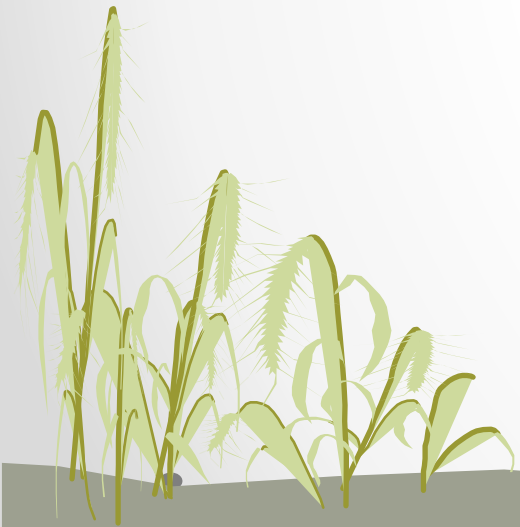


Quality Improvement Kacheliba District Hospital and Konyao Health Center

Suggestions by
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Rotary Doctors
November-December 2022



1. Hygien

Goal: Reduce hospital aquired infections

- Hand sanitation
- Soap at the ward – done, but needs continous refilling
- Hand-washing possibility near toilets – done, but need continous refilling
- Clean floors twice a day
- Clean latrines four times a day
- Desinfect beds between patients

Source: *National Infection Prevention and Control Guidelines for Health Care Services in Kenya, 2010)*



2. Antimicrobial resistance

Goal: Slow down the rising antimicrobial resistance so that common and cheap antibiotics still can be used.

- CME ("common cold"): Awareness among staff
- Prevent spread: Respiratory hygiene
- Make patients aware of common cold, that antibiotics is not needed and what to do
- Restricted use of broad spectrum antibiotics eg ceftriaxone
(Teaching among waiting patients? Video?)

(According to WHO about 5 milion people is estimated to die every year due to infections with multiresistant bacteria.)

3. Efficacy

Goal: To improve the quality and the efficacy in the meeting with the patient in OPD and wards

- Staff to check vital signs before the patients see CO.
 - Adults: Temp, BP, pulse, RR
 - Children: + weight, length, SD, MUAC, vaccination status, deworming
- Triage according to vital signs
- Morning meetings (reporting and information)
- Respect working hours (be on time and leave on time)
- Pharmacist update CO what medicines are available
- Nurses to put iv-lines



4. Improve preparedness for emergencies

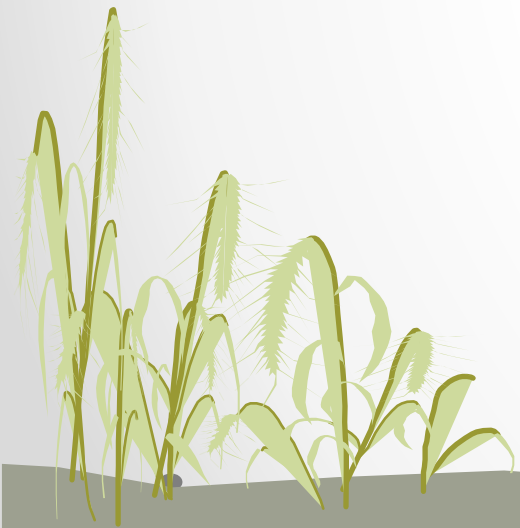
Goal: To improve the quality of care in stabilizing a critically ill patient and thereby improve the prognosis of the patient.

- Use of standardized method of investigation (A-E).
- Guarantee the supply necessary supplies for resuscitation in the OPD
- Supply an immobilizer for spinecontrol during transport
- CPR training - adult and child - for all staff at least 1/year.
- Learning from mistakes and casualties



5.Examination of the patient

- Examination of the patient is essential to get the right diagnosis and treatment
- All needed essential equipment for examination of the patient should be in place in the OPD and warden: stethoscope, BP machine, torch, tongue depressor, otoscope, reflex hammer.



Antimicrobial resistance:

Reduce the use of antibiotics, especially in common cold.

Why?

- Slow down the rising antibiotic resistance.
- Antibiotics disturb the normal bacterial flora of the gut and it takes some months to restore it = risk of diarrhea/clostridium GE.
- Side effects common (nausea, rash, vomiting, dizziness, yeast infections etc)
- Allergic reactions (mostly cotrimoxazole and penicillins)
- Have no effect on viral infections
- Cost money

Common side effects of antibiotics include:



Rash



Dizziness



Nausea



Yeast Infection



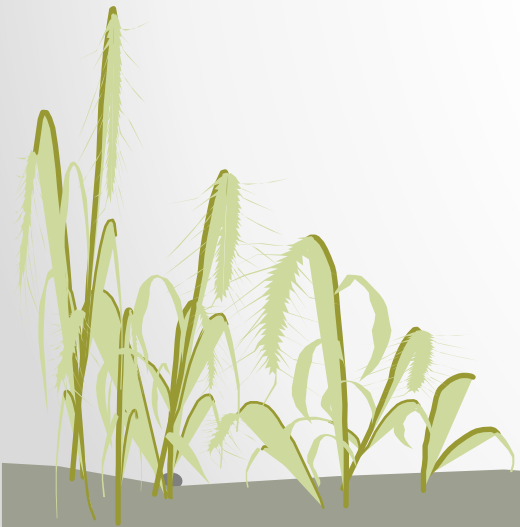
Diarrhea

Antimicrobial resistance:

Reduce the use of antibiotics, especially in common cold.

How?

- CME
- [ReAct \(reactgroup.org\)](http://reactgroup.org): For staff to learn more
- Fact sheet about pneumonia versus common cold for staff



Common cold versus pneumonia

Common cold/URTI	Pneumonia												
<p>Virus. Antibiotics useless.</p> <p>Normal children have 6-7 common colds a year and an adult 2-3.</p> <p>Symptoms:</p> <ul style="list-style-type: none">CoughRunning noseFeverSoar throatNot so sick3-5 days but can last longer <p>Treatment:</p> <p>Symptomatic (paracetamol, nasal drops, cough syrup)</p>	<p>Bacteria. Antibiotic is needed.</p> <p>Symtoms:</p> <ul style="list-style-type: none">CoughIncreased respiratory rateRespiratory distressHigh feverMore sick-lookingChest wall indrawings and nasal flaring on small childrenCrepitations often heard when examining the lungs <p>Treatment: Antibiotics and symptomatic treatment</p> <p>The normal respiratory rate for children varies by age.</p> <table><tr><th>Age</th><th>Rate (in breaths per minute)</th></tr><tr><td>Infant (birth to 1 year)</td><td>30 to 60</td></tr><tr><td>Toddler (1 to 3 years)</td><td>24 to 40</td></tr><tr><td>Preschooler (3 to 6 years)</td><td>22 to 34</td></tr><tr><td>School age (6 to 12 years)</td><td>18 to 30</td></tr><tr><td>Adolescent (12 to 18 years)</td><td>12 to 16</td></tr></table>	Age	Rate (in breaths per minute)	Infant (birth to 1 year)	30 to 60	Toddler (1 to 3 years)	24 to 40	Preschooler (3 to 6 years)	22 to 34	School age (6 to 12 years)	18 to 30	Adolescent (12 to 18 years)	12 to 16
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IMPROVING ANTIBIOTIC USE



**BE
ANTIBIOTICS
AWARE**

SMART USE, BEST CARE

Do I really need antibiotics?



SAY YES TO ANTIBIOTICS

when needed for certain infections caused by **bacteria**.



SAY NO TO ANTIBIOTICS

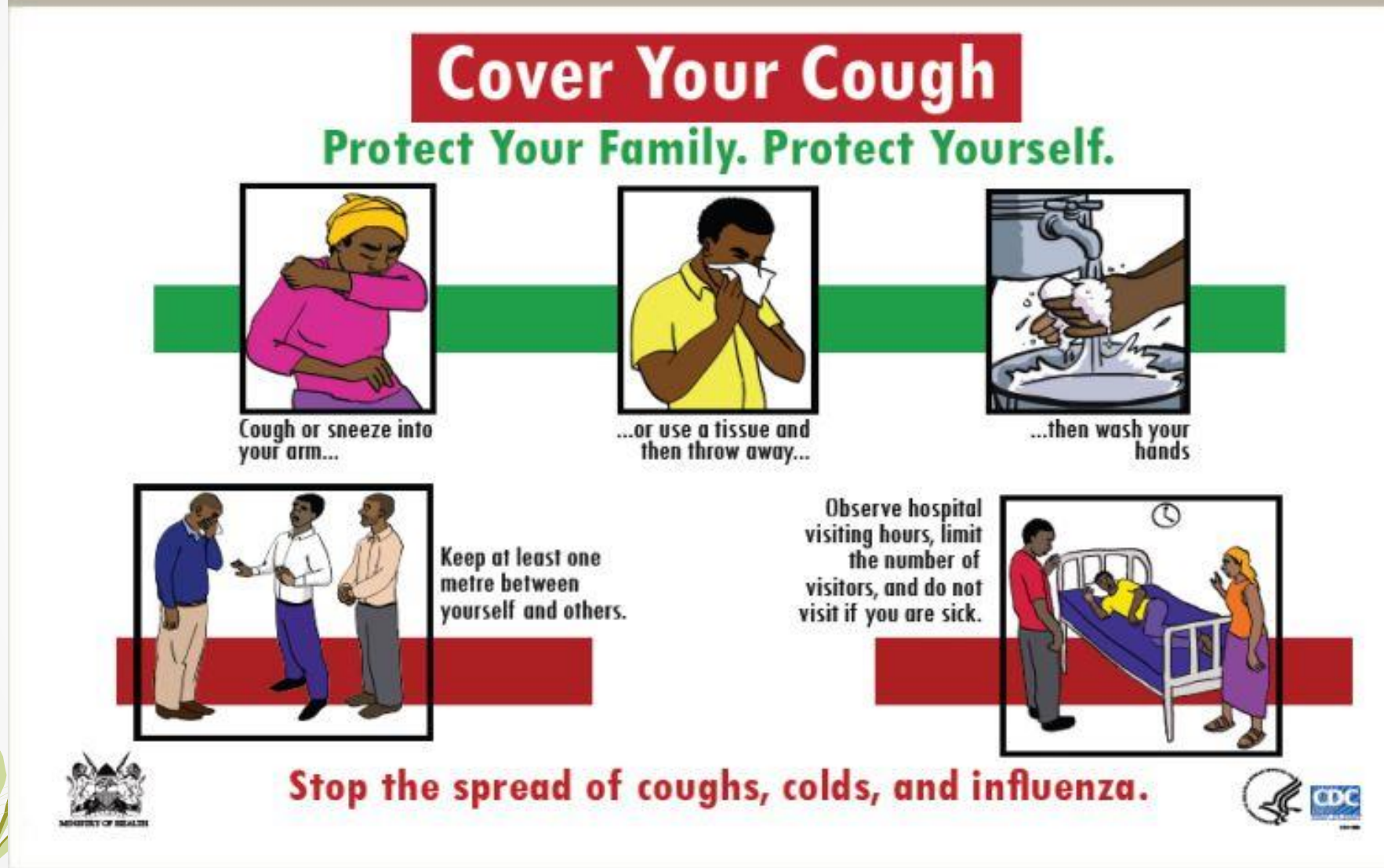
for **viruses**, such as colds and flu, or runny noses, even if the mucus is thick, yellow or green. Antibiotics also won't help for some common bacterial infections including most cases of bronchitis, many sinus infections, and some ear infections.



Antibiotics
are only
needed for
treating
certain
infections
caused by
bacteria.

Antibiotics do **NOT** work on
viruses.

Figure 17: Poster on respiratory hygiene



Staff to check vital signs

Why?

- To find the most sick patients (high resp rate, low blood pressure)
- Discover children with low weight/malnutrition
- Discover people with hypertension
- Increase the quality of OPD
- Make the OPD more efficient
- Reduce the work burden for CO which gives them more time to talk/explain to the patient



Staff to check vital signs

How?

- Nurse/other staff member takes vital signs before CO sees patient.
- Patients with bad vital signs – go straight to CO.
- Children < 2 years + HoB/fever – BS for MPS before seeing CO
- Triage according to vital signs
 - 1) can wait
 - 2) need to see CO soon
 - 3) need to see CO immediately



Vital signs – adults

Temperature
Blood pressure
Pulse

If cough and/or
Hotness of body and/or
Temperature ≥ 38 ?

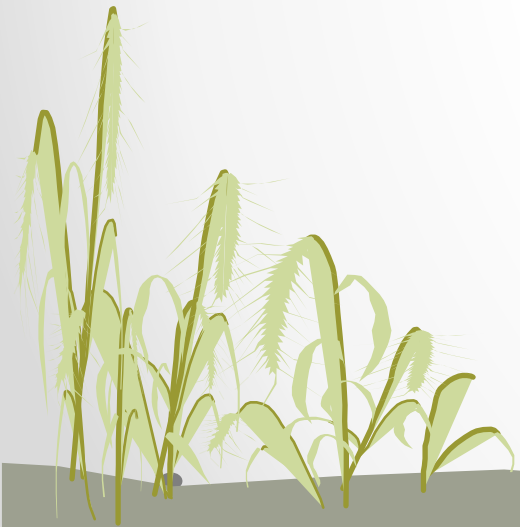


Respiratory rate

Normal blood pressure: 90/60 - 140/90

Normal pulse: 60 – 80/min

Normal respiratory rate: 12 - 20/min



Vital signs - children

Temperature
Weight
Length
Vaccination status
Dewormed?

If ≤ 5 years

Plot weight and length in purple book

If low weight

MUAC

If fever/hotness of body and ≤ 2 years

BS for MPS

If cough and/or
Hotness of body and/or
Temperature ≥ 38

Respiratory rate

Normal:

	Pulse	Respiratory rate
<1 month	100 – 165	30 - 60
1 month – 1 year	100 – 150	30 – 55
1 – 2 years	70 – 110	20 – 30
3 – 5 years	65 – 110	20 – 25
6 – 11 years	60 – 95	14 – 22
12 – 15 years	55 - 85	12 - 18

Improve preparedness for emergencies

How?

- Use of standardized method of investigation (A-E). CME
- Guarantee the supply necessary supplies for resuscitation in the OPD (airway aids, oxygen, pulseoxymeters, BT machine, iv lines, tourniquet, defibrillator, emergency medications: adrenaline, atropin, diazepam/phenobarbital, morfine, glucose, fluids, antibiotics and paracetamol)
- Immobilizer for spinecontrol during transport
- CPR training - adult and child - for all staff at least 1/year. CME
- Learning from mistakes and casualties by organizing monthly "Morbidity and Mortality" staff meetings
- Increase adherence to medical guidelines eg fluidtherapy for dehydration and burns. CME.

