

# Institute Of Secretariat Training And Management New Delhi

Training programme on
Water, Sanitation and Health
Under
Capacity Building for Poverty Reduction
Reading Material
On
Health

Prepared by Rekha Sharma Deputy Director

# **Acknowledgement**

Satisfaction and gratitude that accompany the successful completion of this work, would be incomplete without the mention of those, whose guidance and initiative made this work a reality. I would like to thank Shri P.K. Jha, Joint Secretary, Department of AR&PG, Government of India, for his constant support and encouragement.

I am grateful to Dr. Khwaja M. Shahid, Director ISTM, for his guidance, valuable suggestions and unstinted support in accomplishment of this work.

My special thanks are due to Ms. Rashmi Singh, Director, Mission Convergence, Govt. of NCT of Delhi, and Ms. Naseem Khan, Training Specialist, whose cooperation was instrumental in accomplishing this task.

I wish to express my gratitude to Sh. M.P. Sethi, Additional Director, ISTM, who guided us throughout this project and gave useful tips on handling different aspects of the project.

My sincere thanks are also due to MNGOs and NGOs involved in this project, for giving us their assistance in gathering important information which helped in conducting training courses under this project. The project could not have been a success without their support and cooperation.

I also acknowledge the support rendered by Sh. J.K. Bharti, Stenographer, and Ms. Vibhuti Sharma, who worked diligently for the completion of this task.

The credit is also due to various websites and online sources, including the website of Ministry of Health and Family Welfare, for valuable information and pictures, which has gone into preparation of this work.

Rekha Sharma Deputy Director ISTM

# **Index**

Chapter	Topic Page No.	
1.	Introduction	5-14
2.	HEALTH	15-18
3.	FOOD	19-22
4.	ADULTERATION	23-27
	ANNEXURE	28-30
5.	PERSONAL HYGIENE	31-36
6.	HEALTH, HYGIENE, SANITATION	37-39
7.	ILLNESS AND HEALING	40-51
8.	WOMEN HEALTH IN SLUMS	52-54
9.	ADOLESCENT HEALTH	55-58
10.	INFANT/CHILDREN HEALTH	59-66
	ANNEXURE	67-72
11.	GENERAL HOME REMEDIES	73-80

Note — Utmost care and all efforts have been taken to prepare this reading material as accurately as possible, however the information given in this book is merely for reference and must not be taken as binding in any way

**Chapter 1** 

**Introduction:** 

Poverty has rightly been adjudged the biggest curse in this world. Poor people are

trapped in a vicious circle in which poor sanitation leads to sickness and sickness

leads to low productivity. Lower productivity means less money to buy food for family,

who will, therefore, be weaker and more prone to diseases. This circle can only be

broken by better sanitation and disease control leading to healthy conditions of living

which would ultimately result into higher productivity which means more money on

hand i.e. improvement in quality of life,

But is it so easy! Even after six decades of independence, a decent lifestyle - just a

clean house with safe drinking water and proper sanitation facilities, is still a distant

dream, an eluding one to millions of people.

In contrast with high benchmarks of Human development, set up by the western

countries, worldwide, approximately 1.8 million people die because of hunger,

malnutrition and poor sanitation. In India alone, more than 0.6 million children die due

to diarrheal diseases only. The mortality rate is much higher in slum areas. About 50

million people of our population are suffering from intestinal diseases, which claim

approximately 5 million lives every year.

Let us take a look at the pathetic socio-economic conditions prevailing in the slums in

the very heart of our capital city, Delhi. The conditions are no better than anywhere

else in the country.

These slums house about 5 million of our population. The number is increasing at an

alarming rate as lakhs of people are migrating from rural/ remote areas to Delhi in

search of work. These slums are facing acute problems which are –

1500 slums in Delhi house about 5 million people

5

 The average population density in a slum is 300,000 people per square kilometre

An average dwelling houses 6-8 people, yet measures 6ft by 8ft

• The under 5 mortality rate is 149 per 1000 live births

• 1 water pump serves on average 1000 people

Many slums have no latrine facilities

Where latrines are provided, the average is 1 latrine per 27 households

40% of children are severely malnourished

• 75% of men and 90% of women living in slums are illiterate

 Most households earn Rs 1000-1500 per month with a family of 6-8 people.

(Source: Asha,, NGO)

In this scenario, our government has rightly included "Health" as a high priority area. It is of utmost importance to break the vicious circle of poor sanitation-low productivity-less money-less food-weak, sick and poor people. All this can be improved considerably by creating good sanitation and healthy conditions. And as such capacity building at grass root level in health sector, truely deserves the priority, it has got.

As the main determinants of health are sanitation, public hygiene, nutrition and safe drinking water, our health strategy should focus on the integrated development of these determinants for integration of our main health concerns.

The module envisages to impart all the necessary knowledge and skills which are required by a trainer for completion of tasks with regard to providing improved access of primary health care to poor people living in urban slums of Delhi and NCR region.

How to make a start!

**KNOW YOUR COMMUNITY** 

As we know the community living in slum areas and resettlement colonies are very poor. Their sources are meagre and they generally live on their day to day earnings.

Due to financial constraints and unhealthy living conditions, these people are even more vulnerable to health hazards. Consequently their health needs are not adequately met with and in absence of timely help/ treatment, even small problems like cold, cough and fever etc. become serious.

Therefore, the first task is to guide them in a proper manner so that they get good care in time and also without financial obligation or at affordable cost.

It is important to convince them that the health care is equally important in their life as other services like food, clothes, electricity, shops, education, roads, employment, post office etc.

### ASSESS THE HEALTH NEEDS AND PREPARE A STRATEGY

Let us see how we can start the process of drawing up a sound strategy for the community.

It is a participatory process. All the stakeholders especially the marginalised groups of population, should be got involved such as old people, women and adolescents along with SHGs and the school teachers of nearby school, if available. As a process owner, everyone would contribute to the process of preparing and assessing the health needs of the community and also will proactively try to find solutions to these needs.

(SHGs can play a vital role in this task.).

Let community workers and SHGs form a core group. You will be one of the members of this group. This group should go around the basti/ colony, observing various sanitation/health related( e.g. waste water pools and garbage heaps serving as breeding grounds for mosquitoes) problems.

You may engage children in a rally so as to create awareness of health issues, informing people about time and venue of meeting. Songs and street plays also invite attention of people. Then gather in a central place open to all.

Draw a community map on a big paper or a wall. Ask people to draw their

house in the map. Show waste water cesspools in the basti/ colony. Discuss

about problems. Ask people about sources of wastewater flowing in the street

or in cesspools. Mark the houses on the map with objects like small stones in

different colours etc. You can also mark houses having sick people, down with

fever. Then discuss about malaria( linking it with the water formation around

the houses which is the cause for having sick people in the house) with people

and talk of solutions.

(Think of solutions to eliminate breeding sites for mosquitoes. You can handle

more problems in the same meeting. Think of handling problem of malnutrition

amongst children in your areas and how such exercises can be useful.)

**Communication:** 

Health information and communication is more important than medicines

and injections.

Proper information and advice help people to avoid diseases and stay healthy.

Currently, poor people, including especially women and adolescents do not

have access to information on health issues. You can fill this gap and act as a

local resource on health issues. Equipping them with valuable health

information will have a lasting effect and will definitely bring changes in health

promoting behaviours and adoption of healthy practices.

See what people already know and this can be treated as a base to move

further. Start with the more important problems first.

Understand the problems from their viewpoint and find possible solutions.

8

Find effective ways of bringing change in attitude of people. Try and see that even the reluctant persons are drawn into conversation and can be explained the benefits

of living in clean surroundings.

Prepare the meeting grounds for group discussion, personal discussion,

demonstration, community meetings, exhibition, health camps, Self Help Group

(SHG) meetings, meetings of adolescents, religious gatherings, local bazaar days

etc.

• Use aids like flip charts, booklets, posters, prabhat pheris, songs, models,

puppet shows, street plays etc.

• Look for innovative methods in communication.

Assess impact of your efforts. Has it changed how people think? Has it

changed the way they do things? Has it improved utilization of health services?

Enable people to change their behaviour such as construction of sanitary latrines

in their house or community toilettes for the whole basti.

And remember advice is good if only it is practical and replicable. You cite examples

where it has been attempted successfully.

Involve children and women in publicising such activities as they are the

most effective and suitable ambassadors of such cause.

Also organise "Health Melas" or "Health Day" in the basti/community every month.

This will definitely attract the community and also ensure participation of people on

regular basis.

One may think of providing supplementary food for pregnant women or small

children on this occasion.

9

# Counselling

People often need help to find solutions to their health problems. Some of the common health related issues where you can offer help are

- Prevention of / precautions for communicable diseases
- Adolescent health
- Pregnancy and childbirth
- Child Health and nutrition
- Immunization
- Unmet needs of Intimate problems like infections/AIDS
- Chronic ailments like cancers, TB, leprosy,
- Choosing simple health care options

### In such situations

Even if you do not know about these problems fully you can certainly direct people where to go.

- Tell them about the kinds of solutions available in a given situation
- Follow up with them and find out how they are using the help.
- Suggest alternatives if problems persists.
- Warn them about "quakes" or "jhola chhap" doctors.
- Counselling needs knowledge of the subject. Equip yourself with the required knowledge and skills so as to be an efficient guide.

One needs to have lot of sensitivity and sympathy to handle such situations. Counselling also needs motivating skills. Different problems involve different solutions. Therefore motivating becomes necessary.

### IN CASE OF EMERGENCY

If someone needs to be hospitalised in case of a serious illness, some accident, some insect bite etc. one should make sure that the needy and helpless people get the right and timely help.

It would be appropriate to keep some vital information handy about :

- Which is the nearest hospital where the patient can be taken to?
- Availability of transport with help of the people.
- Contact nos and Contact persons in the hospital.
- Good and timely first aid.

# **Escorting helps**

It improves your relation with the families and enhances your credibility in community.

This will make your linkages with the hospital.

# **Primary medical care**

Some problems are common and not serious in nature. For such problems simple home remedies prove to be very effective and are money savers too. This would help in -

- Saving time and money of poor people.
- Reducing potential threat to life by minimizing risks in case of serious diseases like TB, Pneumonia and diarrhoea etc.
- Simplifying many of day to day health tasks.

However be sure about the remedies and medicines being advised as first hand help. One should immediately go in for referral in case of a serious illness or accident. It is always advisable to keep a first aid kit handy for injuries/accident.

# Registration of births and deaths in the community

Educate the community about getting every birth and death in family, registered with the concerned civic authority.

Always keep a diary for noting your experiences, difficulties and thoughts on such occasions. This would act as a powerful guide in future.

⇒ In case of occurrence of any unusual disease in your area, immediately inform the concerned health authority incharge

# What can we do as a Group?

Who is responsible for the image and maintenance of your basti?

- a. The Government?
- b. The civic authority?
- c. The school teachers?
- d. Me, my family and my people?

Every city govt. has an official responsibility to keep the city neat and clean but no govt./civic authorities can do so without our cooperation.

In the first place, we are responsible for the cleanliness of our house and surroundings, for the simple reason that if it is unclean it will affect our health and well being.

# What can I do alone?

a. Should not use plastic bags since these block drains. Instead use cloth bags or paper bags.

- b. Should not litter around. Throw garbage in dust bins only.
- c. Should keep my house as well as surrounding area including the street area in front of my house.
- d. Advise my neighbours to do the same.

# What can we do together in a basti?

- i. We can form a group of women, men and youth to improve our living conditions. Volunteers can be asked to organise meeting of the group and others.
- ii. Each house should try and have its own latrine with the help of loans available under various govt. schemes.
- iii. Community latrines can be constructed by pooling in nominal contributions from each family. This also has to be kept clean with the common funds kept by SHGS.
- iv. Organise daily /weekly door to door collections for nominal payment.
- v. Vermiculture (using garbage to make compost) for wastes can also be a good source of income for some families while keeping basti clean.

Educate the residents about keeping hygiene i.e practicing good habits like using latrines and washing hands after defecation and before eating.

Beautifying basti by keeping small area clean for children and organising meeting of adults.

- vi. If possible, some plants and trees can be grown which will provide cool shelters during summers besides giving it an attractive look. Kids can be involved in this task. They will do it happily and willingly.
- vii. Fill up low lying areas having stagnant water with mud. This will stop breeding of mosquitoes and flies.
- viii. Some women can be trained in matters like health, first aid etc. She will also advise other women to use iodised salt and on family planning matters.

- ix. Some women and youth can be identified in the basti who have ability to read and write. They can be entrusted with the task of coaching children and illiterate people of the basti. They can be paid out of common funds suitably for this task.
- x. Should try and convince others to make small savings everyday. Savings so generated can be pooled in which can serve as a reliable helping hand for needy people in times of need. They can get loans from such common funds at easy rates of interest. This can later on be organised into formal "Thrift and Cooperatives" with the help of community workers/ mobilisers.

Let us take a pledge- we will keep our house, community and city clean for a healthy and wealthy nation.



# **Chapter -2**

# **Health in Slums**



# In this chapter we will learn about

The definition of a slum

The reasons for rise in slums in Delhi

The concepts of 'Health' and 'Public Health

The definition of "slum" varies from country to country. In India, each state has its own definition of slum. The National Definition of 'Slum areas' was set by the Slum Areas Improvement and Clearance act of 1956.

It defines them as places where buildings:

- **1.** are in any respect unfit for human habitation;
- 2. are by reason of dilapidation, overcrowding ,faulty arrangement and design of such buildings, narrowness or faulty arrangement of streets, lack of ventilation, light,

sanitation facilities or any combination of these factors which are detrimental to safety, health and morals.

Slums are an urban phenomenon and they represent an imbalance between migration into cities and economic growth within the city itself. Slums grow in the following ways.

- 1. Population growth of slums. Indian slums suffer from "poor utilization of the reproductive child health services provided by the government, lack of awareness regarding birth spacing, and very low use of contraceptives
- 2. Migration from rural areas to more developed areas by people looking towards to earn more through higher-paying manual labour compared to the low-returns life of agriculture.
- 3. Despite rapid economic growth in urban areas, poverty is still on the rise.

(source : sangamindia.org)



Health

Do you think the following questions can convince the community to give a serious

thought to take care of their health by just adopting healthy practices?

How often do you fall sick in a month?

Are there any sick people in your family?

How much do you spend on medical bills?

How by easy practices you can save all that money on medical expenses

use it for other needs.

Note-people living in these areas, often compare the importance of any need on the

basis of its cost. So just dictating complex definitions and theory on health would not

be successful

The key is to be simple

• Link all important aspects of health to saving money and a better life.

Giving real life examples from their own slum communities.

Invite people to speak and share their experiences among the slum dwellers.

Health is a state of complete physical, mental and social well-being and not

merely the absence of disease or infirmity. The body and mind need to be

**healthy.** And our relation with the society should also be healthy. People often think

health is linked to medicines, doctors and hospitals only. This is not always true.

Imagine!! Working at your full potential

Free from pains, or illness.

Do you like the above idea! Then try and achieve it-How

Just like a tree needs, water, sunlight, air, and manure to grow well and bear fruits, a

human body also needs several things to remain fit and run smoothly.

17

and



Public health: Public health is community health. It has been said that: The mission of public health is to "fulfil society's interest in assuring conditions in which people can be healthy."Public health comprises of dentistry, nursing, optometry (eye treatment), nutrition, social work, environmental sciences, health education, health services administration, and the behavioural sciences, its activities focus on entire populations rather than on individual patients. Doctors usually treat individual patients one-on-one for a specific disease or injury. Public health professionals monitor and diagnose the health concerns of entire communities and promote healthy practices and behaviours to assure that our populations stay healthy.

Doctor's	<b>-</b>	Individual patients
Public health workers		Entire community

The Main Focus Areas Of Public Health In Slum Areas Are:

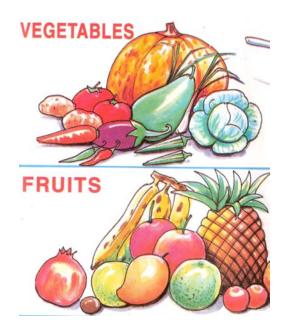
- Vaccination
- Sanitation
- Awareness
- Control Of Infectious Diseases

# Good Health depends upon:

- A balanced diet.
- Personal hygiene.
- Cleanliness and proper sanitation.
- Freedom from illness and proper healing.

# **Chapter 3**

# **Food**





# In this chapter we will learn

What is the importance of food.

What is a balanced diet

What are the sources of nutrients required by our body.

What are the healthy practices that keep us away from diseases

We all need to eat enough and good food every day to stay healthy. Eating all types of food is necessary for keeping our body fighting fit. We need to eat more food when recovering from illness. A child needs more food for growth. So do adolescents. Heavy work requires more food. Men need little more food for energy in the body than women. A woman needs more food in pregnancy and breast feeding. She also needs supplement of iron and calcium.

Certain foods need to be avoided in certain diseases.

All grains and cereals are our staple food. They give us most of energy and proteins. But we need to eat enough of these. Similarly non veg. communities take meat and fish.

Do you know that malnutrition contributes to more than half of childhood death in our country?

# A balanced diet:

A balanced diet consisting of roti, dal, and a subzi



Food has five basic elements: fats (fats from oils and ghee), proteins (white of egg, pulses-milk) carbohydrates (cereals, sugar, sweets), minerals like calcium or iron, and vitamins. Minerals and vitamins are necessary in small quantities. A balanced diet has all these elements in requisite amounts.

Now you will learn about nutritional values of commonly consumed food, pulses, cereals, vegetables, fruits and fats:

- Pulses and beans provide body building elements.
- Food grains like rice, wheat, sorghum, maize, ragi, bajra etc make the bulk of our daily food. They give us energy. Some people think that only rice and wheat are

good. The reality is different. Bajra, ragi, jowar, maize are not inferior foods they are rich in nutrients.

- Oils and ghee provide lubrication. Children need more amount of fats for their growing needs. They provide more energy than other elements.
- Green leafy vegetables and fruits help in blood formation. Vegetables also give us fibre needed for normal bowel movements.



Body requires some minerals like calcium, iron, iodine and zinc. Some nutrients called vitamin are also necessary in small quantities. Both these are present in vegetables, fruits, sprouts and salts .Vitamins and minerals are full of nutrients important for human health . You know that drinking water is good for you, but did you know that every system and organ of our body depends on water. Water is essential for all body functions .together they provide all the necessary elements for health. Combination of foods like pulses with grains (khichdi is good), and lemon with vegetables improves quality of food.Lemon, guava and Amla increase iron absorption and help make our blood healthy red. Fermentation and sprouting increase vitamins in the food. Diets in slums have a basic problem. it consists of a single staple cereal with insignificant amount of fat. Since most slum families have both parents working, they look for cheaper ready to eat, junk food to avoid cooking.

Such food is available from local markets and is not healthy.

Things like khari rusk, or local biscuits, namkeens, pakoras are not healthy at all as they are made from stale oils ,or contaminated ingredients besides being empty in nutrients .Unfortunately present arrangements for keeping a check on these local shops is not sufficient. Hence, the only way to go is awareness. Slum people should be made aware of all damage that is caused by consuming this form of local cheap junk food.

Healthy food practices along with right storage and consumption of food is also necessary.

## **Healthy practices**

- Always wash vegetables, fruit and pulses in running water in clean utensils.
- Do not drain and throw away extra water while cooking rice.
- Do not overcook vegetables.
- Wash vegetables properly before cutting them.
- Do not cook or eat in a fly infested dirty area.
- Always keep the place, where you cook, clean and tidy.
- Always wash hands before cooking or eating.
- Always wash utensils immediately after eating; leaving dirty utensils in the open will attract flies and germs.
- Fresh food is always better than stored food; avoid storing cooked food for next meal.
- Using iron utensils for cooking is good for health. Combinations of dal and cereals called khichri is a healthy eating practice, it is especially good for young and elderly sick people, and even for daily meals.
- Do not eat hurriedly.
- Always try to cover cooking utensils with a plate as this saves a lot of vitamins in the food and helps to cook it faster.

Chapter – 4

**Adulteration** 

It is generally said that home cooked food is best food as it is considered as pure

and hygienic. However, we can be sure of the quality of home cooked food as far as

the cleanliness and hygiene is concerned but can we be sure of the quality of food

ingredients, that have been used for cooking. These could be pulses, milk, ghee,

spices, oils and various other food products.

What can go wrong with our food products?

Have you ever thought that milk is looking like milk but it could be actually synthetic

milk which is made of substances like urea or detergent?

Can we check our food items before cooking?

If we send it to lab it will take a long time.....What to do?

Before answering these questions, let us find out

What adulteration is and What type of adulterants are generally found in food article,

and

How these adulterants can affect our health?

Adulterants are the substances which, if mixed with our food articles, contaminate

our food and can cause potential damage to our health. It can also lead to serious

illnesses like cancer, cardiac arrest, blindness and paralysis as well.

Food adulteration is one of the major problems we face today. Unchecked

adulteration of food may lead to innumerable health hazards.

These days rarely any food item is spared from the malicious practice of food

adulteration. Almost every food-item from milk to fruits, from vegetables to grains is

added with adulterants.

Adulterant reduces the quality of the food and this weakens the health of the one

who consumes them, thereby increasing the cost for healthcare. Regular Intake of an

23

adulterated food can lead to many health problems. From curable to incurable disorders and diseases can ruin one's lifestyle and life as well.

There are different kinds of adulterants which are commonly used for vested interests.

Some adulterants enter via agricultural steps, as they are not cleaned well. These are visible adulterants like stones, leaves, soil, sand and dust to name a few. The consumer can clean them and this makes it less harmful.

Other adulterants that are intentionally added are invisible or they are made invisible by astutely camouflaging with the color or texture. They are generally harmful for the health and most of them lead to serious health problems like cancer.



Artificial colour used to give extra food shine

Common adulterants are lower grade harmful substances like Argemone oil mixed in mustard oil.

Other leaves and saw dusts are adulterant when they are mixed with tea leaves.

Many toxic chemicals are also used to colour sweets. <u>Methanol</u> is an adulterant for alcohol.

In the name of original ghee, it is adulterated with vanaspati or sometimes with animal fat.

Honey is adulterated with other sugar.

Pulses are adulterated by colouring them so they may look fresh.

Similar toxic colouring approaches are used for vegetables and fruits to look as fresh as they can, in order to increase their sale.

One of basic food, milk is commonly adulterated with water and that too from some unsafe source.

The common use of toxic colouring agents as an adulterant for fruits, vegetables, sweets are very dangerous when it comes to health of a person. It can lead to serious health issues like cancer, cardiac problems, insomnia and paralysis and other neurological problems or death as well. When it comes to honey adulteration it seems safer than the adulteration with the toxic chemicals. As this will only have an economic impact without any health issues. Even milk can be completely adulterated without any sign for milk in it, by making it artificially with detergents &chemicals. Adulteration is a social crime and many are in need of good health. Food adulteration increases the burden of health in the society. It is a punishable offence under the Food Adulteration Act ,1954. Consumer awareness of quality of food and alertness in detecting common types of food adulteration can thus help arresting this menace.

Some of the industrial adulterants commonly used-

S.N	Adulterant	Foods Commonly	Diseases or Health
0		Involved	Effects
1	Argemone seeds	Mustard seeds	Epidemic dropsy,
	Argemone oil	Edible oils and fats	Glaucoma,
			Cardiac arrest
2	Artificially coloured	As a substitute for cumin	Injurious to health
	foreign seeds	seed,	
		Poppy seed, black pepper	
3	Foreign leaves or	Tea	Injurious to health,
	exhausted tea leaves,		
	saw dust artificially		cancer
	coloured		
4	TCP	Oils	Paralysis
5	Rancid oil	Oils	Destroys vitamin A and E
6	Sand, marble chips,	Food grains, pulses etc.	Damage digestive tract
	stones, filth		

7	Lathyrus sativus	Khesari dal alone or	Lathyrism (crippling
		Mixed in other pulses	spastic paraplegia)
8	Mineral oil (white oil,	Edible oils and fats,	Cancer
	petroleum fractions)	Black pepper	
9	Lead chromate	Turmeric whole and	Anemia, abortion,
		powdered, mixed spices	paralysis, brain damage
10	Methanol	Alcoholic liquors	Blurred vision,
			blindness, death
11	Augusta		Dizziness, chills, cramps,
	Arsenic	sprayed over with lead	paralysis, death
		arsenate	
12	Barium	Foods contaminated by	
	Banun	rat poisons	
10	1	(Barium carbonate)	Ukai ikai (augla augla)
13	Cadmium	Fruit juices, soft drinks, etc. in contact with	'Itai-itai (ouch-ouch) disease, Increased
			salivation, acute gastritis,
		-	liver and kidney damage,
		contaminated water and	
		shell-fish	productio dance.
14		Water, liquors	Cardiac insufficiency and
	Cobalt		mycocardial failure
15		Water, natural and	Lead poisoning (foot-
	Lead	processed food	drop, insomnia, anemia,
			constipation, mental
			retardation, brain
			damage)
16	Cannar	Food	Vomiting, diarrhoea
	Copper		
17	Tin	Food	Colic, vomiting
4.5	1   1   1   1   1   1   1   1   1   1		A !! !!!
18	Zinc	Food	Colic, vomiting
	Mercury	Mercury fungicide treated	9 1 2 1
19	ivici cui y	seed grains or mercury	aeatn
		contaminated fish	

Food material	Adulterant
Cereals such as wheat, rice	Mud, grit, soapstone
Dal	Kesari dal,metanil yellow(a dye)
Haldi(turmeric)powder	lead chromate
Dhania powder	Powdered cow dung or horse dung, starch
Black pepper	Dried papaya seeds
Chilli powder	Saw dust, brick powder
Mustard seeds	Argemone seeds
Edible oils	Cheaper oils such as mineral and Argemone oils
Milk	Extraction of fat, addition of starch, water
Honey	Jaggery, Sugar
Ghee	Vanaspati(hydrogenated vegetable fat)

### **Adulteration Test**

Mixing water with milk is a common practice amongst milk vendors. Take a drop of milk on a glass plate and hold it vertically. If the drop of milk sticks to the glass plate or flows down slowly, leaving behind a white trail, then the milk sample is pure. If the milk drop runs down quickly on the glass plate, leaving behind no white trail, then the milk has been diluted with water. This is because when pure milk is adulterated by mixing with water, then its viscosity decreases i.e. it becomes very thin. For testing the quantity of water in skimmed milk, an instrument called the lactometer should be used. If the milk is unadulterated the lactometer reading should be 1.026(Check/Annexure for more of such common household adulteration tests.)

# **ANNEXURE**

S. No.	Food Articles	Adulterant	Method of Detection	Determinant / Remarks
1.	Milk	Synthetic Milk	a) Take few drops between fingers and rub it. b) Effect of boiling. c) Effect of storage.	a) It gives a soapy feeling. b) It turn yellow on boiling. c) It turn yellow after some time
2.	Sugar	Chalk powder	Dissolve in glass of water	Chalk will settle down at the bottom
3.	Honey	Sugar / water	Put it on a small piece of paper / cotton cloth and burn it	If adulterated, sample will make chirping sound
4.	Tea leaves	Colour	Spray on wet blotting paper	Coloured tea leaves colour on wet paper
5.	Coffee	Chicory	Gently sprinkle coffee powder on the surface of water.	The coffee floats over water but chicory begins to settle down
6.	Common Salt	White powdered stone, chalk	Stir a spoonful of sample of salt in a glass.	The presence of chalk will make solution white and other insoluble impurities will settle down.
7.	Chilli Powder	Sawdust and colour	Sprinkle chilli powder on the surface of water	Sawdust will float on water and added colour will make water coloured.
8.	Coriander Powder	Horse dung powdered	Soak coriander powder in water	Horse dung will float on water.

9.	Mustard Seed	Argemone Seed	Mustard seeds have a smooth surface. The argemone seeds have rough surface and are black. Press seeds between fingers.	Mustard seeds inside it is yellow while for argemone seed it is white. Magnifying glass may be used for identification. Argemone is very harmful.
10.	Sella Rice (Parboiled Rice)	Metanil yellow (A nonpermitted colour)	Rub a few grains in the palms of hands.	Yellow colour would get reduced or disappear.
11.	Split Dal (Arhar)	Khesari Dal	Khesari dal has edged type appearance showing a slant on one side and square in appearance.	Polishing of Khesari dal cane make it look like Arhar dal so avoid polished Arhar dal. Khesari dal is very harmful.
12.	Silver Leaves	Aluminium Leaves	Ignite few leaves.	On ignition, genuine silver leaves burn away completely, leaving glistering white spherical ball of the same mass whereas aluminium leaves are reduced to ashes of dark grey blackish colour.
13.	Coconut	Any other oil	Place a small bottle of oil in refrigerator.	Coconut oil solidifies leaving the adulterant as a separate layer.
14.	Saffron	Dried tendrils of maize cob coloured and scented	a)Break the saffron. b) Dissolve saffron in water.	a) Genuine saffron is tough, whereas spurious saffron is brittle and breaks easily. b) Artificially

coloured spurious saffron will dissolve quickly in water whereas a bit of pure safforon when allowed to dissolved in water will continue to give its saffron colour so long as it lasts.
--

Note:- The above tests are only indicative / preliminary and may be used as consumer alertness. In case of suspicion about adulteration, the same needs to be got analyzed by standard food testing laboratories.

Details of Standard Test Laboratories could be obtained from National Toll Free Number 1800 -11 - 4000 (BSNL / MTNL)

(All Working days - Mon-Sat, 09.30 AM to 05.30 PM ) Other Users Dial - 011-27662955-58 (normal call charges applicable)

# **Chapter-5**

# **Personal Hygiene:**









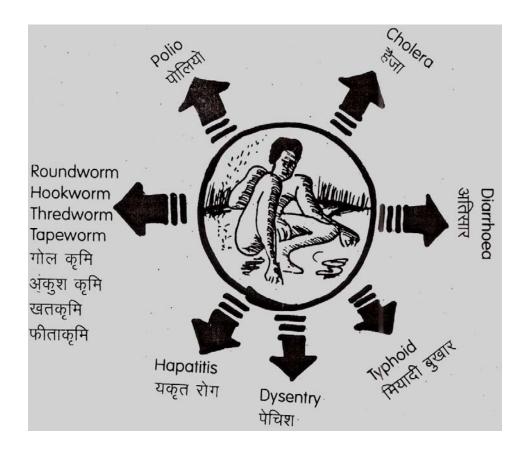
# Personal hygiene

# In this chapter we will learn:

How to keep one's body clean.

Importance of personal hygiene.

Diseases caused by lack of personal hygiene.



The term personal hygiene means taking care of various parts of the body from head to toe. Taking care of the hair, eyes, nose, throat, teeth and skin. The term also includes dietary habits, healthy habits, appropriate clothing and exercise.

In this part of the chapter we will also later discuss good sanitary habits. That goes a long way in preventing diseases, and improving personal hygiene. No matter how much clean a person may try to be, if the surroundings where he or she lives in are dirty, not much can be done to maintain good health always. We can fall ill by various infections caused by virus or bacteria present in air or water.



### Eye care:

Our eyes are a very important part of our body. They give us vision to see the whole world around us.

Deficiency of vitamins A causes night blindness.

Trauma to eyes: it is caused by dust and smoke, pieces of stones or glasses flying into the eyes or playing with bows and arrows or other sharp objects and bright light, ultraviolet rays and sparking from welding machine.

Unhygienic activities: like rubbing of eyes with dirty fingers, putting used or dirty surma sticks to put kajal, washing eyes with dirty water.



# Points for health education

Eat plenty of dark green, leafy vegetables, available at cheaper rates in the market, like palak, cabbage, methi, yellow fruits, carrots etc.

Wash your face and eyes every morning with clean water.

Do not use each others handkerchiefs or dirty clothes or rags to clean your eyes.

Do not let flies sit on your face, eyes, or eyelids, or on that of your younger children or brothers or sisters.

Do not aim at anyone with a stick, or a pointy object and don't throw stones or dirt in anyone's eyes.

# **Care of ears:**

Some people poke needles, sticks or hairpins to remove wax from ones ears. This can be very dangerous and can permanently damage the ear.

It can also cause infection and injury.

One should always go to a doctor in case some insect goes into the ear, or if you want to get the wax from your ears removed.

Hearing can also be damaged by sudden burst of loud noises right into the ear canal. So always avoid making sudden loud noises into other peoples ears.





## **Care of teeth:**

Healthy teeth are essential for proper nutrition. If teeth are not properly taken care of, they will develop infection. This will result in toothache, and inability to chew food.

After eating, particles of food remain stuck to our teeth. If they are not removed, they decay and produce substances that destroy the outer layer of our teeth, called enamel.

Always brush inside and outside your teeth. Do this twice a day in the morning and evening; use a soft brush or datun of neem, babul, jamun, and tamarind or banyan tree, to clean your teeth. You can also make your own tooth powder by mixing finely powdered salt and charcoal if you don't have toothpaste. Do not eat too much sugar or sweet things.

Always gargle your mouth after eating sweets.





- If you have a toothache, go to a doctor. If a bad tooth is not attended to, it will get infected and will either fall out or will have to be pulled out.
- Massage your gums after brushing your teeth.

### Care of throat and nose:

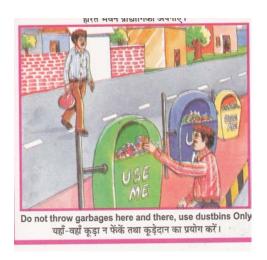
- Many people have the habit of blowing their nose or picking it, or spitting anywhere on the ground. These habits are unhygienic, unsightly, and make the ground dirty. They also spread infection, and diseases like T.B.
- Coughing and sneezing on other people can also be harmful.
- Germs from sick person can travel to a healthy person and can cause diphtheria, whooping cough, tuberculosis.
- Breathing through nose fills the lungs with filtered air while breathing through the mouth can cause unfiltered air to be filled in the stomach.
- Shouting and talking can strain the throat and can cause temporary loss of voice?

# Care of skin, nails, and hair:

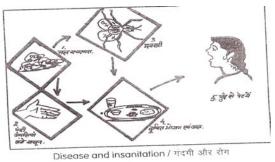
- During the day we gather a lot of dust and dirt from our surroundings especially in the hot summer months. If this is not removed by frequent bathing the skin harbours germs. This leads to boils, ring worms, sores and infections, rashes and body lice or scabies.
- Also a dirty sweaty skin gives out a foul smell.
- Dry hair without use of oil may result in dandruff. Schoolchildren particularly girls are likely to get lice from companions.
- Nails: Long dirty nails are not only ugly to look at but also unhygienic.
   If hands are not washed properly the nails can harbour germs and bacteria, that can cause deadly infectious diseases.
- **Dirty clothes:** can have insects like lice, bugs, germs, and can cause infections. They can also cause bad smell.
- Always wash clothes in clean water and dry them in sun's heat which further kills all the germs in the clothes.
- Take bath everyday. Use soap and water. Scrub body, feet, clean under the nails, with a brush, or rough cloth. Take care to wash between folds of skin and groin.
- Wash hair at least once a week, and more often during hot weather
   Comb and plait it properly, loose hair attracts dust and lice faster.
- Every evening after school, comb the hair with a fine toothed comb to remove lice and dirt and tie them up in a neat plait.
- Keep your shoes outside your house or room before entering it.
- Always wear clean clothes, wash your clothes regularly specially in summers.
- Always keep your rooms dry and clean, don't let moisture manifest in small closed or dingy rooms where no sunlight can reach inside.
- Wash your hands well with soap and water after you go to the toilet and before you take your food.

# **Chapter -6**

# **Health, Hygiene and Sanitation:**







In this chapter you will learn:

- How to keep your surroundings clean.
- Need for clean surroundings.
- And health hazards of living in a dirty area.

# A clean neighbourhood/basti:

- Living in a clean dirt free environment is life's blessing.
- It is an achievable task.
- ➤ While keeping few things in mind we can together have clean surroundings without additional costs or expensive machinery.
- ➤ Talk to your local authorities or together construct community latrines to avoid defecating in the open. Community workers can help and train slum inhabitants in constructing cheap 'sulabh shauchalays'
- > Don't throw solid garbage, polythene bags and bottles in open drains.
- Put kerosene oil in air coolers, and don't let water store in old boxes, furniture or objects kept in open to avoid breeding of mosquitoes.
- Do not walk barefoot outside your house, always wear chappals or shoes.

#### **Important facts:**

Housing in slums becomes a major health concern because residents of slums live in overcrowded situations. Two-thirds of households are simple one-room structures, a majority of them with dirty floors and poor ventilation. Such overcrowding can lead to rapid spread of respiratory and skin disease.

- Access to drinking water in slums is another major problem. More than two thirds of slum residents lack access to safe drinking water on their premises. The main sources of water are handpumps, though tap water is available in some homes. The lack of safe drinking water facilitates the spread of water borne diseases. The presence of stored water further promotes the breeding of mosquitoes and diseases such as malaria.
- Absence of available latrines is a major health problem as well. It is estimated that over one third of slum households have no access to bathroom facilities, promoting open defecation, which in turn leads to spread of faecal-oral disease and parasitic infestation.

(source: sangamindia.org)



# Health hazards from unclean body and surroundings:

- ➤ Defecation in open places, dirty drains, open garbage dumps in the neighbourhood all lead to severe health hazards and diseases.
- ➤ It spreads diseases like dysentery, cholera, hepatitis, typhoid poliomyelitis, intestinal worms and many more.
- Walking barefoot in dirty lanes and near drains. Children walking and playing barefoot near drains, all cause spread of contamination.
- Vegetables kept in the open attract flies and have to be washed properly.
- Drinking water kept in the open and contaminated by germs and flies.
- Use of unclean vessels to store food and water.

# **Chapter-7**

#### **Illness and healing:**

Illness means loss of health. Sometimes body heals itself. Other times we need to go to the doctor, or take medicines, or it lasts longer.

Why do we fall ill? Here are some causes:

- Malnutrition
- Dirty surroundings, unhygienic practices.
- Intestinal worms.
- Vector borne diseases or caused by mosquitoes or sand flies.
- Water borne diseases.
- AIDS
- Tuberculosis
- Accidents and unavailability of first aid.

We have discussed problems related to diet and dirty surroundings and lack of sanitation in chapter 3,5, and 6. While most of the diseases or illnesses in the slum areas are caused by lack of sanitation and unhygienic living practices, most of the other diseases are also caused either by the same reason, or do not heal and spread faster due to it.

#### In this chapter we will learn:

- About various diseases common in slum areas and causes thereof.
- Basic knowledge about their treatment.
- Ways to prevent such diseases.
- This chapter aims to make slum inhabitants aware of common causes and treatments of diseases.

Remember education is the first step towards prevention of an illness.

#### **Intestinal worms:**

- ➤ Intestinal worms are produced due to contamination of food drinks and open defecation.
- They are of many varieties hook worms, round worms, tape worms, thread worms etc.
- ➤ Pin worms look like fine white threads in the stools, round worms have pointed ends and can be as long as the width of ones hands. Tape worms can be equal to the height of two men.
- ➤ People get worms by ingesting eggs of worms which can get transferred to our food through contamination. Once these eggs are inside the body they develop into Larva and then into adult worms.
- Hook worms can eat away and burrow into the foot of a person and get inside the body.

# Signs and symptoms:

- > Pin worms: anal itching
- > Round worm: vomiting, vague abdominal pain, potbelly with nourishment, occasional intestinal obstruction.
- ➤ Hook worm: weakness, pallor, loss of appetite, itching at the site of entering in the foot.
- Tape worm: vague abdominal pain, indigestion, diarrhoea, occasional obstruction of the intestine

#### **Treatment And Prevention:**

- With de- worming medicine every four to five months.
- De-worm family members also.
- Boil or disinfect water.
- > See a doctor.
- Always wear footwear outside the house specially when going out to defecate.

> Teach children to wear chappals, and train them to keep their feet clean at all times.

> Always wash your hands before and after eating and before and after defecation.

Use soap or ashes of burnt wood or paper to clean hands.

Always use clean water to wash hands, clothes and for bathing.

> Do not defecate in the open.

Wash vegetables and fruits properly and keep all food items covered at all times.

#### **Vector borne diseases: Some insect borne diseases are:**

Diseases carried by insects are related to sanitation because insects breed in stagnant water, and sanitary methods can keep insects from landing on faeces and from entering homes.

#### Some insect borne diseases are:

Mosquito borne diseases

Malaria

Encephalitis

Dengue fever

Mosquito borne diseases rarely cause death but they weaken the patient completely. This makes it difficult to work, and loss of work means economic and other losses.

Encephalitis can cause death as can malaria especially in younger children.

#### Malaria

Three types of malaria are found in India.

- Poor sanitation leads to stagnant water which further leads to breeding and growth of mosquitoes.
- Slum dwellers fail to take important measures in mosquito prevention hence become an easy target.
- Mosquitoes are becoming resistant to the sprays used on them.
- Symptoms: headache, chills, body ache, high fever, sweating.
- Symptoms like fever reoccur after every alternate day, signs of chronic malaria may include anaemia and enlargement of spleen.

#### Kalazar

- Caused by the bite of female sand flies.
- It weakens a person making him or her prone to diseases.
- Symptoms: fever, loss of weight, enlargement of spleen, and liver, polar anaemia.
- Treatment: most cases can be cured with medication. However medication can be toxic and should only be taken under supervision of a physician.

#### **Dengue fever:**

- It is caused by virus. It spreads through the bite of the female Aedes mosquito.
- It can occur at any time of the year and affects persons of all ages.
- It takes about 2-15 days between the mosquito bite and onset of disease's symptoms and last for about 10 days. It is non-fatal, if treated well.
- It can be treated by medication.
- Also by keeping the surroundings clean and dry during rainy season.
- Put kerosene oil in water of air coolers during summers.
- Throw away or cover any open junk that can manifest any mosquito.

# Japanese encephalitis:

It is caused by virus.

- Spreads through the bite of infected culex mosquito.
- Epidemics have occurred in Bihar, Tamil-Nadu, Uttar Pradesh, and West Bengal.
- Symptoms: fever, headache, fatigue, unconsciousness and death, in 20-40 % of cases.

•

Treatment: by vaccination.

#### Filariasis:

- Caused by microfilaria, or microscopic parasite.
- Spread through the bite of the culex mosquito.
- Microscopic worms appear in the blood at night.
- Its diagnosis can only be done through a blood smear done at night between 10 pm and 4 am.
- Symptoms: fever, chills rigors(shivering), later symptoms include elephantiasis, or painful swelling of the lower limb.

#### **Prevention:**

- Anti mosquito and other insecticides –Spray as per direction by spray team.
- Walls after spray are not to be dusted or washed or plastered for at least 10- 12 weeks.
- Use mosquito curtain.
- Use mosquito repellent oil. Use of neem oil (2% solution with coconut oil applied on skin is very effective).
- Plaster the cracks and crevices of the wall.
- Keep drains clean and fill up low lands with water stagnation

Use Paracetamol or Aspirin to relive pain and fever.

<u>Water borne diseases:</u> In almost all Indian slums, diseases caused by consuming contaminated water or water borne diseases are on a rise. Some of these are prevalent from the pre independence era and have not been eradicated. We'll be discussing the following diseases and their prevention

and treatment:

- 1. Cholera
- 2. Dysentery

#### **Cholera:**

Cholera is water borne disease caused by a bacteria that lays its eggs in contaminated water.

- This water when consumed or used by a person sends the eggs in the body that later turn into larva.
- These larvae then turn into worms inside the body and cause various problems.
- When a person infected by cholera defecates in the open or the infection gets transferred to a water source, cholera spreads like a forest fire.
- Symptoms: severe diarrhoea, abdominal pain, can be seen after 1 to 5 days of infection.
- Any food washed with the contaminated water, can also spread the disease if consumed.

#### **Prevention:**

- The best way to prevent cholera is clean and proper disposal of faecal matter.
- Proper and separate washing of the clothes, utensils of the patient.
- Proper washing of hands that touch the patient.

Water purification, water for drinking, cooking and cleaning should be

boiled, filtered or chlorinated.

**Treatment:** 

• the best treatment is the administration of the ORT solution or the oral

dehydration therapy.

This is so as most of the body fluids and electrolytes get lost in heavy

diarrhoea.

Antibiotics are also given to the patient to slow down the infection from

spreading.

**Dysentery:** it is caused by bacterial and worm infection.

It results in severe diarrhea containing mucus and/or blood in the feces with fever and

abdominal pain.

Mild stomach pains and frequent passage of feces. Symptoms normally present

themselves after one to three days and are usually no longer present after a week.

ORT or oral dehydration therapy is the best cure, but in severe cases patients are

also given antibiotic medication.

Diarrhea, dysentery, and cholera are all related to contaminated water.

The **best prevention** for these diseases is to always drink pure water.

But most importantly to try and not contaminate water sources in the first place by

proper sanitation and waste disposal practices.

Also always try to boil, filter, or add chlorine to water before drinking it.

#### AIDS:

HIV is a very minute germ. This germ hurts the very human defence system that fights all germs. HIV infection is detected with a blood test. A person having HIV germs in the blood is considered as HIV positive. Infection cannot be identified without a blood test.

## The germ HIV is passed on from one to the other person:

- Through unprotected Sexual relationship with a person who is HIV positive.
- Through blood transfusion when blood is taken from HIV positive individual
- Through contaminated needles used previously in a HIV positive person
- From HIV positive pregnant woman to child during delivery or afterwards.

#### HIV is not passed on by

- Touching and kissing a person.
- Playing, swimming together.
- Using common bathrooms and toilets

#### Some facts relating to HIV/AIDS

- The main cause of HIV-AIDS spread is risky sexual behaviour.
- It can also be passed on to a child by HIV + mother, and through transmission of infected blood and syringes.
- After exposure to risky situations, HIV test will be positive only after 6-12 weeks. This is the window period. So one has to wait for this period to get an HIV test.
- In our country more than 85 percent of HIV transmissions take place through sexual route. AIDS can strike anybody depending on his/her behaviour.
- AIDS is the illness due to HIV infection. This may take months and years after HIV test is positive. But the right kind of awareness is most important to prevent this deadly disease from spreading.

## **Symptoms of AIDS:**

- Continuous weight loss,
- Persisting diarrhoea,
- Repeated fever, illness lasting more than one month.
- The minor features include chronic cough, itching, rash on body and genitals.

#### **We can Prevent AIDS:**

Prevention of HIV/AIDS is the only effective way of eliminating this deadly disease. Following points are important.

- Creating awareness in community about risky sexual behaviour, causes and spread of HIV/AIDS and its seriousness..
- In some hospitals we have special services for pregnant women. This involves
  Counselling, blood tests and provision drugs to HIV +Ve mothers. This will
  reduce the risk of infection to the baby.
- Awareness among adolescent boys and girls about healthy family life including sex education is important.
- Adolescents should have access to information on AIDS transmission and prevention. Adolescent girls are more vulnerable.
- Blood testing facilities are available at most district hospitals. Here blood test for HIV/AIDS is done along with counselling services.

#### **Tuberculosis:**

A minute germ causes TB. It spreads from one person to other through breath. A TB patient's sputum has thousands of TB germs. Also while coughing or sneezing the germs spread in the air. The germs also stay in dust for long and affect people. TB germs enter the lungs of nearby persons. In a weak person the germs survive and produce an illness. It may take months to get completely cured.

TB can affect any part of our body. But Chest TB is the most important. It spreads from one person to other through air.

TB is serious illness. Any one, rich or poor, adults, male or female and Children can suffer from TB. Under- nutrition, weak immunity, overcrowding, poor living conditions etc. help Tuberculosis to spread.

# A person suffering from TB has one or more of these symptoms.

The most common symptom of TB is cough lasting 3 or more weeks.

- Sputum cough
- Evening fever with sweating,
- The patient may also have chest pain.
- Coughing up blood. (Blood spit)

However, the following four points are important for suspected TB cases.

- Diagnosis needs checking patient's sputum under microscope.
- Escort the patient to nearest CHC/PHC, where facilities are available.
- No fees are charged for any tests or the treatment.
- AIDS patients can also have TB.

Controlling TB in India is a tremendous challenge. Every year, 1.8 million persons develop the disease, of which about 800,000 are infectious; and, until recently, 370,000 died of it annually. Very effective cure for TB is available. One has to take the medicines in front of qualified nurse or MPW or any health provider. This is called directly observed treatment (DOT). Just providing anti-TB medication is not sufficient to ensure that patients are cured. The DOTS strategy ensures that infectious TB patients are diagnosed and treated effectively till cure, by ensuring availability of the full course of drugs and a system for monitoring patient compliance to the treatment.

The improvement occurs in a few weeks. However, the full treatment takes 6 to 8

months in most cases. The purpose is to make the patient complete the full

treatment. You can also be a provider for DOTs treatment to TB patients in your

area. Try to get more information about DOTs treatment from health workers or

nurses. During treatment the sputum is tested periodically for germs of TB.

Remember that services are available free!

Precautions: One should cover the mouth with handkerchief while coughing and

sneezing. This halts spread of germs. One should take the medicines regularly. Keep

a follow up for this. Persons having TB should avoid close contact with young

children.

Children should get BCG vaccine in time that prevents serious forms of TB.

What do you think about this?

Some people say TB is incurable disease.

Why some patients of TB stop treatment before completion?

• Why patients go to private doctors though government gives free treatment?

Many TB patients don't like to take anti-TB drugs due to side effects.

(source: mohfw.nic.in,)

# Accidents and first aid:



# **Chapter 8**

#### Women health in slums



(Source:Asha)

The poor health of Indian women is a concern on both national and individual levels. Indian women, those living in the slums, particularly have many health issues.

Women are not only differentiated, but their health care needs are also ignored completely.

They do most of unpaid work in a household but still they are given the least nutritious food as compared to males in the families.

Majority of women have to perform all their tasks by themselves with little or no help from their husbands or other family members

Most common problems found in women living in slum areas are-

# Reproductive problems and diseases,-

Due to lack of education and awareness, poor hygiene, poor sanitation facilities, early marriage and early motherhood and scores of other such problems, slum women become easy targets for Reproductive diseases.

The problem gets multiplied as women are not able to take care of their health needs due to limited resources and rigid mindsets. As a result the problems get aggravated.

Almost all the women in slums suffer from nutritional deficiency, the most common among them being:

• Anaemia i.e. iron deficiency- the most common symptoms are pale eyes(white portion of the eye), pale nails and pale face. The women often feel weakness,

fatigue, and breathlessness due to this.

• **PEM-** Women suffer from protein Energy malnutrition (PEM) that was reflect through dispigmentation of hair, sparse and straight hair, and rough skin. The main

reason for the deficiency is poor and insufficient diet. The sources of protein are milk,

paneer and other dairy products which are too expensive for the slum dwellers.

• Deficiency of vitamin A and vitamin C- vitamin A causes rough and scaly skin.

vitamin c causes swollen spongy gums.

Can we do something!

Most women are unaware of benefits of iron rich vegetables, and though green leafy vegetables like palak, and spinach or sarson leaves are cheaper than other vegetables, they do not buy them because of their unprefernce ion their nuitritional

choices and lack of education.

They should be educated about the nutritional value of green leafy vegetables and

about how it can take care of their health problems to an extent.

They should be made aware of the benefits of including iron in their diets.

Also of taking the cheap iron tablets, circulated among them...

As per the findings of a survey, majority (70%) faced workload problem. They had to

work for long hours and often complained of neck pain, backache and headache.

Most common problem with slum women is lack of education and low income that

deters them from taking right steps towards their better health.

Most of the slum women work long hours and have no respite from house work so

they have double burden of labour coupled with insensitivity towards their health by

family members.

It is important that women should be made aware of the fact that only a healthy

woman can keep her whole family in good health.

Source: PG.deptt, CRM&E, Govt. college,Jammu)

**Chapter-9** 

Adolescent health (problems and issues):

Adolescent has been defined by WHO as the period of life spanning between 10-19

years. They are no longer children, but not yet adults.

The main issues -

1. They are in growing phase and are under great pressure from peers, from

parents, from society, and self.

2. They lack knowledge and skill to cope up with pressure.

3. They constitute more than 22% of the population and require due attention

because of peculiar problems.

4. Adolescence is the period of rapid physical growth, sexual and psychological

changes.

Habits and behaviour picked up during adolescence (risk taking behaviour,

substance abuse, conflict resolution) have lifelong impact. If the behavioural

problems are not checked they might develop complex characteristics in adulthood.

5. Many adolescent boys and girls are sexually active but lack information and skill

for self-protection.

6. Communication gap exists with parents and other adults (lack of family

"Connectedness")

All these facts have got important public health implications:

The 70% of the mortality in adulthood is due to habits picked up during adolescence

(risk-taking behaviour, substance abuse and conflict resolution.)

> Prevailing malnutrition, anaemia and lack of immunization have adverse

intergenerational effects. It is well known that a stunted adolescent getting

married giving rise to a low birth baby, that too female, again unable to develop or develop in to a stunted female and the cycle keeps on repeating;

- Adolescent pregnancy, the risk of adverse outcome again is higher;
- Lack of "connectedness" with parents and other adults prevents transmission of health messages and crucial skills leading to adoption of risky behaviour, substance abuse and HIV infections etc.

Why adolescent behave in this manner and adopt risky behaviours. The meaning of word adolescence is "to emerge". The word itself explains certain characteristics and problems emerging out of the word ADOLOSCENT. These characteristics are:

#### **Characteristics:**

- A Aggressive, Anaemic, Abortion
- D Dynamic, Developing, Depressed
- O Overconfident, Overindulging, Obese
- **L** Loud but lonely and lacking information
- E Enthusiastic, Explorative, and Experimenting
- S Social, Sexual and Spiritual
- **C** Courageous, Cheerful, and Concern
- E Emotional, Eager, Emulating
- **N** Nervous, never say no to Peers
- **T** Temperamental, Teenage Pregnancy

#### So the major health problems of adolescents can be categorized into:

- Nutritional problems,
- Mental health problems,
- Substance abuse,
- Accidental and intentional violence.

Some startling facts about the health problems of the adolescents: In Meerut in a study carried out on adolescent boys the prevalence of anaemia in adolescent boys was found to be 42%, which is quite high.

- Adolescent pregnancy Common (50% of women in India had a child before reaching the age of 20. (Indian Paediatrics, January 2004).
- Increasing vulnerability to HIV/AIDS- over 50% of all new cases in India are among 10 to 24 years of age (UNAIDS - 2002)
- Substance abuse is quite common. Number of studies have found out that tobacco, alcohol and other substances, even the injectables are commonly used.

#### What could be the strategies for the promotion of adolescent health:

The meaning of the word adolescence is to emerge and this word itself gives the solution to the problems of adolescents.

#### STRATEGIES FOR PROMOTION OF ADOLESCENT HEALTH:

- A =adoption of healthy life style
- D=develop appropriate i.e.c. strategy, discourage early marriage and teenage pregnancy
- **O**=organize adolescent/ youth friendly clinic
- L=life skill training, legal support, liaison with peers, parents
- **E**=educate about sexuality, spirituality, responsible parenthood
- S=safe, secure and supportive environment to be provided
- C=counselling / curriculum in school inclusive of family life education
- **E**=enable & empower for responsible citizenship
- N=networking for experience sharing
- T=training for income generation, teen clubs

(source:indmedica.com)

We must understand that the problems of adolescents in slum areas are largely due to their socio-economic conditions, lack of education and awareness and communication gap with parents/elders. As they say "Idle mind is devil's workshop", is fully applicable to adolescents in slum areas. Since most of them are school dropouts and generally working as child labourers in unhealthy conditions and even in the company of unsocial elements of the society, they fall prey to all kinds of abuses as mentioned above. The best solution for these problems is to keep the adolescents gainfully occupied either in studies or in some skill building areas so that they could become financially independent and lead a normal life later and grow into responsible citizens. Also it is very important that they should get full attention in their families and get proper guidance about all their problems. The root cause of all their problems actually is their vulnerable age and the fact that they relate more to their peer group than their families and in the process somewhere get misguided.

#### For trainers:

- Young population finds it more comfortable to discuss their issues with people from their own age group, self help groups could be encouraged to first educate some proactive youngsters then take their help in interacting with adolescents.
- Giving examples of celebrities who they look up to, to prevent them from substance abuse and violence.

# **Chapter 10**

# **INFANTS/ CHILDREN HEALTH:**

For an infant, immediate breast feeding is vital as it gives baby nutrition and immunity against diseases. Breast milk is the best food for the baby for first six months. No other feed including water is necessary as it provides for all the needs of the baby.

#### **Child Care practices after six months**

After six months of age mother milk is not enough, the baby needs extra food to grow. This is the period of weaning during which they make a gradual transition to eating family foods. .

- Start one new food type at a time, not many.
- If top milk is given, do not dilute it.
- Food like porridge, cooked vegetable, fruit pulp is good for babies after six months age.

Semi solid food prepared from roasted, puffed grain, flour prepared from fermented grain (satva) are easy to digest.add oil or ghee to child's food to improve nutrition.

- Eggs are a good source of body building element called proteins.
- Babies and children need frequent feeds every day. Child should be offered food every three to four hours.

Hands must be washed thoroughly before preparing food and feeding child. Maternal hygiene is also important along with cleanliness while preparing food for babies.

For older children (2 years) keep food ready and reachable for the child. The child should be able to eat it whenever hungry e.g. Roasted groundnuts and Jaggery

(gud) are popular.

Eggs, groundnut, Soyabeans, fish are high protein foods. Child growth is better with these feeds.

(Guidelines for appropriate weaning / complementary feeding may be seen in the Annexure at the end of the chapter.)

The incidence of malnutrition rises sharply during weaning period i.e. 6-18 months of age. The deificit acquired at this stage are difficult to compensate for later in childhood.



# **Immunization**

Many serious germ diseases in children can be prevented by immunization vaccines.

- BCG prevents Lung TB.
- OPV (Polio dose) prevents Polio.
- DPT protects the child from Diphtheria, whooping cough and Tetanus
- Measles vaccine prevents measles.
   These vaccines are given free to all children at all govt. run health centres and hospitals.
- Vaccines need cold storage during transportation to retain their power.
- Child gets fever after DPT injections. This can be treated with 'Paracetamol' tablet or liquid.
- BCG is usually injected on the baby's left shoulder. A scar is formed six weeks after injection. It shows that the child may have become immune to Lung TB.
   Give also five doses of vitamin A. Start from nine months age, and give every six months. This protects children from night blindness. Vit A also boosts child's immunity against germs.

We all know that many parents deny their children immunization. Immunization boosts body's fighting power against diseases caused by germs. You can help them by explaining benefits of Immunisation.



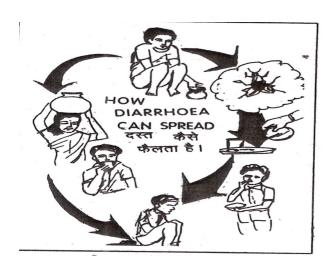
#### **Immunisation Chart**

Name of vaccine	When to			
	give			
BCG	At birth or any time up			
	to one year			
Hepatitis B	Within 48 hours of birth			
Polio – 0	At birth (if delivery is in			
	institution)			
Polio – 1+DPT+Hepatitis B	6 weeks			
Polio – 2+DPT+Hepatitis B	10 weeks			
Polio – 3+DPT+Hepatitis B	14 weeks			
Measles+ Vit A (1ml)	Nine months			
1st Booster DPT & Polio +Vit A	18 months			
2ml				
Vit A 2ml	24 months			
Vit A 2ml	30 months			
Vit A 2ml	36 months			
Vit A 2 ml				
If a child is not given				
the vaccines in right				
time, get them started				
whenever possible				
and complete the				
primary immunization				
before child reaches				
first birthday.				

Immunization card is given for each child by the health worker and to be kept safely for further follow up. The child gets full immunization in time. Parents should bring the child for immunization as per schedule. Only complete immunization protects the child fully. Partial immunization does not protect and gives false sense of protection.

Some people have misconceptions about immunization. You need to dispel these. For instance some people feel that immunization is harmful to babies as it causes fever and therefore illness.

#### **Diarrhoea**



Why does diarrhoea occur? The major target group of diarrhoea is infants and small children. Some even die due to the illness. Germs are the main cause of childhood diarrhoea.

These germs come from unsafe drinking water, unclean feeding practices, bottle feeds etc. We can avoid these problems with help of families and the community by observing cleanliness all around.

# What happens to child with diarrhoea?

- Water makes up to 72-75 percent of children's body weight. That makes life possible.
- What if we lose even some water? Think of a plant without water. If we forget to water the plant. We know what would happen to it!

Water loss can be fatal. Whatever the germ of diarrhoea, the dehydration is the cause of deaths. You have to act in time Let us see how water loss affects the baby.

#### **Dehydration**

Treatment of diarrhoea is very easy and quite effective. The principle is to prevent dehydration(loose motions may not stop for 2-3 days). Water needs to be restored quickly. Continue feeding. If child is breast feeding, it should continue.

# Severity of dehydration of child:

Dehydration	Child is	Thirst	Tongue and mouth	Eyes	Talu (AF)	Skin fold on pinching	Urine
none	Alert,	present	Moist	Moist	Normal	Normal returns quickly	Normal
Mild dehydration	Restless, irritable	present	dry	Dry and sunken	sunken	Fold stays a while	Little
Severe dehydration	Sleepy, floppy	Not drinking	dry	Dry and sunken	sunken	Fold stays for long	absent

#### **Home Available Fluids (HAF)**

Give the baby a lot of watery foods like 'Sharbat', coconut water, rice-kanji, light tea etc. You should talk about commonly available, locally accepted liquids which are given to children.

# **Oral Rehydration Salt (ORS)**

Take one litre of water in a clean container. Empty the full packet of ORS in this. Stir it. Start giving this fluid spoon by spoon to the child. Prepare fresh ORS everyday.

#### **OTHER TIPS**

Mother/father or other care taker, should wash hand properly before feeding the baby. It should not give new infection.

Give ORS spoon by spoon to avoid vomiting.

If possible, use boiled water for preparing ORS. At least make sure it is from safe sources.

Continue breastfeeding if the baby is breastfeeding.

Give other foods and drinks along with ORS.

Bottle feeding is bad for any child. Avoid it in diarrhoea also

#### When to refer the child

If dehydration is severe (Start fluids and then send)

If the vomiting does not stop

In case of convulsions

If the child has fever

If the child gets blood in stools

REFER the child to the PHC/CHC where facilities for admission are available. If possible, escort the family.

This child may need fluids through bottles.

#### How to prevent diarrhoea?

To prevent diarrhoea keep the home and its surroundings clean. Prepare the food in clean vessels and store in clean conditions. Do not allow house flies to breed in neighboring places. Wash hands before eating and after defecation with soap and water. Never use food that is going spoilt. Summer season hastens spoiling of food. A thumb rule - use freshly prepared food and consume within one hour.

#### What we can do

Identify children with diarrhoea.

Know the signs of dehydration.

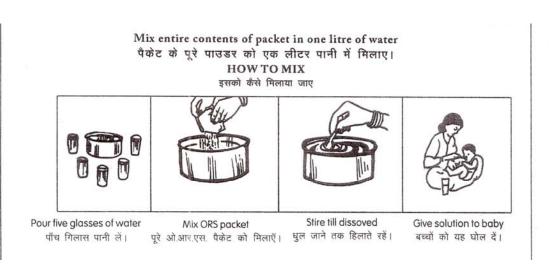
Learn to prepare ORS at home.

Refer or accompany the child to hospital if seriously ill.

Discuss with people about cleanliness of home, while cooking and storing foods.

Discuss with them about not to stop feeding babies who have diarrhoea.

.



Source: mohfw.nic.in

# 1. Weaning / Complementary Feeding

Infants and young children are at increased risk of malnutrition from six months onwards, when breast milk alone is no longer sufficient to meet all nutritional requirements and infants enter a particularly vulnerable period of weaning during which they make a gradual transition to eating family foods. The incidence of malnutrition rises sharply during the period from 6 to 18 months of age in most countries, and the deficits acquired at this age are difficult to compensate for later in childhood.

Complementary feeding is extremely essential from six months of age along with breast feeding, to meet the additional needs of the growing baby. An infant weighing around 3 kg at the birth doubles its weight by six months and by one year the weight triples and the body length increases to one and a half times than birth. Breast milk is the best source of nutrition for the baby till first six months, but after six months of age breast milk alone is not enough to make an infant grow well, other foods are also essential, thus complementary feeding should be started at six months of age.

Weaning is the process of gradual transition from breast milk/milk diet onto Solid foods Complementary feeding is extremely essential from six months of age along with breast feeding, to meet the additional needs of the growing baby

#### 1. Guidelines for appropriate weaning / Complementary Feeding:

The process of weaning should be carefully guided as complementary foods are often of lesser nutritional quality than breast milk. In addition, they are often given in insufficient amounts and, if given too early or too frequently, they displace breast milk. Further gastric capacity limits the amount of food that a young child can consume during each meal. Repeated infections reduce appetite and increase the risk of inadequate intakes. Infants and young children need a caring adult or other responsible person who not only selects and offers appropriate foods but also assists and encourages them to consume these foods in sufficient quantity at appropriate intervals.

**Properly Fed** - Give complementary feeds consistently with child's signals of appetite and satiety, and actively encourage the child to consume sufficient food using fingers, spoon or self-feeding.

Adequate - Complementary foods should provide sufficient energy, protein, and micronutrients which will meet a growing child's nutritional needs.

Safe and Simple - Complementary foods should be hygienically stored, prepared, and fed with clean hands using clean utensils, and not bottles and teats'.

**Timely -** Complementary foods should be introduced at six months when the nutritional needs exceed which is not fully provided through exclusive and frequent breastfeeding.

# When to start Weaning/ Complementary Feeding:

At the age of six months babies are ready to be moved onto mixed diet. The food can be given to baby when.

- 1) Baby sits up.
- 2) Starts chewing or putting toys and other objects in their mouth.
- 3) Reaches and grabs accurately.

## **How to Start weaning/ Complementary Feeding:**

Start offering a small quantity of cooked and mashed vegetables (carrot, potatoes, sweet potatoes, etc), mashed fruits (banana, mango, papaya, apple etc) or cereal (rice, wheat, ragi, jowar, bajra and millets) mixed with milk, after a milk feed or in the middle of the feed. If the food is hot allow it to cool, mix it and taste it before giving it to the baby.

- As far as possible, the regular family food should be given to the child after softening and mashing, rather than cooking special food.
  - The food should be soft but not watery.
  - The food should not have chilli and other spices
  - The food should be neither too hot nor too cold
  - Start giving just a few teaspoons of foods once a day.
  - Use a little of baby's usual milk to mix the food.
  - Use a spoon or cup to feed and "never a bottle"
  - Allow baby to feed themselves, using their finger as soon as they show interest.
  - Serve to the child in a separate plate or in a bowl.
  - Give the baby a range of foods and of different grains to taste.
  - Do not force the child to feed, if the baby doesn't seem to want it, wait and try again later.
  - If spoon is being used for feeding wait for the baby to open his mouth when the food is offered.
  - Let the baby touch the food.

Use active feeding i.e. encourage the child to eat by giving separate bowl to make him touch and feel the food, talk to him and tell him about the food which they are eating, allow the child to eat at its own pace and time.

#### **Babies First Food should be:**

Cereal or root staple food.

- Soft and flowing.
- Thicker than breast milk.
- Bland in taste.
- Mashed or strained.

# Weaning / Complementary Feeding according to the age:

#### 6 TO 9 Months

- Give home based foods. Mash all food and give semi-solid food, do not over dilute.
- Gradually increase the amount of food over 3-4 weeks, increase to 50-60gms or half a cup.
- Add a little vegetable oil for increasing energy density and green leafy vegetables for vitamins and iron.
- Feed 5-6 times a day as babies have small stomach and eat only small amount a time.
- Continue breastfeeding and give semisolids after breastfeeding.
- Mashed rice with dal or khichri, mashed vegetables, a little roti softened in dal or milk can be given from the food normally cooked at home.
- Green vegetables must be given either separately or added to dal and khichri or stuffed in roti or paratha.
- Continue breast feeding.

#### 9 to 12 Months:

- •Give almost everything cooked at home (without spices), introduce chopped food.
- The food at this stage does not need to be mashed.
- A variety of household foods can be given four to five times a day, such as rice, dal, roti, khichri and the quantity can be gradually increased.
- Foods like curd, egg, khir, dalia, upma, idli and bread can be included.

- Vegetables and seasonal fruits can be added.
- Fish or minced meat can be introduced in the baby's diet in nonvegetarian families.
- Continue breast feeding.

#### 12 to 18 Months:

- By this age the child should be eating all the food prepared for the family.
- Quantity of food to be increased, give roughly half the amount that the mother eats.
- Give about 50g green leafy vegetables to avoid anaemia and Vitamin A deficiency.
- Continue breastfeeding.

# **Preparing and Starting the Complementary Foods:**

# Babies' food must be prepared and stored hygienically.

- 1. Utensils should be washed thoroughly with water and soap
- 2. Clean water should be used for preparing food.
- Hands should be washed before preparing foods as well as before feeding the child.
- 4. Food should be covered and protected from flies and other insects.
- 5. The foods should be fresh and prepared immediately before they are to be eaten.
- 6. The foods should be cooked or boiled well.
- 7. The food should not be reheated.
- 8. Use boiled and filtered water for drinking and keep it clean.

# DO'S and Don'ts of Complementary Feeding:

• Try a variety of different foods include mashed-up fruit, vegetables, rice, pasta, dal and other pulses as well as meat, fish and well cooked eggs.

- Offer finger foods such as cooked vegetable sticks, pieces of soft ripe fruit, bread crusts and chapatti pieces.
- Try and feed the baby mashed-up versions of what the rest of the family is eating as long as there is no added sugar or salt to it - this will help the baby get used to eating what everyone else eats.
- Introduce foods that commonly cause allergic reactions one at a time. That way, one can spot any problems. These foods are eggs, wheat, nuts.
- Continue to give the baby breast milk or infant formula milk alongside solid foods until he or she is at least a year old. The more solid foods the baby eats, the less milk he or she will need.
- Make sure any cooked food has been thoroughly heated, cooled and tested to make sure it's the right temperature.

# Dont's

- Rush or force feed the baby. Most babies know when they've had enough to eat. Go at the baby's pace and be patient. If the baby shakes his or her head, turns away or refuses to open his or her mouth, take the food away and try again later.
- Leave the baby alone when eating. Keep a close eye on the baby when offering him or her solid foods as some babies may choke.
- Force the baby to eat any solid food if he or she doesn't want it the baby will take it when he or she is ready.
- Feed the baby eggs, wheat-based foods that contain gluten (like bread or breakfast cereals), fish, citrus fruits (like oranges or orange juice), nuts and seeds or soft and un pasteurized cheese before he or she is six months old.

# Tips for Successful weaning/ Complementary Feeding:

 Parents or caregivers should remain patient, as it usually takes longer for a child to finish a meal of solid foods than to finish a meal of breast milk, Children are likely to play with solid foods, which is normal and should not be discouraged.

 Children who are adjusting to complementary feeding sometimes begin to suck their thumb or engage in a similar habit. Such habits are comforting to the child

and should not be discouraged during this time of transition.

It is not true that only expensive foods are nutritious. Families with low income

and resources can also meet their baby's nutritional needs through locally

available/cheap foods.

Forced feeding should be avoided. Meal times should be pleasant times and not

a torture.

• If the baby refuses a new food or spits it out, leave it for few days and then try

again later.

If a particular food makes the baby sick or turns pale, it should not be given, as

the baby may be allergic to that food.

In order to get an accurate idea of the amount the baby has eaten and to

encourage active feeding the baby should be fed from a separate bowl or

plate.

The shape of the feeding bowl or plate should be such that they can be easily

cleaned. The edges should be rounded so that the child is not hurt.

• It is convenient and hygienic to feed with a spoon, hand feeding can also be

continued but care must be taken that the hands are cleaned and the nails cut

short and scrubbed frequently.

(Source Abhilasha issue 11th Jan 2010 a VHAI newsletter)

# Chapter 11

# General / Home Remedies Different healing systems



In this chapter we will learn about

Different healing systems in our country

Too much use of injections, saline and medicines

Nature heals most illnesses. Our body has such healing properties like the tree healing itself. We can help the process of healing with medicines. We need good nutrition for that.

We have many types of healing systems. The Angreji system is well known. Ayurveda employs herbal and other medicines. Sidhaa is a similar branch. Unani is also herbal system. Homeopathy uses very small dose of medicine in sugar based tablets. Naturopathy uses water, mud, diet etc for cures. Yoga also heals some illnesses. In acupressure and acupuncture, special points on the body are

used to cure health problems. In the village the traditional Baid uses herbal remedies.





# The Allopathic system

About 300 allopathic medicines are essential for a hospital. For primary care we need very few medicines.

Some internal medicines/drugs like Paracetomol (para), chloroquine (chloro), Iron Folic acid (ferrous) and ORS can be safely used for common ailments like mild fever, loose motions, weakness etc. These medicines are safe, cheap and very effective. They will help us in many illnesses

Overuse of Injections and saline (bottle) - Injections and saline are necessary only in some situations. Injections and saline used in clinics are not so often necessary. Frequently injection and saline are given for profit and not for cure. False beliefs about injections and saline are rife. We become poorer by paying the hard earned money for many needless injections and saline. We can save these expenses with

help of simple remedies and raising health awareness. But peoples' attitudes take

time and efforts to change.

Patients are being charged anything like 50 Rs more for one bottle. It is just water

and salt and some sugar. If we prepare and drink at home it, the cost is just fifty

paise. Its effect by mouth is also equal to saline. Some patients insists on injections

and bottles and doctors also are driven by profit motives. You can educate people

about utility/futility of injections and bottles.

**Tonics** 

Tonic bottles are also very popular. Many healers prescribe and patients ask for

tonics. Are tonics necessary, do they give us strength as promised?

The answer is "NO". No medicine book prescribes tonics. Tonics are just some

water, sugar, vitamins and some minerals. The cost is often very high. In the same

cost one can take an egg daily or a glass of milk for a full month. This is a much

better buy for the money. Tonics also create a false sense of cure. Many parents

wants their doctors to prescribe tonics for their children

You need to educate people on the futility and costs of tonics. It will save peoples'

money being wasted. It will also help them in improving their diet

**Avoid self-medication** 

Some people buy drugs for illnesses without information. Some people use

medicines lying in the house for illnesses. This can be unsafe. Expired medicines

can cause health problems.

Avoid overuse of medicines

Medicines are very useful and are life saving at times. Overdose can be harmful,

especially in children. Medicines can have side effects too. You should ask your

doctors about the dosage schedule of drugs. Inadequate dosage doesn't help.

Education about rational drug use in community will help our work. And prevention is

better than cure. We need to learn and teach how we can avoid getting illnesses by improving our living conditions.

#### **Home Remedies**



#### Five important medicinal trees and plants

Our country has a very rich source of medicinal plants. We can use these for being healthy and treat ailments at little cost. Some trees in the neighborhood are angels in green. We will learn about just five of them now.

# Neem (Azadirecta Indica)

Neem tree is well known. Its leaves, fruits and outer portion of the stem have medicinal property.

Leaves are used for skin diseases like eczema, infection. The oil prepared with extract of neem leaves is useful in itching and wound healing. The decoction of crushed neem leaves is also used for the same purpose. Neem is a great antiseptic and pest-control medicine. Decoction of the outer portion of its stem is also helpful in various diseases. Therefore, preserve and cultivate neem plants.

#### Making neem oil:

Make 100 ml fresh juice of neem leaves.

Add 25 cc sesame oil to this. Slow boil the mixture under cover. The water part will completely evaporate in half an hour. Cool and filter it. This is neem oil for wound care. Keep it in a well-capped bottle. It will stay for one year. Apply this to wounds 2-3 times a day. This heals the wound well. For childbirth injuries, neem water bath is a healing treatment. Crush some leaves of neem and put them in warm bath water. Let the mother sit for fifteen minutes in this bathtub.

#### Tulsi (Oscimun Sanctum)

Tulsi is a small herb, but having great medicinal properties. Tulsi leaves are mainly used for some ailments. They are useful in cough and cold. Give the tulsi juice with honey. The leaves are hot in nature, that is they are used in kafadosha. The decoction of Tulsi leaves is also useful for cough. The leaves are chewable. The seeds of tulsi are cold in nature.

Hence the seeds are used in heat (pitta) disorders like heart burn, bleeding from nose, Burning feet, bleeding piles, sore mouth etc. Give the seeds with milk or ghee. Soak 20-30 seed grains in water or milk. This is a dose for once. Take it 2-3 times a day.

The seeds of tulsi are cold in nature. Hence the seeds are used in heat (pitta) disorders like heart burn, bleeding from nose, Burning feet, bleeding piles, sore mouth etc. Give the seeds with milk or ghee. Soak 20-30 seed grains in water or milk. This is a dose for once. Take it 2-3 times a day. Take about a cupful of tulsi leaves. Soak them in water for five minutes. Then crush them on a stone. Strain in cloth and collect about 20 ml juice (half a cup). Crush more leave if necessary to make 20 ml. This makes 3 doses for one day for an adult. This is good for cold and fever illnesses. Give it for 3 days. For children the dose could be 10 leaves juice, 2-3 times a day.

# **Ghrtakumari (Aleo Vera)**

**GhrataKumari** (Aloe Vera) is a garden plant. In wounds, we can appear aloe in place of a medicated dressing. Take a piece of aloe about the size of the wound. Cut it into a slice. Clean the wound with water. Apply the aloe slice on it and tie up with a clean cloth bandage. Change the dressings everyday. It heals faster. It is very useful for burns treatment as ressings.

Kumari is used in several Ayurvedic preparations. It is useful for liver disorders and women's illnesses like pain in the periods. It is also used for dandruff and for the growth of hair. You can grow kumari in your garden and ask people to grow in the kitchen garden. It is hardy plant and stays for years.

#### Adusa (Adhotoda Vacica)

Adusa is small shrub grown for fencing. It is good remedy for coughs. Use fresh juice or decoction of leaves. Fresh juice of leaves is used with honey. It is useful for bleeding disorders eg. Blood in cough, blood in stools, urine etc.

Take 50-60 gms of adusa leaves and wash them clean. Slow boil the leaves in one liter of water for half an hour. About one fourth water should be left. This is adusa Kawatha for coughs. Cool and filter it. Give 20 ml once, 2-3 times a day for three days. One can add sugar or honey as per requirement.

#### Kuda (Holerrhena antidysenterica)

This is a forest tree with typical fruits. The fruit is black in color when fully ripe. The fruit is like thin double drumstick but in twins. The bark or cover of the tree-stem is used for medicine. This is a good medicine for loose motions and dysentery. You can simply grind a piece of bark and mix with a spoon of honey and give as medicine. Kadha (Kawatha) also is useful. For this take a 10 gm (2 teaspoon full) of bark powder, add one glass (200 ml) of water and boil. Boil it till ½ water remain. Cool and bottle it. For an adult 20 ml kadha (Kawatha) for 3 times a day is useful to stop dysentery.

Some simple home remedies

Haldi (turmeric) is a powder of a root. It is widely used in our country in food as spice

and as medicine .Its medicinal antiseptic properties are known since hundreds of

years. For bleeding wounds press with Haldi powder to stop it. Haldi also has great

wound healing properties. People use haldi with oil for cuts and abrasions. This is

good practice. The practice is to apply it with milk and chana dal flour (besan) at the

time of bath, as UBTAN to improve complexion.

Triphala is a very useful combination of three fruits: Aamla, Hirda, and Beheda. We

can use the triphala powder in constipation. It is useful to reduce obesity and

diabetes. Its external application is very useful for healing wounds. Triphala powder

can applied on skin at the time of bath. Its decoction is useful for gargling in illnesses

such as sore throat.

Stomatitis and bleeding gums. Triphala powder is also used as tooth powder and

vision disorders.

Oil massage is good for pain in the joints. Medicines may still be necessary for joint

pains. Sesame oil or coconut oil are considered good for massage. Massage

improve blood circulation in the skin.

Mulethi is very a useful plant. It is available as small dry sticks. The stem is used to

improve voice if it is hoarse. It is given with honey. Mulethi powder is useful in cough

and hyper acidity. It improves the brain function when given with cow's milk. It is also

used in pitta disorders-because Mulethi has cooling properties.

Mulethi is used as an external application to improve skin glow. The powder is

applied with haldi powder and milk. Mulethi improves general health. It serves as a

tonic when taken with shatavari (Asparagnc) powder and milk Especially in lactating

mothers

Aamla Powder with ghee is useful in Hyperacidity

Gulkand (Rose Petal in sugar) + Ghee is also useful in heartburn. Warm/hot water sips if helps to reduce dry cough.

Lemon juice with sugar & salt helps in diarrhoea.

Honey is good for cough, and use as a vehicle for medicines. For gaining weight use milk and ghee if is available What do you think about this?





(Source: mohfw.nic.in,)