

For male circumcision analysis shows advantages in cost and logistics of disposable kits compared to reusable kits

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Rapid scale-up of this new prevention program

In support of PEPFAR's efforts to make voluntary medical male circumcision (VMMC) available to at least 80% of 15- to 49-year-old men by 2015 in 14 African countries, SCMS is assisting the scale-up to meet increasing demand without sacrificing product quality.

The importance of standardization:

Male circumcision (MC) kits are a critical component of this prevention strategy. Standardized kits save time, reduce costs and ensure the use of only sterile sanitary equipment, protecting the patient. SCMS assisted in designing two types of kits:

Disposable kits – For remote sites where most VMMCs take place with limited human resource capacity and sterilization services



Reusable kits – Most appropriate for major hospitals with sterilization facilities and qualified staff



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The cost factor: Getting the best value for money

SCMS analyzed total-cost-of-use data from two southern African countries with established VMMC programs. In assessing several hidden logistics costs such as storage, quality control/assurance and labor, we found that although the purchase price for reusable kits is cheaper than the disposable kits, the total cost-of-use is not.

	COMMODITIES		HUMAN RESOURCES (W/O MEDICAL PERSONNEL)		TRANSPORTATION, WAREHOUSING AND LOGISTICS		TOTAL COSTS
REUSABLE	\$7.17	+	\$7.22	+	\$5.19	=	\$19.58
DISPOSABLE	\$13.50	+	\$2.07	+	\$3.76	=	\$19.32

How do disposable and reusable kits really compare?

Autoclaving In the Real World

- Intermittent basic services can stop procedures (electricity/water /fuel)
- To save money, sometimes not all steps are followed
- Maintenance/training not at forefront of priorities

The Human Cost of Reusable

- Higher risk of infection through improper autoclaving
- Larger probability of injury due to dull instruments

Disposable Benefits

- Assure sterilization
- Eliminate secondary infection risk
- Ideal for settings without autoclaves
- Ensure all necessary items are available

Title: For voluntary medical male circumcision (VMMC), analysis shows advantages in cost and logistics of disposable kits compared to reusable kits

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Background: VMMC reduces the risk of HIV infection for men by as much as 60%. To support PEPFAR VMMC programs, SCMS provides disposable and reusable male circumcision kits. A VMMC technical working group, with representatives of PEPFAR, WHO and other partners, carefully selected the components of each kit. Disposable kits were designed for remote and outreach sites where most VMMC takes place. Reusable kits were intended for major hospitals with sterilization facilities. The impact on the patient and amount of infectious waste resulting from each kit are smaller. Therefore, cost and logistics may be the deciding factor between the two kits.

Methods: Using data from two southern African countries with established VMMC programs, SCMS conducted a cost analysis that included several hidden logistics costs, such as storage, quality control/assurance and labor.

Results: Analysis shows that although the purchase price for the reusable kit is significantly cheaper than the disposable kit, the total cost of its use is not. The price difference between the two kits is offset by the cost of additional logistical support, essential infra-structure, QA/QC requirements and labor.

Conclusions: Analysis shows that the total cost of disposable VMMC kits is slightly less than reusable kits. In addition, disposable kits have the advantage of being delivered as pre-sterilized, self-contained packages. Because reusable kits must be assembled from individually purchased components that have been sterilized close to the point of use, they have several disadvantages and risks to patients, including being prone to human error during assembly (resulting in incomplete kits of wrong instruments) and risk of compromised sterility during storage, transport, and assembly. With the possible exception of major hospitals, we recommend the use of disposable VMMC kits as the device of choice in VMMC sites.

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