WASH IN HCF GLOBAL LEARNING EVENT
KATHMANDU, NEPAL

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NOSOCOMIAL INFECTION PREVENTION IN BURKINA FASO

1. GEOGRAPHICAL
   - 274 200 km2
   - 19 Mio habitants
   - 55% under 15 year-old
   - Life Expectancy: 57

2. ACTIVITIES
   - Pilot Programme (2010-2015): 26 Heath care facilities
   - Scaling up (2016 onward): 63 Sanitary Districts + 9 Regional Hospitals Centers (2’000 HCF)
INTRODUCTION TO BURKINA FASO HEALTHCARE SYSTEM

HEALTH CARE SYSTEM:
1st: 1’698 CSPS (rural areas)
   43 Medical centers
   47 District hospitals
2nd: 9 Regional hospitals
3rd: 4 University hospitals

PROGRAMME OBJECTIVES
✓ Improve disinfectant quality
✓ Improve hospital disinfectant autonomy
✓ Increase disinfectant use at different level of the HCS
✓ Increase cost-efficiency ratio
INTRODUCTION TO BURKINA FASO
HEALTHCARE SYSTEM
**METHODOLOGY / THEORY OF CHANGE**

**Intervention**
- CHLORINE GENERATORS ARE INSTALLED IN 26 HEALTH CARE FACILITIES IN BURKINA (representative sampling of Burkinabe healthcare structures)

**Outputs**
- TRAINING on technology & hygiene practices for Ministry/other stakeholder
- MONITORING & EVALUATION of hygiene practices

**Outcomes**
- AVAILABILITY of adequate chlorine volume for HCF, at cheaper price
- INCREASE USE of chlorine for disinfection purpose
- Integration of NATIONAL EXPERTISE (service provider)

**Impact**
- REINFORCE HYGIENE PRACTICES & PREVENTION OF NOSOCOMIAL DISEASES
IMPROVE ACCESSIBILITY, QUALITY & SUSTAINABILITY OF HEALTHCARE SYSTEM

2000
Sanilec

2005
M&E Sanilec

2010

2013
Evaluation Pilot 1
WATA-Standard®
4.8 [g/h] active chlorine
2 L of active chlorine in 2h30

2015
Evaluation Pilot 2

2016
Scaling Up

Pilot 1

Pilot 2
SUSTAINABILITY RELY IN GOOD SUPPLY CHAIN, MAINTENANCE AND PEER TRAINING
Systematic soaking of bedpans in chlorine solution (around 5g/L).
Systematic decontamination of health-care equipment with chlorine solution (and disinfection, if appropriate).
Systematic decontamination of the placenta after childbirth, before it is given to the parents.
Systematic decontamination of the labour room and bed after childbirth.
Systematic decontamination of the mother’s linen after childbirth.
Replacement of the decontamination solution if it becomes cloudy, or at least after 24 hours.
Use of chlorine solution for washing disinfecting waste disposal bins.
Use of chlorine solution for disinfection of sanitary facilities (showers, toilets etc.).
Facilities available for handwashing with chlorinated water.

OUTCOME 1 : HYGIENE PRACTICES MEASUREMENT

Compliance with the "11 good hygiene practices" by the 25 health - care institutions at the end of the study

- Facilities available for handwashing with chlorinated water.
- Use of chlorine solution for disinfection of sanitary facilities (showers, toilets etc.).
- Use of chlorine solution for washing disinfecting waste disposal bins.
- Systematic decontamination of gloves after use.
- Daily cleaning of premises and surface with chlorine solution.
- Replacement of the decontamination solution if it becomes cloudy, or at least after 24 hours.
- Systematic decontamination of the mother’s linen after childbirth.
- Systematic decontamination of the labour room and bed after childbirth.
- Systematic decontamination of the placenta after childbirth, before it is given to the parents.
- Systematic decontamination of health-care equipment with chlorine solution (and disinfection, if appropriate).
- Systematic soaking of bedpans in chlorine solution (around 5g/L).
OUTCOME 2: HYGIENE PRACTICES IMPROVEMENT

WITNESS GROUP
Ratio: 4/20 comply with at least 8 best practises
20% of good practises

PILOT GROUP
Ratio: 20/22 comply with at least 8 best practises
90.9% of good practises
Are you generally satisfied with WATA?
The technology is valued
Are you generally satisfied with WATA?
The quantities of chlorine produced met the requirements
The technology helped to improve hospital hygiene

POSITIVE FEEDBACK AT LOCAL LEVEL
Qualitative Review (26 staff of hospital)
USE, VOLUME, EFFICIENCY, HYGIENE

STRENGTHS & CHALLENGES
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CHALLENGES (PILOT 1 and 2)

PILOT 1:
• Need for larger range of device to fit the requirements of each health center (different volume of production/day)

• Working with different electricity sources (on-grid/off-grid) and develop a timer for a better use on site (more reliable)

• Supply chain for reagents of the chlorine concentration (quality control)

• Staff Capacity building is crucial

PILOT 2:
• Consistent data monitoring due to staff changes and displacement in the country

• Work out a financial mechanism to ensure maintenance fund (and ROI) on a long-term basis.

LESSONS LEARNT AND STRENGTHS

• New range of devices have brought alternative option for off-grid health care centers (WATA-Plus, Midi-WATA and Maxi-WATA)

• WATA devices are accepted and pertinent (Satisfecit from the Ministry of Health 2015)

• Best practises have been monitored during the phase 2 (with great improvement)
NEXT STEPS & RECOMMENDATIONS

SAVING REALISED

2,7 to 53 Euros per day
(compared with Aquatabs and other local bleach products)

RETURN ON INVESTMENT
(on devices only)

Less than a year (2014)
(even for larger off-grid devices)
TECHNOLOGY INSIGHT

PRICE: 480 USD/ UNIT
NOT INCLUDING TRANSPORT TO LOCATION, SOLAR PANEL OPTION AND TRAINING
SHORT SUMMARY

✓ 90,9% of health care centers are implementing on a continuous and constant basis at least 8 best Hygiene practices (Among the “11 Hygiene best practices definition)

✓ 75% of health care centers have improved the disinfectant quality

✓ 70% of health care centers are autonomous 12 month after the pilot 2.

✓ Saving realized: 2,7 to 53 Eur. saved per day

✓ WATA ROI (return on investment) is less than 1 year
NEXT STEPS: SCALING UP!

- Building a reflection technical team (at the ministry level with local implementers)

- Health Care Programme Equipment Report (currently being drafted)

- Supply chain constraints for implementation and continuous capacity building/maintenance.

- Funding opportunities (in Burkina Faso)

- Training of health care agents

- Maintenance (preventive and curative)

- Monitoring and evaluation (FACET)
REFERENCES / CONTACT

Geneva Health Forum link
http://ghf2016.g2hp.net/files/2016/12/P-2-07.pdf
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