

Practice-Relevant Research: Identifying WASH in HCF Gaps to Reduce Healthcare-Associated Infections.

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Outline

- Introduction
- Research gaps in WASH in HCFs
- Focus on WASH and mothers' health seeking behavior in Uganda
 - Methods
 - Results
 - Conclusions
 - Recommendation

Introduction

- Water, sanitation and hygiene (WASH) in health care facilities (HCFs) are critical for quality health care service provision
- Many HCFs in low income countries lack basic WASH infrastructure.
- Preventable risk to those providing and seeking services
 - Mothers at risk of HAIs
 - Newborns are at higher risk (including sepsis)
- Unfortunately, WASH in HCFs' research is still limited

Gaps in WASH in HCFs' research

- Contribution of poor WASH to nosocomial infections (attributable burden and linkages)
- Most effective WASH interventions (Velleman et al., 2014).
- Cost-effectiveness of WASH interventions
- WASH needs across different levels of HCFs
- Coverage and quality of WASH in HCFs.
- How to provide sustainable WASH services in HCF settings.
- How HCF WASH improvements impact mothers' health seeking behavior?

Aim

This study aimed to understand the factors that determine the choice of delivery place among mothers in hard to reach areas of Rukungiri and Kanungu Districts in Western Uganda.

Methods

- **Study design and study setting**
 - Cross sectional study - mothers of children \leq 1year
 - Kisiizi hospital and Bwindi Hospital
- **Sample size estimation**
 - 900 households, with mothers (child \leq 1year) as respondents
- **Sampling procedure**
 - Random numbers assigned to all villages per catchment
 - Sorted and selected.
 - From each village, Simple random sampling of Households (with a child \leq 1year) was done.

Methods

- **Data collection tools and procedure**

- A structured questionnaire
- Questionnaire captured data on mothers':
 - Socio-demographics;
 - Awareness on health facility location services
 - Distance to the nearest health facility
 - Place of delivery of most recent child and reasons for their choice as well as
 - Challenges experienced while at the HCF were administered

Methods

- **Data entry and analysis**

- Data was entered and cleaned in EpiData V 3.1 statistical software.
- Univariate, bivariate and multivariable analysis using STATA 13.0.
- Outcome variable: place of last child delivery (1 = “Public facility”, 2 = “private facility” and 3 = “home delivery”).
- Multinomial logistic regression was used to obtain the relative risk ratios and their 95% CI.

Results I

Variables	Frequency (n = 894)	Frequency (%)
Age category (years)	(Mean = 26.6, SD = ± 5.97)	
16-25	447	50.0
26-35	370	41.4
36-45	77	8.6
Parity (Number of children)		
1-2	495	55.4
3-4	259	29.0
5 and above	140	15.7
Length of stay in the area (years)	(Mean = 9.67, SD = ± 9.56)	
0 - 5	417	46.6
6 - 10	197	22.0
>10	280	31.3
The wealth quintile		
Lowest	179	20.0
Second	181	20.3
Middle	188	21.0
Fourth	169	18.9
Highest	177	19.8

Results II

Variables	N (%)	Public facility (2)		Home delivery (3)	
		RRR (95% CI)	P values	RRR (95% CI)	P values
Occupation					
Peasant	666 (74.5)	1		1	
Business person	128 (14.3)	1.10 (0.45 – 2.65)	0.835	0.16 (0.03 – 0.81)	0.027*
Salaried worker	50 (5.6)	0.26(0.06– 1.17)	0.079	0.07 (0.00 – 0.504)	0.008*
Others	50 (5.6)	1.28 (0.31 – 5.19)	0.732	0.28(0.02 – 3.48)	0.288
MCH services sought					
Private HCF	608 (68.0)	1			
Public HCF	198 (22.2)	28.5 (14.38 – 56.52)	<0.001*	2.78 (0.94 – 8.26)	0.065
Skilled HCW available?					
No	303 (33.9)	1			
Yes	591 (66.1)	0.44 (0.21 – 0.92)	0.029*		
WASH services at the facility					
Poor	547 (61.1)	1			
Good	347 (38.9)	0.39 (0.17 – 0.92)	0.031*		
Presence of theatre / caesarean services					
No	749 (83.8)	1			
Yes	145 (16.2)	0.14 (0.04 – 0.54)	0.004*		

Discussion

- Health facility deliveries were more common than home deliveries. Similar findings were found in studies in Kenya (Gitonga & Muiruri., 2016., Bazant et al., 2009).
- Mothers were less likely to deliver from public facilities as most of them choose private facility for good WASH services.

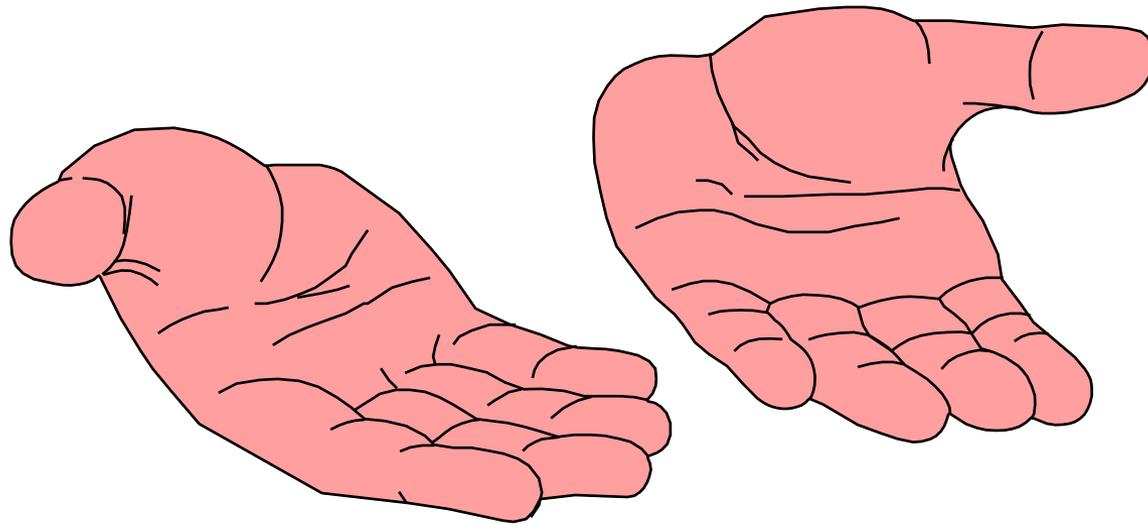
Conclusion

- More deliveries occurred in private hospitals as compared to public health facilities.
- The determinants for choice of HCF to deliver a child included:
 - WASH status,
 - Type of facility for ANC attendance,
 - Availability of caesarean services.
- Home deliveries were related to faster progression of labour, high costs of formal delivery and transport challenges

Recommendations

- It is important to improve WASH conditions in HCF
- Improve infrastructure for caesarean deliveries and recruit more health workers in all facilities.
- To mitigate home deliveries and associated factors, it is vital to address transport challenges and increase sensitization of pregnant mothers in order to increase hospital deliveries.

Thank you for your attention!



Any questions or comments ?