Lesson on Iodine Deficiency Disorders (IDDs) for Community Members

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Lesson on Iodine Deficiency Disorders (IDDs) for Community Members

Purpose: To familiarize villagers with iodine deficiency disorders and explain why iodine dispensers will be placed in the wells.

Target: Community members of villages where there is a high prevalence of goiter and are targeted to receive iodine dispensers.

Duration: 45 minutes

Place: At a village meeting place.

Objectives: By the end of this lesson, participants will be able to explain:

- The cause of goiter
- What iodine is, and its sources
- Problems associated with lack of iodine
- Some ways to prevent and to treat IDD
- Reasons for placing iodine dispensers in wells

Method: Discussions following a question and answer format using pictures.

Materials: Pictures and iodine dispensers.

I. Introduction

- Welcome participants
- Introduction of educators
- Presentation of the objectives of this meeting

II. Goiter

Q: Are there any people with goiter in this community?
A: (Yes)

Show pictures #1 and #2.

Q: What do you see in these pictures?
A: (A woman with goiter, a man with goiter)

Discuss if people have seen men with goiter, and that goiter can affect both men and women.

Q: What is the cause of goiter?

Try to get as many answers as possible- directing answers towards lack of nutrient. If no one mentions lack of food or nutrients, ask if anyone has heard of vitamins/minerals and what they know about it.
Explanation: Goiter is caused by a lack of a substance called iodine in the food you eat. When this nutrient is absent from the diet, people can have many different illnesses of which goiter is the most obvious. The lack of iodine can affect everyone but is particularly dangerous for children and women.

III. Source of Iodine

Show picture #3.

Q: What do you see in this picture?
Let participants identify as many items as possible.

A: Fish, crabs, oysters, seaweed, etc.

Q: Do you know where these come from?
A: (From the sea)

Q: Have any of you eaten any of these items? If yes, how often?
Try also to get answers from people about where they can find such food and if this food is affordable.

Explanation:

=> These food items are rich in iodine
=> Most food rich in iodine comes from the sea.
=> Food rich in iodine is important for health.
=> Most of you here cannot find sea food easily. Fish and other food obtained from the river is not rich in iodine.
=> In some places the soil also has iodine. In these places, the food that grows in the soil contains iodine. But here there is no iodine in the soil.
=> Each person needs iodine to a different extent, and the degree of disease or goiter you see may be different. Some people in your community may have large goiters, and some may have none. But remember, goiter is only one of the diseases associated with lack of iodine. Many people think that goiter is not a very serious problem; but, goiter is only the visible part of iodine deficiency. People may have other health problems related to iodine deficiency in addition to or without goiter.

IV. Problems Related to Lack of Iodine

a) Importance of Iodine for Reproductive Health

One group of people most affected by lack of iodine are women. Show pictures #4 and #5.

Q: What do you see in this picture?
A: (A pregnant woman, a woman with different birth outcomes- ask what they think happened to the pregnancy- stillbirth, miscarriage, very small baby)

Explanation: When a pregnant woman lacks iodine in her diet the following may result:
Very small or premature baby
Children with malformations
Frequent miscarriage
Stillbirth

Q: Are these problems common in your community?
Lack of iodine could be one of the contributing factors if these are common problems in the village.

b) Importance of Iodine for Children
Iodine is also very important for children. Children with no iodine may die at a very early age.

Q: How many of you here think school is important? Do you want your children to be smart?

Explanation:
- Iodine is important for the development of the brain. Children who eat food with iodine are able to learn better and do well in school.
- Children with lack of iodine have difficulties learning.

c) Lack of Iodine and Cretinism

Show picture #6.

Q: What do you see in this picture?
A: (Picture of a child with cretinism- children with some skeletal/neurological deformities, mentally retarded, often deaf or mute and very small for their age.)

- Children with cretinism result when pregnant women lack iodine.
- This problem is irreversible, once a child is born this way, giving iodine will not reverse the condition, but it can be prevented if the mother gets iodine during pregnancy.

Q: Are there children like this in this village?
If yes, lack of iodine is a serious problem in this community.

d) Other Problems Related to Iodine Deficiency

Lack of iodine in some people may be related to lack of energy and weakness. People tend to be less productive, less tolerant of cold, and tire easily.

Q: How many of you keep some animals?
Find out if people keep chickens, pigs, buffalo. What is the condition of their animals?

Explanation:
- Iodine is also important for the health of animals.
- Animals who get iodine tend to be bigger and stronger. Chickens lay more eggs. Buffalo are stronger and pigs or sheep are bigger and are less likely to have miscarriages.
V. Prevention and Treatment of Iodine Deficiency

Show picture #7.

Q: What do you see in this picture?
Let participants list the various objects on the picture

A: Sea food, iodized salt packet, a capsule, a well, food items and a garden.

Explanation:

=> People who live by the sea and eat sea food will not have problems with lack of iodine.
=> In order to help people who cannot get iodine through their food, many countries have programs to add iodine to the salt. In Cambodia, plans have been made to iodize the salt.
=> The salt you buy now at the market is not likely to have iodine at this time. It may take up to three years before all the salt you can buy has iodine in it. Salt that is imported may however have iodine. When you buy salt, ask for iodized salt if available.
=> Another method of prevention is taking iodine oil capsules; these may be available at a hospital or district health center.
=> Some fish sauce or bottled water from Thailand also contain iodine. This is another method of adding iodine to food.
=> Yet another method of providing iodine is putting it in the well. That way, when you drink the water, cook with it, or water your garden with it, you will get iodine.

VI. Review the Lessons Covered

What is the cause of goiter?
What are the problems associated with lack of iodine? For children, for women, for all people, for animals?
Where can you get food that has iodine?

VII. Reason for Putting Iodine Dispenser in the Well

Show iodine dispenser to villagers. Pass it out so people can get a good look and ask questions.

Explain:

=> The large capsules inside the container are iodine tablets that will slowly dissolve into the water.
=> One container/canister can last for a year.
=> We will have to lift the pump and place the canister at the bottom of the well.
=> The advantages of supplementing iodine through water are:
   - You get iodine when you drink the water or cook with it.
   - If you use the water for your garden, the food you grow will have iodine in it.
   - Your animals can also benefit from it when they drink the water
Encourage questions from the participants. If there are none, use the following list to address questions people may have but are afraid to ask. Tell them that these are common questions asked in other places.

1. Will this affect the smell or taste of the water?

No. There will not be any change in the taste or smell of the water.

2. Are there any side effects from drinking the water with iodine?

The amount of iodine that dissolves in the water is so low that three litres of water will have enough iodine for one person for one day. No side effect is expected from drinking this water.

3. Will the water affect the color of the rice that is cooked or clothes washed in it?

No, no change in color occurs in this water with iodine.

4. Will my goiter go away if I drink this water?

For people with small goiters it will take six months to one year for the goiter to recede. Those with large goiters may have to take medication and even then it may take a very long time for it to go away or may never disappear unless an operation is done. For most people though the goiter is expected to become smaller or disappear over time.

5. Will this canister affect the functioning of the pump?

The pump will work just as well as it did before the addition of the canister.

Ask participants if they are willing to have the iodine dispenser installed in their well. If everyone agrees, then make plans for installing the dispenser. Tell participants if they have any concerns or questions that may come up, they will have an opportunity to discuss them when the team arrives to install the dispensers.
PICTURES