Menstrual Waste Management
Role of Systems / Stakeholders

Myles Elledge

Senior WASH Consultant &
Director – Babson Center for Global Commerce
University of the South, Sewanee TN USA
myles.elledge@sewanee.edu
Topics

1. Safety
2. Culture
3. Policy
4. Costs of Waste Management
5. Incineration
Safety

• Limited research and epi evidence on the risk of solid waste in emerging markets

• Gerba (Univ Arizona, microbiologist) menstrual disposal bins are bacteria hot-spot, include e-coli, Hep A & C, staphycoccus. Hardy bacteria

• Unpublished lab research confirmed e-coli on pad waste

• US OSHA guidance on safe management of blood-borne products, including menstrual products. Not regulated waste, but BBP includes guidance for building and restroom managers on safe handling, and lining and regular disinfection of bins
Cultural Factors

• Stigma / taboos associated w/ blood & menstrual waste  
  e.g. who sees, who handles, where disposed, how disposed,  
  type of treatment, black water recycling

• Beliefs influence disposal at home & in public spaces  Field  
  insights:
    - Carry away from public spaces for fear of  
      how will be handled
    - Public spaces desirable disposal when home  
      communities lack privacy

• Preferences. Privacy, and confidence in how waste will be  
  handled
Policy

• Lack of clear guidance on systems to manage menstrual waste at national, provincial or local level. On-site guidance for public bathrooms and work-sites is domain of local government.

• Institutional confusion between education, local government, public works agencies for oversight of shared facilities.

• Confusing or misleading guidance. Solid waste, regulated waste, or medical waste. Classification is driver for on-site behavior and service provision.

• If classified as “riskier waste”, lack of guidance on systems for handling, and even less enforcement.

• Lack of guidance on waste treatment methods, burying, landfill or incineration.
Costs of Poor Waste Management

• Un-desirable Facilities. Sites not clean or attractive for use. Taboos are influential

• Workforce Safety/Servicing. Cleaners ill-equipped to safely manage. Unprotected, or opt to not clean because of culture or perceived health risks

• Off-line. Clogged toilets go usable, deterring sustained sanitation practices
  - High cost of maintenance for owners and utilities (§§ de-clogging)
  - Lost operational hours of toilet facilities

• Infection risk. Clogged toilets and pipelines pose operational risk of spills, and infection risk
Incineration

- Large-scale v. decentralized systems
- Safety standards absent for small systems
- Decentralized system operational challenges
  - Poor design for users
  - Power supply unreliable
  - Lack of durability
  - Too low temperature (e.g. ~150°C), emissions
  - Lack of destruction, disinfection
  - Installation and venting
  - Absence of product testing, inspection, certification
- Innovation
  - Durability & automated controls
  - Temperature of operation (~600°C)
  - Venting