

# Handwashing behavior change in health facilities

July 11<sup>th</sup> 2018



# Outline

- Impact of handwashing in healthcare settings
- Recommended and current practice
- Examples of behavior change approaches and drivers/ barriers



# Impact of handwashing

Handwashing by birth attendants can increase survival rates for newborns by as much as 19%.  
(Blencowe et al. 2011).



Photo: ICM

# Impact of poor handwashing

## **Healthcare-associated infections**

- 15.5% of patients in LMICS experience HCAI (Allegranzi et al. 2011)
- Sepsis leads to 6 million deaths per year (WHO)

## **Maternal and newborn survival**

- Handwashing of birth attendants alone up to 19% reduction in mortality, 30% reduction in cord infection and 49% reduction in neonatal tetanus (Blencowe et al. 2011)
- Bacterial infections around the time of childbirth account for about one-tenth of maternal deaths globally (Say et al. 2014).

**Quality of care, patient satisfaction and care seeking** (Adekanye et al. 2013; Oyo-lta et al. 2007).

## **Risk to health workers**



# Recommended Practice

World Health Organization recommends handwashing with soap or cleaning hands with handrub:

- Before touching a patient
- Before any clean/ aseptic procedure
- After body fluid exposure or risk
- After touching a patient
- After touching patient surroundings (WHO, 2009)

In addition to all critical times for everyone!

Additional recommendations for **hand hygiene**, such as glove use.



# Current Practice

- Average of 61% of health workers do not adhere to WHO – recommended hand hygiene practices (WHO, 2016)
- Handwashing was found to be the least practiced of five IPC behaviors in study of six countries, with handwashing prior to delivery at 37%, with soap available in most facilities (de Graft-Johnson et al, 2017)



Photo: USAID

# Why?

- Multiple complex reasons by context:
  - Access
  - Conscious drivers
  - Unconscious drivers
  - Enabling environment

# Access

Lack of supplies and place to wash hands form barriers to handwashing.

In LMICS, 39% of health facilities lacked soap for handwashing, and 66% of health facilities lacked soap and piped water (Cronk and Bartram, 2018)

Availability and location of hand hygiene products influence compliance (MCSP, 2017)

66%

OF HEALTH FACILITIES IN LMICS  
LACK SOAP AND PIPED WATER FOR  
HANDWASHING.<sup>vii</sup>



# Conscious Drivers

Knowledge- practice gap appears across studies.

Study of Indian nurses showed high knowledge (91%), practice only scored 58% (Guo et al. 2017)

Perception of risk to oneself (Yawson and Hesse 2013, Shobwale et al 2016)

Associated with improved practices: education and feedback, periodic refresher training, multimodal and multi-cadre training

# Unconscious Drivers

- Habit and subconscious decision making
- Caris et al 2017: Nudges increased handrub use at stations with nudges, but not at all stations.
- Improving convenience of handwashing stations or handrub dispensers (e.g. through workflow assessments);
- Placement of HW stations provided higher return than volume (Thomas et al 2009).

# Enabling Environment

- Facility Level: Leadership & management, staffing, accountability
- Community Level: Demand for behavior
- Policy level: Investment, accountability, strategy

# Enabling Environment - MCSP Case Study



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# Increasing Motivation and Action through Accountability/Certification Systems

- Standardized, short checklists allow individual staff members to understand their roles and responsibilities and monitor their own performance. They also allow staff to understand which checklist criteria are the most important.
- Certification systems link personal performance to collective performance (pressure/motivation to perform)
- The annual certification process generates data, which can be used for decision making and prioritization at each level of the health system
- Publishing results through media (radio, internet, etc):
  - increases community awareness and involvement
  - Instills an informal sense of competition among between facilities, managers and districts




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# An Example from the MCSP/Haiti Program

WASH criteria	Score
General hygiene	15
Hygiene promotion and communication	10
Water access	20
Excreta management	20
Waste management/wastewater management	20
Management linen laundry	5
Kitchen and food	5
Treatment of instruments and tools	5



**WASH- CHECKLIST DE LA CCA**

Nom de l'Établissement de soins: \_\_\_\_\_


Niveau: \_\_\_\_\_ HCR : \_\_\_\_\_

Nbre clients/jour: \_\_\_\_\_

#staff WASH : \_\_\_\_\_

Nom de l'inspecteur \_\_\_\_\_

Date de l'inspection: \_\_\_\_\_



Maternal and Child Survival Program

Département: \_\_\_\_\_

CS : \_\_\_\_\_ CCS: \_\_\_\_\_

Nbre de Lit: \_\_\_\_\_ Nbre staff: \_\_\_\_\_

# staff Med : \_\_\_\_\_ # staff para-med : \_\_\_\_\_

1ere visite	2eme visite	3eme visite	4eme visite

No	Criteria	OUI	NON	Scores	Sur
<b>HYGIENE GENERALE DE L'ETABLISSEMENT</b>					
i				...../	<b>15</b>
1	Existence d'une structure de gestion qui prend en compte le volet WASH				2
2	Existence d'un plan d'amélioration de la qualité des services incluant le volet WASH				2
3	Propreté générale de l'établissement				1
4	Existence et affichage d'un plan de nettoyage en publique				3
5	Gestion de l'équipement de nettoyage				2
6	Campagne de nettoyage régulière du site incluant l'extérieur immédiat du site				2
7	Personnel d'entretien orienté sur leur tâche et régulièrement supervisé				2
8	Personnel utilise l'équipement de protection personnelle pour le nettoyage				1
ii	<b>PROMOTION D'HYGIENE ET COMMUNICATION POUR LE CHANGEMENT DE COMPORTEMENT</b>			...../	<b>10</b>
1	Existence d'un plan d'affichage IEC				1
2	Existence d'un plan d'éducation à l'hygiène				1
3	Seances d'éducation réalisées pour les patients et accompagnateurs				2
4	Disponibilité des matériels IEC dans les zones stratégiques				1
5	Formation de tous les personnels en WASH PI-GD				2
6	Les ASCP ont réalisé des activités de PH				1
7	Orientation sur l'utilisation des infrastructures sanitaires				2
iii	<b>EAU</b>			...../	<b>20</b>
1	Existence d'infrastructure de stockage d'eau				3
2	Existence de réservoir de secours				2
3	Plan de nettoyage et désinfection du système hydraulique et ou du système de stockage				3
4	Plan préventif de maintenance du système de distribution d'eau de l'établissement				3
5	volume d'eau disponible au moment de la visite			.....gal	
5	Disponibilité d'intrant (HTH) stocké selon les normes				2
6	Existence d'un système de suivi de la qualité de l'eau				3
7	Rapport mensuel de la qualité de l'eau disponible et affiché				2
8	Personnel formé en chloration de l'eau				2
	Résultat test Chlore résiduel au moment de la visite			.....mg/l	

Haiti National Clean Clinic Scorecard



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# Haiti Clean Clinic Scoring System

**CERTIFIED  
CLEAN CLINIC**

Certified Clean Clinic - **GUARANTEED**: clinic scores 80% + 100% for the management of excreta

**CLEAN CLINIC  
SILVER**

Clinic scores 85% + 100% management of excreta

**CLEAN CLINIC  
GOLD**

Clinic scores 95% + 100% for the management of excreta + promotion of sanitation and hygiene in its area of intervention

**CLEAN CLINIC  
DIAMOND**

Clinic scores 100% + promotion of sanitation and hygiene with communities in its area of intervention



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# Clean Clinic Approach (CCA)

(MCSP & Save the Children)

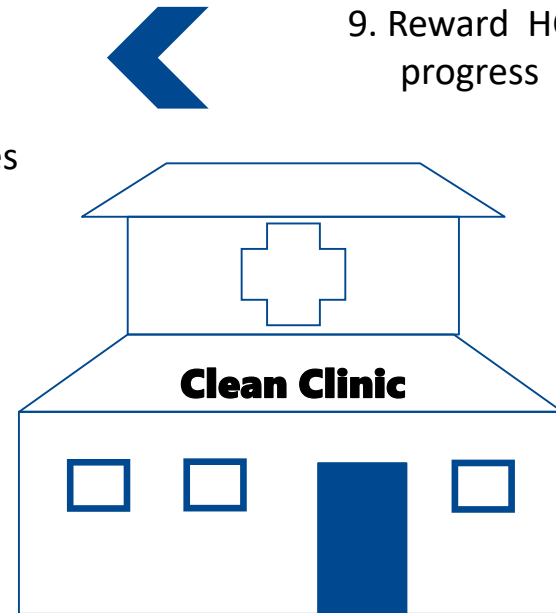
1. Conduct health care facility (HCF) assessment
2. Establish/refine national minimum WASH standards for HCFs
3. Develop program parameters with government
4. Train district and HCF leaders
5. Introduce CCA programs in target HCFs



10. Refine priorities and action plans and continue improvements



6. Integrate WASH actions into annual action/work plans



9. Reward HCF progress



8. Conduct inspections, scoring, & coaching and share results



7. Implement the CCA programs activities





# Key Considerations

- Need for behavior change to respond to drivers in context (knowledge: practice gap)
- Multimodal response
- Enabling environment
- Question of sustained behaviors?



Photo credit: DFID

# Resources and Thanks

## **Recommended Resources:**

- Phase I Report: WASH for Neonatal and Maternal Sepsis Reduction Study, Maternal Child Survival Program
- Global Handwashing Partnership 2017 Research Summary

## **Thanks to:**

MCSP: Steven Sara and the Phase 1 Report Authors

GHP Research Summary Authors



**Thank you**

**[www.globalhandwashing.org](http://www.globalhandwashing.org)**



# Discussion

- What efforts are ongoing?
- What opportunities are there?
- What current or potential solutions are there?
- What barriers exist?
- What recommendations do you have?