

Module - 404

HEALTH EXTENSION ACTIVITIES



The Foundation for Research in Community Health

3 & 4, Trimiti B Apts., 85, Anand Park, Aundh, Pune - 411007

Tel: (020) 25887020, Fax: (020) 25881308

Email: frchpune@giaspn01.vsnl.net.in

HEALTH EXTENSION ACTIVITIES

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Lesson 2

Health, Poverty and Gender Discrimination

Aims

On reading this lesson you will understand

- Poverty and Health are closely inter-related.
- Poverty doesn't just mean not having money but is also connected to some other factors.
- Our health can suffer even by absence of information

Knowledge

You will know about

- Poverty and Health are related to each other.
- Gender is related to health.

Skill

You will learn

- Understanding the thought process of villagers.
- Identifying the problems of the village.

Perspective

You will understand

- It is wrong to make judgements without knowing the cause.

Introduction

Ayushi started to discuss the causes of illness. She introduced the conditions leading to the death of a 2 year old girl Surekha. She had a cough and cold. Since she was a 'girl' (not a boy) her unemployed but drunkard father refused to allow spending on her treatment. Moreover, taking her to a doctor or health worker would mean losing a day's wages without certainty about getting medicines or meeting the concerned person. Thus, even though a health worker like Ayushi could have saved the daughter of a poor family, it didn't actually happen.

Ayushi extracted the following reasons of the child's death from the women of the village:

1. Not getting medicines on time
2. Lack of organisation in government hospitals
3. Higher charges of private doctors.
4. Unavailability of transport for the patient
5. Bad roads
6. Neglect as a girl-child
7. A working woman's inability to spend
8. No power of decision-making
9. Lack of awareness about early stages of disease, illiteracy
10. Drinking and wife wife-bashing habits of penniless husbands.
11. Ignorance about saving.

Ayushi then added her comments about Indian conditions among children. Absence of pure drinking water causes diarrhoea among children. Some tribal children die of malnutrition simultaneously there are people who spend lakh's of RUPEES on a single party. Is such a society healthy?

While majority of the population lives in villages, rural folk do not get sufficient water, health services and jobs. However all the facilities are abundant in cities Social health is connected to developments. Next time they would discuss a well-developed area of the country.

families. Ayushi asked the women whether they considered these two individuals healthy or unhealthy. The discussion brought out their understanding of the terms in different ways.

They debated whether "wanting to stay in bed" is a sign of illness or laziness; whether looking well built meant healthy or being able to do all one's work was important.

In rural Maharashtra a person is considered a patient if he is ill for about 2 weeks and if the illness is considered serious. Otherwise he is just "ill."

They considered an individual healthy if he had a good appetite, energy to work and a good night's sleep. Then the women tried to describe the symptoms a "patient" as one who fell ill often, didn't get children. Others disagreed about relating reproduction with health. Some felt it was related to past sins etc.

FRCH conducted a survey in a small village. The villagers believed that being unemployed signified disease because one cannot get a meal unless one works and without food one cannot be healthy. They have sold their agricultural land to industries and now feel that they cannot get food without a job.

This clarifies that people's ideas are affected with time, spread of scientific awareness, conflicts in life and social as well as financial problems.

The conversations of the women revealed that people who were dissatisfied in life suffered mental problems. This condition was interpreted as illness by society. Thus every social belief or practice could not be acceptable.

Here are some symptoms of health or "well-being"

Physical

1. Good appetite
2. Energy to work
3. Normal sleep
4. Not falling ill frequently

Mental symptoms of well-being include

1. Feeling satisfied
2. Being calm

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Self Examination

1. Make a monthly list of the no. of patients suffering from different diseases.
This will show you the likely months of prevalence of each disease
2. Find out the periods of high frequency of cough and cold
3. What will you advise these patients?
4. Study the map of your village to locate areas with greater requirement of services.
5. List the people who will be helpful in gathering the above information.

What needs to be done?

- Control of villagers over staff and medicines of the government hospitals.
- Training local villagers for primary health care
- Spread of Education
- Facilities like roads and transport in villages
- Efforts to maintain unity within the villages
- Improvement in conditions of women
- Financial independence, spending capacity of all.

Exercises

Choose the correct alternatives

1. What should we do to ensure health for all members of our society?
 1. Have big hospitals
 2. Have medical colleges everywhere
 3. Good education for all
 4. Efforts to raise social, financial, cultural levels of all
2. What is the cause of illness?
 1. Infection
 2. Mal nutrition
 3. Gender Bias
 4. All the above
3. What is necessary for village-level health?
 1. Staff Medicinal control by villagers in government hospitals
 2. Health Training for some villagers
 3. Efforts to improve social and financial levels of women
 4. All the above
4. Health can be achieved by
 1. Treatment of disease
 2. Prevention of illness
 3. Combined efforts to solve causation problems
 4. Free health service for all

Answers

Alternatives - 1-3, 2-4, 3-4, 1-3

Lesson 3

Health and Development

Aims

On reading this lesson you will understand

- Explaining the scope of development.
- Efforts to determine the direction of development.
- The interrelationship of development with health

Knowledge

You will know about

- The meaning of development.
- The link between development and health.

Skill

You will learn

- To know what people consider as development.

Perspective

You will understand

- Respect for health.
- Keep in mind people of all classes while making development plans.

Introduction

Ayushi spoke at the meeting of the women of the saving group, about a so-called "well-developed" area.

Renuka was a hard-working house-wife in a village. She also milked the cows and buffaloes along with house keeping. Her husband delivered it to the customer while she worked in the fields. She returned home to cook for the family even when tired.

Some people came to the village to acquire land for the big new industry. The villagers were tempted by the high price offered. When worried about their occupation as farmers, they were assured of jobs in the factory. The farm-workers were worried about themselves but women like Renuka thought it was not for them to "think". Since they didn't have a male-child, her husband thought they didn't need to "preserve" their farms. She didn't interfere with his decision to sell the fertile land.

All the agricultural land in the village was sold for "development". A big factory was constructed in its place and a sparkling colony in the near by area. Educated city-dwellers came to live there. It was complete with security, trees and all signs of development. On the contrary, the original village was reduced to poverty. The man and young boys made merry with the cash-price received. But hardly anyone got jobs. The women like Renuka were forced to work as maids in the nearby new colony. The factory waste contaminated the river. Construction workers from other states built temporary shelters which soon developed into a slum area full of plastic bags, stagnant water and devoid of facilities even for the children.

Except for a handful of villagers no one else benefited by the coming of the factory. Remaining land became barren. There was no money to feed the families, so animal breeding was out of question. They had no facility in any ration shop. The factory had spread smoke all around. The senior citizen were dying of pollution. The girls had to married off while yet at school. The story is not imaginary. Renuka father-in-law actually developed chronic cough due to smoke. Her mother-in-law lost her eye-sight and later she too lost her life.

The following points need to be considered

Social

1. Evaluation of social regulations, ethics and creation of new regulations.
2. Follow social rules beneficial to all.
3. Understand and try to change discrimination based on sex, financial , caste differences.
4. Support for ill-treated women victims.

Political

1. Regular meetings of Gramsabha.
2. Having many organisations in the village.
3. Participation of women and backward tribes.

Economic

1. Be sufficiently able to fulfil basic needs.
2. Have security for future.
3. Availability of employment for all villagers.
4. Refuse to go to any limit for excess of wealth.
5. Eradication of corruption.
6. Reducing Alcoholism
7. Abolish malnutrition
8. Ban female feticide.

Cultural

1. Respect women, elders and children.
2. Respect nature.

Environment

1. Clean drinking water for all.
2. Sewage facilities in every village.
3. Social afforestation in villages.
4. 33% rural areas to be under forestation.
5. Proper pastures and grazing areas.

Think about the following points -

Self-examination

1. Why do you think Renuka's mother-in-law died?
2. What will you describe as development?
3. What according to you is or should be the role/responsibility in such examples?
4. How should development be clarified?
5. What should be the responsibility of the factory?
6. Which movement stressed the rehabilitation of the displaced recently in India?

Exercises

Fill in the blanks

(Smoke form the factory, Political Development)

1. Renuka's father-in-law died due to _____.
2. Holding the Gramsabha regularly is a part of _____.

Match the following

- | | |
|------------------------------|---------------------------------------|
| 1. Social development | 1. Respect for elders |
| 2. Economic development | 2. Participation of women in Politics |
| 3. Environmental development | 3. Eradication caste discrimination |
| 4. Political development | 4. Availability of Employment for all |
| 5. Cultural development | 5. Potable drinking water for all |

Describe in your words your interpretation of development

Answers

Blanks - 1-1, 2-2

Match - 1-3, 2-4, 3-5, 4-2, 5-1

Lesson 4

People and Concepts about Health

Aims

On reading this lesson you will understand

- What may be the causes behind the reasons for illness.
- Which measures do people take for different diseases.
- People belief's about health are related not just with illness but also with all the problems in their lives

Knowledge

You will know about

- People's concepts about well-being are not linked to illness alone.
- People have/use different remedies for each disease.

Skill

You will learn

- To know about people's concepts.
- To understand the factors leading to peoples illness.

Perspective

You will understand

- Why there are so many reasons for people's ill-health.

Introduction

Ayushi had to discuss the causative factors of people's ill-health. She asked the women to explain how they tackled a patient. Some of them resorted to prayers and magic when they related the illness to family problems. They tried rituals and pilgrimages. Only if they didn't see any improvement they went to the doctors after buying home-remedies and traditional medicines.

This is what they gathered from their conversation -

1. The traditional medicines for some diseases are correct.
2. Just as we believe in allopathy though it has no cure for certain diseases, there is no harm in believing in God.
3. It is easier to understand the behaviour of people if we understand the concept behind their life-style.
4. Superstition for some may be culture for others.
5. When we expect people to change, we have to provide the related facilities e.g. - sufficient water to practice cleanliness. Since the concept of well-being goes beyond the disease to all aspects of life, treatments will also be different for the diseases.

This lesson teaches us that people have knowledge (They are not ignorant). Diseases like cough and cold can be cured by themselves. Yet doctors prescribe medicines. Just as we don't consider this unscientific we cannot criticize villagers. They have used conventional remedies successfully.

So you should ask people about their traditional medicines. Find out their beliefs about each disease and when they prefer to consult a doctor.

Summary

The concept of health keeps getting modified with social and economic changes. You must gather information about it so that you can know which aspects about their ideas need to be changed.

- There are different angles to health and disease.
- Health is related to financial, social and cultural aspects.
- Concepts can be modified.

Self-examination

1. Explain how this chapter has modified your beliefs.
2. List the beliefs of 5 women from your village.
3. Explain the factors which obstructed your discussion with the women and how you overcome the difficulties.
4. What further information do you need in this connection?
5. List the home-remedies discussed with people.

Exercises

1. Concept of health keeps changing with these alternations
 1. Social 2. Economic 3. Cultural 4. All the above
2. A health worker should discuss the beliefs of the people in order to
 1. Understand their health-related superstitions.
 2. Change the misconceptions
 3. To achieve good health when combined with their experience
 4. All the above.
3. The health-worker should be aware of folk-medicines
 1. Since some diseases are linked to blind-faith.
 2. Some diseases get cured with home-remedies.
 3. Treatments may have some problems.
 4. All the above.
4. Take care of the following when enlightening people about health
 1. Their concepts/tradition.
 2. The political/social/geographic conditions of the area
 3. Conventional/home-remedies
 4. All the above

Answers

Alternate - 1-4, 2-3, 3-2, 4-4

Lesson 5

Disease

Aims

On reading this lesson you will understand

- Which diseases are infectious and which non-infectious
- How epidemics spread.
- On which factors does health depend

Knowledge

You will know about

- The role of a health-worker

Skill

You will learn

- Understand the difference between infections and other diseases.

Perspective

You will understand

- Know superstitions among people and try to remove them.

Introduction

Our surroundings, our body and mind are constantly changing. Their condition is never steady. If these changes occur disproportionately, we cannot correspond to them.

Diseases - Illness means malfunction in the normal systems of the body, mind. There are 2 types of illnesses -

1. Non-Infectious
2. Infectious

Non-Infectious diseases are as follows

1. Changes caused in the body with age e.g. 'Vaat' (Gas).
2. Deficiency -related e.g. diet deficient in vitamin A leads to night-blindness, anaemia etc.
3. Abnormality since birth - e.g. cleft lip.
4. Caused by external factors e.g. allergy, flatulence.
5. Mental Imbalance - e.g. worry, disappointment etc.
6. Unnatural growth of tissues e.g. tumour, cancer.
7. Incidence of physical injury, e.g. a fracture of the hand.

Infectious Diseases

They may be caused by germs, they can spread from a patient to another person.

Epidemics

When the some kind of illness spreads at the same time among many people in an area, it is called an **epidemic** e. g. epidemics of diarrhoea, fever with ague, etc.

Nature has a lot of organisms and germs. While we can see many like plants, birds there are microbes which are so small that they can't be seen by the naked eye. These microscopic organisms are viewed through the microscope. They occur everywhere - in air, water, trees, our bodies and even grow on food.

They are of 4 types -

1. Virus
2. Bacteria
3. Saprophytes
4. Parasites

Germs may be harmful or beneficial . Some of them prepare vitamins in our body- bacteria convert milk to curds.

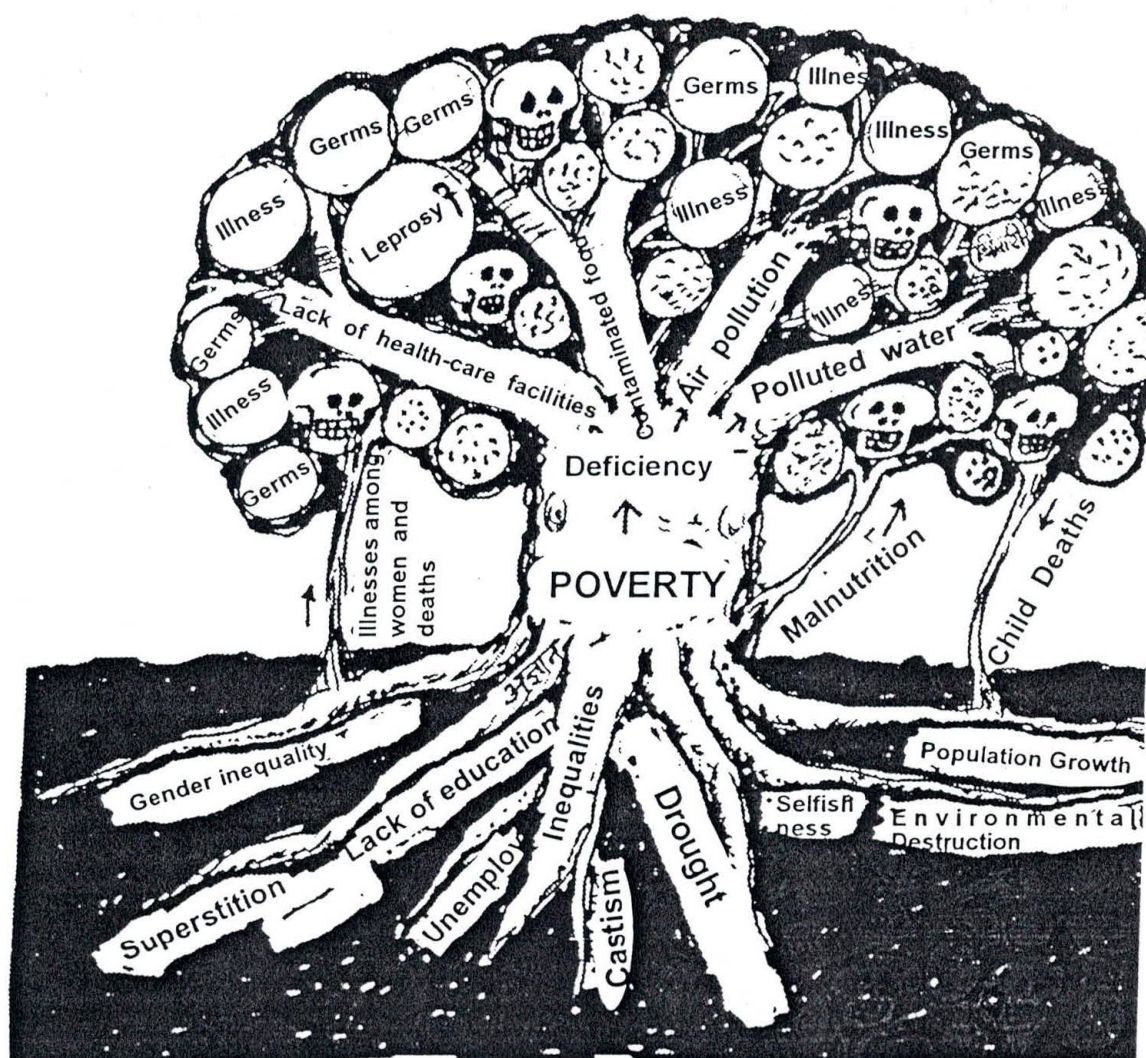
Germs cause illness like colds, coughs, TB and malaria. Even if they are all around,

people with good resistance don't get the disease because their W.B.C. can destroy them. But weaker people lose to them falling prey to diseases and sometimes even to death. We can prevent the spread of diseases by a careful diet, cleanliness around us and vaccination. Our resistance power will increase due to which diseases will not spread.

How do diseases spread?

1. By contact with contaminated food etc. as in typhoid
2. Direct contact with the belongings/bed-clothes or touching a patient e.g. cough, cold, TB.
3. Entry of parasites in our body- e.g. mosquito-bite may cause malaria.
4. Bites by animals e.g. Rabies from infected dogs

The following chart shows that factors affecting health with information of them in the form of a tree.



Banyan Tree of Diseases

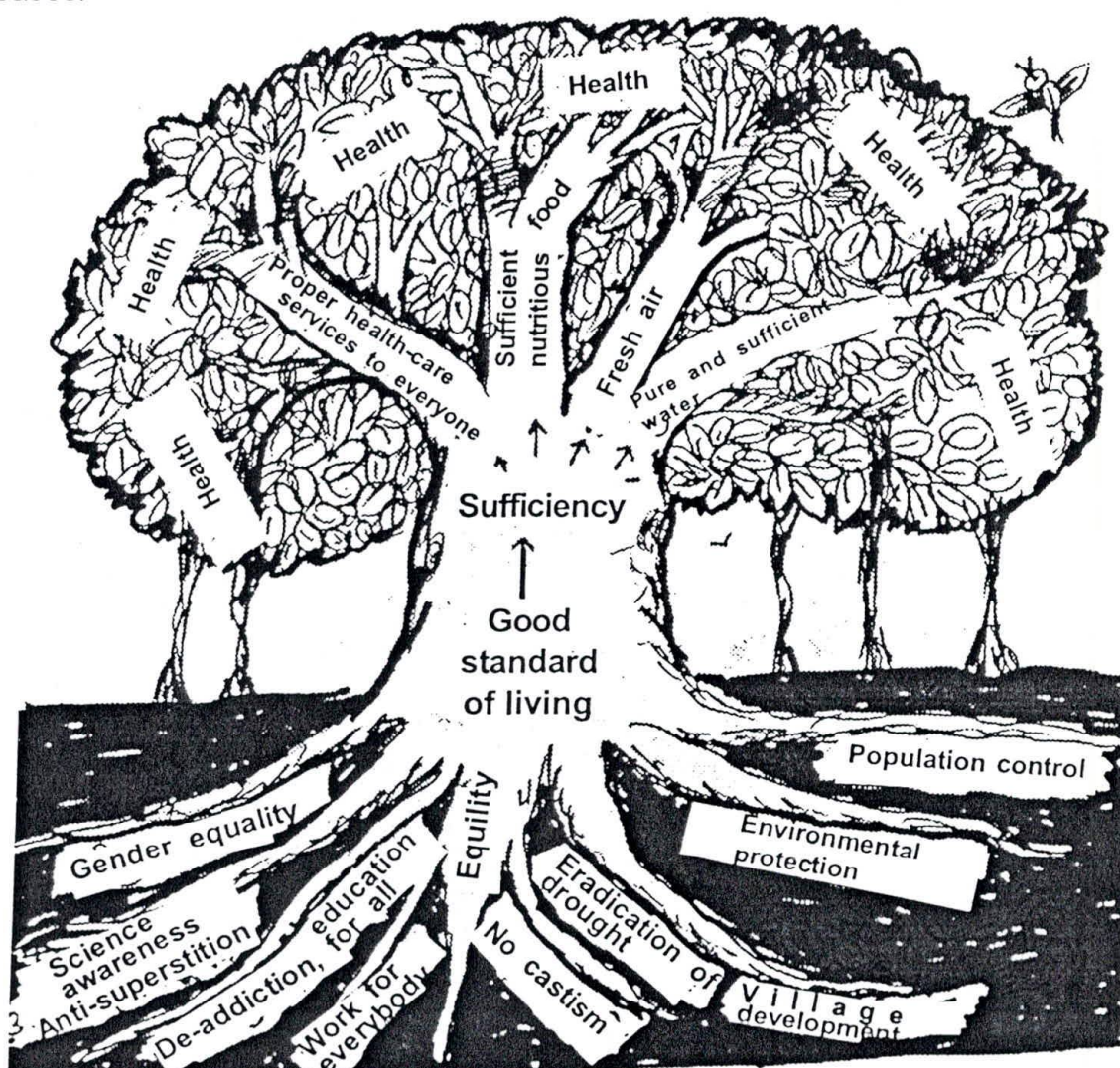
The Banyan Tree of Diseases shows that (good and bad) depends on social factors as follows -

1. Life style

A good income, nutritive diet, a house to protect from cold/heat/rain, facilities for education, public sanitation, sewage arrangement for flowing water, provision of latrines, timely and suitable treatment together with some rest, entertainment and mental health contribute to good health.

2. Drinking water

Insufficient water supplies prevents cleanliness, low levels of ground water are caused by water flowing away or too much use by cash-crops. Impure water causes, diseases like Polio, gastro, jaundice, typhoid less water means lack of bodily cleanliness causing skin diseases.



Tree of Health

3. Home and Environment (Surrounding)

Just like water, it is equally important to maintain cleanliness at home and the surroundings. It is commonly seen that people keep their house clean and throw all the household waste out. This pollutes the environment serves as a breeding ground for flies and spreads obnoxious odour. The flies enter the house and contaminate food. All this has a deteriorious effect on our health. It is therefore our responsibility to maintain cleanliness and hygiene in our house and our surroundings.

4. Disposal of flowing water

Water around the house may contain germs that cause skin diseases. It also breeds mosquitoes causing malaria. The garbage mixes with it and pollutes the atmosphere. It creates bad odour and flies carry the infections into the house. Thus the surroundings should be kept clean and soak-pits should be used.

5. Latrine

Often rural population or slum dwellers pass stools in the open due to lack of toilet facilities. This causes many diseases to spread.

We can aim for a village free of human excreta by undertaking latrine building programmes with the help of the Panchayat Committee and the Gram Panchayat.

6. Health services

We all must have information about how and where treatment for illness can be obtained.

7. Health Worker Scheme

This was started in 1977, keeping villages in mind. A local villagers is trained about health and simple treatments. The Government provides the medicines. Such bare-foot doctors are common in China.

Our rights regarding health

1. Health service is given treating a patient as a human-being.
2. There should be no discrimination based on financial state while treating a patient.
3. The patient must be informed about the disease and the treatment.
4. The patient must have the facility to complain if these rules are not being followed, so that he can get justice.
5. The most important thing is that everyone must get health related services (not just treatment).

Health for all by 2000

The poor countries like India, Pakistan and Bangla Desh suffer from bad health. In 1977 a world meeting was held to discuss how the people can be free of some diseases. These were the main points-

1. Provide primary health care to all.
2. Reduce malnutrition by providing a sufficient quantity of good food.
3. Arrange to provide clean and safe drinking water to all.
4. All children be immunised against 6 diseases - diphtheria, whooping cough, tetanus, polio, TB, measles.

The government had accepted the above objectives for the year 2000.

But what is the reality today?

We must remember that we have some responsibilities to reach the goal.

Exercises

1. Falling ill means _____.
 1. Body becomes weak
 2. Getting infected
 3. Getting Fever
 4. Disorder of normal functioning of body system
2. An epidemic is
 1. Spreading of disease
 2. Many simultaneous patients
 3. Many people get the same disease
 4. The same disease afflicts many people together in one area.
3. Itching or rash due to allergy is a disease that is
 1. Infectious
 2. Non-infectious
 3. Epidemic
 4. Viral infection

4. A barefoot doctor in the Health Care Scheme is
 1. A doctor serving in a village.
 2. A government doctor in a village.
 3. A doctor moving bare-foot in a village.
 4. A health worker from the village, working with the people.
5. Our health-related rights include
 1. Getting good food/water
 2. Getting government health services
 3. Providing treatment and preventive health services to all.
 4. Immunisation of children.

Fill in the blanks

(Environmental cleanliness) (Health for all by 2000) (Microscope) (Resistance of the body)
(B) (1977)

1. _____ can save from infection by germs.
2. The Health Care scheme was made in _____.
3. The World meeting of 1977 decided to aim for _____.
4. _____ is a preventive measure for spread of diseases.
5. A _____ is used to observe microbes.

Match the pairs

- | | |
|----------------------|---------------------------|
| 1. Contaminated Food | 1. Non-Infectious Disease |
| 2. Cancer | 2. Microscope |
| 3. Mal nutrition | 3. Mosquito |
| 4. Malaria | 4. Cause of disease |
| 5. Germs | 5. Typhoid |

Answers

Alternatives - 1-4, 2-3, 3-2, 4-4, 5-3

Blanks - 1-4, 2-5, 3-2, 4-1, 5-3

Correct Pairs - 1-5, 2-1, 3-4, 4-3, 5-2

Lesson 6

The Philosophy of Different Treatment Systems

Aims

On reading this lesson you will understand

- The principles underlying treatment systems

Knowledge

You will know about

- The fundamentals of each system ('pathy') of treatment.

Skill

You will learn

- Respect all treatment methods.
- The 'pathy' (method) is a medium, not objective, if it cures a patient, it is suitable for him.
- Respect for and cautious use of tradition.

Introduction

Treating a patient and caring for him is natural to all human beings, whichever place or time-period.

The nomadic man used natural things for treatment. As man progressed agriculturally, he began to use particular plants for particular complaints.

Even animals consume a particular, grass when they suffer from motions. But man has moved away from such natural inspiration.

Naturopathy

This is based on the belief that the body is the source of disease. So the same elements should be used to cure it. Since illness considered a slow-process, the treatment is also slow.

Therefore the 5 elements air, water, sky, earth and fire are used with the help of yoga, diet and isolated treatments.

Ayurveda

This also believes organisms consist of the basic 5 elements. There has been detailed analysis of diet and conduct related to the 3 doshas - kafa, vaat, and pitta. They have to be balanced by using elements opposing them.

Some people have all the three doshas in the same quantities while others have one of them in excess. The 'Prakirtidosh' or 'Tridosh' can be recognised as follows -

1. **Vaatdosh** - Excess of this keeps a person slim and active but has a variable appetite. Such a person doesn't gain weight and keeps falling ill. Vaat dosh makes a person prone to constipation prefer warmth and suffers in the cold. His skin is dry and stiff. His veins are clearly visible.
2. **Pitta dosh** - Symptoms of excess of 'pitta' are – intolerant to heat, softer skin, good appetite hot-tempered, good excretory system.
3. **Kafa dosh** - Those with kafa dosh are quiet, low poor appetite but good stamina, sleep well and love exercise.

Some people have two 'doshas' together

Homeopathy

It was developed by Dr. Hanneman about 200 years ago. He felt quinine was not suitable for malarial and tried it on himself when he was normal. He found it produces the same symptoms as the disease even with changed quantities. Thus he concluded that substances having the same properties can be used for treatment. Thus homeopathic medicine, consist of different materials.

Allopathy

In this method diseases may be divided into infectious and non-infectious.

Non-infectious diseases may be caused by disorder in some part of the body like-heart attack, cataract, cancer etc.

They may be caused by external factor e.g. - poison due to snake bite, cough due to smoking or ulcer caused by excessive drinking.

Diseases of deficiency like malnutrition leading to anaemia etc.

Problems since birth like birth marks or mental epileptic fit or conclusion, deformity. Some diseases may be mental. Some things are harmful like anxiety, superstition or uncontrolled phobia.

Infectious diseases:

Infectious diseases spread when attacked by germs.

Reiki, Acupressure and acupuncture

They are based on the faith in flow of energy in the body. When obstructed, it causes disease and has to be stimulated.

Self Examination

Which systems of treatment are available in your village?

Why do people go to witch doctors?

What do self-curing diseases indicate?

Write the symptoms when the patients should be sent to the primary health centre or allopathic doctor.

Exercises

1. According to Naturopathy for good health are must
 1. Be a vegetarian
 2. Follow suitable timings for diet and conduct
 3. Practice Yoga/pranayama
 4. Use exercise/yoga/fasting/simple diet/water therapy.
2. Ayurveda is the science of
 1. Human disease
 2. Veda
 3. Man's living and disease.
 4. Diet and conduct
3. Infectious Disease means
 1. Person to person
 2. Many people at time
 3. Disease among adults
 4. Children's frequent illness
4. Non-infectious diseases are -
 1. One Patient shows infection
 2. Not contagions
 3. Similar symptoms among many patients
 4. One person has symptoms of many diseases
5. These medicines don't benefit non-infectious diseases
 1. Anti bacterial
 2. Anti viral
 3. Anti parasitic
 4. Homeopathic
6. The main thing in Reiki, acupressure, acupuncture
 1. Opposing flow of energy
 2. Encouraging / Inducing flow of energy
 3. Balancing the energy flowing
 4. Controlling the energy flowing

7. Reiki, Acupressure, Acupuncture believe disease is caused by
1. Obstruction in flow of energy
 2. Increase of flow of energy
 3. Obstruction in flow of electric impulses
 4. Obstruction in fluids of tissues

Fill in the blanks

(Homeopathy), (Man's body is the source of disease), (Earth, Fire, water, wind, sky), (Natural)
(Dr. Hanneman) (Kafa, Vaat, Pitta)

1. Naturopathy believes that _____.
2. Treatment and caring for patients is a _____ human inspiration.
3. Ayurveda believes that our body consists of Panchamahabhootas _____.
4. The imbalance of tridosh _____ causes disease in humans.
5. _____ started Homeopathy.
6. Different substances having similar properties can be used as medicine for treatment according to _____.

Match the pairs

- | | |
|------------------------------|---|
| 1. Cleft lip | 1. Mental Disease |
| 2. Uncontrolled phobia | 2. Non-infectious disease |
| 3. Non infectious disease | 3. Clearly, visible, "Neela" (veins) |
| 4. 'Vaat Dosh' | 4. Bacteria |
| 5. 'Kafa Dosh' | 5. 'Pitta-Dosh' |
| 6. Reduce excretory problems | 6. Poor Eater/Fond of physical exercise |

Answers

Alternatives 1-4, 2-3, 3-1, 4-2, 5-1, 6-2, 7-1

Blanks - 1-2, 2-4, 3-3, 4-6, 5-5, 6-1

Pairs - 1-2, 2-1, 3-4, 4-3, 5-6, 6-5

Lesson 7

The Role of Health Worker

Aims

On reading this lesson you will understand

- It is necessary to imbibe the mind-set, life-style and psychology of the villagers in order to work as a Health Worker in a village.
- How to help others while continuing our own work.
- Realise the meaning of culture.

Knowledge

You will know about

- The role of a health worker.

Skill

You will learn

- Working in coordination with people.

Perspective

You will understand

- The implication of 'culture'.

Introduction

A new health worker called Madhuri came to Sunderpur. She had heard that Ayushi worked in her neighbouring village and decided to consult her to decide how to start working. Actually Ayushi had to complete her records the same day, but decided to share her experiences with Madhuri as she worked.

She narrated some incidents to the new health worker. A health worker called Mahadu was once bitten by a snake. Ayushi had rushed to give him the anti snake venom-injection (ASV). But instead he preferred to be treated by a traditional healer in the temple. He recovered in a couple of days. Ayushi pointed out that it meant he was bitten by a non-poisonous snake otherwise he would have died without ASV Injection. He reasoned that hardly anyone ever died of snake-bite in that region, in spite of several people being bitten. He attributed this to merit and sin. He felt he was bitten because his wife had worked during menstruation (against convention) but was saved because he wasn't a sinner.



Madhuri criticized the man for his ignorance. But Ayushi reminded her not to dismiss his knowledge gained by his experience as a farmer. Statistically he knew people there didn't die of snake-bite but being illiterate his reasoning was not scientific. But this didn't mean he was not intelligent. He could draw conclusions but he could not reject convention. This concern for culture was preserved by Ayushi and whenever she gave the ASV injection to a villager, she urged him to visit the temple. This endeared her to the villagers and they agreed to take her treatment while they continued their cultural practices.

In the olden days people attributed all illnesses to sins and curses. They took patients to temples or places of worship. Often they felt better. Modern medical science also tell us that some diseases get cured without treatment, like viral infections. So there is no harm in such patients visiting the temple.

Madhuri was apprehensive about whether the villagers would ever change. Ayushi reminded her that she herself was literate, worked and dressed differently from her own mother. Thus generations were always changing, only change is a slow process. Some rebels always oppose what is wrong in tradition e.g. Savitri Phule and Mahatma Phule. Though education

was denied to women by convention, they decided to start it. No doubt they had to struggle a lot. Contact with British culture helped them in this respect. Now educating women is acceptable to society.

Thus neither should we consider tradition as totally infallible, nor should we reject it as a whole. We keep learning through experience. Ayushi summarised some of the customs favourable to our lives as follows -

- Cleaning the teeth early morning is a standard practice. Use of neem is beneficial to us.
- Bathing before visiting the temple is important for cleanliness.
- Joint families give support to all members, thus they rarely suffer mental illness.
- Also senior citizens and children are cared for.
- People giving traditional medicines do not charge money because they consider it a sacred duty.
- Every festival has a recommended diet which is beneficial for health e.g. Sesame and jaggery provide warmth in winter.

Madhuri wondered how the above facts would concern her own work. Ayushi clarified that she could mention these practices to the village women. She could include them while encouraging them to talk about their health problems. This would bring the health worker closer to the people. Involving them in trying out treatments would become easier if she showed that she accepted the above conventions. Ayushi cited the example of how once she once requested a witch doctor to help her when people refused to discontinue defecating near the drinking water in spite of repeated efforts. The man spoke to the villagers and they agreed. Thus she had used his authority to bring about a change from wrong practices. This helped to prevent Gastroenteritis during the rains.

Finally she mentioned how she had learnt not get cross with the villagers. Once she discovered that a little boy had night blindness. She scolded his mother for not bringing him for treatment. The rustic woman retorted that she did not consider it an illness at all, moreover she had no time to meet her. Ayushi realised that they first need to be made aware about good and bad health. Only then could they be treated for perceived ailments. Thus Madhuri realised the importance of getting to know what the people around her thought, what they didn't know, and how they lived. This would help a health worker to identify problems, familiarising them at the same time. Soon they would accept her suggestions.

Self Examination

1. Explain how the chapter has changed your perspective.
2. Collect information about superstitions related to different diseases in your area.
3. What would you do in case of an epidemic? Whose help will you take?
4. What will you do to prevent contamination of water in your place?
5. Discuss with people what they think about health.

Exercises

1. A health worker in a village should
 1. Move about in the village.
 2. Give information to people
 3. Only tell people what you think
 4. Understand people and work in coordination with them
2. People take long to change because
 1. People have blind faith
 2. There is pride about forefathers.
 3. People are stubborn
 4. Cultural practices have a deep impact upon people.
3. If you wish to change superstitions related to disease,
 1. Provide scientific information to people
 2. Pressurise people
 3. Understand their experiences and give them time to accept changes
 4. Educate people

Fill in the blanks

(Malnutrition) (A)

1. Deficiency of vitamin _____ causes night blindness
2. _____ may cause swelling on the bodies of children

Answers

Alternatives 1-2, 2-4, 3-3

Blanks - 1-2, 2-1

Lesson 8

Anaemia

Aims

On reading this lesson you will understand

- Getting information about the illness called Anaemia.
- Knowing the causes, symptoms and treatment of Anaemia.
- Knowing the different methods of testing the constituents of blood.
- Find out the age-wise amounts of constituents in normal as well as anaemic conditions.

This chapter will develop your knowledge, skills and perspective as follows -

Knowledge

You will know about

- What anaemia is
- Which substances are necessary to develop constituents of blood and
- Know the symptoms of anaemia those who can be recognised

Skills

You will learn

- Testing blood contents
- How to identify that a person is anaemic?

Perspective

You will understand

- What is the root cause of this disease on such a large scale in our country. and it can largely be treated by eliminating poverty and inequality.
- How anaemia can be overcome through diet

Introduction

Anaemia can be defined as a reduction in the oxygen carrying capacity of blood. Anaemia is known as '*Pandurog*' or '*Raktkshay*' or '*Raktpandhri*' in Marathi. Since it is very common in India, people get so used to it that the condition is not perceived as a disease. This occurs more among women, particularly rural, but even children below 5 years and 20% men suffer from anaemia. It is aggravated by poverty.

Blood contains two kind of cells 1. Red blood cells (RBC) 2. White blood cells (WBC) RBC contain haemoglobin which gives its own red colour to blood. All the oxygen required by every cell of our body for metabolism is supplied by the red blood corpuscles. The redder the blood, the more is its ability to carry oxygen. The RBC are created in bone marrow and remain in the blood for about 3 months after which they are destroyed in the spleen. Their protein, iron etc are separated from them to make new RBC. While unwanted material is given out through urine, making it yellow. This colour is noticed during jaundice.

In anaemic condition, total amount of haemoglobin is reduced. In one kind of anaemia it is reduced in all the cells while in the other kind, the no. of RBC is reduced.

Age	For Normal Health	In Anaemic Condition
6 months - 6 years	About 11	Less than 11
6 years - 14 years	About 12	Less than 12
Above 15 (male)	14 to 16.5	Less than 13
Above 15 (female)	11 to 14.5	Less than 12
Pregnant women	11 to 13	Less than 11

Blood components in 100 ml gram

Causes of anaemia:

1) Physical reasons:

A) Decrease in the quantity of plasma in the blood cells – iron, proteins and vitamin B are primarily useful for generating plasma. It is necessary to obtain these constituents in the proper proportion. The quantity of plasma decreases and anaemia occurs if the quantity of any of these constituents decreases or in case of malnourishment.

B) Decrease in the quantity of blood cells – Each ml of blood has approximately 50 lakh red blood corpuscles. Total blood cell count decreases if the speed of cell generation is slower than that of cell degeneration. It may also be caused by haemorrhage (due to various reasons).

- Timely treatment of the physical reasons of anaemia is essential as this can prevent potential serious consequences.
- The impoverished must be assured of medical treatment.

Women undergo blood loss during child birth, menstruation and abortion. Periodic loss of blood in large quantities during pregnancy, child birth or due to menstrual problems (menorrhagia, metorrhagia) and lack of adequate nutritious food leads to anaemia. Anaemia can also be caused due to other ailments like:

- Malaria in which the RBCs (red blood cells) are destroyed
- Worm infestation in the intestine, in which the worms continuously suck blood
- Continuous loss of blood from (intestinal, duodenal, peptic) ulcers
- Persistent episodes of diarrhoea and vomiting leads to reduced absorption of iron (ferrous sulphate) and vitamins, thereby leading to anaemia.
- Haemorrhoids (piles) leads to constant loss of blood from the body.
- Urinary bladder disorder affects the bone marrow functioning thereby impairing the production of RBCs and accelerating its destruction. This leads to serious reduction in the haemoglobin levels.
- (Long standing) chronic illness also lead to anaemia, as the intake of food reduces and that of medicines increases during illness.
- Excessive loss of blood due to surgery, accident or injury can also lead to anaemia.

2) Economic reasons:

Impoverished, labourer class people are not assured of year round employment in our country. They are not paid appropriately for their labours most of the times. The government spends less amount of money on the necessary issues like food supply, health services, employment and education, and even this expenditure is not brought to fruition due to chaotic management. Owing to low production, impoverished people cannot obtain nourishing and sufficient food. Various diseases and anaemia can be observed in a large percentage of impoverished people due to the same.

Impoverished people, labourers and daily labourers must be assured of year round employment and provision of sufficient foodstuffs. Everyone should have equal rights on natural resources. Inequality must be reduced.

3. Social reasons:

Women and impoverished people are always given an inferior status in our society. The diet and health of women are ignored. Innumerable hard household work falls upon the women and they can eat only after the men have eaten. To add to their troubles, there is a myth that pregnant women should eat less and not eat fruits. A girl is given inferior treatment since the day she is born. In reality, women require better nourishment as they have to go through menstruation, pregnancy, postnatal stage, etc., but as they do not get proper nourishment incidences of anaemia are higher in women. To add to this, women themselves fast for the well being of their family. Women become pregnant frequently as birth control

measures are not used, and as a male child is desired, the sex of the foetus is determined and female foetuses are aborted, which leads to haemorrhaging and the woman's health deteriorates further and anaemia increases.

The symptoms and diagnosis of anaemia:

The following symptoms are observed at the onset of anaemia.

- Dull and pale complexion
- Feeling of exhaustion
- Breathlessness after walking
- Cramps in the hands and legs.

Once anaemia increases

- Heart palpitations
- Swelling in the legs
- Nails and inner eyelids - Palor become pale
- Pinkness of the tongue decreases.

If one or more of the abovementioned symptoms are observed in a person, it is necessary to conduct a blood test. The person may not notice the above symptoms distinctly if the blood constituents have been decreasing slowly. Hence, all men and women should possibly opt for a blood test to diagnose anaemia instead of ignoring it.

Examination of blood and blood constituents

The blood tests are conducted by taking a blood sample from a finger or a vein in order to determine the (blood constituent) level of haemoglobin. This can be detected by using number of methods. The estimation might show a slight variation from different methods used.

- A few drops of blood are taken on a particular type of blotting paper in order check the redness of the blood. It is compared with a predetermined red colour. This is an easy method for estimating the haemoglobin level. Though the estimate by using this method might not be accurate one can diagnose anaemia.
- In the second method, one drop of blood is added to the blue coloured saturated solution. If this drop sinks to the bottom, it is normal and if it floats, it is inferred that the haemoglobin count is low. Even this inference is only an estimate.
- Sahili's Method – Used as a standard all over the world and used in many places in our country. In this method, a few drops of blood are added to hydrochloric acid of a particular strength and this mixture is diluted till it matches a predetermined colour shade. Once both the colours match, the blood constituents are calculated comparatively.
- That apart, some inferences are occasionally made by examining the type and count of red blood corpuscles.

Treatment of anaemia:

A) Household preventive measures against anaemia:

Our diet should consciously include the following.

1. Haliv contain iron in large quantities, so eat it can be consumed in the form of laddoos and purridge etc.
2. Eat split grams, jaggery, peanuts, puffed rice (churmura), parched rice, dates and black currants.
3. Eat a lot of fresh raw green leafy vegetables and fruits all year round.
4. Eat chutneys made of peanuts, linseed, sesame seeds, etc.
5. Use jaggery instead of sugar.
6. Eat mutton, fish and liver.
7. Eat sprouted pulses
8. Eat lemon, gooseberry, tamarind, guava, jujube (bor) as they have vitamin C. Vitamin C aids the absorption of iron, present in the food, into the blood.
9. Eat all types of cereals and leafy vegetables regularly.
10. Use fenugreek seeds and fenugreek powder. Using sprouted fenugreek seeds is the best.
11. Tender blades of wheat can be eaten.
12. Use iron vessels for daily cooking, e.g. wok, tava, knife, *vili*, spatulas.
13. While milling, add soy beans, whole black gram to wheat in the following proportion.
 - 250 g soy beans + 2 tsp fenugreek seeds to 4 kg wheat
 - 1 mul whole black gram + 1 to 2 tsp fenugreek seeds to 1 kg jowar / bajra / raggy

Iron tablets:

These tablets contain iron and folic acid. Iron tablets are black and red in colour. Since the past few years, women, especially pregnant women, lactating mothers and infants are being prescribed iron tablets (ferrous sulphate) as a preventive measure against anaemia. (It is necessary to provide education regarding the use of these tablets, as these tablets would otherwise lie unused in the house.) Most women and children do not experience any side effects by consuming these tablets. As a preventive measure, one tablet must be taken every day for three months, one small tablet for a child and one large tablet for an adult.

Treatment:

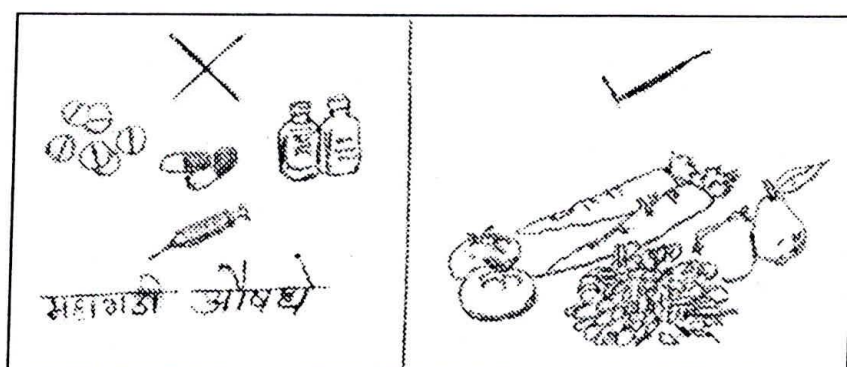
The dosage of tablets should be doubled in case of anaemia. That is, two tablets instead of one, for a minimum of three months and a maximum of six months.

It is better to administer oral tablets to anaemic patients (Except for patients whose

haemoglobin count is just 2-3 grams). The time for a complete recovery differs according to a person's health. Except in severe conditions like post-operative care, post-delivery and other similar causes of severe blood loss, oral tablets are considered to be the safest and most effective. The blood constituent level comes to normal within 6 to 8 weeks of oral consumption of tablets. If some other disease is responsible for the decrease in blood constituent level, it is necessary that this disease be treated first. In such a case the patient must be referred to a doctor.

In the beginning, administer only one tablet a day after meal in order to avoid the side effects of iron tablets. Administer appropriate dosage on an empty stomach only after the body gets used to the tablet and the side effects disappear.

Household remedies and iron tablets are the best treatment for anaemia. Taking expensive medicines is not necessary. Anaemia is not cured by injections or saline. Rather than drinking tonics, it is better that the money be spent on nourishing food.



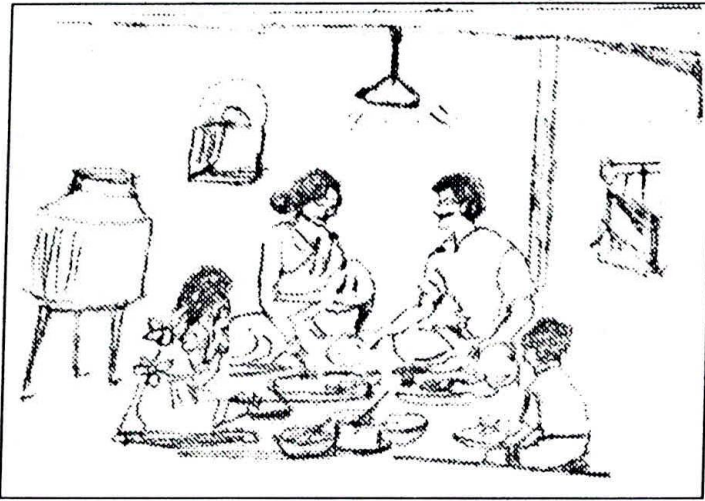
The necessity of change in the social and familial condition of women:

Women have double work load in our society. But, they do not receive food in proportion to their work. Girl child is unwanted largely owing to evil practices like child marriage and dowry. They seldom enjoy a respectful status in their natal (mutual) or conjugal (in-laws) house, which in turn has a deleterious effect on their physical and mental health. A fierce battle must be fought against such unjust customs and traditions in our society.

The community should have the facilities required to make a woman independent from all points of view. This should include sufficient food, higher education and opportunities for employment. Women should have equal share in the ownership of house and farm.

Some details about anaemia

1. 40% women and 20% men have anaemia
2. Women need 3 times more iron than men. Breastfed children also need it.



3. Anaemia has a range of cause from chronic dysentery to malnutrition.

4. Always remember that anaemia may be the cause behind fatigue, body-ache and related symptoms like feeling unenthusiastic etc.

5. Anaemia has to be found out because patients rarely complain about it.

6. Anaemia lowers body resistance, increasing the risk of bacterial infections

thereby.

7. Preventive iron tablets must be taken for at least 3 months.

8. Iron injections may cause reactions.

9. Jaggery, green vegetables and iron utensils provide sufficient iron.

10. The government has a programme for anaemia which is cheap and easy.

Self Examination

1. Which diet is recommended to correct the deficiency of iron, vitamin B and protein.
2. Why do more women suffer from anaemia?
3. Why should pregnant women prevent anaemia?
4. Is there any way to eradicate anaemia from rural areas?

Exercises

Fill in the blanks

(Bone Marrow), (14-16.5 gm), (less blood) (120 days), (red), (iron, protein, vitamin B), (Anaemia), (11-14.5 gm), (Iron 60 gm/folic acid), (6-8 weeks)

1. Anaemia means _____.
2. Haemoglobin is _____ in colour.
3. RBC are produced in the _____.
4. RBC exist for about _____.
5. The amount of haemoglobin among men is _____.
6. Women have _____ of haemoglobin.
7. You need _____ for production of blood.

8. The primary indications of _____ are pale, lifeless skin, fatigue and panting.
9. The blood becomes normal after taking iron orally for _____ weeks.
10. The iron tablets given through the government programme include _____ and _____.

Choose the correct alternatives

1. Colourlessness around eyes and nails as well as a light flabby tongue in a person suffering fatigue are the symptoms of -
 1. Anaemia
 2. Malnutrition
 3. Jaundice
 4. All the above
2. The causes of Anaemia can be
 1. Long-term bacterial infection
 2. Cancer
 3. Worms
 4. All the above
3. The treatment for anaemia depends upon _____
 1. The amount of haemoglobin
 2. Amount of blood
 3. WBC count
 4. Diet
4. If there is only 2 to 3 gm of haemoglobin
 1. Fresh blood should be given
 2. Iron injection is given
 3. More iron is given through diet
 4. All the above
5. Anaemia occurs among _____ women
 1. 40%
 2. 20%
 3. 30%
 4. 50%
6. Anemia occurs among _____ men.
 1. 20%
 2. 30%
 3. 10%
 4. 50%

7. To prevent Anaemia

1. Take iron tablets

2. Give blood

3. Take an iron injection

4. Use iron-rich food and iron utensils

Answers

Blanks - 1-3, 2-5, 3-1, 4-4, 5-2, 6-8, 7-6, 8-7, 9-10, 10-9

Alternatives - 1-1, 2-4, 3-1, 4-1, 5-2, 6-1, 7-4

Lesson 9

Malnutrition: Social, Economical and political Aspect

Aims

On reading this lesson you will understand

- Get details about the cycle of undernourishment .
- Find out the proportions of food constituents for women of different age groups.

Knowledge

You will know about

- Causes of Malnutrition specially in case of women.

Skills

You will learn

- Make women realise the seriousness about malnutrition by making them aware.

Perspective

You will understand

- How our conventions are responsible for malnutrition of women.
- How our political and economic activities have adversely affected women's health.

Introduction

Food is an important necessity of man. Almost 40 percent of the population live below the poverty line in India. It is difficult for them to obtain sufficient food throughout the year. It is common to come across higher incidences of malnourishment in such places and, of these the number of malnourished women and children is high. When our body does not receive all the necessary food constituents through our diet, it is known as malnourishment. Malnourishment has an adverse effect on our body. It stunts growth in children. The body becomes emaciated and weak and the person feels tired. In India, the number of malnourished children, impoverished labourers and women is high. Many diseases are caused due to malnourishment. The expense for the treatment of this disease and the loss of wages during that period affects their ability to buy the food required for nourishment adversely. This leads to an increase in the severity of malnourishment and other diseases. This vicious cycle is incessant. Here, one wonders as to why everyone does not obtain the food required for nourishment.

Where does all the food produced in lakhs of tons go? Every year, newspapers report about the malnourishment in Adivasis and the resulting deaths. Is there really any effective solution planning for this?

If, on the one hand, we say that our country's rate of development and progress has increased, then, on the other hand, why is hunger a horrifying reality? In the recent past, thousands of tons of grains rotted in the granaries, but were not distributed to the needy, merely due to the ineffective distribution and lack of willingness to do so. This shows political and governmental apathy. Proper planning and effective implementation is imperative to ensure adequate availability of food to the Adivasis and impoverished labour class. The impoverished and needy people should be rightfully assured of employment and change in this scenario is an important need. For this, the goals and policies of the government as well as the officers implementing them must have a positive outlook.

The natural resources available with us have been distributed disproportionately. A handful of people own large portions of land and water. The prices of foodstuffs will increase due to the opening of the economy and, again, the impoverished labourer class and women will bear the brunt of it. Every body will veer towards planting cash crops for maximum profits, due to which there will be a deficit of food grains and their price may increase. Executing the necessary solution plan in a timely manner and the production of different types of foodstuffs must be encouraged. Only this can ensure adequate (nutrition) food supply to all. Besides the aforementioned political and economical changes, there is also a direct need to bring about social changes.



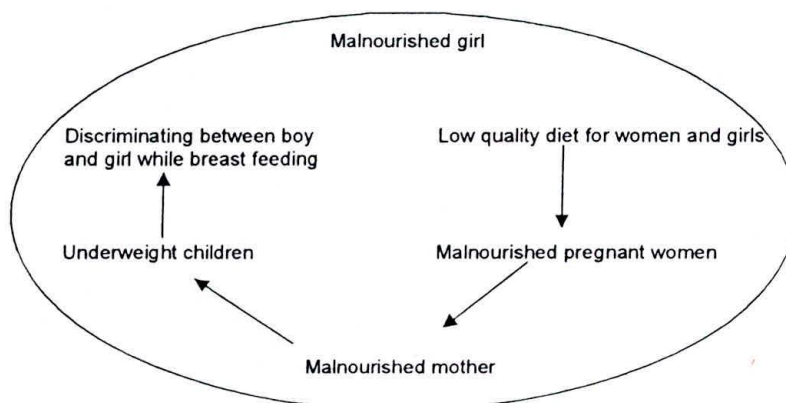
Our culture based on sexual discrimination, and the inferior status given to women is responsible for malnourishment in women. In our society, women do not receive proper nourishment due to pregnancies in immediate succession. In this male dominant society, where siring a male child is desired, illegal sex determination tests are conducted and women are repeatedly compelled to abort female foetuses.

The girl-child is top-fed early. Less of mother's milk implies receiving less of resistance power. Also girls and women have to often eat the left-overs when the 'males' have finished their meal. Yet, they have to contribute to house-keeping, fetching water, baby -sitting. Absence of sufficient food and play hinders their proper growth and development. They are prone to obstructed labour.

Pregnant women are prevented from some essential nutrients by superstitions e.g. milk may fasten a foetus to the uterus, that papaya or jack-fruit may cause abortion etc. Further, giving birth to a girl often leads to criticism. Once again she is expected to go through pregnancy deliveries take their toll on her health.

Another harmful convention is fasting for almost 75 days a year for some reason or the other. Widows are even deprived of certain foods.

The Cycle of Malnutrition in Women



In order to break this vicious cycle of malnourishment, it is essential that the reforms be made at all levels.

There should not be any discrimination between man and woman in the community and family. Men and women must have equal opportunities for education, jobs - in order to become financially independent, business, etc. Women should get an equal share in the ownership of farm as well as house. Women should be assured of a safe pregnancy. Women should have the freedom of choice to conceive. Women should not have to endure many pregnancies for fulfilling the desire for a male child.

The proportion of food constituents required by women at various ages					
Age	Weight	Protein	Vitamin A	Calcium	Iron
Years	Kg	g	Unit g	Mg	Mg
11-18	46	46	800	1200	18
19-22	55	44	800	800	18
23-50	55	44	800	800	18
50-55	44	800	800	10	-
Pregnancy	-	+30	+200	+400	-
Lactating mothers	-	+20	+400	+400	-

(Reference: Coreen Robinson – Nutrition and diet therapy)

Identifying malnourishment in children –

There are two methods for identifying malnourishment in children aged between 0 and 5 years.

- 1) Using a weight, height and age chart.
- 2) Measuring the mid-arm circumference.

Two types of malnourishment can be observed in children.

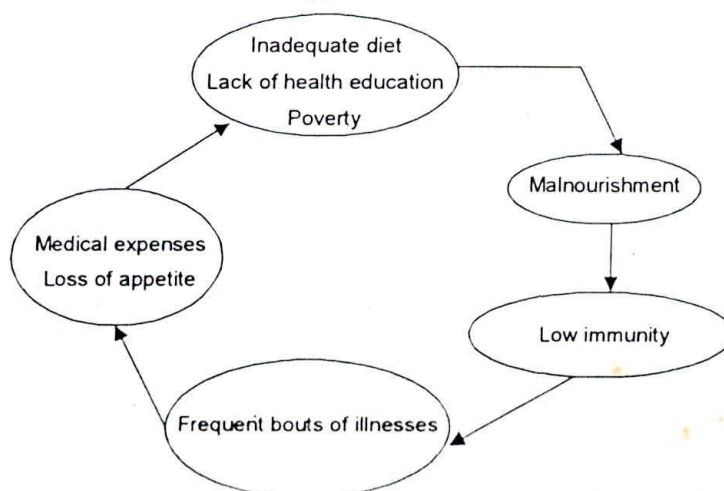
1) Emaciation -

In this type, the child's hands and legs decreases in size and becomes gaunt and the ribcage can be seen. The child demands for food constantly. In this type of malnourishment, the child has not received the constituents necessary for energy, growth and protection in the correct proportion.

2) Swelling -

In this type of malnourishment, there is a swelling in the child's legs. The abdomen appears to be distended. The arms are thin. The child is listless. This type of malnourishment is difficult to identify. Prote deficiency in food leads to this type of malnourishment.

Malnourishment in children :



In order to eradicate malnourishment in children:

- Provide them with a fresh and balanced diet.
- Treat them immediately in case of any illness and take them to the doctor for regular checkups.
- Take advantage of the Government programmes held through Anganwadis. Follow up to ensure that the child is gaining weight.
- Educate the mothers about the children's diet and vaccination programmes

Nourishment for infants:

The nourishment of infants must be monitored right from the beginning for the timely prevention of malnourishment. Infants grow rapidly, which means that they require more food. Since the size of the stomach in infant is relatively smaller, they cannot consume large quantities of food at one time. They must hence be fed 5-6 times a day.

Mother's milk is extremely important in an infant's diet. Apart from mother's milk, the infant must also be fed the following from the fourth month onwards –

- Rice gruel, soft rice
- Porridge made from Ragi (Nachani) + rice flour
- A thin soup made of boiled vegetables and tomatoes
- A soft khichidi of split green gram (moong) and rice

Inculcate the habit of eating all types of foodstuffs in an infant by the age of one year. Increase the portion size of food with increasing age. Their diet should include various pulses, sprouts, eggs, fish as well as fruits and leafy vegetables. Infants become more active with increasing age, due to which their bodies require more fuel. The infants' requirement of energy is fulfilled by the oil and ghee in their diet. A balanced diet enhances infants' nourishment. Infants do not need expensive tinned powders. Powders like Farex and Cerelac essentially contain cereals, pulses and milk powder.

Exercise

1. The cause of malnutrition in women is:
 1. Insufficient food intake
 2. Excessive physical activity
 3. Poverty
 4. Gender based cultural differences.

2. The vicious cycle of malnutrition in women can be broken by:
 1. Providing nutritious food to pregnant women.
 2. Providing nutritious food to women and girls.
 3. Improving the social, economical and political status of women
 4. All the above

3. Lack of adequate nutritious food intake in adolescent girls leads to :
 1. Malnutrition
 2. Difficulty in child birth due to impaired development of the pelvic bone
 3. Physical growth retardation.
 4. Contracts diseases

4. What are the causes of malnutrition ?
 1. Inequitable distribution of foodgrains and opening of market economy.
 2. Lack of sufficient micronutrients.
 3. Rising price of food grains.
 4. Low production of foodgrains

5. One of the following can have an adverse effect on the health status of women:
 1. Acceptance of market economy.
 2. Tendency to cultivate more cash crops
 3. Reduction in cultivation of cash crops
 4. All of the above

Answers

1-4, 2-4, 3-2, 4-1, 5-1

Lesson 10

Nutrition

Aims

On reading this lesson you will understand

- Knowing about balanced diet

Knowledge

You will know about

- The dietary constituents obtained from food.
- Understanding the function of constituents
- Knowing the changes caused by deficiency of constituents.

Skills

You will learn

- To identify the symptoms and indications of nutritional deficiencies
- To increase the nutritional value of foodstuff.

Perspective

You will understand

- Balanced diet doesn't imply expensive food.
- All the food constituents are necessary for health.

There are 5 different constituents of food

1. Carbohydrates 2. Protein 3. Fat 4. Vitamin and Minerals 5. Water

A balanced diet is the one that includes these constituents in the proportion required by the body. Deficiency of the constituents causes these changes - weakness, mental strain, lack of development among children, weight loss, skin changes.

Carbohydrates

They give instant energy to work but need other constituents to store it. They occur in grains (like rice, wheat, ragi, corn, potatoes, sugar (also honey and jaggery), milk and fruits.

Proteins (Body building food)

Proteins are necessary for the growth of our body as well as for compensating the wear and tear. They help growth, strong muscles and development of brain. They are found in high quantities in fish, eggs, soya-beans, milk and its products. On a smaller scale they also occur in green vegetables and 'dal' (split-peas)

Fats

Our body stores energy in the form of fat which is used when necessary. It is obtained from butter and cooking oil on a higher scale but also from groundnuts, soyabean, coconut and milk in medium amounts.

Vitamin and Minerals (Protective Food)

They help the smooth functioning of the body and for healthy blood, bones and teeth. They are found in large quantities in green leafy vegetables, fruits, grain bran, etc.

Types of Vitamins

Vitamin A - necessary for healthy eyes. May cause night-blindness in case of deficiency. Sources - yellow fruits and vegetables like papaya, carrot, cod liver oil.

Vitamin B - This group is necessary for various functions of the body. Deficiency causes 1. inflammation of mouth, 2. Dermatitis 3. Indigestion 4. Weakness 5. Aching limbs.

Vitamin C - Present in sour fruit like guava, citrus group, tomatoes, green leafy vegetables, maximum in 'Amla' Deficiency causes scurvy, blue patches on skin with bleeding below the skin. These fruits must be eaten raw if possible. Vitamin C is very important in our

Lesson 11

Care, Nutrition and Women's Health

Aims

On reading this lesson you will understand

- The causes of dietary deficiencies in women.
- The effects of malnutrition
- Why it is necessary for women to remain health.

Knowledge

You will know about

- The reason for ill-health of women.
- Which diseases are caused by lack of care and nutrition.

Skills

You will learn

- Investigating as to how malnutrition has become a part of women's living.

Perspective

You will understand

- How necessary it is for women to realise that nutrition is one's right.

A nutritive diet is required for good health. Most diseases in the world are caused by malnutrition combined with infections. Not only is insufficient intake of calories responsible but also deficiency of fine nutrients like Iodine, Vitamin A, and Iron. A protein rich diet is expensive and the poor, who are used to a poor diet, don't consider themselves under-nourished as they do spend their earning on food.

Anaemia related to deficiency of Iron affects women in their growth- 88% of pregnant women in India, 40% in Africa, China and South America and only 15% in Western countries suffer from this. Deficiency of iodine prevents development of the brain and is the greatest cause of mental retardation but this can be controlled. It also is the cause of cretinism and defects of birth.



Measles and Diarrhoea are aggravated by deficiency of Vitamin A along with the night blindness. So are reproductive infections which lead to pelvic swelling, and chronic back-ache and finally even infertility which may result in rejection by families. More girls than boys suffer this deficiency.

The above diseases form only 3.4% of total illnesses. Other deficiencies include insufficient calcium obstructing bone development, resulting in osteoporosis in old age. 45 crore women and 40 crore men are underdeveloped due to malnutrition.

There are 3 causes of anaemia and malnutrition. The first is the presence of parasites in the intestines. They destroy appetite but can be controlled by treatment. The second is malaria to which undernourished people are prone. The third is ignorance which prevents women from consuming sufficient quantities of nutritive food. This is particularly true of Vitamin A which can be obtained without spending much as such vegetables are easy to grow.

Misconceptions also contribute to discrimination against women's nutrition. Several Asian and African communities believe (wrongly) that a nutritive diet in the first 3 months of pregnancy gets transferred to the umbilical cord, not the foetus. According to them nutrition given in the next trimester may make the baby so heavy that labour will be difficult. Thus the expecting mother is deprived of sufficient food. Comparatively she is better off in her parental home, where physical exertion is reduced as she is allowed to rest with the support of her parents and siblings. An under developed woman gives birth with a smaller cervix, often causes infant mortality.

Poverty discourages the poor from consuming leafy vegetables. Therefore they need to be subsidised, in order to prevent malnutrition. Women need to be made aware of essential nutrients so that they can make changes in their life-style. If they can improve their nutrition, they will be healthier, in turn their families and this will enable improving their financial condition. A healthy girl becomes a healthy woman. She can have a beneficial effect on the health of the whole family since senior women control important decisions, in society. Thus girls and women needed to be educated about health. Mere aid from foreign organisations or non Government Organisations (NGOs) is only for emergencies and has short-term returns.

Exercises

Fill in the blanks

1. Vitamin A, 2. Worms, 3. Malaria, Ignorance, 4. South East Asia, 5. Iodine, 6. Calcium
7. Reproductive, Cervix)

1. The main cause of blindness in children is _____
2. Vitamin A deficiency in women may cause infection in _____ and swelling in the _____.
3. Osteoporosis is caused by lack of sufficient _____.
4. _____, _____ and _____ are the causes of malnutrition and Anaemia.
5. Deficiency of _____ causes cretinism and mental retardation

Correct Alternatives

1. Adverse effects of malnutrition of women's health can be reduced by -
 1. Giving nutritive diet
 2. Giving iron tablets
 3. Educating women about rights and financial improvement
 4. All the above
2. The poor and the women suffer malnutrition because of
 1. Deficient diet
 2. Lack of education
 3. Weak financial condition
 4. All the above

Answers

Blanks - 1-1, 2-6, 3-5, 4-2, 5-4, 6-3

Alternatives - 1-3, 2-4