Acceptance, use and maintenance of urine diversion dry toilet (UDDT) at eThekwini Municipality

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Background

• VUNA: Socio-economic boundaries
• Objectives:
  (1) Explore the use, acceptance and maintenance of the UDDT
  (2) Education programme to enhance the level of acceptance, use and maintenance of the UDDT.
Methods

- Mixed methods: qualitative and quantitative
- 3 rural areas situated at East, North and South of Durban in eThekweni
- Respondents age: 22 - 63 years

Quantitative
- 40 households per area
- Random selection
- Questionnaire
- Profiling

Qualitative
- Homogenous groups (maintainer, non-maintainer, non-user)
- 12 focus group discussions
- 121 participants

Qualitative
- Purposive sampling
- 25 key informants
- Ward councillors
- Ward committee
- Previous local facilitators
Quantitative results

**Condition of the UDDT**

- In good condition
- Not in good condition
- Not using the toilet

**Condition of UDDT Items**

- In good condition
- Broken
- Missing

Items:
- Backcover
- Seat
- Door
- Vent Pipe
- Mesh
Qualitative results

Acceptance:
- acceptance low
- aspire for flush toilet
- role models
- youth more accepting
- silence about UDDT
- mismatch of benefits
Use:
-97% are using the UDDT
- children under 5yrs discouraged to use UDDT

“I tell my grandchildren to use the open space by our house to defecate...I’m scared they might fall inside” (female focus group member)
Results cont.

- Maintenance:
  - repairing
  - emptying
  - role of children

- Design
  - not accustomed to needs and reality

"it’s (UDDT) too technical, having to make sure that the urine goes to which hole, it takes the comfort and peace that one should get when using a toilet" (Ward councillor)
Different traits of maintainers and non-maintainers

Maintainers

- small family
- information more detailed
- more children
- teamwork
- recipient- middle aged woman

Non-maintainers

- woman exploitation and undermining
- drinkers in the family
- lack information
- recipient migrated or deceased
Development of H&H education

Service provider

Bridge the gap through health and hygiene education

Water and Sanitation Agenda

Perceptions and experiences on the ground

Equality Self-worth
Issues addressed by education

- why UDDT?
- benefits of UDDT
- function and importance of UDDT items
- cycle of faecal-oral contamination
- hand washing
WHAT IS A URINE DIVERSION DRY TOILET (UDDT)?

- It is a toilet that separates urine, and the faeces collect in a vault. The importance of separating urine and faeces is to (1) reduce odour, (2) enable fast drying of faeces which makes handling of faeces more simple and hygienic, (3) reduce environmental impacts, and (4) allow for the recovery of urine, which can be reused as fertilizer.
- The excreta inside the UDDT vault are dried with the help of natural evaporation and ventilation. The toilet requires no water for flushing. UDDTs can be successfully used in all climatic conditions and are most advantageous in arid climates where water is scarce and faeces can be effectively dried.

WHAT IS A URINE DIVERSION DRY TOILET (UDDT)?

- UDDTs are waterless systems that are particularly suitable for conditions where water is scarce or expensive. It protects ground water.
- A dry vault UDDT can transform infectious faeces into a safe product CDV that storage times are important and the UDDT is operated correctly.
- Odourless and no flies which eliminates transmission of diseases.
- Decomposed content is easier to handle when removing.
- Waste decomposes before being exposed to surrounding soil which minimizes water pollution since the waste is safely contained in a sealed vault.

HOW DO I/WE MAINTAIN THE UDDT?

- Ensure that when sitting on the seat the urine goes in front and faecal matter drops into the back hole. Never use the urinal that is connected to the soak away pit.
- Pour solid waste every time after defecating.
- Ensure that lid is closed after defecation.
- Remember to wash your hands with soap!
- Use damp cloth when cleaning the floor or the seat to ensure that no water enters into the faecal vault.
- Remember to wash your hands with soap!
- When the faecal vault is full move the toilet pedestal and place it over the second vault. By the time the second vault is full the waste in the first vault would be dry and safe to remove. Using tools: Remember to wash your hands with soap!
- Do not throw any solid waste inside the toilet.
- Do not pour detergents inside the toilet.

IN WHICH AREAS ARE THEY MOSTLY SUITABLE?

- Applications are typically found where connection to a sewer-based sanitation system is not available or areas where water supplies are limited.

QUESTION: Are UDDTs only found in South Africa?

ANSWER: No, but in many other countries in Africa and abroad.

BENEFITS OF UDDT

- Safe on-site disposal of human waste
- No new pit required to be dug when full
- No need to move top structure when full
- UDDTs are also more resource efficient due to the ease potential of the product.

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Health & Hygiene starts with ME!

You are not looking too good—what’s the problem?

My people have not been looking after me.

Is that why they don’t look well?

They are always getting sick and it’s because they are not keeping me clean.

When I’m dirty, they get dirty.

They keep me dirty and I am filthy.

Well, I am cleaned every day...

Which means my people are healthy!

And all they have to do is to make sure they pour soil or ash into the bowl after they use the toilet...

And wipe down the seat and inner bowls with a damp cloth.

Wish! I am sorry to be personal, but you do smell a bit!

Yes, I know—and these flies!
Health and hygiene education

- 2 areas
- 1114 individuals reached

50 households
- 414
- Weekends
- Saturdays

8 schools
- 583
- 4 primary (grd 5 & 7)
- 4 high school (grd 8 & 9)

9 groups
- 117
- Community care givers, women’s group and youth groups
Expectations and future target

Expected results
- more informed
- change of perception
- more children to use toilet
  - minimise open defaecation
- clean the toilet regularly
- regular hand washing after toilet use

Target group
- children
- teachers
- youth
- elders
- leaders
- influential individuals and groups
Summary

- poor use and maintenance of UDDT defeating the purpose
- comprehensive health and hygiene education is vital
  - informed by community
  - the EWS to provide regular updates
  - impart knowledge to local leaders
  - target everyone
  - use community health givers
- evaluate
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Ngiyabonga!

Thank You
For your attention!

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