

# Perspectives of Hand Hygiene practices during Covid 19

## Buyiswa Lizzie Mazibuko- ICAN

Preventing and controlling transmission of COVID 19 infection

# OUTLINE

- Introduction
- IPC Bundle
- Hand transmission dynamics in the context of Covid19
- HH in the Community
- Challenges
- Hand hygiene for All Global Initiative
- Lessons learnt



# Introduction

- Hand hygiene, use of PPE and cleaning and disinfection of medical equipment and environment – are some of the critical IPC practices at the forefront of COVID-19
- Essential to protect both patients and health workers from infection.
- I perceive Infection Control awareness in Africa has seemingly improved because of **fear of transmission of Covid-19 to self**
- This has seen an increase in the uptake and use of ABHR and hand washing soap
- The role IPC plays in HCFs and Communities has been strengthened
- Multiple partners supporting training
  - platforms used in Africa e.g ACDC , AU, ICAN Webinars (English and French), RTSL

# Your 5 Moments for Hand Hygiene



Moment	When	Why
1	BEFORE TOUCHING A PATIENT	WASH Clean your hands before touching a patient when approaching her/his bed. To protect the patient against harmful germs carried on your hands.
2	BEFORE CLEAN/ASEPTIC PROCEDURE	WASH Clean your hands immediately before performing a clean/aseptic procedure. To protect the patient against harmful germs, including the patient's skin, from entering her/his body.
3	AFTER BODY FLUID EXPOSURE RISK	WASH Clean your hands immediately after an exposure risk to body fluids (and after glove removal). To protect yourself and the health-care environment from harmful patient germs.
4	AFTER TOUCHING A PATIENT	WASH Clean your hands after touching a patient and her/his immediate surroundings, when leaving the patient's side. To protect yourself and the health-care environment from harmful patient germs.
5	AFTER TOUCHING PATIENT SURROUNDINGS	WASH Clean your hands after touching any object or surface in the patient's immediate surroundings, when leaving – even if the patient has not been touched. To protect yourself and the health-care environment from harmful patient germs.

World Health Organization | Patient Safety | SAVE LIVES  
 A member of the United Nations | Clean Your Hands | Clean Your Hands

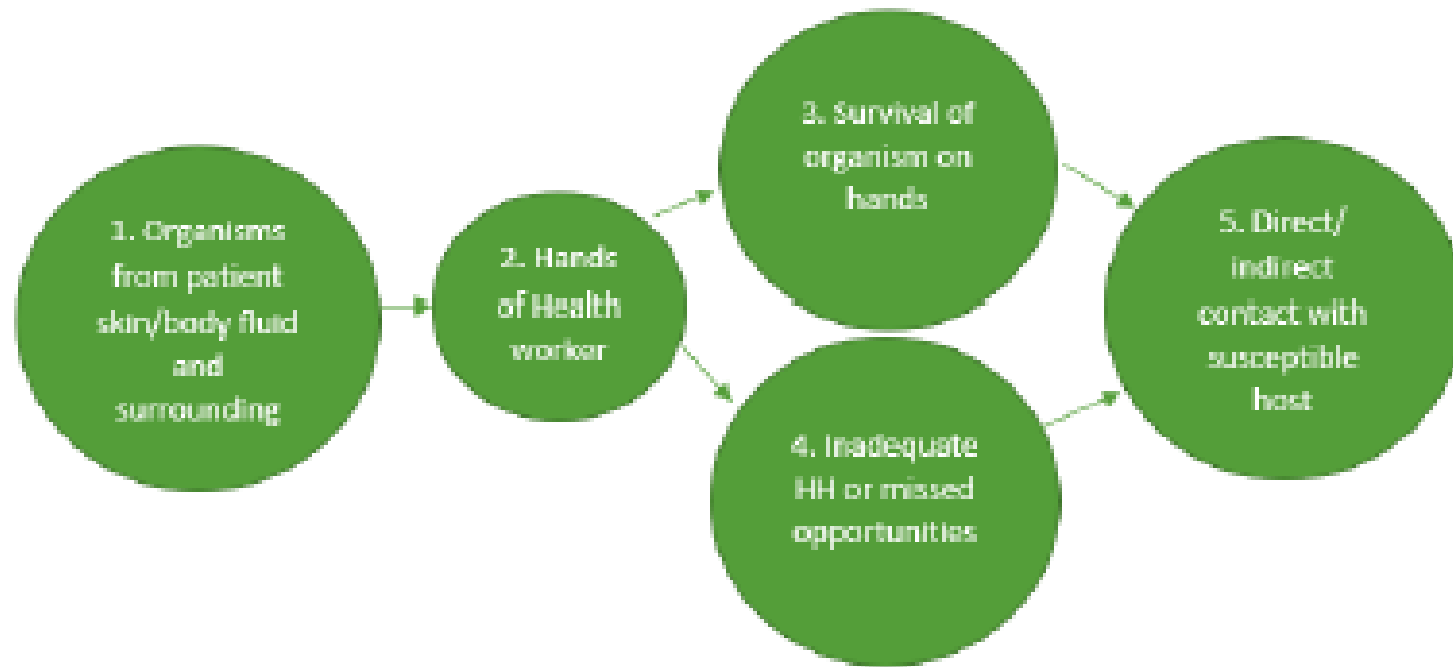
# IPC Bundle for Covid-19

- Hand hygiene
- Cough etiquette
- Physical distancing
- Appropriate use of PPE



# Methods of HH practiced in Africa

- Use of ABHR
- Handwashing with soap and water
- Handwashing using chlorine
- HH Products must be **effective (meet required standards), skin friendly and accepted** by the HCWs / Community



Hand hygiene transmission dynamics in the context of Covid 19

# Why perform HH?

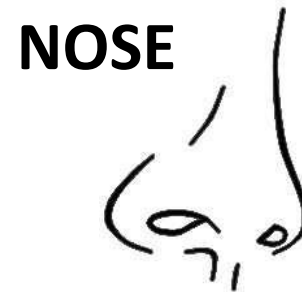
*Hand hygiene reduces the transmission of micro-organisms to self and others.*



HAND



EYES



NOSE



MOUTH

**Do not touch your face (eyes, nose, mouth before performing HH if you have to touch it inevitably but during this COVID-19 avoid touching your face.**

## Factors that Reduce Hand Hygiene Effectiveness

- Rings and bracelets increase microbial count on hands.
- Rings also increase the risk of torn or pierced gloves.
- Jewellery should not be worn during patient care (Longtin, Sax, Allegranzi, Schneider, & Pittet, 2011).
- In an instance where a bracelet may not be removed due to religious reasons, the bracelet may be pushed as high as possible above the wrist before performing hand hygiene.





# Factors that Reduce Hand Hygiene Effectiveness

## Skin integrity:

- The condition of the hands can influence the effectiveness of hand hygiene, and proper skin care is essential for infection control (Bissett, 2007).
- Skin cracks, dermatitis, or cuts can trap bacteria and may place patients at an increased risk (CDC, 2007).



# Factors that Reduce Hand Hygiene Effectiveness

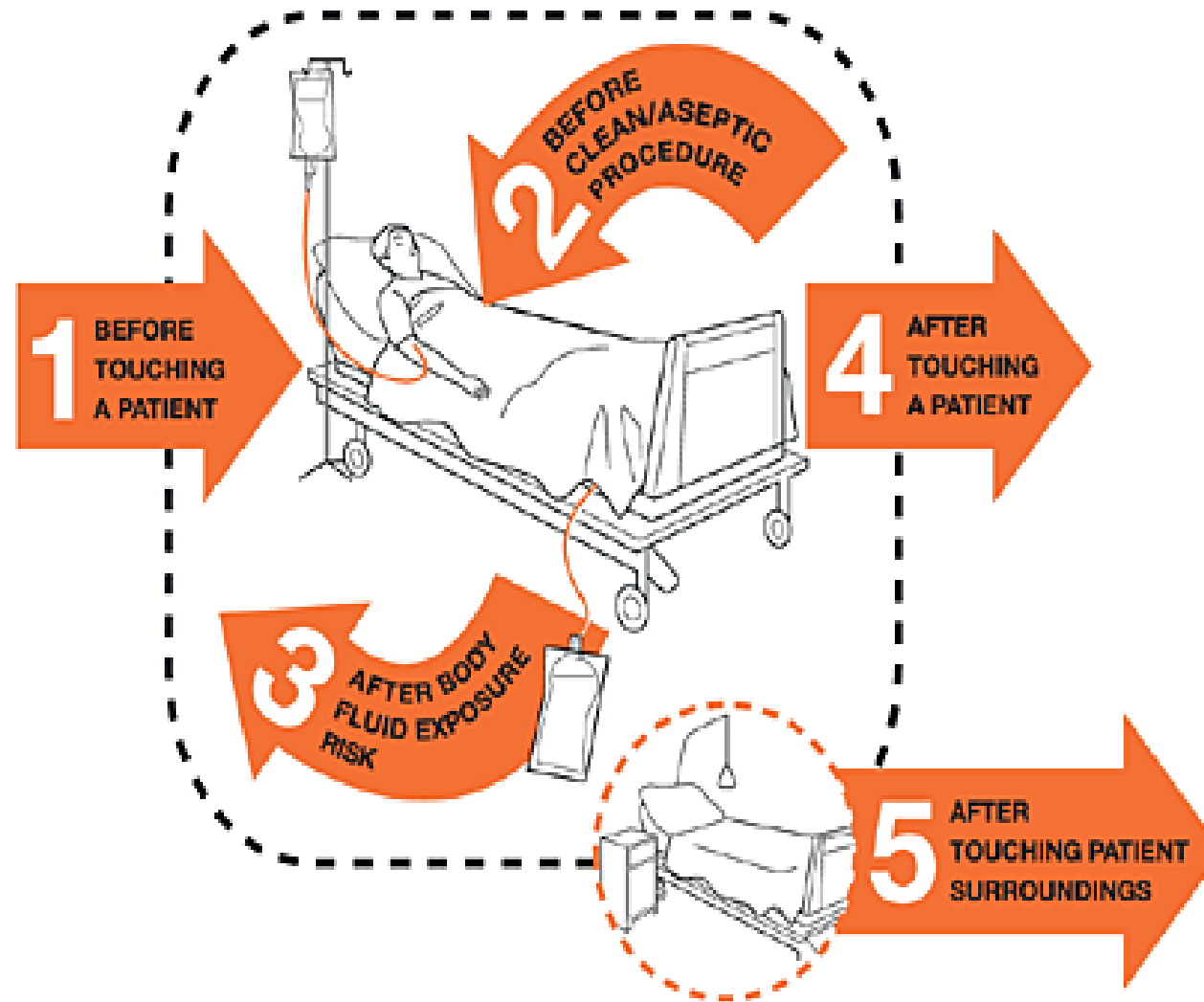
- Artificial nails and nail extenders: Artificial nails and nail extenders increase the viral load of bacteria up to nine times compared with bacteria found on hands.
- Nail length: Nails should be a maximum of 1/4-inch long and should not extend past the end of the finger (Patrick & Van Wicklin, 2012).
- Nail polish: Nail polish should be freshly applied and be free from chips or cracks



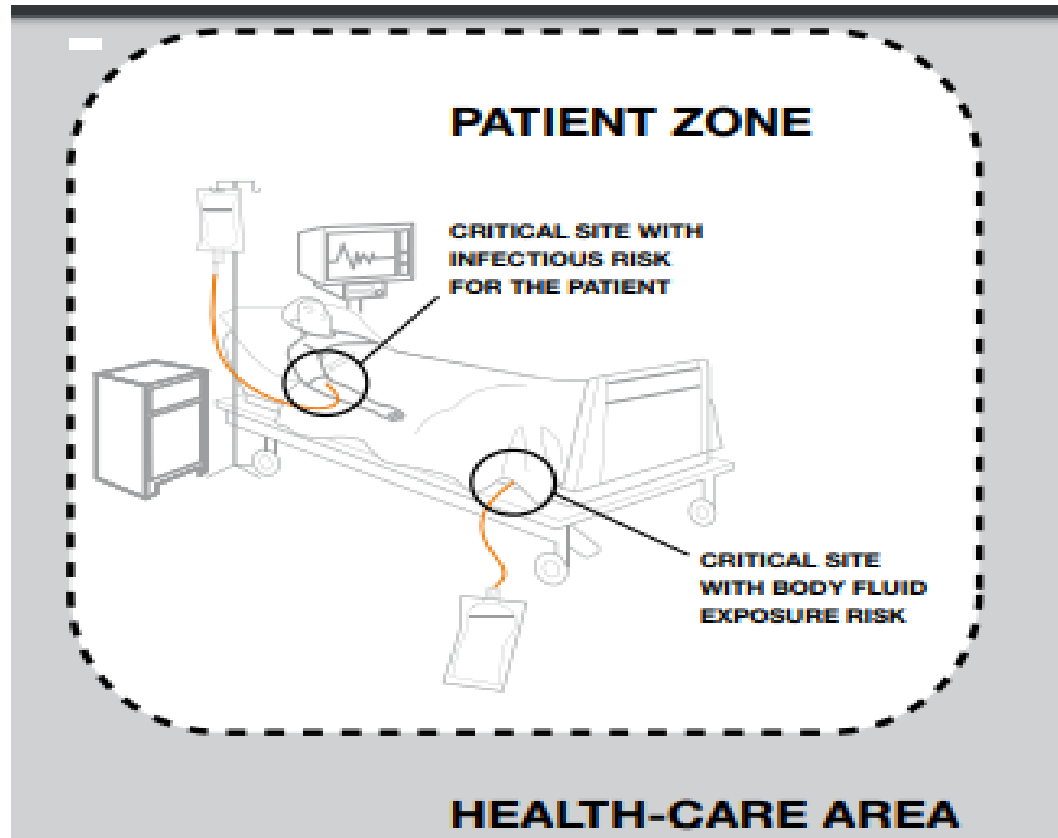
# Factors that Reduce Hand Hygiene Effectiveness

- Water temperature and products:
  - Warm water removes less protective oils than hot water, whereas hot water increases the likelihood of skin damage (WHO, 2009a).
  - To prevent contamination, products must be dispensed in a disposable pump container that is not topped up.
  - An adequate amount of soap is required to dissolve fatty materials and oils from hands as water alone is not sufficient to clean soiled hands (WHO, 2009a).

# Five moments For hand hygiene



# Patient Zone



- Patient +surfaces and items that are temporarily and exclusively dedicated to him
- Two critical sites
  - Clean site
  - Body fluid
- Patient flora predominately contaminates the zone
- Patient zone

# Healthcare Area

- **Health care area:** it contains all surfaces in the healthcare setting outside the patient zone of patient X.
- **It includes:**
  - other patients and their patient zones and the wider healthcare facility environment.
  - The healthcare area is characterized by the presence of various and numerous microbial species, **including multi-resistant germs.**

# Definition of “point-of-care” (1)

- **Point-of-care** – refers to the **place where three elements occur together: the patient, the health worker, and care or treatment involving patient contact**(within the patient zone)
- The concept embraces the need to **perform hand hygiene** at recommended moments exactly **where care delivery takes place**
- This requires that a **hand hygiene product** (e.g. alcohol-based handrub, if available) be **easily accessible** and **as close as possible** (e.g. within arm’s reach), where patient care or treatment is taking place. Point-of-care products should be accessible without having to leave the patient zone

# How to Handrub Technique

Rub hands for hand hygiene! Wash hands instead when visibly soiled. Duration of the entire procedure: 20–30 seconds



1a Apply a palmful of the product in a cupped hand, enough to cover all hand surfaces



1b



2 Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa



3 Rub hands palm to palm



4 Right palm over left dorsum with interlaced fingers and vice versa



5 Palm to palm with fingers interlaced



6 Backs of fingers to opposing palms with fingers interlocked



7 Rotational rubbing of left thumb clasped in right palm and vice versa



8 Once dry, your hands are safe

Pires, D., Bellissimo-Rodrigues, F., Scule, H., Gayet-Ageron, A., & Pittet, D. (2017). Revisiting the WHO "How to Handrub" Hand Hygiene Technique: Fingertips First? Infection Control & Hospital Epidemiology, 38(2), 230-233. doi:10.1017/ice.2016.241

 Private Organizations for Patient Safety Hand Hygiene

©World Health Organization 2009. All rights reserved.

- Pour ABHR into a cupped hand
- Dip finger tips in cupped hand
- Pour from one hand to another
- Dip finger tips into cupped hand (2)
- Palm to palm
- Web of fingers
- Back of hands
- Cupped hands
- Thumbs
- Rub till dry



All illustrative procedures have been taken by the World Health Organization to verify the accuracy contained in this document. However, the published illustrations being provided as a guide only and not a standard of practice. The responsibility for the interpretation and use of the material lies with the reader. It is to be noted that the World Health Organization is liable for damages arising from its use. WHO also welcomes the Republic of Kazakhstan (Kazakhstan) to participate the activities of the national Patient Safety Programme for their active participation in developing the material.

# How to Handwash?

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

**Duration of the entire procedure: 40-60 seconds**



Wet hands with water;



Apply enough soap to cover all hand surfaces;



Rub hands palm to palm;



Right palm over left dorsum with interlaced fingers and vice versa;



Palm to palm with fingers interlaced;



Backs of fingers to opposing palms with fingers interlocked;



Rotational rubbing of left thumb clasped in right palm and vice versa;



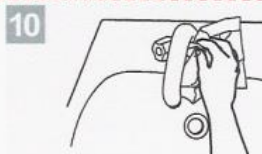
Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



Rinse hands with water;



Dry hands thoroughly with a single use towel;



Use towel to turn off faucet;



Your hands are now safe.



# Behaviour change strategies

- Use of Checklite
- Use of SureWash
- HAI audits
- Use of HH Awareness videos-  
point of care videos
- Refresher trainings – e.g  
Cameroon trainings





Dorsum

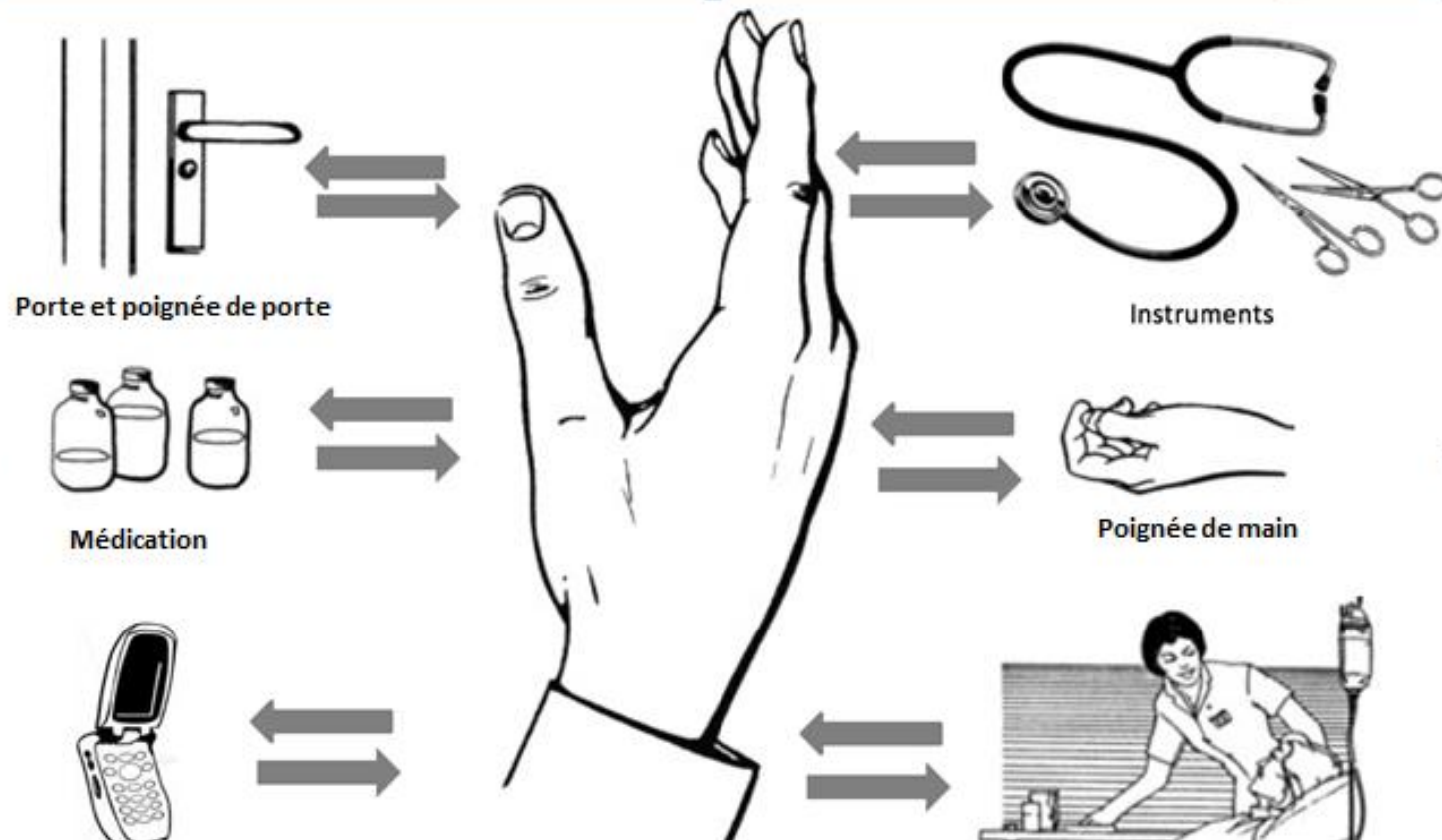
- Palm

Grey: sometimes forgotten

Black: often forgotten

# Proper Hand hygiene technique

# Hand Hygiene – What is happening in Africa?



Intensified Hand hygiene trainings amongst HCWs

Countries have built capacity to manufacture ABHR using WHO formulations

Despite the availability and increased uptake of ABHR in care activities, there is no documented evidence to suggest an increase in HH Compliance rates amongst HCWs

Confusion on when to use soap or ABHR

# Challenges:

- Understanding of the WHO 5 Moments for hand hygiene
- Confusion between patient zone and health care area
- Definition of Point of care
- Adhering to the proper HH technique
- Applying ABHR on gloves –the effects
- Behaviour change- inertia

## Caveats regarding washing, decontaminating and reprocessing gloves – *WHO Guidelines on Hand Hygiene, section 23.1.6*

- Any practice of **glove washing, decontamination or reprocessing is not recommended** as it may damage the material integrity and jeopardize the glove's protective function
- **Some evidence exists that cleansing latex-gloved hands using an alcohol-based handrub solution is effective** in removing micro-organisms and shows increasing contamination rates of hands only after 9–10 cycles of cleansing.
- However, cleansing plastic-gloved hands with an ABHR **leads to early dissolving of the plastic material.**
- It should be noted that this process may be applied **only in the framework of contact precautions implementation and as long as gloves are not soiled with blood and other body fluids.**

**N.B No recommendation exists concerning the washing and reuse of gloves, nor the washing or decontamination of gloved hands** followed by reuse on another patient



# The Community and Hand Hygiene

# Strengthening hand hygiene practices in the community

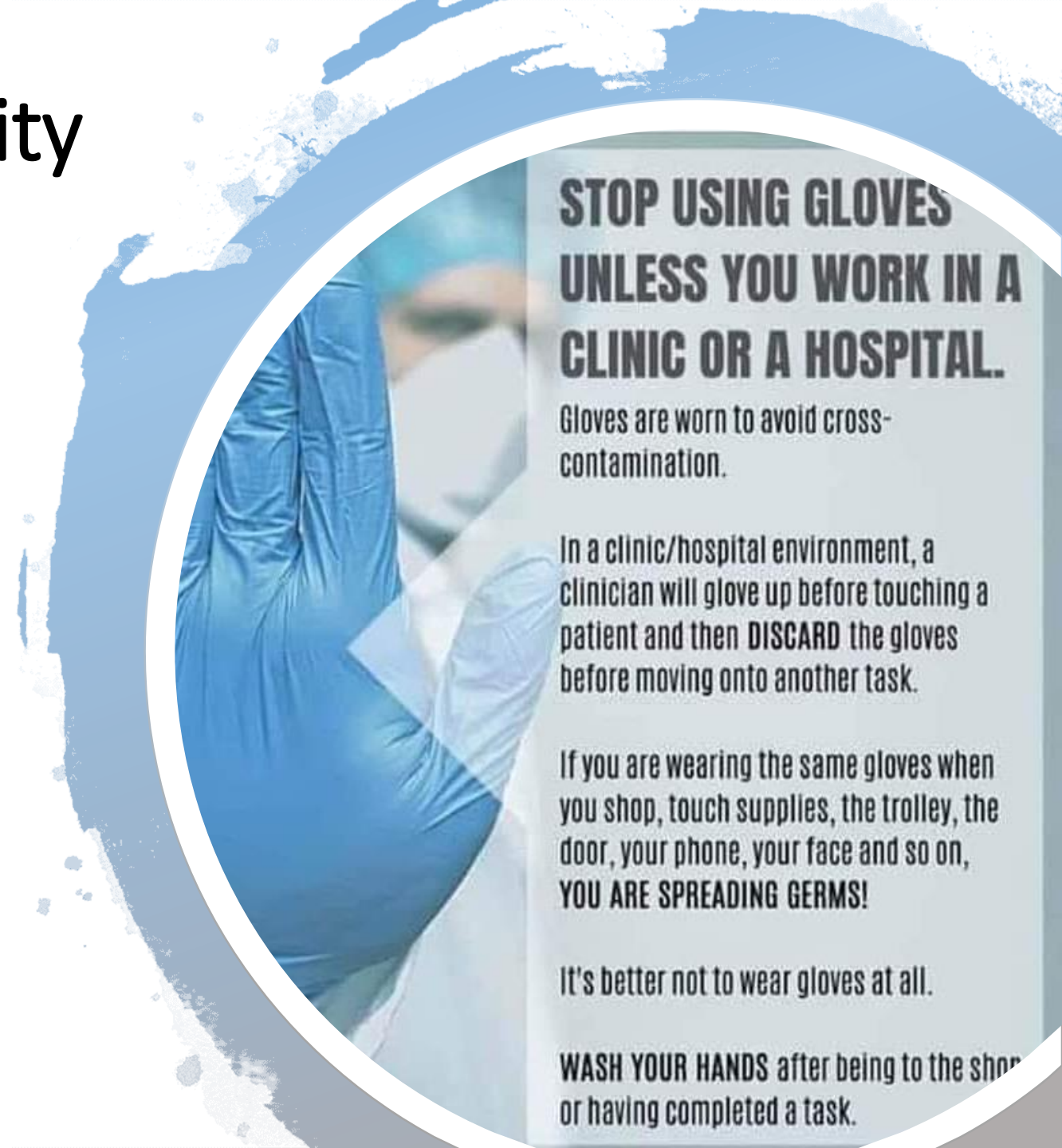
- Running water/alternative systems
- Training in good hand hygiene technique
- Use of Alcohol Based Hand Rub OR use of tippy taps at the entrance of households





# Glove use in the community

- Initially community was seen in supermarkets with gloved hands
  - Increased awareness on trusting HH and **NO USE OF GLOVES IN COMMUNITY**
- Coronavirus can survive in surgical gloves for 8hours



# Promotion of HH in communities

- Encourage family members and visitors to do HH at home
- Consider the use of water and soap or alcohol-based hand rub

When ?

- Before and after cooking food
- Before and after eating
- After cleaning
- After handling of waste
- After using toilet
- After blowing, touching the nose, sneezing, coughing



# Challenges for HH in Communities

- Water shedding
- No clean sources of water
- ABHR Costs- sustainability issues i.e a 100ml pocket sanitizer costs(USD)
  - Cameroon (\$2-\$3)
  - Nigeria (\$2)
  - Sierra Leone (\$2.80)
  - Zimbabwe (\$3-\$5)
- Some hand disinfection products used at entrance of supermarkets causing skin reactions, others too dry, some no name....

# Challenges for HH in Communities (2)

- Shortage of ABHR in supermarkets
- Unverified messages from social media platforms

We noticed that hand sanitizers are out of stock in supermarkets and where available, the prices have more than tripled. A sanitizer that used to cost 250 is now going for 1500. Worry not. Here is a solution. You can make your own hand sanitizers by mixing glycerine with methylated spirit at the ratio of 1:3. **One unit of glycerine with three units of methylated spirit.** Eg 10 ml of glycerine should be mixed with 30 ml of Methylated spirit. Shake the mixture thoroughly and pack in whatever dispensing container you have and carry with you in your bag. In fact for those of you with school going children pack some for them.

Thank you and Thank me later.

16:00

circulating - any

# OTHER HAND HYGIENE INITIATIVES

# Hand Hygiene for All

A whole of society approach to achieving universal hand hygiene and stopping the spread of COVID-19

# Hand hygiene for all global initiative

- aims to implement WHO's global recommendations on hand hygiene to prevent and control the COVID-19 pandemic and work to ensure lasting infrastructure and behavior.
  - WHO and UNICEF-led initiative calls
    - for countries to lay out comprehensive roadmaps that bridge together national COVID-19 preparedness and response plans with mid- and long-term national development plans to ensure hand hygiene is a mainstay beyond the pandemic, as part of infection prevention and control (IPC) and water, sanitation and hygiene (WASH) efforts
    - proposes a framework for coordination and collaboration among global and regional partners, with the primary aim of supporting and growing country-led efforts and investments.
- it builds upon and supports existing programmes such as the WHO SAVE LIVES: Clean Your Hands global campaign and the WASH in health care facilities initiatives.**

# The Global Initiative 3 stages

- **Responding** to the immediate pandemic,
- **Rebuilding** infrastructure and services, and
- **Reimagining** hand hygiene in society





# Get involved

- **Advocate** globally and locally including with civil society and multi-stakeholder groups
- **Include** hand hygiene progress updates on access, behaviour, country case studies in reports, meetings, events.
- **Commit** to increasing and streamlining hand hygiene within your organization and programming.
- **Share** joint statement, public brief, and key messages on social media channels.

# Lessons Learnt...

An overburdened health system can be overburdened with training

- Training workshops on their own are not sufficient to achieve good IPC practice : need to emphasis on behaviour change strategies
- Multiple partners supporting training, no coordination and lack of standard message resulting in mixed messages and confusion in practices



# Recommendations

- Need to scale up co-ordinated IPC trainings with mentorship for HH observers/monitors
- Understanding of Hand Hygiene with emphasis on:
  - WHO 5 Moments (reduce transmission to pts and HCWs)
  - Hand rubbing technique
  - hand washing technique



# And finally...

- What if the Coronavirus looked like this?
- Would YOU change YOUR behaviour towards HH?





THANK YOU

Clean Hands save lives

# Acknowledgements

- BBraun- Unconditional education grant
- ICAN
- ICAZ
- WHO
- CDC
- Unicef