it for 10-15 minutes to kill the germ. The container should then be emptied into a drain, cleaned and dried in the sun before re-use.
- * One SHOULD NOT spit anywhere except into the container.
- * Children should be kept away from the affected person until the sputum is free from the germ.
- * If a mother has TB, she can continue breastfeeding her child. However, she should wear a mask when she breastfeeds or looks after the child.
- * There is NO need for the affected person to use a separate plate, glass, cup or spoon. The saliva does NOT contain the TB germ. IT IS THE SPUTUM WHICH IS DANGEROUS.
- * Family members must also be tested for sputum TB if cough persists over 2 weeks. Infants must be given BCG vaccine.

Dengue

This disease is caused by a virus and transmitted man to man only by day-biting mosquitoes. The dengue mosquitoes breed in man-made water containers/ vessels in or around the house.

After being bitten by the mosquito, a person can develop dengue fever after 4-10 days.

They experience symptoms that last between 2-7 days, which include:

- * Sudden high fever, sometimes with chills
- * Severe headache
- * Body ache and joint pain
- * Pain behind the eyes
- * Weakness, loss of appetite, abdominal pain
- * Sometimes, a red, itchy rash appears on the face, neck and chest then spreads to the body.

- * The fever starts coming down after 5 days, and recovery begins, although the body pain may persist for some time.

The dengue symptoms can get worse and lead to severe dengue or dengue haemorrhagic fever with additional complications, such as:

- * severe and continuous pain in the abdomen
- * bleeding from the nose, mouth, gums or skin, including bruises
- * black stools
- * pale and cold, clammy skin, profuse sweating, loss of consciousness

Severe dengue is potentially fatal. Anyone showing these symptoms/complications should consult a doctor immediately. Early diagnosis and proper care can save lives.

There is no vaccine or cure for dengue. Antibiotics have no role in the treatment of dengue fever. It is important to take rest, drink plenty of fluids and eat nutritious food.


How to control the spread of dengue fever:

- * **Preventing breeding of mosquitoes in the vicinity by:** draining stagnant, exposed water at weekly intervals; removing solid waste and objects where water collects; covering the water tanks or water storage containers; emptying water coolers once a week, drying the water tank.
- * **Protecting ourselves from mosquito bites by:** wearing covered attires; using mosquito repellents; using bed nets for children and pregnant women.
- * If dengue fever is suspected, one should **seek medical advice**.

Malaria

Malaria is a disease caused by a germ which is transmitted to humans by mosquitoes. The germ enters the mosquito when it bites and sucks the blood of a person ill with malaria. When the mosquito bites another person, the germ is transmitted into his/her blood. This mosquito bites at night and, depending on the type, it breeds either in slow flowing streams, irrigation canals and seepages, well water, overhead tanks, ponds, drains, collections of water on the roadside and near houses.

A person who has malaria will go through different stages as explained below:


Severe dengue is potentially fatal. Anyone showing these symptoms/ complications should consult a doctor immediately.

Stage 1: Very severe shivering and cold feeling. This lasts from 15 minutes to 1 hour.

Stage 2: Temperature begins to rise, reaching a high grade (39.0° to 41.0° C) and the person feels very hot. This lasts for 4-6 hours.

Stage 3: There is a lot of sweating, before the fever comes down and the person feels better.

In malaria, the fever usually occurs every alternate day or even after 2 -3 days. Sometimes the fever may be high grade without shivering, or it may occur daily or every 2-3 days.

The person must have the blood tested for malaria. It is important to take complete treatment, as advised by the hospital/health centre. One should never self-medicate with malaria drugs.

How to control the spread of malaria:

- * Patients with malaria as well as others must sleep under mosquito nets.
- * Steps must be taken to prevent breeding of mosquitoes.
- * Protection from mosquitoes can be done by taking the following steps:
 - ◆ Using mosquito nets at night. If available, mosquito nets that have long-lasting insecticides on them should be used. This type of mosquito net should not be washed too often.
 - ◆ At night, the body should be covered with a thin sheet. One can wear thin cotton clothes to cover the arms and legs. Children must wear thin protective clothing at night.
 - ◆ Houses should be screened and fumigated whenever feasible. Mosquito repellents (creams and lotions which keep mosquitoes away) can be used.
 - ◆ Breeding of mosquitoes should be controlled (**See Environment outside the house**)
 - ◆ Spraying of insecticides to kill mosquitoes in the houses, cattle sheds, parks and open spaces is sometimes done by government departments. This should never be prevented.

Sexually-Transmitted Infections (STI)

Sexually-transmitted infections are caused by germs which are spread by sexual contact. Some important facts about these diseases are:

- * They occur in both men and women.
- * The effects of the infection are commonly seen in women because of the structure of their reproductive system.
- * It is more common in young people between the ages 20-29 years.
- * It occurs in men who have sexual contact with sex workers.
- * Women usually get the infection from the husband.
- * It occurs in those who have multiple sex partners.

What happens when a person has an infection?

Most STIs may be asymptomatic, but the following symptoms can occur.

Men have:

- * Pain or burning sensation while passing urine.
- * Watery discharge from the penis which after 2-3 days becomes thick and yellowish (pus).
- * Sudden, severe pain in one testicle.
- * Swellings on the penis.
- * Ulcers on the penis.

Women have:

- * Difficulty in passing urine.
- * Pus in the urine.
- * Increased discharge from the vagina that may have a bad smell or may be yellow in colour. Vaginal discharge may be thick, having a foul smell and yellow pus.
- * Itching and pain in the vagina.
- * Irregular bleeding.
- * Pain in the lower part of the abdomen.
- * Infections which lead to sterility (inability to have a child).

What should be done if anyone has the above signs and symptoms?

- * One should go to the hospital or health centre for investigations and treatment.
- * Both partners must be treated otherwise the infection will recur.
- * The diseases can be treated and cured if seen in the early stages.

- * Delay in treatment will worsen the disease, making it more difficult to cure the disease.
- * It is very important to give correct answers about sexual habits, so that correct treatment can be given.

How to control the spread of STI

- * By changing the lifestyle and sexual behaviour. By being faithful to a single partner.
- * Using condoms when having sex with a partner.

HIV/AIDS

Acquired Immunodeficiency Syndrome (AIDS) is caused by a germ (virus), HIV, which enters the blood of a person and slowly weakens the immune system. When this happens, the person's body is unable to fight infections leading to diseases.

A person infected with HIV has the germ in:

- * Blood.
- * Semen (men).
- * Vaginal fluid (women).
- * Breast milk (women).
- * Saliva can also contain the virus, but in lesser quantities.

It is through these fluids that the virus spreads from an infected person to a normal person.

The HIV is spread by:

- * Having unprotected sexual intercourse (without using a condom) with a HIV-positive person.
- * Getting a blood transfusion with HIV-positive blood.
- * An HIV-positive mother passing the germ to her baby during delivery and breastfeeding.
- * Using unclean injection needles and syringes. This commonly occurs among drug addicts who use injectable drugs and often use each other's needles and syringes.

The HIV DOES NOT spread by:

- * Using the same utensils and glass of an HIV-positive person for eating or drinking
- * Shaking hands, hugging or touching an HIV positive person
- * Sharing toilets, bedding or clothing
- * Working with HIV-positive people
- * Mosquito bites

What does HIV do?

HIV attacks the defence mechanism of the body and makes it prone to infections. It also reduces the ability of the body to fight diseases.

The common symptoms of HIV/AIDS are:

- * Low grade, continuous fever, which does not get better with usual treatment
- * Cough that lasts for a long time
- * Weight loss
- * Diarrhoea lasting for a long time, not getting better with usual treatment
- * Lumps in the armpits, groin.

In the absence of treatment, the full picture of AIDS is seen. The person will have infections that occur because the body has lost the power to fight disease. These include TB of the lungs, skin infection, respiratory infection, etc. These infections do not get easily cured by medicines as the person does not have the immunity to fight the infection.

If a community member feels that he/she may be at risk of having HIV/AIDS, firstly, he/she needs to go to the hospital or clinic for blood test.

The routinely available tests to detect HIV will take at least three months to appear. During this period, even if one gets tested he/she may get a negative result. There are tests to detect HIV infection early, but they are not widely available and are expensive.

Management of HIV/AIDS if one has tested positive:

If one has tested positive, the best course is:

- * Following the advice and treatment as prescribed by the doctors
- * Treatment once started has to be continued for life; the prescribed medicine

to be taken exactly as advised, without missing a dose

- * Having adequate and balanced nutrition
- * Always keeping medical appointments and seeing the doctor immediately for any illness that one develops, no matter how mild
- * Using condoms when having sex with partner
- * Planning pregnancy to ensure that mother to child transmission does not happen
- * Finding out about HIV counselling and peer support services in one's area, enrolling into these services.

Family/community responsibility:

The family has an important role in helping the HIV-positive person to live life as a normal person. The affected person should remain a part of the family and stay in the same house. There is no need to keep the person away from the family. The family must care for the person in the same way as any other sick person. As already mentioned, HIV does not spread by contact or using the same utensils or the same room.



- * HIV infection and AIDS are serious illnesses.
- * One can protect oneself from getting the disease
- * Change in sexual behaviour will prevent people from getting this disease
- * HIV-positive people should ALWAYS be treated like normal people. They are **not** untouchable.
- * Treatment is available for HIV-positive people and for AIDS.
- * HIV positive women who are on adequate treatment can plan to have a baby.
- * It is important to adhere to advice and treatment to avoid transmission to the baby.

Non-communicable diseases

Non-communicable diseases are slow progressing, long-duration, largely preventable diseases that result from many common modifiable risk factors, mainly behaviours.

Four major non-communicable diseases are diabetes, cardiovascular diseases, cancers, and chronic respiratory diseases. These diseases share common risk factors such as tobacco use, unhealthy diet, physical inactivity and excessive use of alcohol.

Diabetes

Diabetes is a chronic condition that occurs when blood glucose levels remain above normal limits. In simple terms, this happens if the body cannot convert the sugars and starches in our food into energy. It can happen to all age groups, but mostly in adults and elderly people.

Risk factors for diabetes are unhealthy diet, overweight/obesity, family history of diabetes, tobacco use, harmful use of alcohol, and physical inactivity.

What are the symptoms of diabetes?

Early symptoms include frequent urination, excessive thirst, constant hunger, weight loss, very dry skin, vision changes and fatigue. But these symptoms often go unnoticed. As a result, the disease may be diagnosed several years after onset, once complications have already arisen. Impaired glucose tolerance and impaired fasting glycaemia are intermediate conditions and risk categories for future development of diabetes.

What happens when complications in diabetes occur?

If diabetes is not properly controlled, complications may occur. These include:

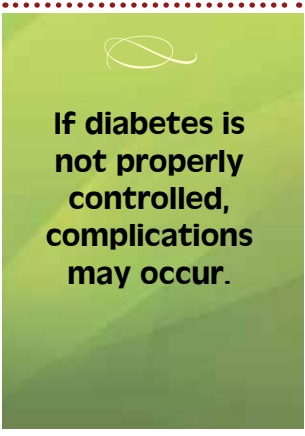
- * Heart disease
- * Stroke.
- * Blindness.
- * Numbness in feet, which increase the chance of foot ulcers and eventual limb amputation.
- * Kidney failure

What is the treatment for diabetes?

Diabetes treatment involves lowering blood glucose and reducing overall risk factors, such as control of blood pressure and blood fats. This requires lifelong care and management.

Healthy eating, physical activity and monitoring blood glucose levels are required. In addition, as determined by medical doctors, oral medication or insulin, or both may be needed to control blood glucose levels.

A special situation is diabetes and the pregnant woman:



If diabetes is not properly controlled, complications may occur.

Diabetes in pregnancy can cause complications to the mother and the infant:

- * The mother can get infections.
- * The baby can be big and the delivery difficult.
- * After delivery, the baby can have low blood sugar levels or breathing difficulties.

It is important that all pregnant women should attend an ante-natal clinic during their pregnancy and give birth in a hospital.

Cardiovascular Diseases

Cardiovascular diseases are a group of disorders of the heart or blood vessels, and include mainly hypertensive heart disease, ischemic heart disease, rheumatic heart disease and strokes.

What are the risk factors for cardiovascular diseases?

Tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol increase the risk of heart attacks and strokes. These behavioral risk factors in turn lead to metabolic risk factors such as overweight and obesity, high blood pressure, high blood sugar (diabetes) and high blood cholesterol. Genetic factors are also associated with cardiovascular diseases.

Hypertension (High Blood Pressure)


What is high blood pressure or hypertension?

Blood pressure is the force of blood against the artery walls as it circulates through the body. High blood pressure or hypertension is a condition where blood pumps through the blood vessels with excessive force.

Blood pressure is written as two numbers. The first (systolic) number represents the pressure in blood vessels when the heart beats. The second (diastolic) number represents the pressure in the vessels when the heart rests between beats. For normal blood pressure, the first number (systolic) should be less than 120 and the lower figure (diastolic), less than 90.

What are the symptoms of hypertension?

Hypertension occurs usually without any symptoms, but could give rise to early-morning headache, nose bleed, irregular heartbeats and buzzing in the ears.


Tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol increase the risk of heart attacks and strokes

Severe hypertension includes tiredness, nausea, vomiting, confusion, anxiety, chest pain and muscle tremors. The only way to detect high blood pressure is to have it measured by a doctor or a health professional.

What are the adverse health effects of hypertension?

High blood pressure can cause serious damage to health. It can harden the arteries, decreasing the flow of blood and oxygen to the heart. This reduced flow can cause -

- * Chest pain.
- * Heart failure.
- * Heart attack.
- * High blood pressure can burst or block arteries that supply blood and oxygen to the brain, causing stroke.

Ischemic Heart Disease

This is a disease, which affects the blood vessels supplying blood to the heart muscle. When these blood vessels get blocked (either fully or partly), the supply of oxygen containing blood to parts of the heart muscle is reduced or cut off and results in:

- * Pain in the chest, especially during exercise.
- * Heart attack.
- * Sudden death.

How do the blood vessels get blocked?

As a person grows older, the blood vessels become stiff and lose their elasticity. Eating fatty foods or lots of oily, fried items causes high quantities of fats in the blood. These fatty substances get deposited inside the blood vessels. This can cause a partial or complete blockage. The early sign is the person having chest pain upon exercise. If this happens, he/she must be taken to the hospital or clinic immediately.

Cerebro-Vascular Accidents (Stroke)

This is a disease in which the blood supply to the brain is suddenly reduced. This can happen in two ways:

- * Blood supply gets blocked.
- * A blood vessel bursts and there is bleeding inside the brain

- * When this happens, the side of the brain supplied by the vessel stops functioning and the opposite side of the body gets weak or paralysed. The person is said to have a "stroke". He/she also has:
 - ◆ Convulsions.
 - ◆ Sudden unconsciousness.
 - ◆ Weakness of one side of the body.

The person must be taken to the hospital immediately for investigations and treatment.

Effects of the stroke: The person will have:

- * Paralysis of one side of the body or of both legs.
- * Inability to speak.
- * Mental slowness.
- * Semi-consciousness and inability to recognise people.

What can be Done to Prevent and Control Diabetes Mellitus and Cardio-Vascular Diseases?

Evidently, all these diseases share common risk factors, which include eating unhealthy foods and leading a physically inactive life, substance abuse and stress. They are largely preventable by adopting healthy lifestyles at early stages.

Given below is a list of actions to prevent and control non-communicable diseases:

- * Mental stress should be reduced and managed through yoga, meditation and other relaxing techniques.
- * It is important to eat lots of fresh fruits and vegetables.
- * Amount of salt added to food must be limited. The total daily intake of salt from all sources should be no more than 1 tea spoon. Be aware that many processed foods are high in sodium. Intake of "pickles", "papads", "chutneys" and soy sauces should be avoided or reduced.
- * Intake of animal oil, coconut and palm oil, butter, margarine, processed foods, frozen foods, fast foods, etc must be controlled.
- * Adults should engage in moderate physical activity for at least 30 minutes on most days of the week.
- * Tobacco use should be avoided completely.
- * Alcohol use should be avoided or strictly limited.

- * Blood sugar and blood pressure must be regularly checked. This is important because the symptoms often go unnoticed.
- * Medicines as prescribed by the doctor must be taken.

Chronic Respiratory Diseases

Bronchial Asthma and Chronic Obstructive Lung Disease are long-lasting respiratory diseases which cause breathing difficulty.

Bronchial Asthma is a disease where the person is allergic to or cannot tolerate certain things. Sometimes, it is very difficult to find out exactly what the person is allergic to. It may be certain smells, food items, dairy products, pollen, dust, pollution and chemical ingredients among others. In many persons, bronchitis symptoms may also start with seasonal change – either just before summers, monsoon, just before or during winters when the weather is smoggy.

The person has:

- * Cough with or without sputum production, which comes suddenly and continues for some time.
- * Severe and sudden onset of shortness of breath associated with wheezing (whistling sound while breathing).
- * Difficulty in breathing because the breathing tube is congested and the sputum cannot be brought out.
- * An attack occurs if he/she is exposed to the allergic agent.

Prevention of attacks:

- * An asthmatic patient may soon get to know what starts the attack. One should avoid contact with such agents to prevent the attack, or at least to reduce the effects of the attack. Further, it is important to:
- * Avoid exposure to dust, mould, strong odours, paints, irritating fumes, and sprays.
- * Avoid keeping pets such as cats in the house as they can trigger asthma.
- * Not smoke and avoid passive smoking
- * Carry medications during travel.

Chronic Respiratory Lung Disease occurs mainly in long time smokers and in those exposed to dusty working environments (asbestos factories, stone cutting factories) who have not used protection from the dust. The smoke/dust damages the lungs, which slowly stop functioning.

The affected person will start with early morning cough with sputum, usually in the winter. After few years, the cough occurs at any time of the year, and continues for a longer time. If it persists for three months at a time, the person has chronic lung disease.

What to do if you or your family members have bronchial asthma or chronic respiratory lung disease?

- * Medicines should be taken regularly for as long as the doctor advises.
- * Regular steam inhalation will help open the breathing tubes and bring out the sputum.
- * Drinking plenty of fluids will help to remove the sputum.
- * **Smoking MUST be stopped.** It is believed that if a person stops smoking when the early morning cough starts, the disease can be controlled. The person can even be cured.

Prevention:

- * Preventive methods are the same as the prevention and control of diabetes mellitus and cardio vascular diseases.
- * Masks and protection should be used when working in dusty environments. The factory employers should provide the necessary protective gear to workers.
- * It is important to see a health professional for regular health check-ups.
- * One should go to the doctor if one gets early morning cough. It is important not to waste time.

Cancer

Cancer is a group of diseases with abnormal growth of cells in any part of the body. These cells spread to nearby areas or to distant parts of the body. Both men and women can have cancer, but some cancers are more common among men and some, more common among women.

Some risk factors of cancer:

- * Tobacco in any form (chewing and smoking).
- * Harmful use of alcohol.
- * Unhealthy diet
- * The risk of developing most cancers increases with age

Tobacco use, unhealthy diet, physical inactivity and harmful use of alcohol increase the risk of heart attacks and strokes

- * Chronic infections can cause liver cancer and cancer of the cervix.

Cancers common among men are cancer of lung, stomach, urinary bladder, and prostate glands. Cancer common among women are cancers of the breast, cervix, ovary and uterus.

Cancer among women

Breast cancer

Breast Cancer is common among women and occurs at any age, but mostly after 35 years. It can occur in both married and unmarried women. In addition to risk factors mentioned above, risk factors for breast cancer are:

- * A woman having a family member (blood relation) who has/had breast cancer.
- * Having the first pregnancy after the age of 30 years.
- * Not breast feeding her baby.

The woman usually feels the lump in her breast. There can be discharge from the nipple. She should immediately go to the District Hospital for investigations and treatment. Breast Cancer is one of the cancers, if detected early before spread, can be treated and the woman may remain free from cancer for many years.

How can it be detected early?

Women should examine their breasts themselves, at least once a month. There is a method for doing this:

- ◆ One needs to stand straight in front of a large mirror. Arms should be kept by the side. Any difference in size of the breasts should be observed.
- ◆ Women must check both nipples for size and shape.
- ◆ Then, each breast should be examined. For the right breast, the fingers of the left hand should be used to press gently all over the breast. The right hand should be used for the left breast. If the person feels a lump and it is painful, she should go to the hospital or health centre for examination and treatment.



Cancer of the cervix

Cancer of the cervix is a common cancer in women in the region. In the earliest stage, the woman may not have any complaints, but if it is left untreated, the cancer will progress to the next stage when women will have vaginal discharge, low back pain, and off and on bleeding. If not treated, the cancer will enter the final stage when the cancer spreads to the nearby areas or to distant parts of the body.

Risk factors

In addition to non-communicable diseases' risk factors, listed below are risk factors for cervical cancer.

- * Women who have sexual intercourse at an early age. The cervix is not fully mature and therefore, can get infected by the germ.
- * Multiple sex partners increases the risk of the infection.
- * Poor personal hygiene is also responsible for infection.

Prevention and control of cancer in women

- * Methods are same as in prevention and control of diabetes mellitus and cardio vascular diseases.
- * Women aged 35 years and over, especially those who have family history of breast cancer, must see medical doctor or health professionals at least once a year for medical check up and tests for breast cancer and cervical cancer.
- * Those who have any early signs and symptoms of breast cancer or cervical cancer must see a medical doctor or health professional immediately. It is important not to delay.
- * Self-breast examination should be done at least once a month
- * Regular "pap smear" testing is also necessary.



- * Cancer, if detected early can be successfully treated.
- * If asked to do a "Pap Smear", one should not be shy and get it done immediately.

Lung Cancer

Lung cancer is more common in men, but women can also have it. It is mainly caused by smoking.

Those who have lung cancer can have:

- * Cough with sputum.
- * Blood in the sputum.
- * Fever.
- * Chest pain.
- * Weight loss.

The person must go to hospital or health centre for investigations. If the cancer has already spread, the person may have:

- * Breathlessness.
- * Difficulty in speaking.
- * Lumps in the neck.
- * Hoarseness of voice.

Risk factors

- * Smoking is the most important risk factor for lung cancer. People who do not smoke but inhale the smoke from smokers can also get lung cancer.
- * A man, who has had tuberculosis in the past, can get a type of cancer lung which starts in the same area as the TB infection.
- * Exposure to asbestos, nickel, and other lung-irritating substances.

How can cancer lung be detected early?

Men over the age of 45 years who have been smoking for a long time should have regular chest X-rays and examination of the sputum.

Prevention:

- * DO NOT START SMOKING, STOP IF YOU DO.
- * The nose and mouth should be covered with a piece of cloth or mask if working in dusty places.

Women should not think that they can smoke and not get cancer. SMOKING CAUSES LUNG CANCER in anyone who smokes.

Cancer of the Mouth

Cancer of the mouth is caused by chewing tobacco mixed with other substances such as betel nut, areca, and lime. Not only is it chewed but it is also kept in the side of the mouth. Cancer is seen on the side where the tobacco is kept and chewed.

Signs and symptoms of cancer of the mouth

The first stage is a whitish patch seen in the mouth. This can be easily seen and can be treated and cured. If it is untreated, the cancer will progress to the second stage when the growth/tumour spreads to the nearby parts. People do not pay attention to the first stage and only go to the doctor when the cancer has spread.

Prevention:

- * ONE SHOULD NOT START USING TOBACCO IN ANY FORM. IT SHOULD BE STOPPED.
- * Oral hygiene should be maintained with regular brushing and visits to the dentist.

Remember!!

- * Both communicable and non communicable diseases are largely preventable can be delayed and controlled through early detection and modification of lifestyle.

- * Communicable diseases:
 - ◆ They are caused by germs that can be transmitted directly or indirectly.
 - ◆ One can get diseases from animals or from humans; some diseases need media to be transmitted to persons.
 - ◆ One can effectively prevent and control communicable diseases if personal hygiene is practised and the environment is kept clean and green, vaccines as appropriate are got, and the advice of medical doctor or health professional is followed.

- * Non-communicable diseases:
 - ◆ They are largely preventable as they are caused primarily due to unhealthy diet, physical inactivity, stress and substance abuse.
 - ◆ They can be effectively prevented and controlled by:
 - Eating healthy.
 - Exercising adequately.
 - Taking medicines as prescribed by doctor.
 - Lifestyle modifications: Tobacco or alcohol should not be used, safe sex must be practiced, and protective gear should be used at work as needed.
 - If one is over 35 years, a physical check-up done every year.

Managing Common Ailments at Home



Managing Common Ailments at Home

Illness occurs in all people, young and old, at some time or the other. When someone is unwell, the person and the family worry as to what has gone wrong. They do not know what the illness is, how serious it is, for how long the person will remain ill or what they can do.

This chapter will help answer these worries and questions. It deals with symptoms of common illnesses in the South-East Asian region. It also describes ways in which diseases begin, what happens and what can be done.

Some diseases are simple and can be handled by individuals and the families themselves with some help from community health workers. A few start as minor ailments but can become serious; then they need to be managed by the doctor at the Health Centre or the District Hospital. There are some which look serious from the start and may have to be managed urgently at the Health Centre or District Hospital. It is most important for the family to recognise when a sick person is not improving and take the correct action. It is also very important to be aware about danger-signs (when there is serious risk to life) so that medical assistance is sought without delay.

In addition to ensuring that the patient takes appropriate medication and follows other advice given by the health care provider, the family needs to provide other forms of support also to the unwell members of the family. What food and fluid need to be given, keeping the person clean and providing emotional support, are other things that can help the person get well as quickly as possible — all these are generally done by the family members. In addition, the family and the community also need to understand the condition, the management that is necessary and work together to help her/him recover fast.

Prescribed food and fluids, hygiene and emotional support can help a person recover from ailments.

Fever

A healthy body maintains its temperature within a narrow range of 37.0°C and 37.7°C. Fever means there is an increase in the normal temperature. During common ailments such as cold, a person may develop mild fever. This is not a cause for worry as the fever usually goes away as the cold gets better.

Fever is graded as:

- * Mild: Temperature (37.8°C – 38.0°C).
- * Moderate: Temperature (38.1°C – 39.0°C).
- * High: Temperature above 39.1°C.

It is sometimes accompanied by rashes as in measles, dengue and chicken pox. Infection in any part of the body can also cause fever as in the case of sore throat, bronchitis, pneumonia, urinary tract infection, and so on. Diseases transmitted by mosquitoes, such as malaria, dengue, chikungunya, also manifest as fever. Fever can also be caused by other infections, allergies or even some cancers.

What to do when one has fever?

* Recording of temperature (when a basic thermometer is available)

- ◆ Children: One should take a clean thermometer, and check that the mercury level, indicated by a bold, thick line, is much below the normal temperature of 98.6 °C. If not, the thermometer needs to be shaken two- three times, with a firm hand to make the mercury level drop lower. Once the level is down below normal, it should be placed in the armpit for one minute. The arm should be pressed to the body.
- ◆ Adults: A clean thermometer with the mercury level below normal, should be placed in the mouth under the tongue. The person has to close his/ her mouth and NOT bite the thermometer! One minute is needed to record the temperature.



Then, the thermometer is to be removed and level of the mercury checked. After noting the temperature, the thermometer should be held under running water, wiped clean, shaken down and placed back in its case.

If a thermometer is not available, the palm should be placed on either the neck, forehead, abdomen or the legs and a note made of the temperature – whether normal, slightly raised, very raised.

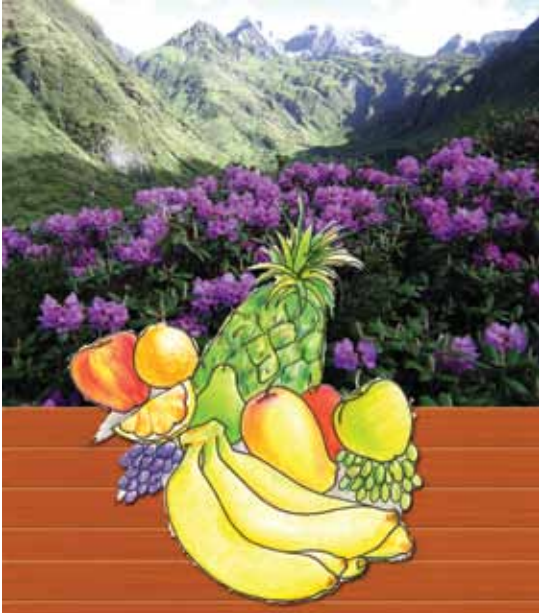
* Management of fever

- ◆ **Mild temperature:** Extra clothes from the person should be taken off as the temperature will go higher if a person is covered with a blanket or wrapped in layers of clothes.
- ◆ **Moderate to high temperature:** In children, extra clothes should be removed. In cold weather, the child may be covered with a thin bed sheet. In adults, extra clothes should be removed and the person can be covered with a thin bed sheet during winter.
- ◆ **Wet sponging** is helpful for high fever. To do this, a clean piece of cloth or towel should be soaked in a utensil filled with tap water. After squeezing it to get rid of excess water, the body should be wiped with this cloth. This needs to be done at periodic intervals so that the body remains damp. Wet towels can be placed on the forehead, armpits and the groin even if the weather is cold. Doors and windows of the room must be kept open. Where available, the fan should be switched on.



The temperature must be recorded every 15 minutes and the cold sponging stopped when the temperature comes down to 37.8°C or feels normal to the touch. While doing this, one must remember to feel a part of the body that was not kept cool by cold sponging.

Extra fluid and food must be given during fever.



Fluid and food must be given during fever. The patient should be given plenty of liquids such as plain water, lemonade, tea, coconut water, rice water or other commonly available fluids at home. He/she should be fed with easily digested food during the fever such as porridge, curd rice, biscuits, fruit, toast, tea, fresh juice, milk, thin soups and anything else that the person may want.

IMPORTANT: IF THE TEMPERATURE GOES ABOVE 39.0°C, THE PERSON CAN GET FITS OR BECOME UNCONSCIOUS.



**Contact the health worker/
health centre for:**

- * Medicines to bring down fever.
- * Taking the person for further investigations and treatment, if the fever does not subside within 3 to 4 days.

Important: IF THE TEMPERATURE GOES ABOVE 39.0°C, THE PERSON CAN GET FITS OR BECOME UNCONSCIOUS.

It is important to seek medical care if fever is accompanied by any of the following:

- * Fits or unconsciousness.
- * Rashes on the skin.
- * Excessive vomiting or diarrhoea.
- * Cough with sputum and chest pain for more than 15 days.
- * Fever accompanied by symptoms such as painful or swollen joints, earache, or localized swelling in any part of the body.

However, One should avoid unnecessary medications. Mild fever is caused by viral infections and antibiotics are NOT needed. Unnecessary use of antibiotics is not only a wasteful expenditure but also exposes the patient to avoidable side-effects and development of antibiotic resistance.

FEVER WITH RASHES

Some fevers are accompanied with rashes on the body. Common conditions that cause fever with rashes are:

- * Measles
- * Chicken pox
- * Dengue
- * Chikungunya

Measles

- * Measles occurs in children who have not been given measles vaccine.
- * Early symptoms begin with running nose, watering eyes, fever.
- * After 3-4 days, red spots appear on the face and forehead and slowly spread down to the rest of the body.
- * The fever goes down once the rash covers the body and the child feels better.

After about 5 days, the rash becomes brown and slowly disappears.

Remember: Measles is a serious disease in under-nourished children. Malnourished children with measles are more prone to complications such as diarrhoea, pneumonia, ear infections and blindness.

Chicken Pox

This condition starts with:

- * Mild fever.
- * Small, red, itchy spots that can be seen on the chest, arms, legs and face after 1-2 days which turn into little pimples filled with clear fluid. The red spots and pimples are present or can be seen on the body at the same time. Later, they dry up and form scabs.

Dengue fever

Dengue fever is a viral disease spread by the bite of a mosquito. It starts suddenly with:

- * Moderate to high grade (very high) fever.
- * Headache.
- * Severe pain in the body and the joints.
- * Pain in the eyes.
- * Itchy rashes on the hands.

Serious forms of Dengue: These are medical emergencies and the patient must be taken to the health centre/doctor immediately.

- * Dengue Haemorrhagic Fever has all the above, plus bleeding spots in the skin, bleeding from the nose and gums.
- * Dengue Shock Syndrome has all of the above symptoms. In addition, a person's blood pressure falls; he/she becomes cold and restless and may even become unconscious.

Chikungunya fever

Chikungunya is a viral disease caused by the bite of a mosquito. It starts suddenly with:

- * High fever with chills.
- * Headache.
- * Nausea or a feeling of vomiting, stomach pains, loss of appetite.
- * Very severe pain in the arms, legs, back and joints.
- * Rash on the body and limbs appears at the beginning or as the fever is coming down.

Managing fever with rashes

- * One has to manage fever as described above.
- * It should be ensured that the patient continues to take food and fluids.
- * It is important to keep the patient clean. She/he can be given a bath and in case rashes are severe, light sponging can be done.
- * Some rashes can be itchy. So the patient's nails should be clipped to avoid injury and infection while scratching.
- * Measles is a preventable disease. All children should be vaccinated with measles vaccine at 9 months of age followed by another dose about six months later. Children in the family who have not been vaccinated should be taken for it as soon as anyone in the family gets measles.
- * In case of any danger sign, like very high fever or persistent vomiting, immediate medical help must be sought from the health worker or health centre.

Danger signs in children (BOX)

- * Inability to breastfeed or drink fluids
- * High fever
- * Fast and difficult breathing
- * Persistent vomiting
- * Excessive sleepiness
- * Blood in stools
- * Convulsions



FEVER CAUSED BY INSECT BITES

Insects such as mosquitoes and sand flies can transmit many serious diseases between human beings and from animals to humans. Some of the common diseases transmitted by insects are described below:

Malaria

Malaria is spread by the bite of a mosquito. It starts with:

- * Fever which is very high is sometimes accompanied with chills and rigors. It may occur every day or on alternate days.
- * Headache.
- * Tiredness.
- * Nausea, vomiting, diarrhoea.

Japanese encephalitis

This is a viral disease transmitted by mosquitoes that breed in standing water, such as in rice fields. Mosquitoes carry this disease from infected animals such as pigs and water-birds to humans. This is a killer disease that mainly affects children. Even patients who survive very frequently are left with serious disabilities.

The disease progresses rapidly. Initial symptoms are:

- * High fever that develops rapidly.
- * Headache and stiffness of the neck.
- * Disorientation.
- * Convulsions.
- * Loss of consciousness (coma).

Leishmaniasis (Kala-azar)

Leishmaniasis (Kala-azar) is spread by the bite of the sand fly. In South-East Asia, this disease is common in some parts of Bangladesh, India and Nepal. The disease takes a long time to develop.



Insects such as **mosquitoes** and **sand flies** can transmit many serious diseases between human beings and from animals to humans

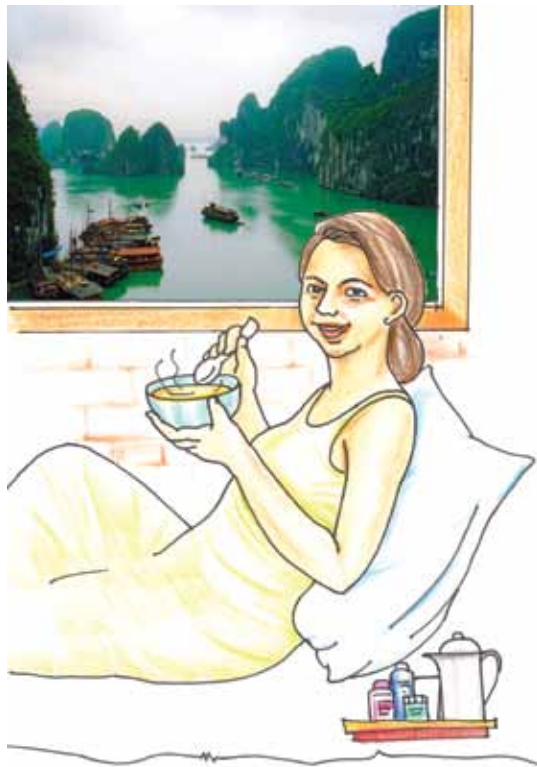
The person may show the following symptoms:

- * Change in colour. The skin becomes dark.
- * Mild fever.
- * Loss of weight. The person becomes very thin and weak.
- * Pain in the abdomen with feeling of a swelling in the abdomen.
- * Sometimes there may be small lumps on the skin of the face.

Filariasis

Filariasis is also spread by the bite of a mosquito. In the areas where this disease is common, most people may have the infection inside them, but do not show any signs of the disease. When the person suffers, there is:

- * Fever.
- * The glands in the armpits, neck and groin become enlarged (grow bigger) and painful.
- * Red and painful streaks (mark-like lines) may be visible on the legs.
- * In long-standing cases, the legs and/or the scrotum in men, and external genitalia (portion of the reproductive system lying outside of the body) in women may become grossly (very much) swollen.



What to do to manage diseases transmitted by common insects such as mosquitoes and sand flies

- * Fever must be treated as described previously.
- * The patient should continue to take food and fluids.
- * Treatment prescribed by health worker or doctor must be taken immediately.
- * Prescribed medicines in the advised dosages for the number of days suggested by the doctor or the health worker must be taken.
- * Immediate medical care from health worker or health centre must be sought if the patient develops any other symptoms
- * Measures must be adopted to protect the patient and others from mosquitobites:
 - ◆ If possible, doors and windows should be covered with wire mesh/screen
 - ◆ One should sleep under mosquito nets.
 - ◆ Indoor insecticide sprays, mosquito coils or repellent creams should be used to reduce presence of mosquitoes.
 - ◆ One can wear long-sleeved shirts and full-length trousers after sunset.

- * Efforts should be made to prevent mosquito breeding in and around the house.
- * General sanitation measures should be followed .
- * Japanese encephalitis can be prevented by vaccination. People should be encouraged to get the vaccine as advised by their local health authorities.
- * Antibiotics have no role in the treatment of these conditions. Unnecessary use of costly antibiotics exposes the person to avoidable side effects and results in development of drug resistance where the body does not respond to medicines.

Other fevers

Typhoid

Typhoid fever is a disease caused by a germ which enters the body through contaminated (unclean or impure) food or water. It commonly occurs in the summer and rainy season. It starts with:

- * Mild fever which slowly rises to moderate and high.
- * Headache.
- * Pain in the stomach with diarrhoea symptoms.
- * Within 7-10 days, the person gradually becomes very sick. There can be drowsiness (feeling of sleepiness), severe pain in the abdomen, constipation, and even bleeding from the intestines.

What to do in suspected typhoid

- * In case typhoid is suspected, the health care provider or health centre must be consulted without delay.
- * Medicines should be taken according to the dosage and for the duration prescribed.
- * In order to prevent typhoid, drinking water must be from a safe source.
- * Hands must always be washed before and after eating food.
- * Eating street foods must be avoided, especially open, cut-fruits.
- * Effort must be made to eat only freshly-cooked food.
- * One should make sure that the cooked food that is to be consumed or eaten after some time is kept safe from contamination by insects. It should be kept in a cool, clean and dry place. If a refrigerator is available, one can store unused food in it.



- * Maintenance of personal hygiene and appropriate waste disposal is necessary.
- * In case one is travelling to a typhoid high-risk area, the health care worker must be consulted for typhoid vaccination.

Heat stroke

This occurs when a person has done excessive physical work in the sun and heat. The temperature rises above 41.5°C and the person becomes unconscious. This can be dangerous to life.

What to do if a person has heat stroke?

- * Steps must be taken immediately to cool the body with wet clothes or sponging and rush the patient to the health care facility.
- * The head and body should be covered with a cloth while working or doing activities in the sun. One should take short breaks out of the sun. It is important to drink plenty of water and other home-made fluids such as lemonade, buttermilk or coconut water.

Convulsions

A convulsion or seizure means abnormal movements of one part or the whole body often with loss of consciousness. During a convulsion, the person may froth from the mouth, bite his/her tongue and even pass urine and stools. Convulsions generally last for a short time but the person can hurt herself/himself when it occurs.

The causes of convulsions are:

- * Epilepsy, which is a disease occurring at any age.
- * High fever in children, which may be followed by seizures
- * Head injury.
- * Certain other diseases such as malaria, meningitis, Japanese Encephalitis or brain tumours.

What to do when a person has a convulsion?

- * The affected person should be turned to one side so that the tongue does not fall into the throat and stops the breathing. If the person cannot be turned to one side, then the head must be turned to one side.
- * The person must be held to prevent her/him from any injury.
- * One must try to put a spoon or something firm into the mouth between the

teeth to prevent the person from biting his/her own tongue. The spoon must not be forced into the mouth or else the teeth may break.

- * Wait for the convulsion to stop.
- * The mouth should be gently cleaned of any saliva or blood.



It is important to go to the hospital if the person is having a convulsion for the first time.

A person diagnosed with epilepsy should:

- * Take the medicines given by the doctor.
- * Follow the dosage as advised. If taken regularly, the person can be free of convulsions.
- * If the medicines for epilepsy are stopped, the person can have a convulsion.
- * One must report to the doctor, if a person has a convulsion even while taking medicines.
- * One must follow the advice of the doctor to prevent serious injuries during a convulsion.

Young children can also have convulsions if there is a sudden rise in body temperature due to fever. Every effort should be made to reduce body temperature in children and they should be taken to the health care provider/health centre.

Cough and cold

Everyone has a cold sometime or the other. Most of these are caused by viral infections and usually start with:

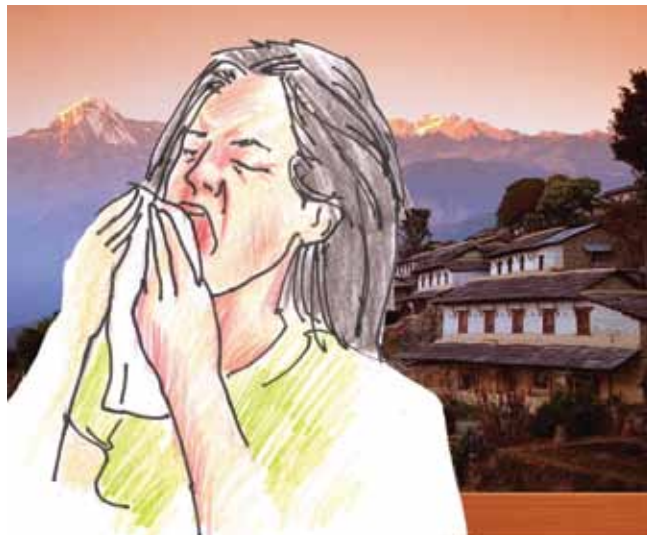
- * Sneezing
- * Runny nose
- * Irritation in the throat and cough

There may also be:

- * Low-grade fever
- * Body-ache, headache
- * General feeling of being unwell, which lasts for 5-7 days

Anyone can be affected by cough and cold at some time or the other, but it commonly occurs in:

- * Young children.
- * School-going children.
- * Elderly people.
- * People with asthma and lung diseases.
- * Chronic smokers or people who smoke many cigarettes everyday.



What to do if one has cough/cold?

- * Cough and cold generally lasts for 5-7 days and will usually settle on its own.
- * Since most of these episodes are caused by viral infections, antibiotics are NOT necessary and may even be harmful.
- * Similarly, commonly available “cough-medicines” are not necessary. These can cause harmful side effects. For cough relief, patients can be encouraged to take warm fluids such as lemon tea and throat-soothing substances such as honey. Gargling with warm water and salt can provide relief from throat irritation.
- * During its duration, the patient should drink plenty of fluids.
- * Steam inhalation may give some relief and help clear stuffiness in the nose and the sinuses.

THE HEALTH WORKER SHOULD BE CONTACTED FOR:

- * Medicine in case of mild fever.
- * Cough that persists for three weeks as it could be tuberculosis.

- * Immediate medical care if the patient coughs out blood.
- * Immediate medical care if there is chest pain with breathing difficulty and wheezing.

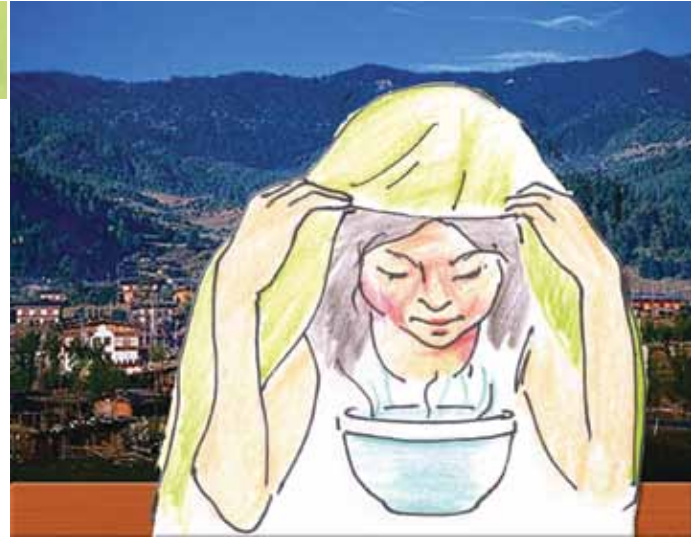
THE HEALTH WORKER/ HEALTH CENTRE OR HOSPITAL SHOULD BE CONTACTED :

If infants and young children:

- * experience fast and difficult breathing.
- * have wheezing (whistling sound while breathing).
- * refuse to eat or stop drinking milk.
- * have ear ache.
- * cry excessively;

If the elderly:

- * cough out sputum that changes colour.
- * experience rapid breathing or have difficulty in breathing.
- * have chest pain.



Families should also go to PHC or contact the health worker if in persons with bronchial asthma and chronic lung diseases, sputum changes colour, breathing is difficult or if there is increase in wheezing..

Protection from respiratory infections

Viruses that cause colds and coughs commonly spread through breathing in germs from people sneezing or coughing nearby and from contaminated hands. Frequent hand washing protects from colds. It is especially important to wash hands before and after handling young children and very old persons.

Germs that cause coughs and colds spread in crowded places. Wherever possible, avoid crowded places to help reduce exposure to disease-causing agents.

Indoor air pollution, for example, due to use of coal or wood for cooking indoors as well as indoor smoking of tobacco products increases risk of respiratory infections.

Many diseases such as whooping cough and measles that can manifest with respiratory ailments can be prevented by immunizing children against these diseases.

Germs that cause coughs and colds spread in crowded places

It is important to make sure that food that is clean, stored and served hygienically, helps children to grow in a healthy manner to protect against diseases. Exclusive breastfeeding for the first six months of a child's life is known to protect children against common infections.

The risk of dehydration is greater in children, older people and people with weak immune systems

Diarrhoea / Loose stools

Frequent passage of loose watery stools is called diarrhoea. It is often accompanied with vomiting and pain in the abdomen. Diarrhoea is caused by germs (viruses and bacteria) that enter the body through food and water. When diarrhoea is accompanied with blood, it is called dysentery.

In most cases, diarrhoea symptoms persist for a definite duration, are temporary and do not permanently change one's state of health. However, it can cause dehydration. If not corrected by taking in fluids, dehydration can be fatal, even causing death. The risk of dehydration is greater in children, older people and people with weak immune systems as their bodies have lower capability to fight diseases.

What to do if someone has diarrhoea?

- * One should make sure the patient continues to eat food and takes plenty of home-available fluids including plain water to prevent dehydration. Other fluids such as coconut water, rice water or lemonade can also be given. Infants should continue to be breastfed. WHO-ORS is a good fluid to prevent and treat dehydration.
- * Fluids should be given frequently in small quantities. If a large amount is given at one go, the patient may vomit it out.
- * Medicines, including antibiotics, and the so-called anti-diarrhoeal drugs are NOT needed for most cases of diarrhoea.
- * Antibiotics are, however, needed if the patient develops dysentery. He/she should take the antibiotic as per the prescribed dose and duration (number of times in a day and the number of days).
- * The patient should be observed for signs of dehydration. These include excessive thirst, restlessness, irritability and sunken eyes. If the dehydration becomes severe, the patient will be unable to drink fluids, become drowsy and lose consciousness. If it is felt that the patient is getting dehydrated, one must continue to give fluids/ORS and consult a health care provider. The patient may need to be given intravenous fluids.
- * If the diarrhoea continues for more than 14 days with persistent symptoms, one must consult a health care provider/health centre.



Food poisoning

Food poisoning happens when food eaten is not fresh, kept in the open or gets contaminated by a food-handler. It can also happen at home if care is not taken to prepare and store food hygienically. Usually, a number of people get sick at the same time with food poisoning. The persons who have consumed or eaten the contaminated food item from the same source, usually at a wedding feast or public event/festival celebrations have:

- * Often, severe vomiting.
- * Diarrhoea.
- * Abdominal pain.

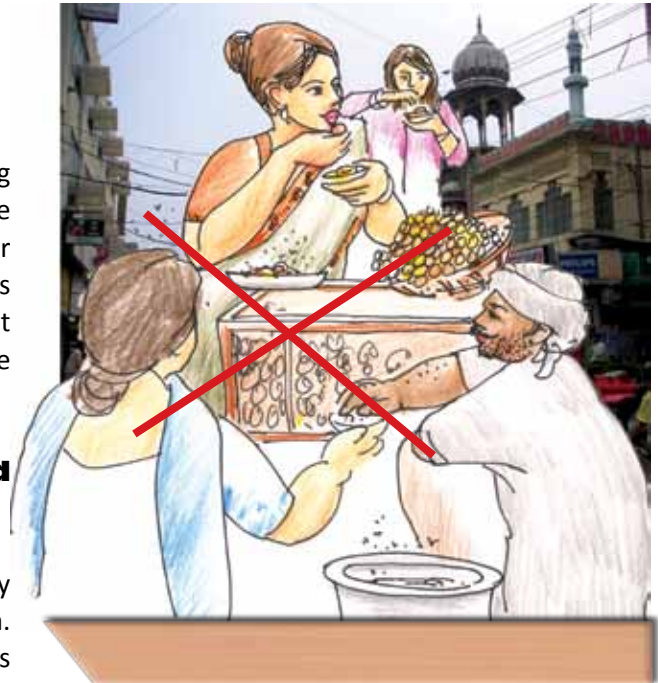
Contamination of food, leading to food poisoning can occur in a family kitchen affecting only the family members. It can also affect a large number of people simultaneously, where the same food is cooked in an open or spread out area, that is not hygienic, and served to all of them at the same time.

What to do in suspected food poisoning?

Management of the individual patient is essentially the same as described for a patient with diarrhoea. However, it is important to remember that patients with food-poisoning may have profuse (severe) vomiting and are in danger of getting dehydrated. Care must be taken to prevent dehydration; if it is suspected that the patient is developing initial symptoms, care should be sought immediately from the health worker or health centre.

Ways to prevent food poisoning:

- * Food should always be cooked and stored in a clean environment. Food handlers should always wash their hands before cooking and serving. Persons with infected wounds, diarrhoea, dysentery and other infections should avoid cooking or serving food.
- * One must eat freshly-cooked food as soon as possible after cooking. Left-over food should be kept in covered utensils in a cool place. It is preferable to keep food that will be consumed after some time, in a refrigerator.
- * There is a high risk of getting food poisoning from street foods, especially cut-fruits. It is best not to eat open, unwashed or cut fruits from a street-side



stall. If street food is consumed, one must ensure that it is properly cooked in hygienic surroundings.

Care should be taken to consume only pasteurised milk and milk products. If not available, it is best to have freshly boiled milk..

Cholera

Cholera is an acute diarrhoeal disease caused by a germ, which enters the body by drinking unclean and infected water. Water sources contaminated with faecal matter often are causes for cholera outbreaks in a particular region, particularly affecting children. It can occur at any time of the year, but is more common during the monsoon season. It starts suddenly with:

- * Profuse (very large quantities) watery diarrhoea.
- * Vomiting.
- * Dehydration as the body loses a large amount of fluids quickly.
- * Muscle cramps.
- * Inadequate passing of urine.

If the person is not given adequate fluids immediately to replace the fluid loss, there will be:

- * Sudden and rapid fall in blood pressure with the affected person having cold, damp skin.
- * Breathing difficulty.
- * Loss of consciousness.

What to do in suspected Cholera?

Individual patients must be treated as for diarrhoea. However, it is important to remember that patients with cholera can get dehydrated very quickly. If dehydration is imminent, one must get medical help immediately.

It is also important to remember that cholera can easily be passed from the patient to other people. It is therefore important:

- * To wash hands every time after touching the sick person, handling their dirty clothes and before eating.
- * One must ensure that the patient takes medicines as advised by the health worker. This will not only help the patient recover but also ensure that the infection does not spread to other people.
- * Cholera will generally affect a large number of people at the same time

who use or consume water or food from the same source. It is important to inform the health authorities about suspected cases of cholera to enable them to identify the source of infection (e.g. contaminated water supply) and take appropriate action so that the disease does not spread further.

- * One of the most important means by which cholera can be prevented is ensuring supply of safe, clean water. Water supplied by municipal authorities is generally safe. Water consumed from other sources e.g. wells, should be regularly chlorinated. In most places, wells are chlorinated by the health or sanitation authorities. However, it is equally important for the community to ensure that wells are cleaned and chlorinated at regular intervals and that every effort must be made to access clean, safe water and prevent wastage of water.

It is best and safest to boil the water before drinking when one is not sure of the quality of water available for drinking.

Jaundice

The yellow coloration of the white of the eyes and skin is a symptom called jaundice. The most common cause of jaundice is liver disease called hepatitis, caused by viral infection. These viruses most often get into the body through eating and drinking infected food and water. This disease occurs commonly in the hot weather and the rainy season, such as diarrhoea and cholera. The viruses that cause jaundice can also enter the body through unsafe injections given by unsterilized syringes and needles, unsafe blood transfusion and sexual contact with an infected person. A few cases of jaundice are caused by liver diseases other than viral infections such as blood diseases, cancers, infections and stones in the gall bladder.

It is important to remember that Hepatitis starts gradually with progressive:

- * Loss of appetite.
- * nausea
- * Vomiting.
- * Low-grade fever gradually becoming moderate.
- * Feeling of weakness
- * Yellowing of the eyes and the urine.

What to do if someone has jaundice?

- * It is essential to give plenty of oral fluids.
- * It is also important to give small amounts of bland, non-spicy food. The patient may initially refuse to eat but the caregiver must encourage the person to take small quantities at frequent intervals. Sometimes it is necessary to prepare special food (which could be sweet) that the person likes, to encourage eating.

It is important to contact the health worker for:

- * Medicines to stop vomiting.
- * Taking the patient to hospital, if required.
- * Tests and investigations that are needed to find out why the patient had jaundice and needed treatment. It is best to let the health worker decide this.

Ways to prevent jaundice

- * Most cases of jaundice are caused by hepatitis, due to consumption of infected food and water. Hence, precautions to eat clean food that is not stale must be observed. Also, drinking safe (boiled or filtered) water as described in the sections earlier will help prevent many cases.
- * Some forms of liver disease causing jaundice due to viral infections can be prevented by immunisation.

One should always insist on sterilised or disposable needles/syringes that can be used and thrown if getting an injection. In case a blood transfusion is needed, one should take it only from a registered blood bank.

- * It is essential to practise safe sex.

Constipation and distension

Constipation, most often, is not an illness. But it is a very common problem with people. Normally, stools are passed at least once a day. If that does not happen, one feels constipated. The person may feel unwell and complain of headache, dizziness, lack of appetite, pain in the stomach and other problems.

This type of constipation usually occurs due to:

- * Decreased (less amount) water intake.
- * Decreased food intake.
- * Not eating enough vegetables (especially green leafy vegetables), cereals or lentils. These are high in fibre and help in bowel movements.
- * Lack of exercise.
- * Older age group, as the function of all the organs slows down.

The first thing to remember is that if a person does not have a bowel movement for a day or two, she/ he is NOT sick. A bowel movement will happen if she/he attends to the common causes given above.

ONE MUST NOT TAKE LAXATIVE PILLS OR ENEMA. These are harmful to the intestines.

If constipation occurs with vomiting, the person must go to the health worker/hospital. There could be obstruction in the intestines which will need to be checked and treated.

If a person has been having regular bowel habits and there is a sudden change (having constipation or diarrhoea), she/he should go to the district hospital for investigations. It could be serious. Distension of the stomach is also not an illness, but it is common and can be very uncomfortable for the person. It most often is due to:

- * Eating too much food.
- * Eating oily, spicy food with chillies.
- * Eating late at night just before going to sleep.

What to do in case of constipation?

- * One needs to be careful about the food eaten.
- * Dinner should be eaten at least 2 hours before going to sleep. If that is not possible, then a walk for about 10-15 minutes after eating is advisable.
- * Locally available spices/herbs such as fennel (“saunf”), asafoetida (“hing”), and carom seeds (“ajwain”) can be used to reduce the feeling of fullness in the stomach.

If the distension does not improve, the health worker/hospital must be consulted.

Urinary tract infections (UTI)

Sometimes infections occur in the urinary system and cause:

- * Fever with chills.
- * Burning sensation while passing urine.
- * Pain while passing urine.
- * Passing small quantities of urine many times in a day.

What to do in case of UTI?

One should drink plenty of fluids (6-8 litres a day).

It is important to contact the health worker for:

- * Medicines to relieve pain and fever.
- * Investigations and further treatment.

Skin infections

The skin has an important role in protecting the body. There are different causes in children and adults for skin diseases.

Prickly heat: In the summer and rainy season, due to humidity, children get prickly heat. This causes them to scratch and when the skin is broken, there is infection leading to boils.

What to do?

The child needs to be bathed at least once a day, or if possible, twice a day. In different cultures, plants/leaves are traditionally used for their protective/curative role in skin diseases. Likewise, one can make a paste of *neem* leaves or a similar plant and apply on the body.



- * The child must be kept clean; it is the best way of preventing skin infections.
- * Finger nails should be cut short to prevent injury on scratching.
- * Clean, loose, cotton clothes are best in the summer.
- * Face, hands and legs and feet of the child should be washed after play.

THE HEALTH WORKER SHOULD BE CONTACTED FOR:

- * Medicines, if the boils are large and the child has fever.

Scabies

This is a disease that is caused by a small mite that enters the skin causing itchy little bumps between the fingers, in the armpits and the groin. Pus occurs when the skin is broken because of scratching. This disease spreads fast to other members of the family because of close contact.

What to do in case of scabies?

The health worker should be contacted for medicine to be used by all the family members.:

- * During bath, a brush should be used to scrub the body well.
- * The armpits, groin, and the area in between the fingers must be properly scrubbed.
- * Thereafter, medicine must be applied all over the body, except the face, daily for three days. NO BATH is to be taken in between.



- * On the fourth day, the person can have a bath and wear clean clothes.
- * All clothes, towels and bed linen must be washed in hot water and dried in the sun.
- * All the family members have to take the same treatment, at the same time.

Boils and abscess

These are infections which cause pus to form under the skin. A boil can form in a hair follicle and can sometimes become large and form an abscess. Injuries also cause abscess formation. Both are painful conditions. Multiple, recurrent boils may be associated with diabetes.



What to do when a person develops boils?

- * Hot fomentation relieves the pain. The method is to soak a cloth in hot water, squeeze and then apply to the area. This is to be done four times in a day. The swelling will reduce and the boil may burst, draining the pus. If there is no relief in the pain or swelling, the health worker or PHC should be contacted.

Burns

Management of a person with burns depends on:

- * Type of burn, caused by hot fluid or fire
- * Part and area of the body involved
- * Infant, child or adult

Hot fluids and small area of the body involved:

- * Affected part must be placed under cold water to relieve the pain.

If a blister forms:

- * One must take the patient to the PHC for further management.
- * The blister must NOT be burst as infection may occur.

Hot fluids and large areas of the body involved:

- * Affected part of the body must be cooled by immersing it in cold water or by applying ice.
- * It is advised to take the affected person to the health centre immediately.

Fire burns:

- * Affected part must be wrapped in a clean cloth.
- * One must go to the health centre urgently.



Observing careful habits to prevent burns is most important (see chapter 3 for details).

Injuries

Cuts

The important point in dealing with cuts is to try and stop the bleeding or get medical help as soon as possible if the bleeding is excessive. The cloth used as bandage for the cut has to be clean. A dirty cloth should not be used under any circumstances.

What to do in case of cuts:

- * The affected part must be washed with soap and water and pressed to stop bleeding.
- * Ice, if available can be used to stop bleeding.
- * An antibiotic ointment (available with the health worker) should be applied and a bandage tied using a clean cloth.

A cut with a lot of bleeding:

- * Should be washed with soap and water.
- * Must be tightly bandaged with clean cloth to stop the bleeding.
- * Should be shown to the hospital or health centre.

In case of serious cut on arms or legs with a lot of bleeding:

- * A clean cloth folded into a pad or bandage should be tied tightly above the cut area.
- * The cut should be covered with a clean cloth.
- * One must go urgently to the hospital or health centre.

Serious cuts on any other part of the body:

- * A clean cloth folded into a pad can be used or a bandage tied as tight as possible to stop the bleeding.
- * One must go urgently to the hospital or health centre.

Broken bones

A broken bone is very painful. The important part of the management is to prevent movement of the broken bone. If the bone is in the arm or leg, then:

- * It is important to let the person remain where she/he is. There is no need to move the person.

- * One must try and get a straight piece of wood, long enough to stretch from the joint above the broken part to the joint below the broken part.
- * The limb must be lifted gently by placing one hand above and the other hand below the broken part.
- * The wood piece must be slid under the area. It must be ensured that both the joints are covered.
- * One person should gently lift the wood piece and the limb; the other person should firmly bandage the whole area to cover the wood piece.
- * If the skin is cut over the broken part, a clean bandage must be applied to cover that area.
- * When moving the person, the wood piece and the limb must be gently held so that there is less pain felt and the broken bone ends do not move.
- * One must go urgently to the district hospital.

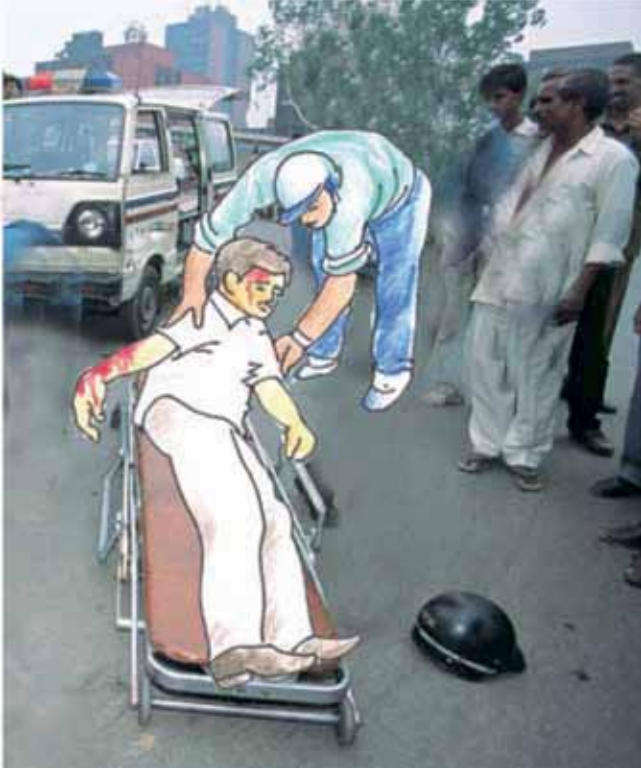
If a victim's back or neck has been broken, one must be very careful when moving him/her. The body position should not be changed. If possible, one must bring a health worker before moving him/her. If the victim has to be moved, it must be done carefully without bending the back or neck.



How to take a person with a broken back/neck to the hospital:

The injured person must be lifted with great care, without bending him anywhere. The head and neck should not bend at all. Taking the help of a few people, the injured person should be placed carefully on a stretcher. If the neck is injured or broken, one can put a tightly folded cloth or sandbag on each side of the head to keep it from moving.

Accidents



- * Any accident leading to serious injury and bleeding has to be treated at the district hospital. One must not delay or waste time; the victim must be taken to the hospital as soon as possible.
- * Bleeding areas have to be bandaged tightly with clean cloth as already described.
- * Broken bones have to be managed as described.
- * An accident victim should be covered with a thick cloth or blanket if she/he is bleeding heavily. The blood pressure falls because of the loss of blood and the person becomes cold. The blanket will help to keep the person warm.
- * It is important to keep talking to the person so that she/he remains conscious.
- * The accompanying person should be able to tell the doctor exactly what happened. This helps the doctor to make a quick diagnosis and manage the patient.
- * One must not crowd around the person. The hospital staff must be allowed to get easily to the patient and do their work.
- * The patient may require blood transfusion. Relatives should be ready to donate blood.



Blood saves a life

Dog bite

The saliva of a dog can carry the rabies virus (germ), which causes rabies in human beings when they are bitten by the dog. If not treated immediately, rabies is a very serious disease causing death in all cases. A person can be bitten by a stray or a pet dog. The treatment and management for each type of bite is different.

Stray dog bite

A stray dog's health status and immunisation is not known. It may be rabid (mad) or normal. The bite may be provoked (by someone who has hurt the dog which made it bite him/her) or unprovoked.



What to do in case of a dog bite?

- * The wound should be washed with running water and soap for at least 30 minutes. This washes away the dog's saliva from the wound and can prevent the rabies virus from entering the blood.
- * Some bleeding can be allowed so that the blood around the bitten area, if infected, flows out.
- * The wound should not be covered or bandaged.
- * Medicine should not be applied on the wound.
- * One must go to the district hospital urgently. Treatment started early with proper medicines and vaccines will save the victim from rabies.

If the dog is rabid, one should inform the community council leader or members so that the concerned government agency can be contacted to catch the dog. This will prevent others from being bitten.

Pet Dog bite

- * If the dog has been vaccinated against rabies as per the schedule, the bite will probably not cause rabies.

What to do?

- * The wound should be cleaned as described earlier in the section on "stray dog bite".
- * One must go immediately to the health centre or district hospital. It should be left to the doctors to decide upon further treatment.

If the pet dog has not been vaccinated or has been partially vaccinated, then the treatment may be the same as for stray dog bite. The doctor will decide this and his advice should be followed.

Snake bite

In the case of a snake bite:

- * A tight bandage should be tied above the level of the bite, if it is on the arm or leg. This stops the poison from spreading to other parts of the body. The bandage should NOT be so tight as to stop the flow of blood completely.. The affected person should be checked to see the colour of the fingers or toes. If the colour changes to dark blue, then the bandage is too tight and must be loosened AT ONCE.
- * One should not make a cut to try and remove the poison.
- * Since the poison can spread through the blood, the person should not be moved, but taken URGENTLY to the DISTRICT HOSPITAL.
- * In case the snake has been killed, one may take the dead snake along so that the doctor can identify if it is poisonous.



Bee sting

In most cases, this is not dangerous; however, the stung area becomes red, hot and painful.

What to do:

- * Ice or cloth soaked in cold water should be put on the area of the bite.

THE HEALTH WORKER SHOULD BE CONTACTED FOR:

- * Medicines to relieve the pain and swelling.

Sometimes the person can have an allergic reaction and go into shock. Symptoms can be itching, redness and swelling of the part. Other symptoms can be difficulty in breathing, .restlessness, excessive sweating and the person's skin becomes damp and cold.

What to do:

- * A blanket should be placed and the person. must be taken to the health centre or district hospital urgently.

Ear Ache

Pain in the ears occurs commonly in children. The common causes are:

- * Cough and cold: The tube which connects the nose and the ear gets blocked when the child has a severe cold with blocked nose. He/she will complain of pain in the ears. A smaller infant may cry excessively and touch the ear. Sometimes pus comes out of the ear, which means that the child has an ear infection.
- * Wax in the ear may also cause ear ache.

What to do:

If the infant or child has ear ache because of cough and cold, then:

- * The condition should be managed with steam inhalation. Plenty of fluids along with a nutritious diet should be given to the child.



THE HEALTH WORKER SHOULD BE CONTACTED FOR:

- * Medicines to treat the cough and cold.
- * Medicines to treat the infection.
- * NO DROPS OR OIL SHOULD BE PUT IN THE EAR

For wax in the ear:

- * One or two drops of clean coconut oil should be put in each ear.
- * One should not put any sharp or pointed object into the ear to clean it.

It is advisable to go to the health centre or hospital for cleaning of the ears.

Eyes

Redness of the eyes: This may be due to allergy or could be the beginning of an infection. If it is due to allergy, there is redness, itching and watering from the eyes. If infection is present, there is itching and discharge of pus from the eyes.

What to do:



Allergy in the eye:

- * Eyes should be washed four times a day by splashing clean water. Hands should be washed with soap and water before doing this.
- * One should take care not to rub the eyes.
- * The health worker should be contacted for medicines.

Infection in the eye:

- * Eyes should be washed as instructed above.
- * Sometimes the eyes need to be cleaned with boiled water in the manner described below:
- * The caregiver must first wash her/his hands with soap and water.
- * A small clean vessel needs to be filled with water with some pieces of cotton in it and boiled.
- * This water should then be cooled.
- * A piece of cotton should be squeezed and the eye must be wiped carefully from inside out. The used piece of cotton must be thrown away and the same steps must be repeated with new pieces of cotton. The same procedure should be followed for the other eye.
- * A clean cloth/towel should be used to wipe the eyes. This cloth should be kept for use by the affected person only. Other people in the family should not use the same cloth/towel.
- * The health worker should be contacted for medicine.

Remember!!

- * For the management of any ailment or disease, as much care as possible should be initially given at home.
- * It is most important not to waste time. Management of an ailment or the symptoms should be started as soon as possible at home.
- * If the condition does not improve with initial care or gets worse, the patient needs the attention of the health worker or doctor.
- * When in doubt, it is better to consult the health worker at the earliest. Advice given by the health worker and doctor must be followed. It is important to return to the doctor, if called for follow up.
- * Minor bleeds from slight injuries to the skin are generally not dangerous and will stop on their own. However, severe bleeding is dangerous and must be controlled. Where the bleeding is from the surface, one should apply a pressure pad to control it. The person should then be taken to the district hospital.
- * Blood in the vomit, sputum or stools can be due to a serious condition and must be investigated and managed as soon as possible.
- * Dog bites must be washed with plenty of clean water and soap before any other treatment.
- * The person must be taken to the district hospital as soon as possible in case of an accident.
- * Blisters should not be burst.
- * Burns need to be kept cool with cold water or even ice, if available. This prevents further damage to the part and also relieves pain.

Self Care : **The Traditional Approach**



Self Care : The Traditional Approach

The World Health Organization defines traditional medicine as the sum total of the knowledge, skills, and practices based on theories, beliefs, and experiences. These are indigenous to different cultures and are used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illnesses. Traditional medicine covers a wide variety of cures and practices which vary from region to region.

Based on the WHO definition, self-care in traditional medicine generally includes the following approaches and activities:

- * Health promotion and prevention of illness.
- * Healthy lifestyle - diet, physical activity, healthy daily schedule, good conduct and good thoughts.
- * Procedures, techniques and exercises to promote health such as acupressure, massage (Chinese *Tuina*, *Nuad* Thai, Indian *Abhyanga* of *Ayurveda*), and exercises (*Qigong*, *Tai-Chi*).
- * Naturopathy and Yoga.
- * Meditation for mental and spiritual well-being.
- * Disease management with herbal and other traditional remedies.

The purpose of this chapter is to provide a brief overview of common traditional practices in self-care used for promoting health, preventing illness, and managing diseases.. In this regard, activities that can be carried out by the individual are generally included. This will enable or help users obtain additional information on any area of interest. Before embarking on self health care, a relevant expert may be consulted for a better and detailed understanding of each practice.

**Traditional
medicine covers
a wide variety
of cures and
practices which
vary from region
to region**

Prevention of disease and health promotion through traditional systems

The traditional systems of medicine such as *Ayurveda* and *Yoga* of India and the traditional Chinese medicine, originated more than 5000 years ago. These have spread gradually to neighbouring countries as well as to different parts of the world. These along with other traditional systems of the SEARO region have always emphasized that health is the dynamic integration between the environment, body, mind and spirit. Elaborate descriptions are available on personal hygiene and diet. Regimens to follow such as daily routine, seasonal routine, good thoughts, behavioral and ethical principles that contribute to health promotion are also laid out clearly. Following certain rules regarding urges that can be suppressed and those which cannot be controlled also lead to positive health.

Daily routine

The regimen of right living is designed for maintaining holistic health for a long and healthy active life; providing relief from pain and disease, for satisfactory enjoyment of life and attainment of what one desires in health.

Time to wake up: It is advisable to wake up about one and a half hours before sunrise. It is rightly said that “well begun is half done”. This is the best time for prayer, yoga and meditation, activities for physical and mental fitness and in getting started for the day.

Drinking Water: Drinking water early in the morning – one to two glasses – according to one’s capacity cleanses the body by enhancing the removal of toxic wastes through the urine and stools.



Bowels: One should attend to nature’s calls at any time. Elimination of urine and faeces cleanse the body and cheer up the mind..

Teeth and mouth care: The tongue and mouth should be kept clean. Soft brushes, made out of twigs of acacia, Indian beech, prickly chaff, etc. may be used for cleaning the teeth. A metal or plastic tongue scraper or twigs of plants mentioned above can also be used to clean the tongue. Chewing of neem twig, clove, cardamom pod and fennel act as mouth fresheners.

Eye care: The face should be washed with soap and clean water to prevent eye infection. Eyes should be washed with popular traditional eye wash. Plain water can also be sprinkled on the eyes seven to ten times in the morning..

Betel leaf chewing: Chewing of betel leaves with fragrant substances like cardamom and cloves refreshes the mouth and enhances digestion.

Oil massage: Massaging the whole body with oil promotes and maintains health. Oils used may be sesame oil, mustard oil, coconut oil or medicated oils. An oil massage ensures softness of skin, free movement of joints and muscles, improves blood circulation and promotes elimination of wastes from the body..



Oiling body apertures: Application of oil in nose, ears, anus, navel along with regular head and foot massage has several advantages. It prevents and treats ailments related to the ears, nose and throat, headache; checks hair fall and greying of hair, maintains the strength and lustre, induces good sleep and relaxes tired feet. Mustard oil, coconut oil or medicated oils are used for this purpose.

Exercise: Regular exercise is essential for perfect health. It builds up stamina and resistance against disease, increases blood circulation and efficiency of body organs, promotes appetite, digestion and prevents obesity.

Bath: Bathing removes sweat and other impurities from the skin, improves well-being, appetite, and span of life. In winters, water used for bath should be lukewarm. Hot water should never be used for head bath and face wash. One should shave regularly, trim scalp hair and keep nails neatly clipped. Clean clothes should be worn after bath.

Diet: Diet should be regulated taking into account the constitution of a person, habitat, season, age, disease, work profile, etc. It should be balanced and the quantity as per one's digestive capacity. Food takes care of physical, mental, social and spiritual health. Therefore, it is important to know what to eat, when to eat, how to eat and how much to eat. It is also important to know the kinds of healthy and unhealthy foods.

Daily work profile: Everyday work should be handled in such a way that it does not become a cause of continuous stress. Some tips are:

**“Early to bed
and early to
rise makes a
man healthy,
wealthy and
wise”**

- * “Hurry, worry and curry” in daily routine should be avoided.
- * It is best not to be a person of extremes; moderation in everything ensures right balance.
- * It is advisable to prioritise work and then move ahead.







Night time sleep: Suggested duration of sleep for an adult is 6-8 hours. On an average, it is better to sleep in between 9.00 to 10.00 pm. “Early to bed and early to rise makes a man healthy, wealthy and wise” is an age-old phrase. By doing so, one remains close to nature, feels light and active.

Seasonal routine

Seasons are classified according to the movement of the sun. These are: spring, summer, monsoon, autumn, early winter and late winter. They are based on the division of 12 months into 6 seasons. Change of season has an effect on the physical, mental and the digestive strength of our bodies. All these three strengths are very less in summers and the rainy season, moderate in spring and autumn and at their maximum in early and late winters. Seasonal changes bring about illnesses. Adopting certain dietary activities and a regimen-based on the season, may prevent them.



Seasonal guidelines

Season	Diet regimen	Activities regimen
Spring (Mar - Apr) 	Light, dry, bitter, hot & astringent foods such as honey, wheat, barley are best. Heavy, oily foods and sweet, sour tastes should be reduced/ avoided.	Moderate exercise, oil and powder massage, fomentations, steam, use of lukewarm water for bath and drinking. Avoid day sleeping.
Summer (May-Jun.) 	Sweet, cold, oily, light, liquid food items, seasonal fruits, milk, rice, barley, sweets, butter milk, coconut water, cold drinks such as prepared from sandalwood, rose, etc. can be taken. Hot, sour, spicy, salty, pungent foods and over eating is best avoided.	Exercise and sexual activities must be minimised. If taking a nap during the day, cool environment is indicated. Application of paste of cooling agents like sandalwood, rose petals, etc. on skin and face is good.
Monsoon (Jul.-Aug.) 	Hot sour, salty, light, a little oily, and easily digestible, soups can be taken.	Powder massage and application of herbal pastes with fragrance on skin. Excess exercise, sexual intercourse, sleeping during the day, sleeping in the dew and on the ground, letting stagnant water stay in surrounding areas, damp areas and excess exposure to strong sun rays must be avoided.
Autumn (Sept.-Oct.) 	Sweet, bitter, light & cold food is preferable. Avoid curd/yogurt sour, salty, pungent and heavy foods	Sitting in moonlight in the first quarter of the night is advised. Sleeping during the day must be avoided.
Early winter (Nov.-Dec.) 	Intake of heavy, oily, sweet, sour, salty, hot food items, soups, honey, milk and milk products indicated. Light, dry & cold food, fasting or skipping meals best avoided.	Oil massage, steam, oiling of head, sun bath, exercise, warm clothes is advised. Sleeping during the day must be avoided.
Late Winter (Jan.-Feb.) 	Sweet, sour, salty, oily, heavy and hot foods, soups, milk, rice, honey, ginger are indicated. Excess pungent, bitter, astringent tastes, light, dry and cold foods avoidable.	Use of woollen blankets and other measures for protection against cold such as warm clothing & warm homes is advised. Massage, steam, exercise are indicated. Morning walk in dew should be avoided or done with precaution. Sleeping during the day must be avoided.

Change of season has an effect on the physical, mental and the digestive strength of our bodies

Some Preventive Regimens

Observation of certain prescriptions and prohibitions ensure physical, mental, social and spiritual well-being. They are as follows:

Non-suppressible urges

There are 13 natural urges, suppression of which may lead to illnesses as given below:

Suppression of:

1. Urine may lead to difficulty in passing urine, urinary stone, weak bladder and inflammation of urinary tract.
2. Stool may lead to pain in abdomen, indigestion, gas in abdomen, headache.
3. Gas discharge from the digestive system may lead to pain in abdomen, indigestion, heart diseases, constipation or diarrhoea.
4. Semen may produce stones, pain in testis.
5. Vomiting may produce illnesses such as giddiness, and fever.
6. Sneezing may lead to chronic cold, headache, and diseases of respiratory system.
7. Belching may lead to hiccups, pain in the chest, cough and loss of appetite.
8. Yawning may lead to diseases of the eyes, throat, ear and nose.
9. Hunger may lead to nutritional disorders, body ache and weakness.
10. Thirst may lead to dryness of mouth and throat and fatigue.
11. Tears may lead to mental disorders, pain in chest, giddiness and digestive disorders.
12. Respiration may cause suffocation, respiratory disorders, heart disease and even death.
13. Sleep may cause insomnia, mental disorders, digestive disorders and diseases of sense organs.

Suppressible urges

There are three types of urges, expression of which create problems. They are concerned with mind, body and speech.

Urges of the mind that need to be suppressed are: Greed, grief, fear, anger, pride, shamelessness, jealousy, attachment, desires, hatred, etc.

Urges concerned with speech are: Telling lies, rudeness, back-biting about others, irrelevant and incoherent talking, etc.

Urges caused by the body are: Physical violence, adultery, stealing, etc.


One should refrain from all the above-mentioned urges. These should be under self-control, always.

Good conduct and being ethical

There are various codes of conduct for maintenance of better mental health. A healthy mind is as important as a healthy body. *Ayurveda* comprises ways to achieve good conduct. They include: truthfulness, control of anger, avoiding alcohol and similar drinks, not hurting others, maintaining cool, speaking with others softly, sweetly and with a smiling face, cleanliness, respecting teachers and elders, loving all, taking care of others feelings, giving something that others need, not criticizing others, refraining from narrow mindedness, pride, not being harsh and being as merciful as possible.

Good conduct also includes going to bed early and rising early. Some of the positive practices include belief in a higher power controlling the universe, taking out time to express our thanks to this power, saying prayers, being spiritual, chanting, giving charity, assisting others.. It is advised to always act in a courteous and polite manner as happiness is achieved by giving and merely by taking. Bad company is to be avoided

These are the principles of right conduct and by following them, one develops the power to suppress the urges and conduct one's life in a positive manner with healthy thoughts.



A healthy mind is as important as a healthy body. Positive practices such as praying, chanting, giving charity and assisting others enhances the state of mind

Social hygiene

Humans are social beings. Naturally, then, one must work in the society in a manner which is conducive to better hygiene and sanitation of the community. This can only be achieved by individual efforts as well as his/her cooperation with the concerned authorities:

- (1) House refuse should not be thrown at random. It should be discarded in a proper manner.
- (2) Water drains should not be allowed to block.
- (3) Toilets should be kept properly cleaned.
- (4) Water sources should not be contaminated.



Bio-cleansing regime

A traditional bio-cleansing regimen called *Panchakarma* comprising five procedures helps keep the body healthy. It facilitates better bio-availability (extent or degree to which a medication or nutrient can be used by the body) of medicines, helps to bring about a state of equilibrium and coordination of body humors (fluids), eliminates disease-causing complexes from the body, checks recurrence and progression of disease and helps in rejuvenation. The five-fold measures included in this therapy are: therapeutic emesis, therapeutic purgation, therapeutic decoction enema, therapeutic oil enema, and nasal administration of medicaments.

Panchakarma procedures are preceded by therapeutic oleation (a procedure meant to maintain oiliness of the body) and sudation applications (that which makes one sweat). These procedures make the body systems conducive to elimination of bio-toxins and cleansing of channels such as sweat glands, urinary tract, and intestines.

Rejuvenation

Traditional herbs for rejuvenation generally promote immunity of the body. They include gooseberry (*Emblica officinalis*), ink nut (*Terminalia chebula*), moon seed (*Tinospora cordifolia*), winter cherry (*Withania somnifera*), long pepper (*Piper longum*), among others. Nutritious foods such as milk, nuts, seeds, wheat, oats and brown rice promote long and healthy life. These also help maintain mental

One must work in the society in a manner which is conducive to better hygiene and sanitation of the community.

health and resistance against disease. The observance of dietetics and hygiene rules as well as good conduct is a must for making the body and mind alive and renewed.

There are specific rejuvenation practices and herbs for different age groups, which help in restoring the loss of specific bio-values of respective ages. The best results of rejuvenative herbs and techniques are obtained before the loss has happened or during that particular age span.


Essential dietary practices

The traditional systems of medicine offer a comprehensive approach for long and healthy life. Their basic principles focus on preventing and treating illnesses through proper diet, seasonal regimen and natural remedies. They explain the properties of food and medicines in terms of their effects on the body. It is important, therefore, to keep in mind the importance of food during traditional treatments. Careful planning is needed for each individual both in healthy and diseased conditions.

In traditional medicine, there is no separation between food and medicine; the underlying reason is that the absence of nutritive food or diet causes disease in the body. This can only be managed with appropriate food, which acts as a medicine to heal the body of its ailment.

There are many disadvantages if proper and regular eating habits are not followed; such as, if the food is taken in excess, and before or after the normal time and interval, as it may lead to indigestion. Similarly, if food is taken in less than the required quantity, it may cause nutritional anaemia, weight loss, sluggishness of mental activities, loss of energy as well as hyperacidity, gastritis, gastric and duodenal (initial part of small intestine) ulcers.

Apart from other factors, “nutritional disorders” are a common health problem among countries in South-east Asia. Nearly 80 per cent of children below the age of 5 years are undernourished and 50 per cent of all pregnant and lactating women have nutritional anaemia. Malnutrition is the single largest contributor to the high rate of death and disease among infants and children. Here, the traditional systems of medicine have a role to play as they are deeply rooted in culture and social values.



The observance of dietetics and hygiene rules as well as good conduct is a must for making the body and mind alive and renewed.

Healthy food



1. Freshly cooked, with little oil/fat, compatible, clean, light, warm and seasonal food should be taken.
2. Meals containing all six tastes namely, sweet, sour, salty, pungent, bitter and astringent should be included.
3. Food items recommended in different categories such as – cereals, pulses, vegetables, fruits, dry fruits, milk and milk products, beverages, non-vegetarian foods, condiments and spices.
4. Recommended foods according to constitution, age, work profile and disease.

Unhealthy food

1. Those that contain foreign bodies such as dust particles, grass, bones, hair, nails, etc.
2. Preserved, tinned and canned foods.
3. Baked (half baked, over-cooked food) and re-warmed, stale food.
4. Excess of refined cereals.
5. Food having more of low calories (millets).
6. Excessively hot, spicy and salty food.
7. Rotten, unripe or unseasonal fruits or vegetables.
8. Foods containing synthetic agents.
9. Consumption of incompatible food items.
10. Focussing only on one or two tastes.
11. Having curd daily.

Eating a healthy diet means that quality, quantity and time must be appropriate. These vary with age, constitution, digestive power, season, any underlying ailment and also from person to person. One has to eat food which is suitable in all aspects to stay healthy. In addition, wrong cooking procedures, irregular timings, imbalanced and non-congenial food causes ill-health. Also, not following the prescribed rules for preparing, preserving and eating food may also cause imbalance of health.

Diet and mind

Diet plays an important role in keeping our mind healthy. The effect of food on mind may be seen in the following three types of diet. Food must be eaten in a balanced manner to keep both the mind and body healthy.

1. Vegetarian, not too oily/fried, not too spicy food items are congenial to the body.
2. Hot, sour and salty, very spicy food excites the mind.
3. Very oily, heavy food leads to a lethargic mind.



Rules for food consumption

Do's

- * The food should be tasty, warm, unctuous, nutritious, fresh, easily digestible and presentable in appearance.
- * Items should be suitable to one's constitution, mental and emotional temperament.
- * One should eat in a comfortable sitting position, in pleasant surroundings, in suitable utensils
- * Food should be cooked as per individual choice.
- * It is best to concentrate on food while eating and finish with a peaceful mind.
- * Food should neither be very hot nor very cold.

- * Liquid/water intake should be more frequent and in small amounts.
- * Rich food should be taken in a limited quantity and frugally.
- * Heavy food should not be taken at night. The proper time for night meals is two to three hours before going to bed.
- * One should eat only when the last meal has been digested and one feels hungry.
- * For overall good health, one or two proper meals are sufficient. Other than this, if hungry, one can have fruits, dry fruits, a salad, liquids or milk.
- * Every meal should contain all six tastes namely sweet, sour, salty, pungent, bitter, and astringent.
- * One should start with sweets/salad/water/fruits, then proceed to the main course, and end it with chewing fennel, cardamom, clove, betel leaf, etc.
- * Variety in food is good.
- * Food must be eaten leisurely, neither too fast nor too slow.
- * After meals, one should sit with a straight spine for some time, walk for some time and then lie down on your left side for a while so that the consumed food is digested properly.

Don'ts

1. Daily consumption of heavy foods.
2. Eating food in hurry, worry, with excess curry.
3. Eating either very slowly or very fast.
4. Eating and performing any other activity such as reading, talking, watching television, working on the computer, travelling or any other work.
5. Taking food when one is depressed, angry, greedy, , etc.
6. Excessive use of any of the six tastes namely sweet, salt, sour, pungent, bitter and astringent.
7. Daily consumption of spicy, salty and pungent foods.
8. Overeating, skipping meals or eating very less, munching again and again and eating when one is not hungry.
9. Sleeping immediately after meals.
10. Playing games, travelling, physical work, talking or laughing loudly immediately after meals.

Incompatible diet

Any food with incompatible or contradictory qualities has a poisonous/toxic effect on the body that aggravates the three humors: ether and air (*Vata*), fire and water (*Pitta*) and water and earth (*Kapha*), which in turn may lead to various disorders; viz: lumps, fever, allergic skin reaction, eczema, abscess and other skin diseases. It also impedes strength, vigour, memory, immunity, etc. Some contradictory combinations are:

- * Fish or its soup along with milk.
- * Honey with butter.
- * Milk or milk products with alcohol.
- * Milk with sour or salty foods.
- * Radish consumed with milk.
- * Lotus stem with honey.
- * Milk or curd with sour or citrus fruits.
- * Cooked or warm honey.
- * Fruits with potatoes or other starchy foods, etc.

SPECIFIC DIET FOR SPECIFIC CONDITIONS

Pregnancy and lactation

- * Milk and milk products, different types of gruels made from cereals and pulses, sweets.
- * Green vegetables, cereals, fruits.
- * Unpolished rice, green, horse and black gram, etc.

Diet for children

- * Milk and milk products.
- * Honey, sweet and a little fatty food.
- * Raisin, almonds and other dry fruits..
- * Sweet jam made up of gooseberry, white gourd, grapes, etc.
- * Seasonal fruits.
- * Wholesome meals, which are nutritive and digestive by adding bishop's weed, cumin seeds, fenugreek, etc.



Any food with incompatible or contradictory qualities has a poisonous/toxic effect on the body

Diet for the elderly

- * Diet that aggravates energy of movement, dry foods, and preserved, unwholesome foods should be avoided.
- * Milk, butter, Cheese are to be taken in very moderate quantities.
- * Easily digestible food, barley, red variety of rice, green gram, black gram should be taken.
- * Fruits such as gooseberry, banana, citrus and other seasonal fruits are also good.

The above principles as laid down under daily routine, seasonal routine, diet, behavioral and ethical principles are useful in preventing illnesses as well as for promoting health. Proper observance of these principles leads to harmony within body, mind, and spirit, leading to physical, mental, social and spiritual health. Such observance leads to wellness.

Procedures/techniques and exercises to promote health

Acupressure

Acupressure is an ancient healing art developed in Asia over 5000 years ago. Fingers are used to gradually press key healing points in different parts of the body, which stimulate the body's natural self-curative abilities. Stimulation of acupressure points releases muscle tension, promotes circulation of blood and enhances the body's life force energy to aid healing. Acupressure therapy is used to relieve pain, strengthen the sexual reproductive system, cleanse the body for greater health, and tone facial and back muscles.

Massage (traditional Chinese *Tuina*, *Nuad Thai* and Indian *Abhyanga*)

***Tuina*:** It is a popular manual technique commonly used to promote health based on theory, diagnosis and treatment of conditions associated with pain. The pain could be as in soft tissue injury, bone fracture, joint dislocation. It consists of pushing (*Tui*) and grasping (*Na*) of soft tissue for pain relief. In bone fractures and joint dislocations, *Tuina* is often used together with modern medical care in management of these conditions.

***Nuad Thai*:** This Thai massage has a tradition of over 600 years. It consists of examination, diagnosis and treatment with the intention to prevent disease and promote health. It uses pressure, circular pressure, squeezing, touching, bending, stretching, application of hot compresses, steam baths, traditional medicine or other procedures based on the principles of Thai traditional medicine. It is said to

promote health by relaxing muscle tension. It is also used to relieve tension, headache, muscle spasm, and in paralysis.

Indian Abhyanga: *Abhyanga* is a massage technique of *Ayurveda*. It is used for health promotion and treatment. Lukewarm, fragrant, medicated oil is used for massage and the oil is selected based upon season, disease and the constitution of the person. Oils having a cooling effect are used for massage in summers and those having a warm effect are used for massage in winters. The massage is done right from head to toe with different steps for different parts of the body.



Abhyanga massage

- * Delays aging process.
- * Relaxes body and mind
- * Improves eyesight
- * Improves physical mental strength, improves digestion
- * Promotes longevity of life
- * Improves the texture of skin and makes it soft
- * Improves immunity
- * Helps in good sleep
- * Detoxifies the body

Exercise (ancient Chinese *Tai chi* and *Qigong*)

Tai chi is a practice involving slow, graceful exercises that combine movement, meditation and deep breathing to improve the flow of *chi* (life energy). This is thought to prevent illness and improve well-being. *Tai chi* originated in China as a martial art. It is practiced to reduce stress, and to adults and the elderly improve posture, balance, muscle tone, flexibility and strength to promote overall well-being.



Qigong is a health care system that integrates physical postures, breathing techniques, and focused intention. It is a combination of *qi* and *gong*. *Qi* means life force or vital energy that flows through all things in the universe. *Gong* means cultivating energy. *Qigong* is practiced for health maintenance, healing and increasing vitality.

Naturopathy/Nature Cure Naturopathy or Nature Cure is a traditional system of healing based on time-tested principles of governing life, living and health. These principles of healthy living, prevention and healing were firmly integrated in the customs and culture of people since ancient times. The principles and practices are well documented in the ancient scriptures.

Naturopathy is a science of health and healing. It teaches how one should live, what one should eat and how our daily routine should be. Nature cure not only helps in attaining freedom from disease but also helps in acquiring positive and vigorous health. Naturopathic physicians help to remove the obstacles in recovery process. They employ natural therapies that strengthen and stimulate the individual's own healing processes. Its main objective is to change the living habits of people and to teach them the healthy lifestyle with the help of different modalities of Naturopathy.

The human body has remarkable recuperative power. It is composed of five great elements – earth, water, fire, air, and ether. Imbalance of these elements creates diseases. Treatment of diseases by these elements is known as Nature Cure or Naturopathy.

The following are some of the important therapies under nature cure which are employed not only for curative purposes but also for prevention of diseases and promotion of health.

Diet therapy

Diet therapy is the main component of naturopathic treatment. Food is regarded as medicine in Naturopathy, which must be taken in natural or maximum natural form only. Fresh seasonal fruits, fresh green leafy vegetables and sprouts are excellent for this purpose.

In naturopathy, food items are generally classified based on the acidic or alkaline ash they leave after digestion and burning down in the body. To remain healthy, it is important that food items be 80 per cent of alkaline and 20 per cent of acidic nature.



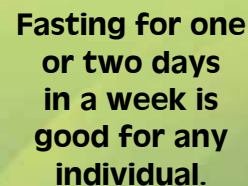
These diets are broadly classified into three types:

- **Eliminative diet:** This is the first stage of treatment, which induces complete cleaning and detoxification of the body by eliminating all unhealthy, unwanted matter and toxins from the system through the kidneys and intestines. It is very near to fasting. Therefore, food items such as citric juices, grape juice, tender coconut water, etc. are part of the prescription.
- **Soothing diet:** In the second stage of treatment, when the body is almost clean and detoxified, patients are kept on soothing diet for some time. This diet is slightly filling. The patient does not feel as if he/she is on fasting and action is not as vigorous as eliminative diet. The food items in this phase generally consist of fruits, salads, boiled/steamed vegetables, sprouts, vegetable soups, butter, milk, etc.
- **Constructive diet:** In the third stage, when the body is fully detoxified and the patient is free of disease condition, he/she is prescribed a constructive diet. Here, his/her new blood, lymph and body cells build up normally. The food items in this phase generally consist of wholesome flour, unpolished rice, a little bit of pulses, sprouts, curd, etc. Being alkaline, these diets help in improving health, purifying the body and rendering it immune to disease. To this end, a proper combination of food or a balanced diet is a must for any individual to have good health.

Fasting therapy

Fasting is an important medium in the natural methods of health preservation. For fasting, mental preparedness is an essential precondition. Thereafter, fasting for one or two days is good for any individual. Prolonged fasting should be done only under the supervision of a competent naturopath.

Basically, fasting in naturopathy intends to give rest to the digestive system. During this process, the vital energy, which digests the food, is wholly engaged in the eliminative process. Thus, it is an excellent treatment for removing the disorders of mind and body. Fasting is considered as a universal remedy for treating almost all disease conditions and is especially advised in treating indigestion, constipation, flatulence, hyperacidity, bronchial asthma, obesity, high blood pressure, gout, etc.



**Fasting for one
or two days
in a week is
good for any
individual.**

Mud therapy

Mud therapy is simple and effective in cooling the body. The mud used for this purpose should be clean and taken from 3 to 4 feet depth from the surface of the ground. There should be no contamination with stone pieces or chemicals, manure etc. in the mud.



Mud refreshes, invigorates and vitalizes the body. It dilutes and absorbs toxic substances and ultimately, eliminates them from the body. Mud is used successfully in different diseases such as constipation, headache due to tension, high blood pressure, skin diseases, etc. In headache and high blood pressure, mud pack is applied on the forehead, whereas it is applied over the abdomen to relieve constipation.

Hydrotherapy

Like mud, water is an ancient method of treatment. Taking bath properly with clean, fresh and cool water is an excellent form of hydrotherapy. Such bath opens up the pores of the skin and imparts lightness and freshness to the body. Physiological systems and muscles of the body are activated and the blood circulation improves. The old tradition of taking bath in rivers, ponds or waterfalls on specific occasions is virtually a natural form of hydrotherapy. Hip bath, enema, hot and cold fomentation, hot foot bath, spinal bath, steam bath, immersion bath, hot and cold packs on abdomen, chest and other parts of the body are the modern versions of hydrotherapy. Hydrotherapy is used mainly for preserving health and relieving different types of illnesses.

Masso-therapy

Massage is also a modality of naturopathy and quite essential for preserving health. It aims at improving the blood circulation and also strengthening bodily organs. In winter, sun-bath after massaging the whole body is a well-known practice of preserving health and strength. It bestows combined benefits of massage and sun-ray therapy. In disease conditions, necessary therapeutic effects can be obtained through specific techniques of massage. Massage is a substitute for exercise in those who cannot do it; e.g. in the elderly, who can derive some effects of exercise through massage.



Chromo-therapy

The seven colours of sun rays, violet, indigo, blue, green, yellow, orange and red are believed to have different therapeutic effects. For prevention and treatment of different illnesses, these colours are used. The simple method of chromo-therapy means exposing the patient to sunlight, which helps in the process of recovery from illness, and also helps in keeping a person healthy.

Air therapy

Fresh air is essential for good health. The advantage of air therapy can be achieved by means of air bath, when air therapy is given daily for 20 minutes or longer. It can be obtained by walking daily, wearing light clothes at a clean place where adequate fresh air is available. Yoga breathing exercise is also used therapeutically as a method of air therapy. It has soothing and tonic effect on millions of nerve endings all over the skin. It is beneficial in cases of nervousness, rheumatism, skin, mental and other chronic disorders.

Aromatherapy

Aromatherapy is the use of essential oils derived from herbal materials such as flowers, leaves, seeds, and other parts of the plant. It is used by inhalation, or through the skin in bath, compresses and massage to a localised area or to the whole body to produce beneficial effects. It has been found to be helpful in promoting health and well-being as well as in reducing stress and anxiety.

Yoga

Yoga is an ancient self-care practice. It is a holistic approach to healing and well-being and a system that integrates healing with culture, diet, environment, and tradition. Yoga practices have shown to reduce signs of mental stress, both in normal persons and in those with abnormally high levels of stress. During the process of its growth and development, Yoga has become more popular as a system of health care. Today, it has gained worldwide acceptance.

The practice of yoga involves body postures, hand postures, breathing exercises and meditation. These components help to improve or develop one's inherent (inside us) powers in a balanced manner. Yoga, when practiced with faith, perseverance and insight, rejuvenates the entire body and its various organs.





The brain, heart, lungs, liver, pancreas, kidney, bowels, nerves, muscles, tissues and glands of the body derive tremendous health benefits. Practicing Yoga ensures oxygenated and balanced blood supply, kindles up the appetite, bestows control over seminal fluid, senses and mind and imparts increased vitality, vigour and longevity to the practitioner.

At present, Yoga is being effectively used for health promotion, disease prevention and management, as also for rehabilitative purposes.

Body postures (*Asanas*)

These are special patterns of postures that stabilise the mind and body through static stretching. The aim is to establish or improve the general muscle tone. Every exercise should be performed effortlessly and maintained for a period of time comfortably. There should be no jerks and the performance of exercise should not lead to undue fatigue.

The body postures are classified as: (1) Meditative; (2) Cultural and (3) Relaxative.

1. Meditative body postures are sitting postures, which maintain the body in a steady and comfortable condition. By various arrangements of the legs and hands, different meditative body postures are performed. The characteristic feature of the meditative posture is keeping the head, neck and trunk erect.
2. Cultural body postures involve static stretching, which bring about proper tone of muscles. This contributes to the flexibility of the spine and renders the back and spinal muscles stronger. They also stimulate proper working of the vital organs in the chest and abdominal cavities. There are many varieties of cultural body postures, which are performed in sitting, lying and standing position.
3. Relaxative body postures are few in numbers, are performed in a lying position and are meant to give rest to the body and mind.

Salutation to the sun is a very useful and popular mode of yogic exercise. It consists of a series of 12 body postures, performed early in the morning, facing the rising sun. These energise the organs and muscle systems of the body. Regular practice ensures a balanced supply of oxygenated blood and perfect harmony between all the systems of the body. The entire human constitution, thus, feels rejuvenated.

Yogic breathing (*Pranayama*)

It is an important component of Yogic practice. It involves slow, deep inhalation, holding of breath and slow deep complete exhalation. The main objective of Yogic breathing is to gain control over the autonomic nervous system thereby regulating the physiological as well as mental functions of the body.

Yogic meditation (*Dhyana*)

This meditation is included in the following section on “Meditation for mental and spiritual well-being”.

Meditation for mental and spiritual well-being

Meditation is a practice that involves mind and body. It originated in ancient times as a part of religious and spiritual practice. Meditation relaxes the mind and therefore, can be beneficial in reducing mental stress. There are many types of meditation techniques and among the most popular are Yoga meditation, mindfulness meditation and transcendental meditation – to name just a few.

Yogic meditation involves ethical practices, stabilisation of body, breath control, withdrawal of senses from external senses and concentration. In **mindfulness meditation**, a common practice is to focus attention on a bodily function such as breathing – inhalation and exhalation – so that other thoughts are blocked from entering into the mind. In **transcendental meditation**, one focuses on a word or phrase in the mind, or a sound that one hears. The result achieved, thereby, is similar as in mindfulness meditation.

Meditation is practiced to reap a variety of benefits: to increase calmness of the mind, to promote physical relaxation, to improve psychological balance, to cope with the stress of illness, or to improve overall health and well-being. Through regular practice, one acquires the power to concentrate deeply. Such enhanced concentration results in many benefits such as increased physical energy, mental efficiency, creativity, calmness, memory, intellect, psychic power and intuitiveness.

Disease management with medications including herbal and other traditional remedies

Health of an individual is a dynamic integration of environment, body, mind and spirit.. Taking this fact into consideration, traditional systems of medicine lay great emphasis on preservation and promotion of health and preventing the occurrence

of disease. Besides, it advocates employing holistic approach to understand all aspects of human life including diagnosis and management of diseases.

The treatment plan is worked out on the basis of underlying morbidity keeping in mind the severity of the illness and the tolerability of the patient. A four-pronged treatment plan consisting of avoiding the causative and precipitating factors of disease, bio-purification, use of soothing remedies and a health-promoting regimen are the hallmarks of traditional treatment. Specific diet and lifestyle guidelines are also prescribed along with medicines and therapies..

All Member countries of the South-East Asia Region have their own traditional systems of medicine. These contain herbal and traditional remedies for specific ailments that have been used by successive generations in the past. Handed down from generation to generation, they have been accepted to be effective and safe. Some of the recent publications in the Region are:

- (1) *Guidelines for the use of herbal medicines in family health care* by the Ministry of Health of Indonesia (2010);
- (2) *Traditional herbal remedies for primary health care* by WHO Regional Office for South-East Asia (2011); and
- (3) *Monographs on the use of traditional medicine in primary health care* by the National Institute of Traditional Medicine, Bhutan (2012).

The above publications contain treatment of common ailments with herbal remedies for interested users. These include acidity and gastritis, common cold, conjunctivitis, constipation, cough, diarrhoea, earache, eczema, eye discharge, fever, fungal infection of the skin, headache, indigestion, jaundice, leucorrhoea, lice infestation, malaise, painful menstruation, parasitic infestation, piles, scabies, sexual dysfunction, sprain, toothache, urinary disorder, vomiting and wound. This section gives information on what types of illnesses are treated with herbal remedies and should be kept.

Concluding tips for self health care – the traditional way

In the traditional health care approach, health is achieved by devoting time for mind and body. Thus, two to three hours every day should be set aside for self health care; enonly th can holistic health be achieved. Otherwise one remains dependent on medicines.

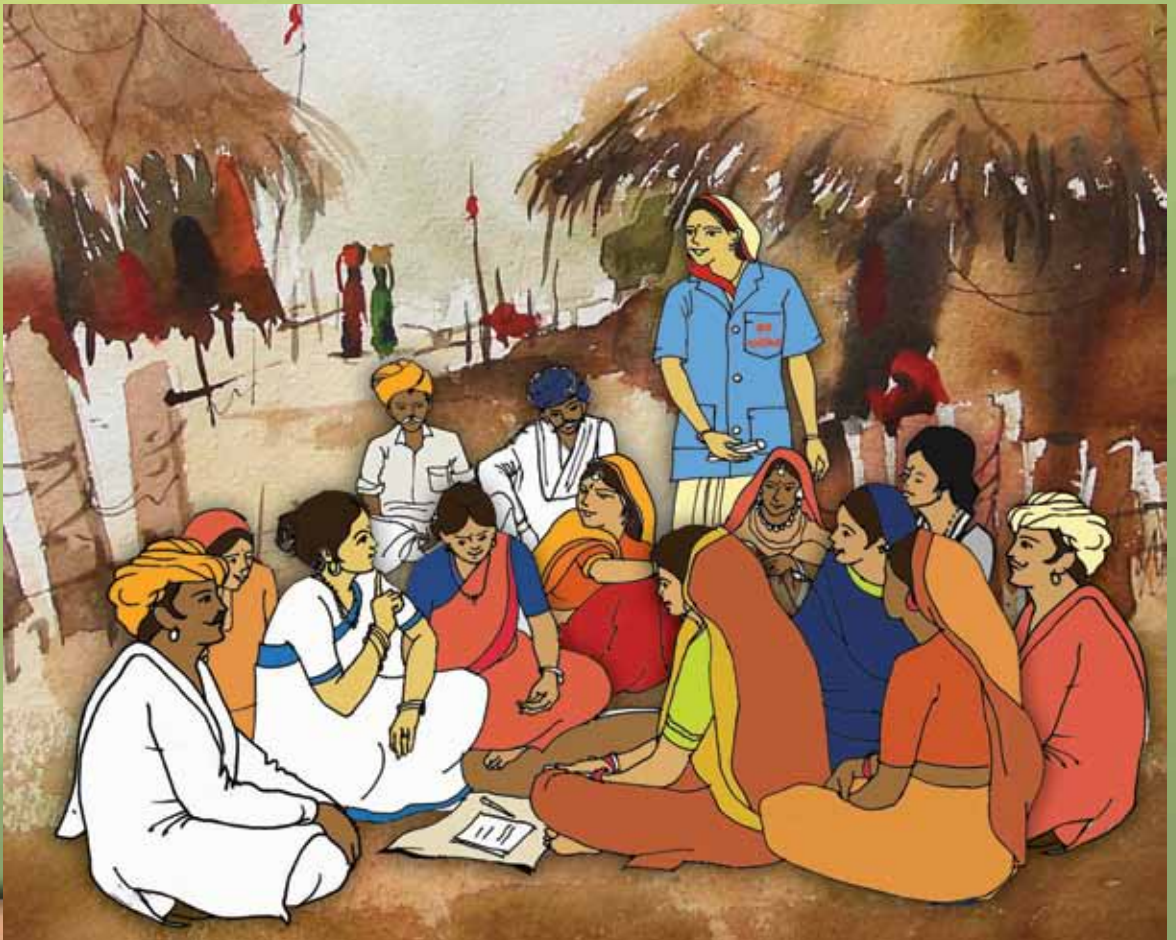
A schedule of two to three hours per day should be something like this:

- * Daily walk: 45 minutes.
- * Daily workout: One hour - Yoga/exercise/aerobics/gym.
- * Daily meditation: 20 minutes.
- * Daily prayer according to belief: 15 minutes in the morning and evening.
- * Taking care of the following:
 - Diet.
 - Sleep.
 - Sexual behavior.
 - Daily schedule
 - Seasonal regime.
 - Suppressible and non-suppressible urges.
 - Conduct, and
 - Thoughts.

Thus, we see that the traditional systems offer a wealth of wisdom in strengthening, curing and preserving our bodies. Practice of the above tips should be done at least five days a week. These practices help in activating one's own healing power.

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Education and Empowerment for Self Care



Education and Empowerment for Self Care

The scope of self-care, as we have understood from other chapters, includes promoting health through positive, healthy actions; disease prevention and control; self-treatment, taking institutional/specialist care and treatment to regain health. It must be practiced as an integral part of our lives. Unfortunately, self care is not a priority for many people, especially those who need it most, the socially and economically disadvantaged. Therefore, it is important to help community health workers and volunteers to develop and sustain self-care.

Community Health Workers (CHW) and Community Volunteers (CV) have a mission to motivate and support people to stay healthy or know how to take care of oneself in sickness and recognize signs and symptoms when professional care is needed. This requires not only individual action but also collective actions of families, organizations and the community as a whole.

To motivate people towards self-care is not just telling them what to do. They need to be informed what is self-care, what will happen if they don't do it, what are the benefits of doing it, how to do it, who they can turn to if they need help, etc. Even if people change their behaviours to practice self-care, without supporting and motivating mechanisms, they can stop doing it any time.

As an individual, a person must take care of his/her own health, eat healthy foods, exercise adequately, and properly manage stress. Collectively, families and communities must work together to keep their environment clean and green. The environment must be conducive to health; appropriate exercise facilities must be made available to people, public places such as schools, workplaces, community areas, etc must be smoke-free and pollution free.

A person must take care of his/her own health, eat healthy foods, exercise adequately, and properly manage stress

Therefore promoting self-care behaviours among people is not just about informing people, but requiring systematic actions - raising awareness, changing views, and building skills.

This chapter will cover 1) the principles and methods of learning amongst adults; 2) teaching/learning methods 3) steps in educating and facilitating people 4) supporting people to be empowered for sustainable self-care; and 5) community/ groups organization.

Principles and methods of learning among adults

General guidelines

In educating community people, CHW and CV are dealing with adults who learn new information and skills in a way that is different from how they learned it as children. As trainers, they will play the role of facilitators rather than teachers. In order to make education for adults interesting and effective, it is important to:

Be participatory: Adults learn best when they are actively involved in the learning process. They are more likely to learn and retain new information when they are active participants.

Be supportive: Adults are most likely to learn in an environment that is supportive, in which participants receive positive reinforcement, such as praise and encouragement, instead of negative feedback, such as criticism.

Build on the participants' experience: Effective training provides adults an opportunity to build on existing beliefs, knowledge, and skills and to share these with each other.

Valuing participants' experiences not only helps them to feel comfortable experimenting with new knowledge and skills, but is also effective in helping them link what they have learned to real-life contexts.

Be relevant: Adults in the community respond best to learning opportunities that offer them the chance to learn information and skills that are relevant to their lives and communities. They are also likely to respond best to training that helps them build knowledge and skills that they will apply immediately.

Role of trainers and facilitators

As facilitators, CHW and CV will help the participants learn, motivate them, and manage the training by:

- * Making sure that each participant understands how to work through the materials and what he/she is expected to do in each exercise.
- * Providing relevant information
- * Answering questions and clarifying any unclear or confusing issues.
- * Leading group discussions, demonstration, and role play practice
- * Helping each participant identify how to apply what they have learned to educate and empower people for self-care.
- * Providing guidance and feedbacks on their performance during classroom sessions and practice.
- * Motivating the participants to participate in the activities



How CHW and CV can prepare themselves:

To educate and facilitate people for empowerment, one needs to have relevant knowledge and skills. In addition to knowledge about self-care, following skills are needed:

- * **Communication skills** include listening patiently to others; making no judgement to others' statements; responding promptly to questions; speaking clearly and simply; asking questions; interacting with the participants; using appropriate body language such as facial expression, gestures and movement.
- * **Facilitation skills** include motivating people to participate in the activities, keeping people involved in the discussions, providing constructive feedbacks; and encouraging people to ask questions.

To facilitate the communication and facilitation skills, it is important to:



- * Practice listening to others, showing attention while other people speak; keep eye contact, asking questions or providing responses when it is appropriate. As much as you can, using open ended questions such as “What do you think about people who smoke?” rather than questions that need “Yes” or “No” answers such as “Is smoking bad to your health?”
 - * Respect others’ opinion; not judging their opinion. Making the point using evidence and information; not getting into unnecessary arguments.
 - * Use names during visits to the participants, give them credit where required, using the speaker’s name when referring back to a previous comment, and providing relevant information as needed.
-
- * Be honest. One must not try to answer all questions asked.
 - * Be humble; not putting oneself above them.
 - * Practice what one preaches. One must be a good role model for the groups. It will be difficult to convince others if CHW and CV don’t it themselves.

Teaching/Learning methods

There are many methods to help people learn. These include lectures or presentation, demonstration, group discussion, group work, role play, etc. This section will explain some of these methods that assist in educating and empowering people.

Lectures and presentation

Presentation is the most used teaching method. It is often referred to as “the lecture method”, “presentation” or “chalk and talk”. If used well, it can convey key facts, concepts and principles. A framework can guide the participants through a topic and stimulate interest in a subject.

A good presentation contains:

- * Clear statements with examples of what is being explained
- * Organization of information
- * Re-capping of key points at the end of each sub-topic
- * Providing opportunity for participant involvement.

Demonstration

Demonstration is an effective method widely used for teaching skills. It is always linked in some way to other instructional strategies. For example, learners are unlikely to learn effectively from demonstration alone. They will need guided practice and feedback on how they are doing. Following is a guide for planning and conducting a demonstration session. CHW and CV must be clear in their minds about:

- * What they are trying to demonstrate.
- * Analyzing the skill(s) needed to demonstrate. Identifying crucial steps of the activity and breaking it down into basic operations from start to finish.
- * Organizing the materials needed in the demonstration.

While carrying out the demonstration, CHW and CV should:

- * Make sure everyone can see the demonstration
- * Describe what they intend to do and why
- * Run through the complete activity first, so that learners know what they are aiming to do.
- * Reveal the main steps of the activity and identify the likely problem areas.
- * Accompany each step with a verbal description, and attempt to show the skill from the operator's point of view, but keep to the main points. Too much talking will distract learners from the visual demonstration.
- * Watch for their response and action and adjusting one's pace accordingly.
- * Inspire confidence in learners as they proceed. This way they will be willing and keen.
- * Try not to over impress or be too absorbed in the demonstration.
- * On finishing the demonstration, check that the process has been fully understood. Ask the participants to recap the main points of the activity. This will help to identify gaps in knowledge and reinforce learning.

Participant practice and supervision

Participants need to practice new skills in order to achieve a positive and benefit result. In providing participants with opportunities for individual practice, it is important to:

- * Plan specific times during the session when individual practice is to be undertaken.
- * Arrange the environment with care. This should be done before learners arrive.

- * Ensuring that when learners begin, they have an idea what they are supposed to do.
- * Ensure that the participants employ the correct procedure right from the start.
- * Being conscious of the group as a whole, even if they are dealing with one person at a time. Listen to what is going on around in case some participants are bored, confused or giving each other wrong advice.
- * Allocate time fairly between individuals.
- * Provide swift and accurate feedbacks for participants.
- * Be encouraging and praise people for what they are doing or trying to do. The whole purpose of individual practice is to do it more efficiently and effectively. When participants experience positive results, their achievement will encourage them to put in more effort for further success. However, until participants achieve some degree of competence, the trainer will need to reinforce their efforts in positive ways.

Group discussion

Group discussion can be an effective method when the main objective is to encourage learners to share information and compare viewpoints. It provides cooperative learning, which encourages thinking skills and triggers new ideas. Listed below are general guidelines for using group discussion during training.

- * It helps to focus on the problems and practices related to the topics selected such as root causes of the problems, solutions to the problems, and how to go about changing people's behaviours. CHW and CV should make sure that they clearly inform the group about the objectives of the discussion.



- * Group discussions can be started by asking questions, for example, how they perceive their health and how is it important to be healthy? How do they keep healthy? Remember that these people have their own experiences; this is why it is best for them to share and learn from each other. They can participate by sharing the information they have, but shouldn't dominate the group.

It may be useful to ask one of the group members to write down points of discussions and, from time to time, read out to the group for consensus. This will also help them to stay focused on the subject.

- * Encouraging participation by keeping them involved in the discussions. Frequently asking them questions to check their understanding and keeping them active thinking and participating throughout the session. Using questions that begin with “what”, “why” or “how”; avoiding using questions that can be answered with a simple “yes” or “no”.
- * One can acknowledge participants’ responses with a comment, “thank you” or a definite nod. This will make them feel valued and encourage further contribution. If they miss some points, one can ask for clarification or invite additional information from others. If the points are still missing, the trainer can fill in the gaps. Quiet members should be encouraged to talk by asking their viewpoint toward the issue in discussion.
- * If the trainer is asked a question, even if they know the answer, they should not give it immediately. One of the participants can ask them back, "what do they think?" This will motivate the audience to think for themselves.
- * If the discussion strays off the topic, the group’s attention should be drawn by telling them they have gone astray, and then original questions/objectives should be restated to make them focus on the main issues.

What to do with overly talkative and disruptive members? Many times there will be group members who love to talk non-stop. This disrupts the effectiveness of group discussion. Listed below are guidelines for CHW and CV to deal with such situations:

- * The talkative member/group should not be asked any more questions. If the person or group answers all the questions directed to the others, answer from another person should be sought specifically. For example, one may turn to the opposite side and ask, “Does anyone on this side of the table have any ideas?”
- * The talkative person or group should be politely told that “You have had an opportunity to express your ideas. Now, let’s hear from others what they have to say on this point.” Then the trainer should rephrase the question and invite other members to respond or address the question specifically to a person.
- * If the person continues to talk about the idea that he/she already proposed and recorded on the flip chart, the trainer can point this out and say “Thank you, we have covered your suggestion.” Then others can be invited to give ideas.

Group work

Group work is one of the group-based learning methods. Participants are divided into small groups of 6 – 8 persons to exchange their views. Situations or problems may be given to them. Their tasks involve discussing the situation/problem and coming up with solutions or recommendations. This exercise helps in improving the communication and analytical skills of the participants and brings out new ideas. Each group can be assigned one task at a time, which must be realistic and relevant to the training. Usually, group leaders are nominated to maintain the proceedings. Each group chooses one member to take notes and compile the group report. Facilitators can be made available as resource persons and to keep an eye on the smooth working of the groups. After the group work, the presenters can put forward their findings and conclusions. It works best when group reports are copied and circulated to all members concerned and incorporated into the training report for future use.

Role play

Role play is a dramatization of a situation or a problem being learned, followed by a group discussion. This method uses drama and theatre to provide participants with an opportunity to practice and perfect the skills learned during this workshop before trying them in a real situation. Role plays can initially be conducted in front of the entire group of participants who can have a chance to observe, ask questions, and provide feedback.

Participants can break into small groups of 6-8 persons. In each small group, the role play can be carried out by 2-4 persons who take the place of, for example,

the CHV, the mother, the children, and the father. Others can observe the role play and provide feedback. Sometimes, it is good to have participants play the roles that are opposite to themselves such as male participants playing female roles and vice versa so they have a chance to place themselves in situations encountered by the opposite sex. The trainer or facilitator can go around the small groups to ensure that the role play is kept short and focused, not taking too much time on planning the script, and making sure that sufficient time is provided for feedback.



What methods to be used?

All methods have strengths and weaknesses, which one needs to keep in mind. For example, a lecture or explanation can convey a lot of information quickly to big groups of learners, but lacks active involvement, which can soon lead to loss of attention. The following thoughts may be kept in mind when choosing education methods:

- * Will the method produce the learning outcomes?
- * Will the method effectively facilitate the development of required outputs (knowledge, skills, and attitude)?
- * Does the trainer have materials or resources required for that method?
- * Does the method suit the learners and the situations?
- * Does the trainer have the skills in managing that method?

Learners may enjoy certain learning methods, but overuse can lead to boredom and ineffectiveness over time. It is best to use a combination of methods that allow learners to listen, look, talk and do.

Steps in educating and facilitating people

It is important that the participants learn how to put all these learning methods together to educate and empower people in their community. This unit will introduce step-by-step guidelines for doing so.

Preparation

Before coming to the session, it is important to do the following:

- * Finalizing the topics to be discussed, the target group and the objectives as well as getting related information to support the discussions must be organized beforehand. For example, if the discussion would be about foods and exercise with adults, CHW and CV may need information about the proportion of adults in the community who are overweight, have diabetes, are hypertensive, etc. This information can be obtained from health staff at health centres. It can draw people's attention to what will be discussed with them. If the objective is to enable the community to cook healthy foods and do appropriate exercises, then one needs to prepare for demonstrations, showing them how to do these activities.

In a class activity, questions need to be put forward to make sure that the participants clearly understand the issue before proceeding further

- * Different groups can be involved – the local administrative bodies, womens’ groups, agricultural groups, etc in the discussions on foods and exercise. These groups can provide supports to motivate and sustain their health behaviours such as providing facilities for community exercise or making healthy foods available in the community. Religious leaders and community leaders can also be invited to give inputs. It might also be useful to have participants who have either positive or negative experiences that would be effective in raising group’s awareness.
- * The materials and documents used must be appropriate for the group. For example, if most of the group members cannot read or write, the key messages need to be communicated to them verbally through pictures or photos instead of using written materials.
- * Selecting a location that makes them feel at home and is supportive to their learning. The place should be quiet, comfortable, friendly and a fear-free atmosphere. This can be a courtyard, under a shade of a tree or the local community centre.

Conducting class activities

Activities to be carried out depend on the objectives of that particular class. Listed below are recommended steps in educating or teaching adults.

- * It is important to introduce the session, explain the objectives one by one and clarify, if needed.
- * It is also useful to determine what the participants already know. They are likely to have variable knowledge and experiences and these can be identified through a group discussion. Questions should be put to the audience, answers need to be listened to and main points written down on a flip chart to get an idea of their knowledge and experiences. Do not immediately disagree or correct their responses but come back to these after the next step where the participants get relevant and correct information.

The information required may be given in a handbook. A participant can read a particular paragraph out loud and the CHW or CV explain the details.

It is vital to discuss with the group to make sure that the information is well understood. This is the time to go back to main points listed on the communication material, say a flip chart or poster. Correct choices should be reiterated and modified. Questions need to be put forward to make sure that the participants clearly understand the issue before proceeding further.

A simple exercise can be conducted to reinforce learning. The facilitator could add an exercise if she/he feels that the trainees have not learnt a particular concept.

Small group discussions and feedback: Trainees work in a group of 6–8 to discuss a given issue or case and answer the questions in their manual. The small groups then present their answers and the facilitator fills any remaining gaps after all the presentations.

Ball games: The purpose of a ball game is to review a list of things, such as the list of danger signs of DHF. Participants stand in a circle and the facilitator throws the ball towards one of them. The trainee should catch the ball and say one item on the list. He or she then throws the ball towards another participant. The game continues until the group has mentioned all the items on the list.

- * If the objective is to develop a certain skill, then the facilitator can demonstrate the skill, such as giving a sponge bath, stabilizing a person who has a fractured leg, giving first aid, etc. It is important to explain ways to develop the skill step-by-step.
- * After a demonstration by the facilitator, each trainee should practice the skill. This can also be done by using role play method. The facilitator/s as well as fellow participants should observe the role play and provide feedback at the end of each session.
- * At the end of the session, the facilitator should summarize the key points.

To help the participants retain information they have learned, the CHW or CV can:

- * Summarize important information at the end of a session.
- * Emphasize key words and phrases to point out important information
- * Limit periods of concentrated learning to 20-50 minutes or less by providing breaks.

End of Day Review (starting from Day 1 of the training)

This is a chance for the participants to give the trainers feedback for the improvement of the training programme. The participants can be asked to answer three questions as follows:

- * What did you like or find useful about the sessions?
- * What should be changed or improved?
- * What did you learn?

The facilitator can indicate what issues will be covered the next day and request the participants to look at the relevant topics in the handbook.

Overview of the Day (starting on Day 2 of the training)

- * Participants can indicate if they have any questions related to the sessions carried out the day before.
- * The schedule for the day can be reviewed to answer any questions participants may have.

Supporting people to be empowered for sustainable self-care

Empowerment is a process by which people gain control over their lives and make their own decisions. It is an internalized process to help people develop skills and confidence in making decisions and taking actions accordingly. To make this happen, people need the right information, appropriate skills and confidence, and continuous supports. To support and facilitate people to empower themselves for self-care, CHW and CV need to provide them with the right information to raise their awareness, change their perception about their health, and appreciate the benefits of self-care practice. They also need to equip them with problem solving skills to overcome any barriers or obstacles. To do this, they need to be able to identify root causes of problem, how to address such causes, and how to set goals. Success will reinforce their practices.

Listed below is guidance for setting goals:

CHW and CV should:

- * State each goal as a positive statement:—‘Eat 4 vegetables a day’ is a much better goal than ‘Don’t eat unhealthy foods.’
- * Be precise: Goals should have dates, times and amounts so that achievement can be measured.
- * Set one goal at a time: This helps to avoid feeling overwhelmed by too many goals and helps to direct attention to the most important ones.
- * Write goals down: This crystallizes the goals and gives them more power.
- * Keep goals reasonable: Small goals are achievable goals. When goals are large, it will be hard to see progress.
- * Set goals, not outcomes. Set goals for behaviors and not for long term

outcomes. For example, ‘eat 1 more serving each of fruits, vegetables and grains each day” rather than ‘lose 10 kilos/pounds.’

- * Avoid setting goals that are too low: It is important to set goals that require a change, but not so large a change that there is no hope of achieving them.

The information provided and methods used must be appropriate for their values, social norms, cultures, and education levels. Telling them what to do will not help them empower themselves. In the process of empowerment, CHW and CV must:

1. Grasp their attention to raise their awareness about health and self-care; change their perceptions about their health and behaviours through assessing themselves, identifying their problems, and what are the barriers preventing them from practicing self-care.
2. Support them to make their own decision and plan for change
3. Provide them with skills needed for the new behaviours
4. Sustain their behaviours through community actions

Raising people’s awareness

How can CHW and CV raise people’s awareness about health and self-care? Few examples that they can do involve relating health to the communities’ physical, social and economical well being; and providing them with real experiences. For instance, they can start with a catchy slogan such as “Health is wealth”. And then add - “Good health cannot be bought, you have to earn it” or “Good health is your own responsibility.” Thereafter, participants can be asked what they think about their health conditions, what illnesses they have, how often they have been sick and what the factors that affect their health are. The facilitator can also ask the participants to measure their height and weight and compare with the standards (This must be prepared before coming to the meeting). The participants can also be encouraged to discuss the risks of being overweight and underweight. The facilitator can add information on causes and health problems of overweight, the severity of such problems; what they should do to maintain good health.

Supporting people to take decisions

If the group is too large, they can be split into smaller groups of 8 – 10 members. Discussion can range from challenges - physical, social, and economical – which may be preventing them from practising self-care. The participants can then as a group, step by step, set the goals and identify how to change their health

behaviours and how they can support each other, what help they need from community or organizations. Each group will be asked to present the results of their discussions. This will allow them to share their experiences.

Building people's capacities

To effectively adopt improved health behaviours, people need skills in planning and practicing as well as develop skills in coping and recovering, if they fail to continue. These can be best done through a small practice session using small group (10-15) efforts to build a supportive environment and a deeper sense of community feeling. After the demonstration, the group can break down into still smaller groups, each having 8–10 members for practice sessions. The activities organized for them must be fun, socially and culturally appropriate, and more importantly, built on their existing experiences and knowledge. One should not assume, that they know nothing about the issues.

For example, it can be a good idea to find out beforehand who in the group is good at cooking health foods and who are good at exercise or who can effectively mobilize people for community action during an emergency. Such persons can be requested to demonstrate their specific skills. This also shows that their skills are recognized and this in turn reinforces the confidence of the group members.

Sustaining people's new behaviours

To support people to maintain their newly developed behaviors, a combination of methods such as peer support, health record, providing feedback, building enabling environments can be used. Cooperation with local administrative bodies working on agriculture or education is indispensable especially in building a supportive environment.

Peer support has been proved to be effective among groups of people who share some common characteristics or experiences such as patients with diabetes, the elderly, housewives, etc. People who share similar experiences will be able to provide good support to others, morally, socially, and physically, through sharing their own experiences.

Objective self assessment is a good method for people to monitor their progress and discern the benefits of their actions. This is important; people will stop doing activities if they think that they gain nothing. There are many tools for self assessment such as a health record or self record of weight, duration of exercise, etc. These tools should be user-friendly, appropriate for the group; or community members can even develop these themselves. Such self-records must be reviewed regularly by either participants, peers or the facilitators. Review must be accompanied by feedback and advice.

Health behaviours cannot be sustained if supporting facilities such as exercise facilities; stores that have reasonably-priced whole grains, fresh and chemical-free fruits and vegetables are not available. Therefore cooperation with other public and private organizations such as local community bodies, women's groups, consumer protection groups, youth and trader groups is indispensable to sustaining people's health behaviours.

Often, people feel like giving up doing the activity after achieving their goal. In such cases, they may continue if they are assigned to help others to achieve similar goals. Community members who have achieved success can lead a new group, provide advice to others, or form a core team with the CHW and CV in helping other to develop self-care skills.

Working with community-based organizations

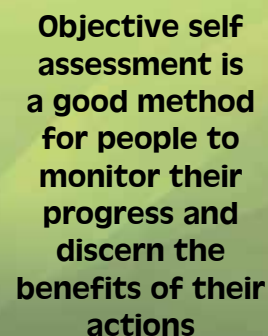
Some tasks or activities cannot be accomplished by individuals or a few family only. Cooperation and support from related organizations or groups in the community is needed. Partnering local administrative bodies, religious leaders, women's groups, youth groups, entrepreneurs or business groups, environmental groups or government agencies) can bring in much-needed additional resources, skills and knowledge to make self-care sustainable and effective. These groups can provide support such as helping in advocacy activities, providing facilities for community exercise or making healthy foods available in the community to motivate and sustain healthy behaviours.

Community organizations and groups that can provide support

The availability of community organizations and groups varies from country to country, and from place to place. The information provided below are examples that can provide initial ideas. Before starting the empowerment process, CHW and CV should explore their communities to get information on the availability of relevant organizations and groups which can provide additional support.

Examples of activities that can be carried out in cooperation with community-based organizations to educate or to raise people's health awareness are:

- * **Campaigns during special days** like Health Day, Women's Day, World No Tobacco Day, HIV/AIDS Day. The activities can include, for example, peaceful marches, candlelight processions, public rallies, marches by school children and painting contests. During such events, the presence of media can be a powerful communication to generate awareness among higher authorities and political leaders on local community issues.



Objective self assessment is a good method for people to monitor their progress and discern the benefits of their actions

- * **Community newsletters or newspapers:** These are good mediums to share tit-bits on community events, happenings, key concerns regarding health, facilities as well as important health information. They can be easily developed and printed at low cost.

Examples of community organizations and groups

Local administrative bodies (Community council, Village council)

The local administrative body in any community is the most peripheral level of governance. Since countries have different administrative systems, the compositions and authorities vary accordingly. But it usually consists of 10-15 members, elected through direct elections or nominated by villagers based on their willingness to work for the benefits of the community. They can play an important role in improving the health of the community. Listed below are a few health related activities they can undertake:

- * Support to ensure adequate supply of safe, clean drinking water: Installation and maintenance of deep bore or hand pump wells.
- * Maintaining a healthy environment. This includes garbage disposal, sewage and wastewater disposal, working towards a clean and green environment, pollution control, smoke free public places and creating community gardens.
- * Health activities such as health education, group exercise, vaccination, ante natal care, can be organized in the community health centres.
- * Referral Services: The local administrative body in consultation with a health centre can establish a two-way referral system between the community, Primary Health Centre as well as local private practitioners.
- * Community Information Centre: In addition to the community health centre, the local administrative body can identify one place where educational materials, posters, newsletters, magazines, newspapers and health-related periodicals can be kept to be used as an Information Centre.
- * Registration and maintenance of population records: births, deaths, marriages, migration.
- * Disease and disaster surveillance: The local authorities can also set up a system to keep track of any disasters that the community is at risk for, any unusual health-related occurrences with epidemic potential such as undefined fever which can lead to influenza, malaria, dengue hemorrhagic fever, TB; diarrhoea, etc.

The local administrative body may have sub-committees such as health, sanitation, and nutrition committees to support some of the aforementioned activities. They can:

- * create awareness in the community about available health services and the community's health rights
- * develop a community health plan based on the situation and priorities of the community
- * record and maintain community health records and health information
- * take initiative to address health challenges and problems.

Religious leaders

It is important to consider that one of the best way to approach any community from the can be through religious teachings, norms and influences. Health education programmes are often more successful if religious organizations and leaders collaborate in advocating and educating the community on the benefits. If the leaders are properly sensitized and educated about the target group's needs (for example, they have seen or heard about a particular community's health problems, challenges and issues (having heard about them personally from the affected group), they may become important allies in helping achieve the objectives. It is particularly important to seek out religious leaders who are gender-sensitive since their support can contribute greatly to enabling women and men to participate equally in your programme.

Self help groups (SHGs)

Community Self-help Groups mean a group or a collection of people who have common interests or characteristics. They come together voluntarily, to do activities that serve their interests. Examples of self-help groups are Women's Group, Senior Citizens' Group, Youth Group, Nature Conservation Group, Farmers Group, Consumer Protection Group, etc. Self help groups can:

- * Pressurize the local administrative body to respond to the requests of local people,
- * Help in demonstrations such as cooking health foods, planning a public meeting
- * Pressurize traders to provide quality and healthy products with reasonable prices to customers.
- * Make healthy products available in the community
- * Run campaigns for "Healthy Diets" "Exercise" "Stop Smoking and Drinking", etc.
- * Encourage women to keep their houses and surroundings clean
- * Help in maintaining a Clean and Green Environment

Health Centre/health staff



Staffs at a health centre can provide information related to health and health situations of the people in the community. It is a good idea to discuss the key communication messages with the health staff. CHW and CV should work on building a rapport with them on a regular basis. They can be consulted on community health data or updates related to the topics they will discuss with the people. They can also provide support during the interventions, if informed well ahead of time. Listed below are examples of support that can be expected from health staffs:

- * creating awareness about health and self-care in the community
- * reinforcing people's health behaviours
- * providing screening tests such as blood sugar, blood pressure, measuring nutritional status.
- * Providing information on community health status.
- * Providing materials needed for educating and empowering people
- * mobilizing community resources to support people's self-care practices.

Traditional healers/ herbal doctors

Traditional community healers can provide information related to using home remedies and medicinal plants for minor ailments as well as health promotion. As they are respected by community people, if properly informed, they can play an important role in advocating with people on health promotion and disease prevention.

Youth Groups

A youth group is usually a group of young people who meet and enjoy activities such as sports, music, videos and spend time talking about various issues. Many

youth clubs are set up to provide young people with a personal and social space with activities designed to keep them off the streets, and giving them the opportunity to engage in meaningful and constructive activities.

Youth groups can be important peer educators. They can be good advocates for promoting health promoting behaviours like eating nutritious diet, exercising regularly, playing sports and staying away from tobacco, alcohol and drugs.

How to mobilize community organizations

To mobilize support from these community-based organizations, CHW and CV need to work with local health staff to:

- * Gain information on related community organizations and groups, who may include individuals and organizations affected by, interested in, and/or having capacities to affect people's self-care behaviours;
- * Regularly network with and inform them and other community-based organizations about the problems, what CHW and CV are trying to do, how these will benefit the people and community as a whole, and what they can do to help. Local health staff can also participate in this activity;

Forming a support group

A support group is important in sustaining people's health behaviours. A group in which members share some common characteristics and objectives is effective in empowering people in solving their problems. People who have experienced similar problems usually share common feelings and emotions, and, therefore are more comfortable to discuss their problems among themselves than with professionals. Members can act as role models for each other; seeing others who are contending with the same problem and making progress in their lives is inspiring and encouraging for them.

A support group allows group members to share information, experiences and practices. They can be good role models while helping to solve their problems.

Listed below are guidelines to form a support group:

- * Members of the group should have common interests and be voluntary
- * The objectives of the group must be clear, for example, to support managing of chronic ailments like diabetes, heart disease, etc among diabetic patients;

to support food security and healthy food consumption among members, etc

- * The size of the group should not be too large so that all members can have meaningful and useful interactions;
- * There must be a group leader who can set the tone for and motivate members to participate in discussions, help members to support each other, and be able to deal with problems that come up during the meetings. Therefore, group leaders must be experienced, understanding, flexible and public-minded persons.
- * Group members can discuss and decide on activities and schedules that they would like to have. The activities should serve their objectives both directly and indirectly. The schedules must be convenient for and agreed to by all members. Activities and schedules should be reviewed and modified periodically.

As part of the community, which plays an important role in supporting people's health behaviours, CHW and CV should join the support group activities to build their trust and to ensure that their activities move forward in the right direction.

Remember!!

- * Self care is one of the most important elements to make health equitable to all
- * Empowerment is the best way to help people develop sustained self care behaviours
- * To empower the community is to build their skills and confidence through right information, right skills and the right support
- * The education process must be appropriate for their age, education level, values, social norms, and culture
- * CHW and CV must prepare themselves before empowering members of the community; it is important to talk less, listen more, pay attention to what they say, respect their experiences
- * Content, methods and materials for participatory community sessions must be prepared before the sessions
- * It is important to identify community organizations or groups and discuss ways and means to support self care behaviours among the community.
- * Most importantly, CHW and CV must be good role models. Truly, it is essential to “Practise what you preach”

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The World Health Organization defines Self Care as the ability of individuals, families and communities to promote, maintain health, prevent disease and to cope with illness and disability with or without the support of a health care provider. Self care encompasses several issues including hygiene, nutrition, lifestyle, environmental and socio-economic factors. Promotion of self care is a means to empower individuals, families and communities for informed health decision-making. It has the potential of improving the efficiency of health systems and contribute towards health equity.

This handbook is designed to provide essential information related to the human body and measures that need to be adopted to preserve and promote health as well as prevent disease. It contains information about what individuals can do themselves when illness strikes. It is an essential tool for community-based health workers and community health volunteers to promote health, prevent and control disease. The information in this handbook will also be useful for health professionals and the general public for adopting appropriate self care practices.

Self Care for Health

A Handbook
for Community Health Workers & Volunteers

