WASH in HCF
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Developing and implementing revised Tool Box for assessment of Water Sanitation and Hygiene (WASH) in “Urban Healthcare Facilities beyond Labour room”

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Outline of presentation.....

• Overview of Tool Box Version 1 & 2
• Process of Development & implementation of revised Tool Box V2 for assessment WASH in Urban Healthcare Facilities beyond Labour room
• Observations: Post Tool Box v1 & Tool Box v2
• SWOT Analysis and Way forward for Tool Box v2
Background & Rationale

• Developing countries struggling with High MMR and efforts to reduce

• Puerperal sepsis third common cause yet not adequately captured: Cleanliness of the labour rooms (LR) and hygiene practices are also not documented

• A tool box was developed as a part of multi-centric study (India & Bangladesh) funded by SHARE – Sanitation & Hygiene Applied Research for Equity & The Soapbox Collaborative
Shared observations at various Platforms
BUT Faced Major Critique & limitations of Tool Box v 1

- WASH assessment was restricted **ONLY TO** Labour room.
- Effort intensive toolkit- needs a lot of work with the site to develop confidence
- Scores of Determinants for Hygiene did not make sense to program/policy planners- need to develop easily understood method for analysis.
- Lacks Replicability/ Roll out
- Too much of Focus on Rural Public Health Care set up : NUHM missing
Process for developing Tool Box Version 2

- Review of available Tools for assessment of WASH in healthcare facilities, Triangulation of findings from Published articles, Systematic reviews, policy briefs, program briefs, Workshop proceedings, and published reports (Post 1999)

- Structural understanding of public health under NUHM

- Series of Round Tables with Government Officials, Experts, Program Managers, UNICEF, Water Aid, Academia, Microbiologists to develop consensus on draft Tool Box V2 & its protocols

- Started looking for Funding Support
- Sought Permission from State / Local Municipal corporation
- Pilot testing the same in 2 States
- Rural Area and 2 Urban Municipal corporation (14 UHC)

- Findings and Observations submitted to the Health Authorities and Policy Planners

- With an ongoing advocacy to use Tool Box V2 for routine surveillance / assessment of WASH
**Tool Box Version 1**

- Tool kit (version 1) comprises seven tools
  - Tool 1: Facility Needs Assessment Tool
  - Tool 2: Document Availability Checklist
  - Tool 3: Walkthrough Checklist
  - Tool 4: Semi structured interview for management
  - Tool 5: Photo prompted interviews with HCPs
  - Tool 6: Photo prompted interviews with Cleaners
  - Tool 7: Photo prompted interviews with recently delivered women

**Tool Box Version 2**

- Tool kit (version 2) comprises Three tools
  - Tool 1: Facility Needs Assessment Tool
  - Tool 2: Document Availability Checklist
  - Tool 3: Walkthrough Checklist & Microbiological Assessment
  - Walk Through and Microbiological assessment beyond LR : As per the standard protocols from selected sites of OPD, IPD, LR , Nursing station and OT
  - Piloting Air Sampling by Settle Plate
Outcome of Tool Box Version 1

Modified Version Used by State Government in This assessment was conducted in all eight High Priority districts of Gujarat: (n=118)
Major issues in Maintaining Optimal WASH (n=118)

LACK OF TRAINED MANPOWER: Cleaning Staff

- DH (n=4)
  - Permanent (Govt.): 4
  - Out-sourcing: 2
  - Daily wages: 9
  - On-contactual: 1

- SDH (n=7)
  - Permanent (Govt.): 3
  - Out-sourcing: 2
  - Daily wages: 19
  - On-contactual: 1

- CHC (n=52)
  - Permanent (Govt.): 16
  - Out-sourcing: 5
  - Daily wages: 13
  - On-contactual: 10

- PHC (n=40)
  - Permanent (Govt.): 13
  - Out-sourcing: 6
  - Daily wages: 16
  - On-contactual: 26

- SC (n=15)
  - Permanent (Govt.): 10
  - Out-sourcing: 4
  - Daily wages: 26
  - On-contactual: 26

- Total (n=118)
  - Permanent (Govt.): 53
  - Out-sourcing: 85
  - Daily wages: 128
  - On-contactual: 102
  - No cleaning staff: 4

Legend:
- Blue: Permanent (Govt.)
- Brown: Out-sourcing
- Grey: On-contactual
- Yellow: Daily wages
- Blue: No cleaning staff
Lack of Protocols

![Bar chart showing the percentage of visible clean healthcare surfaces/floors and schedule cleaning/mopping available in different areas.](#)

**Status of BMW**

- Color coded Bags: 72.8%
- PPE available: 50.5%
- Open Burning: 32%
- Separate Space for storage: 30%

**Bar chart showing the percentage of visible clean healthcare surfaces/floors and schedule cleaning/mopping available in different areas.**

- OPD room (n = 103): 95.1% visible, 37.9% schedule cleaning/mopping available
- Labor room (n = 117): 88% visible, 38.5% schedule cleaning/mopping available
- Postnatal ward (n = 103): 82.5% visible, 40.8% schedule cleaning/mopping available

**Legend:**
- Blue: Visibly clean healthcare surface/floor
- Orange: Schedule cleaning/mopping available

**Microbiological Surveillance Only in OT**
Major Barriers identified GOG

• Inadequate and late release of funds
• Manpower : Inadequate / Untrained manpower
• Poor Documentation
• Other competing priorities
• Restricted Microbiological Surveillance (OT)
Positive actions ......

Office order for corrective actions issued by Commissioner Health to all facilities across the state

State & district level Debriefings

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Observations from Tool Box v 2:
Total UHC = 14 in TWO states (10 UPHC and 4 UCHC)

Poor Status of WASH / No Protocols / Poor BMW m/g / Poor cleaning Practice / Lack of Man Power / Ownership / Issues with Cleaning material
Cont....

- BMW bins and bags available but proper segregation and management a real issue
- No training for BMW for Cleaners
- IPC committees either not available or non functional
- Restricted Microbiological Surveillance
- Absence of routine surveillance of Post Surgical Sepsis or Puerperal sepsis
- Prophylactic use of Ab: Very High
Microbiological Surveillance

- Use Of Microbiological Swab
  - Gathered 15-20 samples per facility based on predetermined sites by pre decided protocols
  - 22.3% Swabs were positivity for pathogenic bacteria
  - Maximum Contamination Mops, Buckets and Cleaning Materials (around 35%)
  - MC organism: Staph Aureus & Klibsella, Stap Coagulase Negative
AM Resistance of Positive samples ranged from 66.6 – 100% to \((at\ least\ one\ commonly\ used\ Ab)\)

- Few were resistant to more than 3 Ab (around 10%).
- Samples from high risk area NICU, LR, OT, Minor OT were also found positive.
- Air sampling: Difficult to execute in Indian Context due to reluctance of Officials.
Challenges

• Health in India is a state matter: Tool Box V2 might lack issues specific to local context.

• Infection control not perceived as a priority in lieu of availability of Broad Spectrum Anti-biotics.

• Lack of WASH documentation / Cleaning Protocols.

• Untrained Man Power that too with high turn over
Challenges

• Require repeated visits to convince the facility In-charge.

• Insecurity among hospital staff regarding data confidentiality as they fear of backlash from higher authorities.

• Microbiological surveillance ? Reluctance from managers

• Difficult to Link optimal WASH with OUTCOME.
Strengths

• Tool Box Version 2 is acceptable replicable, robust and validated now ready to use.

• State willingness for permitting its use

• Can be used as a routine surveillance mechanism

• Microbiological surveillance is now standardized
Weakness

• Did not capture satisfaction / dissatisfaction / motivation.

• Snap shot process, needs further follow up to document the outcome also.

• Not able to publish unless permission is granted from officials.

• Poor Microbiological capacity of IIPHG University
Opportunities

SMART CITY INITIATIVE

BMW 2016 Guidelines

National T/t guidelines for AM use in Infectious D/s
Threats

- Difficult to convince Facility Managers
- Not blinded
- Too much of objectivity: More Critical
- Doesn't capture outcomes
- Acceptance by local stake holders
Way forward ..........

• Permission for 2 more states
• Beginning of a journey, Tool Box 3?
• Successful Grant proposal: Development Grant under the Centre for Environmental Health (CEH).
• Hopeful for MA Grant: Use of solar energy for disinfection of MOPS in resource poor settings (Applied for)
REFERENCES

- http://www.mqsm-gujarat.in/
- https://nrhm.gujarat.gov.in/
- https://nrhm.gujarat.gov.in/nuhm-2.htm
- Wendy J. Graham, Emma Morrison, Stephanie Dancer, Kaosar Afsana ..Deepak Saxena, Yael Velleman and Susannah Woodd. What are the threats from antimicrobial resistance for maternity units in low- and middle- income countries? Glob Health Action 2016, 9: 3338
- Presentation shared by Dr J L Meena, Quality Assurance Officer, Govt of Gujarat