

We know that, the ability of enjoyment and physical happiness depends upon our physical wealth. If body is not healthy, man's all round development will be stopped. A Healthy body is the first step for healthy life. If we take proper care of our health, we shall enjoy long life. The development of the nation is dependent on healthy citizens. Will Durant stated, 'Illness is a crime.' We do some stupid work for our health subject, so the nature takes some hard steps to correct our stupidity. For this, we have to suffer from the pain. It is a tutorial fee making a healthy life. There are three causes for contagious diseases and diseases through insects are as under :

Decrease in immunity power, bacteria of the disease any how enters the body and the suitable atmosphere allows the bacteria into the body. We will study the information of characteristics of the diseases, medical treatment of the diseases and prevention of some contagious diseases.

Diseases caused through contact :

(1) Ringworm :

Symptoms : This is an infectious disease. This disease is caused by bacteria - fungus. It is seen mainly on the parts like neck, waist, inner part of thigh, head, armpit and parts covered with hair. Due to this disease there are round sores with boils on the skin, having heavy itching sensation. The round sores spread at due side and recover afterwards. After some days, the colour of round sores become purple, the hair falls down. There is drip like water from round sores after itching and heavy pain is there. The itch occurs at night instead of day time. This disease is seen mostly in monsoon. It is caused by fungus.

Treatment / Prevention : Take care of personal hygiene. Take bath with clean water and soap. To avoid contact of the person of ringworm, do not use the clothes, ornaments, shoes, socks, helmet etc. of the patient.

(2) Psoriasis : This is a auto immune disease also caused by fungus like ringworm.

Symptoms : Dim white stains get caused on chest, back and mouth. Some times there is little itching.

Treatment / Prevention : Take care of personal hygiene. Take bath regularly with clean water and soap. Use clean towel, clean the body and dry it.

(3) Lice : Bacteria of lice are found in the head and other parts of the body. The female lice puts her numerous nits (eggs of lice) in the hair and put on clothes. The nits break and lice comes out. The old eggs of lice are called nit. The nits stick with hair.

Symptoms : The head gets itching sensation. There is disturbance in sleep. There is abscess in head and there may be fever.

Treatment / Prevention : Do not use clothes, bed-sheet, comb, brush, cap of the lice effected person. Wash the hair with warm water. The nits are closely stuck to hair so wash with little spirit, then use pointed comb.

(4) Scabies : This is a skin disease. This disease is caused due to Itchmite parasitic germs. The cause of this disease is of insufficient and impure water. Itchmite germs enter in the skin and eat up and go ahead. The female itchmite puts nits in the skin and the disease spreads.

Symptoms : Scabies get caused on skin at the places between fingers, waist, wrist, elbow, armpit, the place between thighs. Pus like liquid can drip (trickle). It itches very much at night. This disease spreads ahead to other parts of body and there are pus, itches very much and there will be abscesses.

Spread : This disease spreads with contacted patient and use of the clothes of the patient. Take care of both the causes. If one person is effected in the family, it will be effected to other person of the family also. Boys play in pre-primary and schools together, they may be effected.

Treatment / Prevention : Before applying the scabies medicine, it is necessary that pus becomes dry. Boil the clothes of the patient, because the germs stick with clothes. The part of scabies effected should be washed with rubbing and scrubbing, so that broad deep of germs will be opened. Then apply benzyl benzonate on that parts. Take care that it does not touch eyes or mouth as it is very poisonous. Due to this treatment, the disease comes into control. There may be itching for ten to fifteen days. It is due to allergy of the dead germs .

The prevention for the diseases of skin as mentioned above and for other diseases :

- Wash the whole body with rubbing and scrubbing, everyday.
- After taking bath, clean the whole body with separate towel or with clean piece of cloth. When body becomes dry then put on the clothing.
- After wiping the body, towel should be washed. The care should be taken that, there will not be detergent or soap in the towel, when it was washed.
- When children come home after play, the hands and legs should be washed and dry them. Especially wash the hands and legs before night sleep.
- Try long term planning for increasing of economic, social and education level of people.
- Use loose cotton or khadi cloth, so that sweat should be absorbed, the skin becomes dry and clean.
- Do not use the cloth or comb of the diseased person.
- Take nutritive diet.
- Do not suppress the disease, by taking self medication.
- The government should make necessary arrangement to provide sufficient water to the public.
- There should be facility for the treatment for skin diseases in the primary health centre and in the government hospitals.

Sexual Diseases :

Sexual diseases enter from one body to another body through organs of generation, when doing sexual intercourse with the person suffering from the sexual disease. There are three main sexual diseases Gonorrhoea, Syphilis and AIDS.

General symptoms of sexual syphilis diseases :

- There are scars on the sexual organs.
- Watery liquid trickles from it.
- There creates scars on the skin with pain.
- Joint pain is there. There is headache. The nervous system is damaged.
- There is more tiredness, loss of weight.

Now, we shall get the information of three sexual diseases.

(1) Syphilis : This disease is caused by *Treponema pallidum* bacteria. They are spirochete type bacteria. These germs enter from person to another person, while doing intercourse with person suffering from the disease. There occurs syphilis on the penis after intercourse within three weeks to three months. In case of woman, this syphilis occurs in vagina.

Symptoms : The first symptom is scar on the sexual organs. There is swelling in urethra. The scar is healed without any treatment or incomplete treatment. This is very dangerous, hidden disease. The patient feels that he is free from disease, but it lies in hidden position, it spreads out in the whole body within one or two years.

In this disease, there are different types of small boils on the skin, but there is no itching. There are special type of scars on the wet part of body like anus. Such scars also appear in the mouth. In addition, there is pain in the joints of knee, shoulders etc.

Again this disease remains in sleeping position and it destroys nervous system. The whole nervous system of the brain gets topsy-turvy or may be polio. There is a possibility of heart disease. In addition there appear special types of knots and scars.

There is serious effect on the conceived child, and some time the child is dead in the foetus or dead as soon after delivery. When this disease appears at the time of birth, it is called 'congenital syphilis'.

Prevention : We can trace this disease by blood examination test. Avoid unsafe sex for prevention.

Treatment of syphilis : The penicillin and other effective medicines are available. The complete treatment is necessary for this disease.

(2) Gonorrhoea : The intercourse might have been done with the person, suffering from gonorrhoea in case of males as well as females. During intercourse the couple *Neisseria gonorrhoeae* (Gonococci) bacteria enter the body of one person to another through sexual organs. After two to seven days, symptoms are seen.

Symptoms : For man pus comes out from the urethra. He has to pass urine frequently. The (penis) pains with burning sensation, suffering from uneasiness, and some times, the fever is there. The disease disappears after some time, but it reoccurs frequently, if not treated properly.

For woman there is slight feeling of burning sensation. The symptoms of Gonorrhoea are not easily recognised. The liquid flows from uterus, but there would be other causes, some time a woman is not in a position for impregnation.

Prevention : It is traced out by doing laboratory test of the pus coming out from penis or uterus.

Treatment : The medicines are available for this disease. By doing early treatment, it is stopped barrenness.

The prevention for Syphilis, Gonorrhoea and other sexual diseases :

The ideal of vow to have only one wife or faithfulness towards one lover (or beloved) are useful for prevention of the diseases. The diseases can be prevented by using condom at the time of intercourse as an alternative step.

In these diseases, both the partners, husband wife, should take treatment simultaneously. If possible give the treatment to the persons who are contacted with the diseased person, find out such persons for treatment.

The prevention for AIDS are mentioned, those applied to this disease also.

(3) AIDS : When there is decrease in immunity power, the troubles start. The word AIDS-Acquired Immuno Deficiency Syndrome suggests the meaning. Infectious diseases of various kinds

attack on the body due to the AIDS, The word indicates group of words. It is known as GHAROSH– Acquired Immuno Deficiency Syndrome.

Spread of AIDS :

- To come with direct contact of blood of the diseased person.
- Sexual intercourse with the person suffering from AIDS.
- By taking in blood of the person suffering from AIDS.
- Through injection – needle and instruments of surgery and surgical operation.
- Through pregnant mother to foetus.

HIV / AIDS does not spread in this way :

- By shaking hands, by embracing, by normal kissing.
- By travelling with a person of having HIV / AIDS, using things of diseased person.
- Using telephone, pen, soap, socks of diseased person.

The diseased period of HIV is about 6 months to 20 years after entering the germs of HIV into the body.

Symptoms of AIDS :

The symptoms in adults and in children are different.

Symptoms seen in Adult Patients :

- Continuous loss of weight without any reason.
- Loose motion for more than a month.
- Fever continuing for more than one month.
- TB comes up.
- Diseases of fungus may be caused – scars in mouth, weakness.

Symptoms seen in children :

- Very slow growth rate or loss of weight.
- Loose motion for more than one month.
- Old fever for more than a month.
- There is swelling on whole body.
- There are white scars in mouth and neck.
- Suffering from infection diseases frequently.
- Suffering from whooping cough more than a month.

Treatment of AIDS : Various antibiotic medicines have been developed for treatment of this disease. With the help of this medicine, period of life survival is lengthened. Yet no medicines have been developed for its cure. Due to this it is only remedy to stop AIDS.

Prevention of AIDS :

- (1) The ideal of vow to have only one wife or faithfulness towards one lover. It can be prevented by using condom at the time of intercourse.
- (2) First test the blood of blood donor, then voluntary donors should come forward and donate blood, so there will be prevention on professional blood donors.
- (3) Try to recover the disease without injection. If injection is necessary, use new needle.
- (4) The Injection and equipments for operation must be sterilized.
- (5) Living life should be free from addiction.

- (6) The burden of urbanization, unemployment, mental strain should be reduced.
- (7) Instead of seeing lustful seen in T.V., Film, Periodical and advertisement, see the healthy and individual development programme. Increase the publicity of innocent entertainment and moral values.
- (8) Prevent the problems for health, such as sexual diseases, insufficient nutrition.
- (9) Stop to occur the social stigma of AIDS, Give sympathy to AIDS patients, due to this, people will not conceal the disease.

Diseases spread through germs :

Malaria : Malaria becomes from Malarial Parasite germs *Plasmodium* virus. The female *Anopheles* mosquitoes are main responsible for spreading Malaria. When female *Anopheles* bites the malaria patient, it sucks malaria germs with blood. These germs develop to a limited level, when these mosquitoes bite to a healthy person, malaria germs enter that body. In this way malaria is spread from one person to another. Symptoms of malaria are seen after 10 to 15 days, after mosquitoes bite.

- (1) There is cold and feeling of shivery. There is fever. The shivery is continuous for more than 15 minutes.
- (2) The fever is there for some time. There is feeling of vomiting and nausea. The patient suffers from uneasiness. There is pain in body.
- (3) The fever goes down and heavy perspiration is there.
- (4) The fever comes daily, alternate day or third day.
- (5) Some times, the fever affects the brain, patient becomes unconscious and prattling.
- (6) The germs of malaria attack the red cells and abolish them. The body of the patient becomes pale-anaemia. There is enlargement of spleen and weakness. The patient suffers from pale-jaundice.

Treatment and Prevention :

- (1) If patient has heavy fever, ice should be rubbed on the head, the temperature should be lowered by putting piece of cloth soaked in ice or salty water or cologne on forehead, stomach, chest and hands and legs.
- (2) The patient should be provided with light food i.e. juice of citrus, tea, milk, kanjee.
- (3) The patient should be kept in a good ventilated room and given him sufficient rest.
- (4) Use mosquito-net.
- (5) As per doctor's instruction, give him chloroquine (quinine) tablets. If there is recovery from fever give the medicine upto one weeks as per instruction of the doctor.

The strong efforts should be made to control the production of malaria spreading mosquitoes. Generally, malaria spreading female mosquitoes *Anopheles* bringing up in clean water. Such pit and puddle should be filled or water should be taken out. The burn oil, kerosene, D.D.T. should be sprinkled once in a week in this water to destroy the worm of mosquito. The water tank, container and septic tank should be covered with air tight cover. An iron net or cloth net should be covered to the pipe, which is used for air and exit of water, so that mosquitoes will not enter.

Put 'Guppy' fish in pit-puddle and pond. This type of fish eats the worms of mosquito.

During night, at the time of sleeping, put the clothes which are covered the whole body, use the mosquito-net. Immediate diagnosis and treatment decreases the malaria patient as well as stopping malaria spreading.

Filariasis :

Thin and thread – like germs make the human leg like that of an elephant. This disease spreads by mosquito. So many people are suffering from this disease in India. The proportion of this disease is higher in Uttar Pradesh, Bihar, Andhra Pradesh, Odisha, Tamilnadu, Kerala, South India, Southern Part

of Gujarat. In fact, patients of diseases other than those with filariasis are included in this category.

A culax female mosquito brings up in a dirty water. This mosquito bites the patient of filariasis. It sucks worm of filariasis with blood. When it bites the healthy person, the worms of filariasis enter the body of healthy person.

After time, these micro filaria become adult, each female filaria produces 50,000 micro filaria (larva) per day. There is obstruction in lymphatic, due to this as per lymphatic places there is swelling on hands, legs and testicles. The effected organs are expanded. If the care of prevention is taken early, the swelling will be reduced, and there is relief. When micro filaria enter into body, symptoms are noticed within three months. In these symptoms many a times there is fever, there is pain in the one or other part of body, near that part, there is swelling on lymphatic of that part. The skin is seen reddish, there is pain when it is pressed. There rise red round sores. Moreover there becomes swelling on testicles, some times, the flow of urine is greasy and thick like milk.

Diagnosis : For the exact diagnosis, blood investigation is necessary. When the patient is fast asleep at night, between 10 to early in the morning at 2 o'clock, four to five drops of blood are taken on slide and investigation will be done.

Treatment : In case of early diagnosis, this disease is controlled by tablets. When the disease getting severe, operation can be tried. Its long term results are not good.

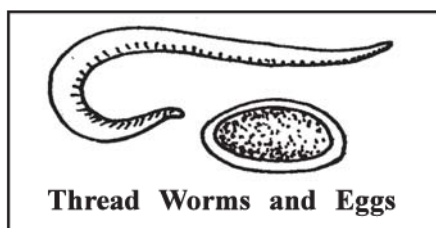
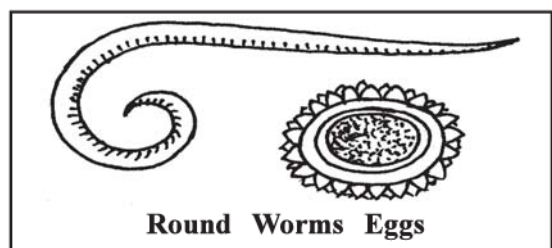
Prevention : This disease is caused by mosquito. Take care that there are no mosquitoes around. The immediate treatment is necessary.

Worms : One or other types of parasitic worms are there in the big intestine of the most of the people. In different languages they are known as KARAM, KRUMI, CHARAM, HARSIIYA, ALASIYAN, SALVALIYA, WORM, INSECT, STOMACH WORM etc. There are main four types of worms.

(1) **Round worms :** These types of worms are seen more in children. They eat the food from intestine so the children suffer from inadequate nutrition. It is possible in our country, out of 10, 5 persons have these types of worms in their small intestine. The length of each worm is 20 to 25 cm. Eggs of round worms, which are in excreta are entered into intestine by polluted water, food and earth through mouth. Here, they puncture the wall of intestine, go into liver and mix with blood. They transfer into insect in arteries and enter into windpipe. They reach upto throat by cough, enter into stomach through food canal and reach intestine. Worms become adult within two months and eating food also. The longevity of worms is six to twelve months. They are light rosy and like earth worms.

Symptoms : Pain in stomach, vomitting, nausea, eating food there is no increase of weight, inadaquate nutrition. Dry coughing, swelling of stomach. Some times intestine becomes closed due to increase of worms and constipation starts. There operation is needed . Some times worms come out by excreta, mouth and nose. There is itching sensation.

Eggs of round worm are racognized under laboratory investigation.

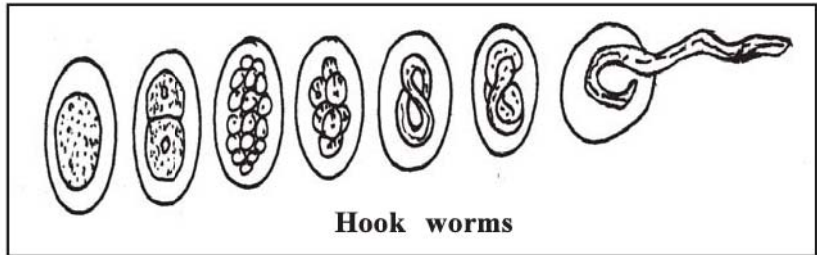


(2) **Thread worms :** These worms are white in colour, one cm long and like peace of thin thread. Its longevity is one to three months. These worms live in big intestine and from they go ahead to anus and near the mouth of anus they put eggs in skin. So there is itching sensation. Due to itching worm eggs accumulate in nails. While taking food, they go to stomach along with food or water, then they reach to intestine. In this way, their span of life is continued.

There is pain at the time of going to ease nature. There is burning sensation at the time of passing urine. One has go to frequently for passing urine. We can see the direct movements of the worms in excreta.

(3) Hook worms : More than thirty percent persons have this type of worms in their intestine.

The ratio is more of this worms to persons of 15 to 25 years of age. These worms harass to an inadequate nutritive people or other persons infected with disease. These worms stay for a little time in healthy person, so there is no sign in such person. These worms drink the blood to stick on the thin veins of intestine skin. In these way hook worms drink blood from human and so anemia is caused.



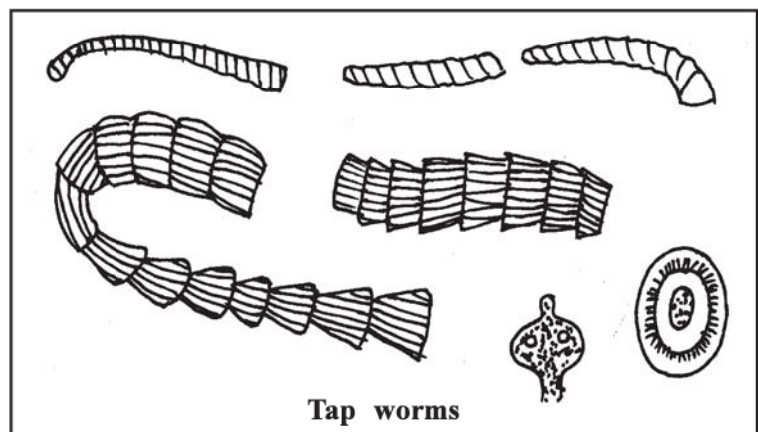
These worms are seen more in the persons who move bare-footed, workers on tea garden, workers of plantain, workers of tobacco farm, earthen workers etc.

Symptoms : Due to anemia, tongue, lips, nail and cover of eyes are seen paleness. There are troubles like inadequate nutrition, weakness, fatigue, increase in breathing. So physical and mental developments are stopped. The more serious condition is that heart is expanded and it may stop. If hook worms maggots are in lungs, coughing may be caused.

Prevention : Generally other worms are seen with naked eyes, but these worms are not seen. So excreta should be tested in laboratory, we can find the eggs and diagnose.

(4) Tap worms : Tap worms are white in colour, flat, about two metres long and six millimetres broad reside in intestine. Actually they reside in animal meat. When the meat of pig, cow or another animal are eaten raw or half cooked, the maggots of the worms enter into intestine.

Generally these maggots of worms are not injurious. These maggots become adult and transform into worms and put eggs. These eggs come out by excreta they enter into the mouth of another person by uncleanliness or other reason or by any way. These eggs reach into intestine and come out as fresh maggots. They puncture the intestine wall and reach the parts of liver, brain, eyes etc. with blood. When they reach here, within two to three months, they damage permanently.



Symptoms and Prevention : Digestion slows down. Slight pain in stomach. The simple infection of tap worms is easy to know. They are seen in excreta of a person in one centimetre pieces separately or jointly more in length.

Prevention of all types of worms :

Worms have not spared anything, to drink the blood of the people and eating valuable food in this high prices period. Especially, labourers become paleness, they are forced to leave labour and become unemployed.

For the prevention of this disease :

- (1) To cut nails regularly and keep clean. To wash hands with soap. To wash hands with soap after going to latrine, before taking food and before cooking. Use bowl with a long handle for taking water. Do not take water from earthen vessel with hands or with pot, use only bowl with a long handle. It is best if the earthen vessel is with tap.
- (2) People should use hygienic latrine. An arrangement should be made for removal of excreta. The government gives the aid for preparing latrine, use that aid for preparing latrine.

- (3) First wash properly vegetables and fruits and then eat.
- (4) Give immediate treatment to the patient of worms-disease. The person who has more possibility of worms disease, medical test should be done every six months and give him necessary drug tablets.
- (5) Separate shoes should be used. After working on earth or farm, hands should be Rubbed and washed the hands and washed. Do not sleep on earth especially on wet earth.
- (6) Keep water facility in travelling, if possible do not eat market food. Use only clean-pure-water and food.
- (7) The immunity power should be maintained by taking green leaf vegetables fruits in diet.

Exercise

1. Answer the following questions in detail :

- (1) State symptoms and prevention of Ring worm.
- (2) State symptoms, spread and the treatment of scabies.
- (3) State five prevention remedies for infectious diseases.
- (4) State symptoms of syphilis.
- (5) How does AIDS spread ?
- (6) State symptoms of AIDS seen in adult patient.

2. Write short notes on :

- (1) Symptoms of Malaria
- (2) Symptoms and Prevention of Psoriasis
- (3) Symptoms and Prevention of Lice
- (4) Gonorrhoea
- (5) Syphilis.

3. Answer the following questions in one or two sentences :

- (1) Which is the insect responsible for Ringworm ?
- (2) Which is the insect responsible for scabies ?
- (3) Give the types and name of worms.
- (4) Which mosquito spreads Elephantiasis ?
- (5) Which word suggests Acquired Immuno Deficiency Syndrome ?

4. Write answer to the following questions by selecting correct option from the options given below :

- (1) Which disease does happen from Fungus – very small insect ?
 (A) Ringworm (B) Malaria (C) AIDS (D) Elephantiasis
- (2) Which disease does happen from Itchmite insect ?
 (A) Psoriasis (B) Scabies (C) Syphilis (D) AIDS
- (3) Which worms stay for a little time in a healthy person ?
 (A) Round worms (B) Thread worms (C) Hook worms (D) Tap worms
- (4) In which disease the growth rate of child is very slow ?
 (A) Malaria (B) Ringworm (C) AIDS (D) Elephantiasis
- (5) For which disease, yet no medicines have been developed yet ?
 (A) Worm (B) AIDS (C) Malaria (D) Syphilis
- (6) Which disease happens from HIV virus (very small insect) ?
 (A) Malaria (B) Worm (C) AIDS (D) Elephantiasis
- (7) Which disease happens by culex female mosquito ?
 (A) Scabies (B) Elephantiasis (C) Malaria (D) Ringworm
- (8) Which disease happens by female Anopheles ?
 (A) Elephantiasis (B) Ringworm (C) Malaria (D) AIDS