



# **EVIDENCE TO SUPPORT CHANGE MEETING WATER, SANITATION AND HYGIENE IN HEALTH CARE FACILITIES**

**REVIEW OF THE EVIDENCE, FOCUSSED ON CARE SEEKING  
BEHAVIOUR AND PATIENT SATISFACTION**

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# AIMS OF THE REVIEW

- **Costs and Economics:** Estimates of economic value of investments in WASH in health facility (e.g. cost-benefit, cost-effectiveness, cost-utility analyses) especially linked to efficiencies gained in service provision and infections averted
- **Care seeking:** Effect of improving WASH services on care-seeking behaviour and patient and staff satisfaction
- **Hygiene behaviour change:** approaches to improve hygiene practices and management of WASH facilities by health facility staff (medical and other staff), patients and their carers
- **WASH technology design:** links with health outcomes, end user and caregiver behaviours and needs, environmental impacts, cost and operation and maintenance requirements
- **Improving and maintaining WASH services:** key factors to facilitate (or thwart) ongoing improvements along with evidence on minimum and extended set of standards required to run an effective and efficient health facility

# RETRIEVED LITERATURE

- **Costs and Economics:** “(Water OR Sanitation OR Hygiene) AND health care AND Cost AND developing country” OR “(WASH OR Water OR Sanitation OR Hygiene) AND health care (Mesh: delivery of Health care) AND developing countries (Mesh) AND Cost” → **1276 hits**
- **Care seeking:** “(Water OR Sanitation OR Hygiene) AND health care AND (satisfaction OR acceptance) AND developing country” OR “(WASH OR Water OR Sanitation OR Hygiene) AND health care (Mesh: delivery of Health care) AND developing countries (Mesh) AND (satisfaction OR acceptance)” → **244**
- **Hygiene behaviour change:** “(Water OR Sanitation OR Hygiene) AND health care AND (hygiene OR behaviour OR staff OR practice) AND developing country” OR “(WASH OR Water OR Sanitation OR Hygiene) AND health care (Mesh: delivery of Health care) AND developing countries (Mesh) AND (hygiene OR behaviour OR staff OR practice)” → **3002**

# RETRIEVED LITERATURE

- **WASH technology design:** “(Water OR Sanitation OR Hygiene) AND health care AND (technolog\* OR intervention) AND developing country” OR “(WASH OR Water OR Sanitation OR Hygiene) AND health care (Mesh: delivery of Health care) AND developing countries (Mesh) AND (technolog\* OR intervention)” → **764**
- **Improving and maintaining WASH services:** “(Water OR Sanitation OR Hygiene) AND health care AND (improv\* OR performance) AND developing country” OR “(WASH OR Water OR Sanitation OR Hygiene) AND health care (Mesh: delivery of Health care) AND developing countries (Mesh) AND (improv\* OR performance)” → **1602**



**Endnote libraries are available**



# CARE SEEKING REVIEW

# CARE SEEKING REVIEW

- **Care seeking behaviour is a complex issue**
- **Care seeking barriers/ delays are caused**
  - **Caretaker's inability to identify danger signs that warrants care seeking**
  - **Cost**
  - **Distance to facility/ lack of transport**
  - **Dissatisfaction with care quality and care outcome**
  - **Lack of skilled staff**
  - **Healthcare facility infrastructure**
  - **Treatment by staff**
  - **Lack of supervision of (other) children at home**
  - **Obstacles related to weather or social unrest**
  - **Household chores/ water fetching responsibilities (antenatal care)**

# CARE SEEKING REVIEW

- **Barriers to care seeking characterised using the 3 delays models (Thaddeus and Maine, 2014)**
  - ❖ **First delay: deciding to seek care**
  - ❖ **Second delay: reaching the health facility**
  - ❖ **Third delay: receiving quality care once at the health facility**

# CARE SEEKING REVIEW

- **Delays in seeking care is associated with a significant burden**
  - ❖ **30% deaths in newborn babies in Uganda (Waiswa et al., 2010)**
  - ❖ **45% childhood deaths from diarrhoea and acute respiratory infections in Mexico (Bojalil et al., 2007)**
  - ❖ **Increased the odds of intrauterine foetal death by 6.6 (95% CI 1.6, 26.3) for delays over an hour (compared to less than one hour) in “near-miss” Women in Afghanistan (Hirose et al., 2012)**

# CARE SEEKING REVIEW

- Various search strategies were trialled (see literature review report)
- Each combination retrieved a different set of papers
- **Use the expertise at this meeting to improve and refine search terms (for a systematic review)**

# CARE SEEKING REVIEW

Search strategy	Number of papers retrieved	Number of papers examined
(WASH OR Water OR Sanitation OR Hygiene) AND health care (Mesh: delivery of Health care) AND developing countries (Mesh) AND (satisfaction OR acceptance)	86	32
(water OR hygiene OR sanitation) AND care seeking AND developing countries	73	37
"Patient Acceptance of Health Care" AND (water OR sanitation OR hygiene)	632	461
toilet AND (patient acceptance OR satisfaction)	107	87
patient satisfaction AND developing countries	507	367
<b>Total</b>	<b>1405</b>	<b>984</b>

Number of papers examined were papers published 2000-2016

# CARE SEEKING & WASH

- **Out of 984 papers assessed, only 24 investigated WASH conditions and care seeking/ patient satisfaction**
- **Full data extraction → Table 2 (review report)**

# CARE SEEKING & WASH

- **WASH was not the main barrier to care seeking but several studies reported on dissatisfaction with WASH condition at Healthcare facilities in LMICs**
  - **35% dissatisfied with toilet cleanliness, HIV treatment centre, Ethiopia (Tessema et al., 2015)**
  - **71.7 % dissatisfied with toilet facilities → only one toilet for patients and no running tap, eye care service, Nigeria (Ezegwui et al., 2014)**
  - **81.5 % dissatisfaction with toilet cleanliness, in-patient health services, Ethiopia (Woldeyohanes et al., 2015)**
  - **Dissatisfaction with general cleanliness (-0.5) and availability of sufficient chairs and toilets (-0.67) (mean gap score), outpatient department, Tanzania (Khamis et al., 2014)**

# CARE SEEKING & WASH- MATERNITY SERVICES

- **The lack of water and sanitation in maternal health services is one of the main drivers making women choose home delivery**
  - ❖ **“In government hospital delivery room is not there. Toilet and water facilities are not there in public health centre properly. So I felt safe to give birth in house.” Griffiths et al. 2001 (Understanding Users' Perspectives of Barriers to Maternal Health Care Use in Maharashtra, India)**
- **Other factors, (good reputation, well-respected doctors and proper handling of complications) were more important than the status of WASH when choosing a health facility. For ambulatory visits, including child birth, the status of WASH installations was seen as less critical than for prolonged hospitalization. Steinmann et al., 2015 (Availability and satisfactoriness of latrines and hand washing stations in health facilities, and role in health seeking behavior of women: evidence from rural Pune district, India)**

# CARE SEEKING & WASH-MATERNITY SERVICES

- **Inadequate WASH condition at maternal services in LMICs**
  - **Women criticise dirty toilet facilities, lack of water and aseptic practices, LMICs (Gabrysch et al., 2009)**
  - **18.23 % would like to see better hygiene in toilets and bathrooms, Zambia (MacKeith et al., 2003)**
  - **27% reported toilets “not at all usable” and 23% “dirty needing cleaning”, restrooms were lacking in 3% health facilities and only 55% had safe drinking water, India (Ray et al., 2011)**
  - **1 health facility had no latrine and 1 had unimproved latrine. 2 facilities lacked hand washing station and only 6/12 had soap for hand washing, India, (Steinmann et al., 2015)**

# CARE SEEKING & WASH

- **Interventions/ audits to improve WASH in Healthcare facilities**
  - **Gel dispensers installations increased use for Hand Hygiene from 33.8% to 40.5%, Paediatric hospital, El Salvador (Caniza et al., 2009)**
  - **Criteria base audit showed significant improvement in cleanliness of maternity wards, but no changes in provision of clean toilet and bathrooms. One hospital had a toilet renovation but no report on results, maternity units, Malawi (Kongnyuy et al., 2009)**
  - **Accreditation exercise showed that 31/40 hospitals had some infection control in place and not a single hospital had a fully reliable autoclave, hospitals, Uganda (Galukande et al., 2015)**

# CARE SEEKING

## Discussion points

- ❑ The link between perceived quality of care and attendance at healthcare facilities is not linear
- ❑ Perceived quality of care is subjective. Measures of satisfaction are influenced by expectation and socioeconomic traits
- ❑ Other factors than WASH drive the choice and use of healthcare facilities. Attendance of facilities with inadequate WASH → associated burden of disease
- ❑ Reliability of exit versus household questionnaire → courtesy bias and intimidation
- ❑ Skilled birth delivery not always associated with a better outcome for mother and baby → care delayed until critical stage and sub-standard quality of care
- ❑ provided care has to be culturally accepted → previous delivery by a male attendant made women choose home birth
- ❑ Improvements in maternity services should also address providers' attitudes and interpersonal behaviour

# CARE SEEKING & WASH

## Conclusions

- ❑ WASH provision is inadequate in many healthcare facilities in LMICs
- ❑ Poor WASH is a reason of dissatisfaction reported by service users
- ❑ Very few studies (in this subset) conducted WASH improvement interventions and recorded impact on patient satisfaction, service use and health outcomes

# WASH<sup>IN</sup> HEALTH CARE FACILITIES

FOR BETTER HEALTH CARE SERVICES



World Health  
Organization



# Questions ?