

Cholera & Oral Rehydration Therapy

Training Level 1 – Community ORT Volunteers

Session #02 –

Oral Rehydration Therapy at community level for
the management of diarrhea

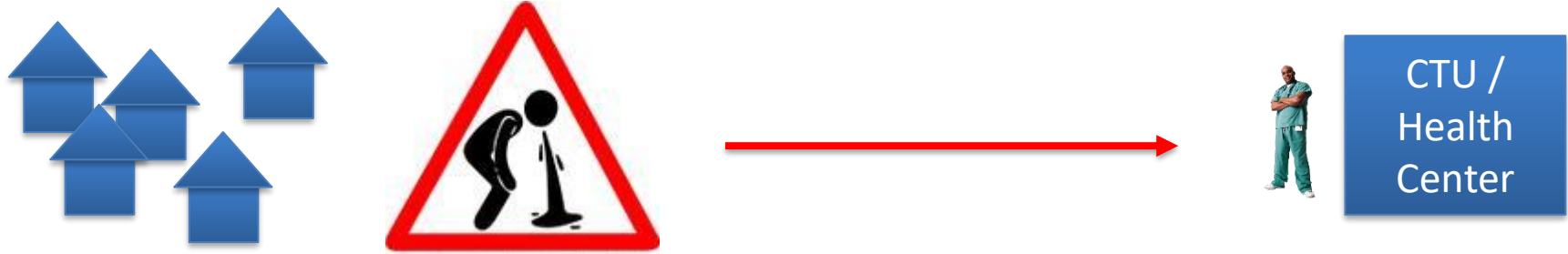
February 2020, Sierra Leone

Session overview

1. Presentation of oral rehydration therapy at community level
 2. Types of diarrhea and assessing levels of dehydration
 3. Decision Flow Chart for Referral & Home Treatment
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1. Treatment Plans & Referral

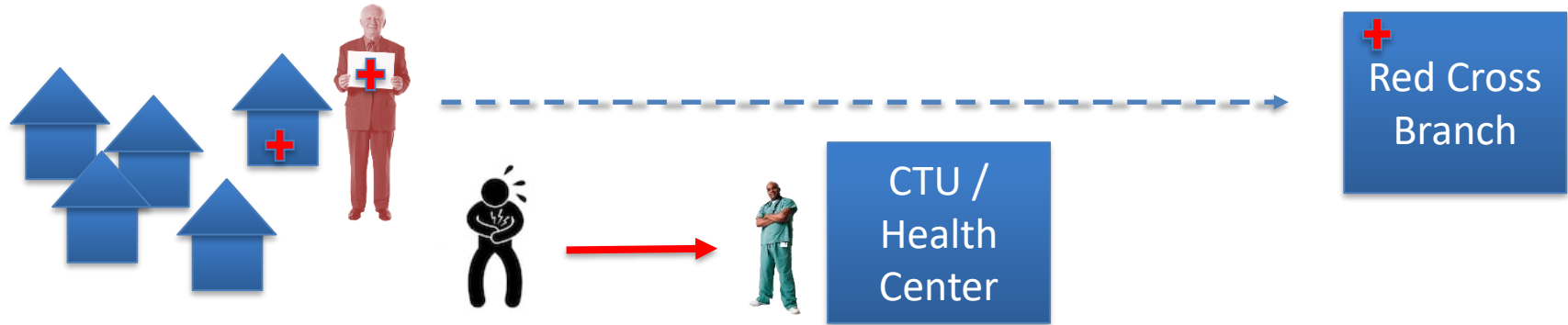
1- Presentation of Oral rehydration therapy at community level

Oral rehydration therapy at community level



- When someone in your village/neighborhood is sick with diarrhea – do they usually go to the health center ?
Why/why not ?
- How long is it before someone with diarrhea goes to the health center ?

Oral rehydration therapy at community level



OUTSIDE CHOLERA OUTBREAKS

Community ORT volunteers will be available in the community before and after cholera outbreaks, to help with the oral rehydration of anyone who has diarrhea.

DURING CHOLERA OUTBREAKS

Access to dehydration evaluation and ORS is key during cholera outbreaks – when the risk of severe dehydration and death is important

Continuous Activities

Demonstrate ORS preparation, report case numbers to Health authorities and RCRC branch, deliver messages on cholera awareness

2- Type of diarrhea and assessing the level of dehydration

Type of diarrhea

Persistent
Diarrhea
> 2 weeks
(14 days)

Bloody /
Mucous
Diarrhea

Diarrhea
+ Fever or
other
complications

Acute Watery
Diarrhea

-Recent/sudden
-W/Without vomiting



**Refer to nearest health
center**

- Possibly Cholera ?
- Acute = important loss of fluids
- Treatment at community level, for mild dehydration
- Referral of all severe cases and at risk populations

Acute Watery diarrhea

-Recent

-W/Without vomiting

No (-)
Dehydration



Home treatment with
ORS at community level

OR

Refer to the health
center in any doubt

Some (+)
Dehydration



Refer to nearest health center

+

Start drinking ORS / breastfeeding while on the way to
the Health Center

Severe (+++)
Dehydration



Assessing the level of Dehydration

No (-)
Dehydration



Some (+)
Dehydration



Severe (+++)
Dehydration



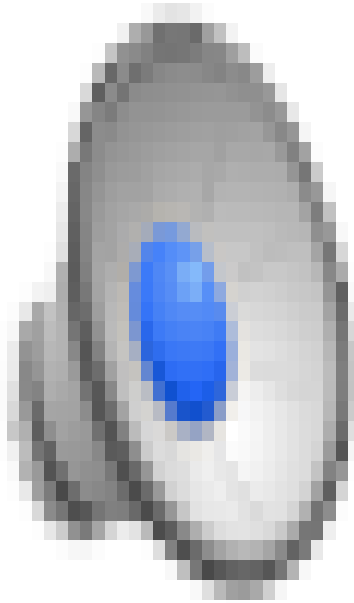
- ☐ Dry Mouth
- ☐ Thirst
- ☐ Small pee
- ☐ Weakness
- ☐ Skin pinch goes back a little slowly

- ☐ Sunken eyes (go inside)
- ☐ Very dry mouth
- ☐ Very weak / unconscious
- ☐ Not able to eat/drink or breastfeed
- ☐ Skin pinch goes back very slowly

Assessing the level of Dehydration



Assessing the level of Dehydration



Assessing the level of Dehydration

ASK – LOOK – FEEL

- **Ask** about diarrhea: Watery (3x/day), today ? since when ?
- **Ask** about thirst ? About urine (normal or very little)
- **Ask** if he/she were able to eat/drink/breastfeed at all today ? Or vomiting ?

- **Look** general condition: Is the person awake and can he/she speak to you?? Can he/she walk? Or very weak ?
- **Look** for sunken eyes (that go inside)
- **Look** at the mouth/tongue – dry ?

- **Feel**. Pinch skin and see if it goes back to normal

3- Oral rehydration principles

- ☐ ORS treatment protocol
- ☐ Preparation of Oral Rehydration Solution
- ☐ Preparation of potable water
- ☐ Information to ask/give diarrhea patients/caregivers

How much ORS should a person drink?

- Depends on the weight of the person (quantity of liquid in the body)
- Depends on the level / severity of dehydration (quantity already lost)
- + compensation of losses (after each loose stool)

Home Treatment

Age	After each loose stool	Within the first 4 hours	After the first 4 hours for the rest of the 24 hours
>5 and <10 years old	1 cup (200 mL)	1 L (5 cups)	1 L / day (5 cups) 1 ORS sachet
>10 years or older	At least 200 mL (1 cup) or as much as wanted	2 L (10 cups) or more	2 L / day (10 cups) 2 ORS sachets

?

Children <5 and pregnant women will be referred to the health center

Activity 1

1. A seven-year-old has three loose stools in four hours. How many 200ml cups of ORS will they have been given ?
2. A 9-year-old has one loose stool in 4 hours. How many 200ml cups of ORS will they have been given ?
3. A 15-year-old has two loose stools in 4 hours. How many 200ml cups of ORS will they have been given ?

How to administer ORS

- Give **frequent sips** of the ORS from a cup or a spoon (especially for young children) **until the patient is no longer thirsty**.
- If the patient vomits, wait 10 minutes before giving more
- Add orange juice or mashed banana to make solution taste better for children if needed

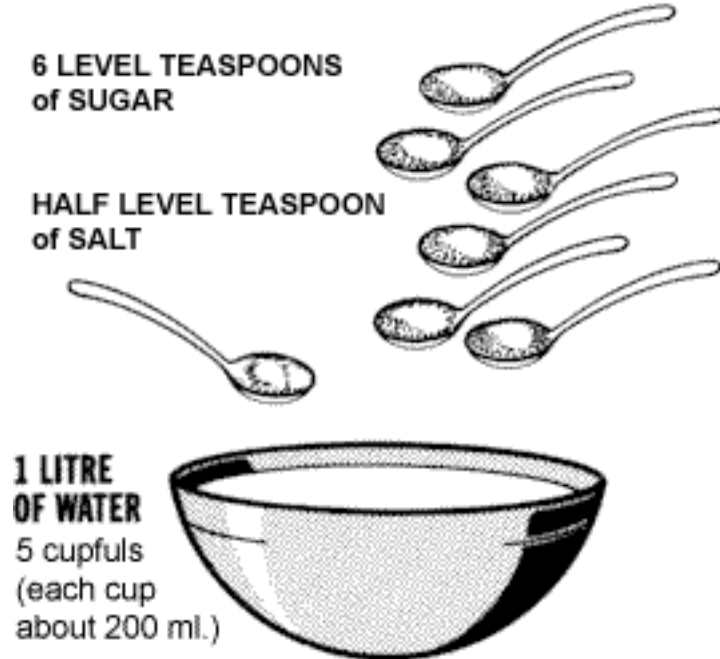
Storage

- Keep ORS solution in a clean, covered container.
- Do not keep the mixed ORS solution for more than 24h.
- **Throw away any mixed ORS solution after 24 hours and prepare a fresh one.**

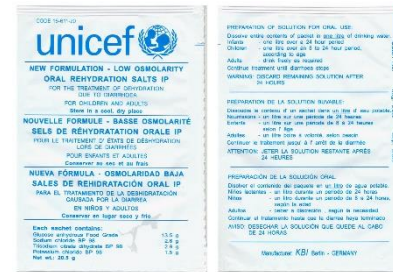
Preparation of Oral Rehydration Solution

- 1 – WASH your hands with Soap and clean water
- 2 – WASH container and utensil with soap and clean water
- 3 – Put 1 Liter of treated water in a clean container

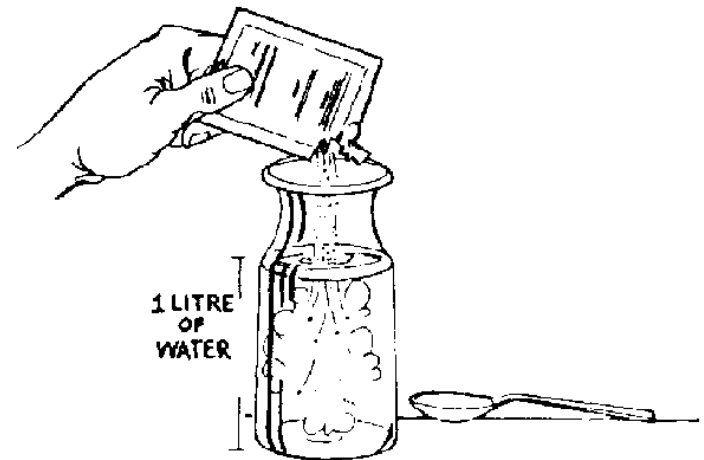
Home – made ORS Solution



Already Prepared Powder – ORS Sachets



1 Liter Safe WATER
1 ORS Sachet



Preparation of Oral Rehydration Solution

- 1 - WASH your hands with clean water and soap
- 2 - WASH container (water bottle for ex.) and stirring utensil with clean water and soap
- 3 - Mix 1 Liter of SAFE (treated) water and 1 ORS sachet in the container / bottle and stir until every particle completely melt (disappears)
- 4 - Encourage the patient to drink the ORS solution

Do not keep the prepared ORS solution more than 24 hours.

After 1 day (24h), discard the old ORS solution and prepare a new one.

Preparation of potable water



Use of a water filter

Use of water treatment products/chemicals
(aquatabs, bleach, chlorine, PUR)



Always use water than has been properly treated for the preparation of ORS !!



+



Filtering (straining) & Boiling

Information to ask/give diarrhea patients/caregivers

- Explain / show how to prepare ORS and clean water (emphasize hygiene during ORS preparation) + ORS storage in close container
- Give ORS for 3 days to take home and prepare one every day and come back if need more ORS
- Tell how much ORS to be given + each time after a loose stool (compensation of water losses)
- Tell to discard ORS solution after 24h and prepare a new one.
- Raise the importance of continuing breastfeeding / feeding and drinking often on top of drinking ORS
- Discuss when to come back (if not improving, if not drinking/not eating/not breastfeeding, if feeling very weak)

Activity 2

Mixing and taste session with ORS

4- Treatment plans and Referral

Who to refer

Persistent,
Bloody/
mucous
diarrhea

AWD +
Severe
Dehydration

All Children <5
and Pregnant
women with
AWD
(Even if no/mild
dehydration)

Very weak,
unconscious
or not
improving



Refer quickly to nearest health center

Where / How to refer

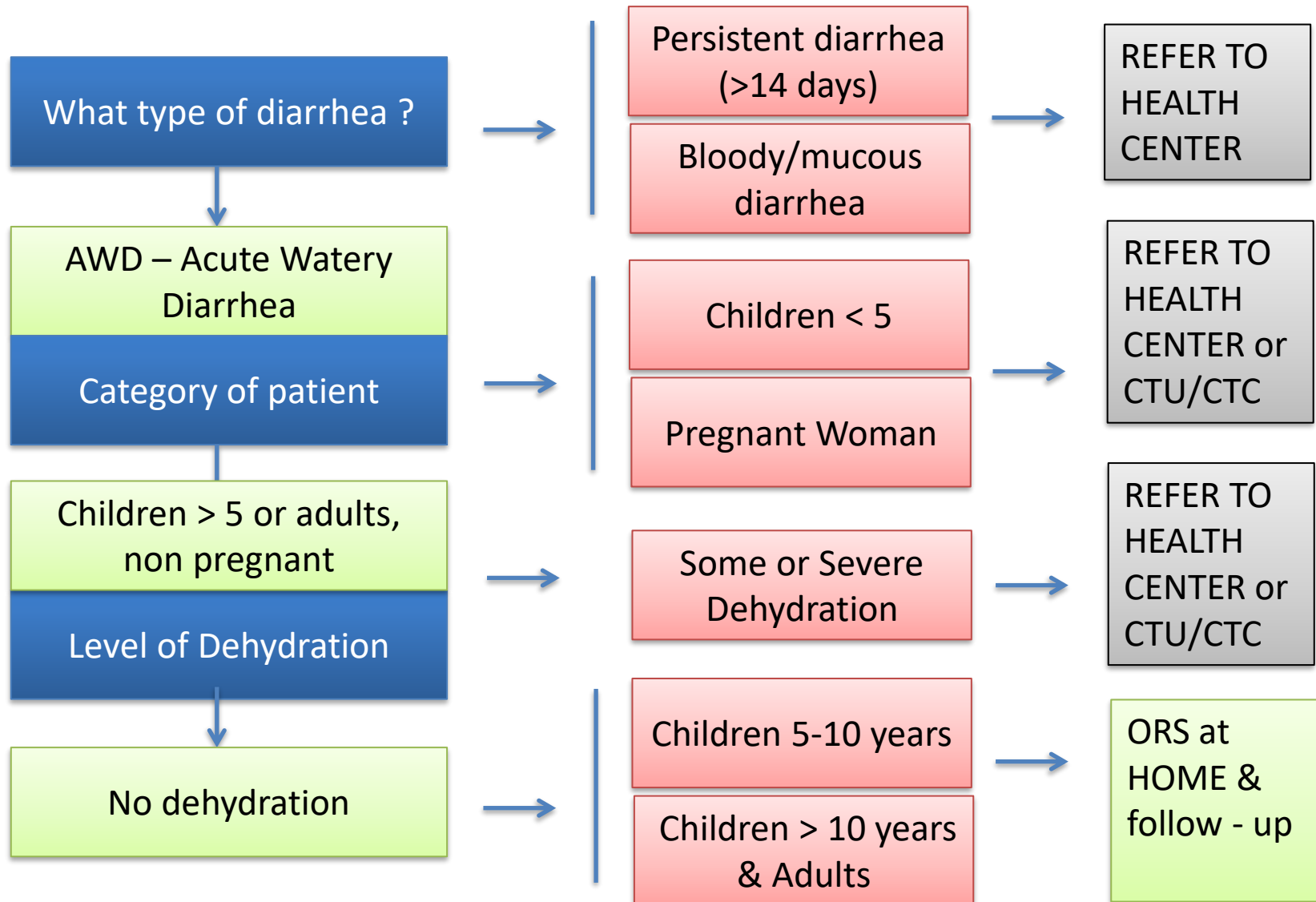
During non-cholera periods – Referral to the nearest health center

During cholera outbreaks – Referral to the nearest CTU/CTC Cholera treatment Unit/Center

➤ **Make sure patient / care taker:**

- Know where is the nearest health center
- Understand the need to go quickly to the health center
- Drinks ORS / breastfeed while on his way to the health center
- Will find a way to reach to nearest health center with family or friends
- If not, see with the community if there is a way to support referral

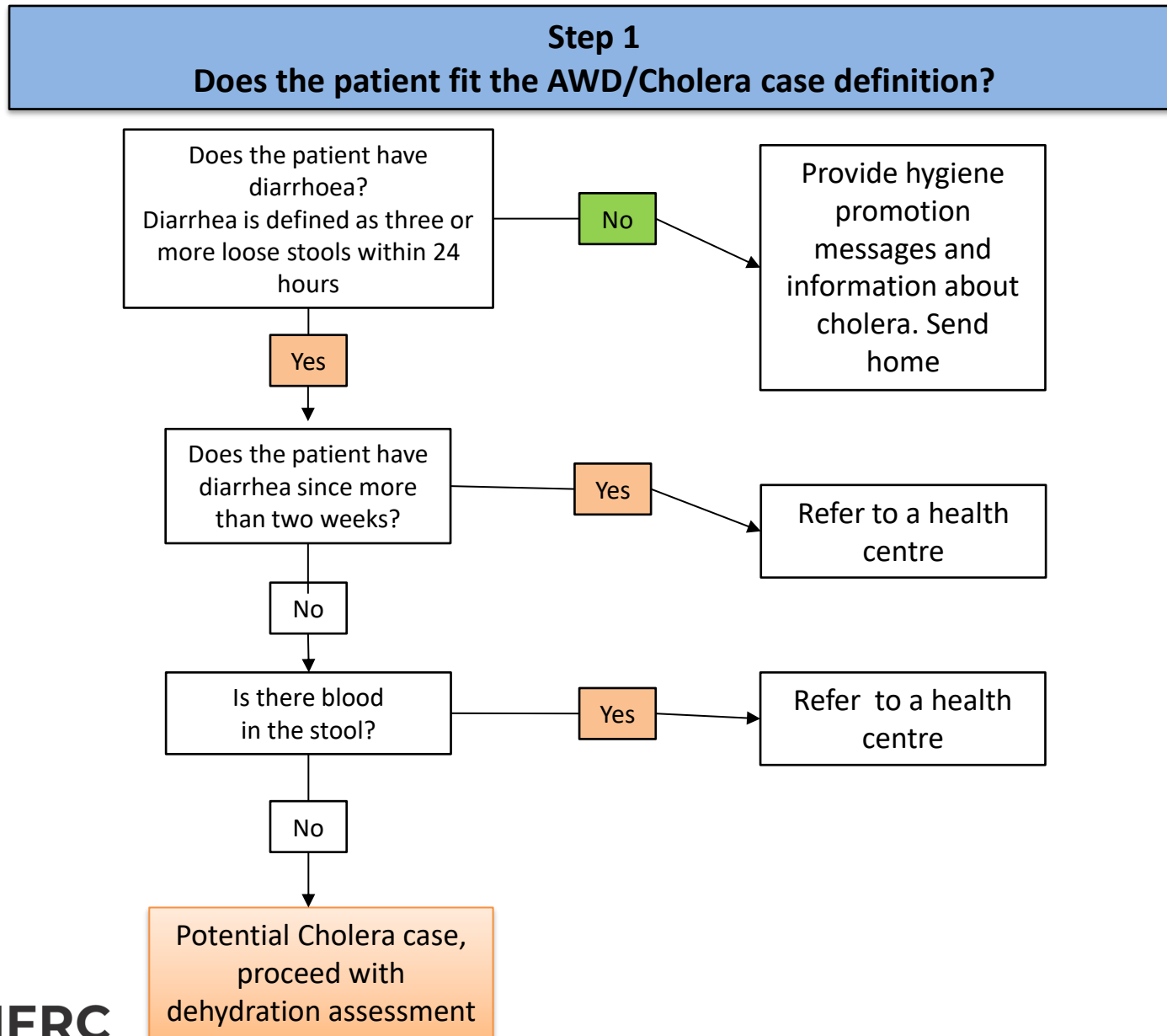
Summary Referral & Treatment decision tree



Activity 3

To refer or not to refer

Flow chart – detection of diarrhea



Flow chart – dehydration assessment

It is a potential cholera case.
Is it a child <5 years of age or pregnant women?

Yes

- immediately refer to CTC/CTU or health centre
- Whilst waiting for transport and during transport start with ORS treatment according to treatment plan

No

Step 2 Assess dehydration status		Assessing dehydration		
		Patient has diarrhoea but no signs of dehydration	Some dehydration (Patient has 2 or more of the below signs)	Severe dehydration (Patient has 2 or more of the below signs)
Look at or ask	General condition	All normal, well alert and drinks eagerly	Restless, irritable. Less alert, still able to speak	Does not/little react or unconscious; floppy
	Tears		Absent	Absent
	Mouth and tongue		Dry	Very dry – like sand paper
	Thirst		Thirsty, drinks eagerly	Drinks poorly or not able to drink
Feel	Skin pinch		Goes back slowly	Goes back very slowly or remains in place
		Home Treatment	Referral to Health Center / Cholera Treatment Center/Unit	

Flow chart – Home treatment

Home Treatment			
Age	After each loose stool	Within the first 4 hours	After the first 4 hours for the rest of the 24 hours
> 5 and < 10 years old	1 cup (200 mL)	1L (5 cups)	1L / day (5 cups) 1 ORS sachet
> 10 years or older	As much as wanted	2L (10 cups) or more	2L / day (10 cups) 2 ORS sachets

50 ml = $\frac{1}{4}$ cup

100 ml = $\frac{1}{2}$ cup

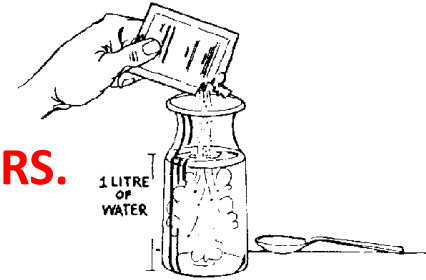
200 ml = 1 cup

Home treatment

For patients with NO dehydration

(1/2)

Patients with NO sign of dehydration should be treated with ORS.



You can keep the patient under observation at the ORP during 1 hour to ensure that the patient is tolerating ORS.

Explain when to return to the ORP or CTU

Give cholera prevention messaging before sending back home



NB: Patients under 5 should be given zinc tablets for 10 days to reduce length and severity of diarrhea. However, all Children under 5 will be systematically referred to the health center / CTU as they are at higher risk of dehydration and can have additional complications. Zinc tablets will be given to them at the health facility or CTC/CTU.

Home treatment

For patients with NO dehydration

(2/2)

Before the patients are sent back home (with ORS for 3 days), advise patients and care givers on the following:



- Continue home treatment with ORS until diarrhea stops
- Explain / Show how to prepare and store ORS (and SSS)
- ORS should be given regularly in small amounts (small spoons for children <2 years and sips from a cup for older patients) and after each loose stools
- If the patient vomits, wait 10 min. and continue to give ORS but more slowly
- Explain to discard old ORS solution after 24h (at the end of the day) and prepare new ORS the next day
- Mothers should continue breastfeeding and other patients eating
- If situation deteriorates (repeated vomiting, number of stools increases, or patient eating/drinking poorly) refer to CTC/CTU/health centre

+ CIPRE Give cholera prevention messages as well as Home-IPC instructions

Flow chart – How much ORS referred patients should drink during waiting time & transport to nearest health center / CTC / CTU

Amount of ORS to drink during transport to the health center or CTC/CTU	
Age	ORS to drink per hour
0 to 6 months	50 – 150 mL per hour
6 months to 2 years	150 – 200 mL per hour
2 years to 5 years	200 – 300 mL per hour
5 years to 15 years	400 – 500 mL per hour
More than 15 years	1000 mL per hour

50 ml = ¼ cup
100 ml = ½ cup
200 ml = 1 cup

Rehydration protocol for patients with **SOME** or **SEVERE** dehydration on their way to the health center / CTU

Patients with SEVERE dehydration should be REFERRED IMMEDIATELY
Patients with SOME dehydration should also be REFFERED, as they have already started dehydration and could deteriorate in a matter of hours.

Whilst waiting for transport and during transport, ensure that patient drinks ORS but only patients that are conscious, awake and can talk to you.



Never insert any liquids into an unconscious patient!

Provide ORS in small amounts but regularly
Mothers need to continue breastfeeding sick babies.

Activity 4

4 patient cases

Level of dehydration

Which Plan to follow.

Summary

- Introduction to the concept of community oral rehydration therapy
- Types of diarrhoea, level of dehydration and associated symptoms – how to recognize them
- Oral rehydration protocol and how to prepare ORS
- Who, When and Where to refer
- And essential messages to deliver with treatment and referral