

# Do Cash or Digital Payment Modalities Affect Community Health Worker (CHW) Performance? – A Case Study of a Remote Refugee Settlement in Western Uganda

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## BACKGROUND

- CHWs are essential in healthcare delivery, especially in low-resource settings such as refugee settlements.
- Kyaka II refugee settlement hosts refugees from various countries neighbouring Uganda, including the Democratic Republic of Congo, Rwanda, Burundi and South Sudan.
- Health services are mainly delivered through CHWs
- However, several challenges hinder CHW's optimal performance, daunting health service delivery
- The most common is poor incentives, including insufficient and delayed payments.
- Less than 40% of the CHWs in Uganda perform optimally.
- In Kyaka II, CHWs are paid using cash and digital methods – alternating every six months
- The effect of monetary incentives and their delivery mode on CHW performance in refugee communities was unknown.

## STUDY AIM AND OBJECTIVES

**Aim:** To understand the influence of digital and cash payment modalities on the performance of CHWs in a multi-national refugee settlement

**Objective 1:** To assess the CHW performance with varying payment modalities

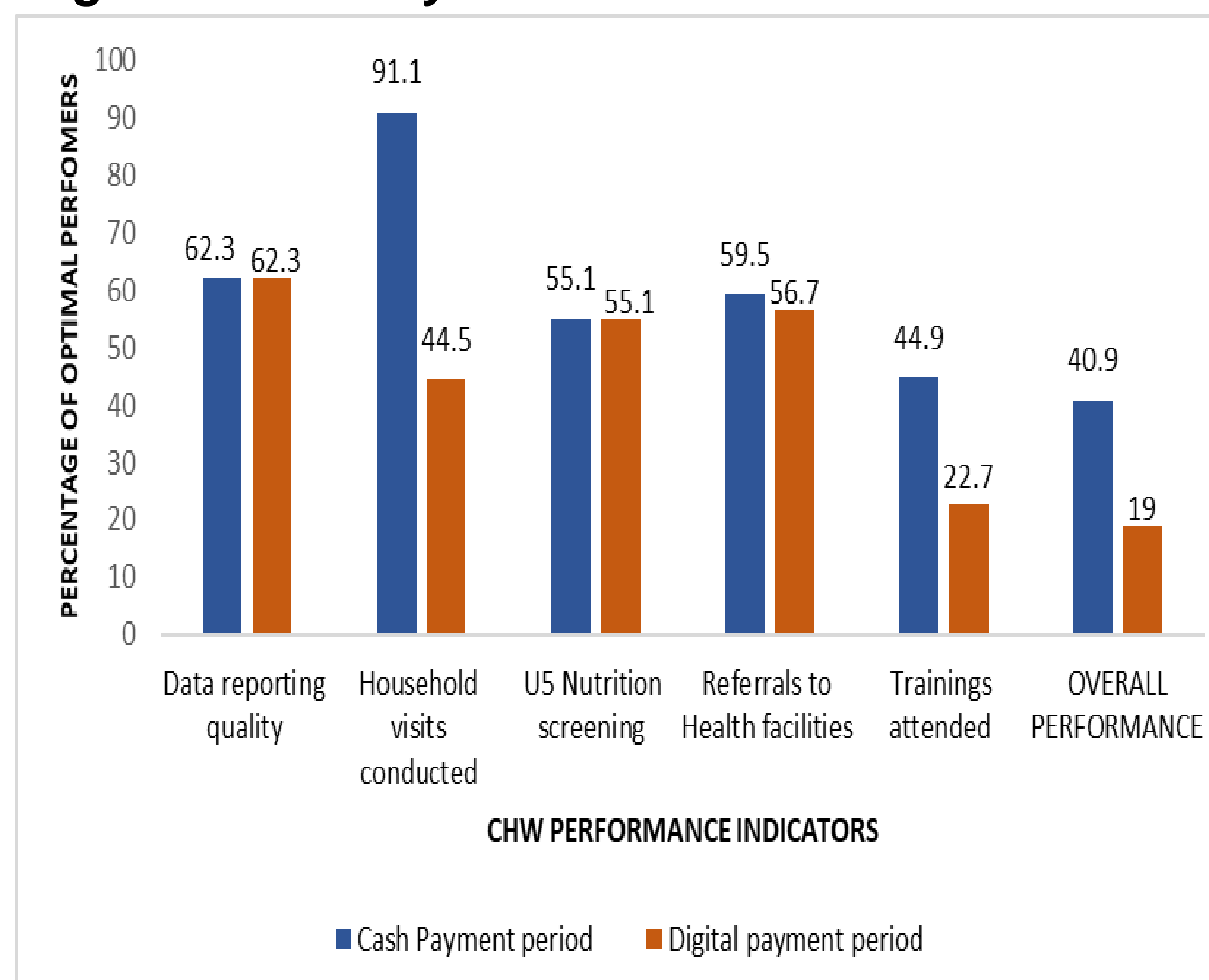
**Objective 2:** To determine the factors associated with the performance of the CHWs across the payment modalities



Fig 2. The principal investigator, Michael T Wagaba, conducting an FGD with CHWs in Kyaka II refugee settlement

## RESULTS

Fig 1. Community Health Worker Performance



CHWs performance was significantly higher during the cash payment period ( $t = 5.28$ ;  $df = 246$ ;  $p < 0.001$ )

## Performance Determinants

### Cash payment period:

- Higher education level; (APR = 1.71; 95%CI: 1.14–2.58)
- Having a side job; (APR = 1.58; 95%CI: 1.13–2.21)
- Male gender; (APR = 0.58; 95%CI: 0.34–0.98)
- Time served (>10 years); (APR = 0.88; 95%CI: 0.82–0.93)
- Number of households allocated (>60); (APR = 0.34; 95%CI: 0.19–0.61)

## Qualitative findings

- Overall, qualitative participants expressed a preference for cash over digital payments
- CHWs found cash payments more reliable and prompter than digital.
- Implementing partners reported that cash payments facilitated more effective CHW appraisal, especially at the time and site of payment.
- Conversely, cash payments encouraged reckless spending and gender-based violence, especially against female CHWs.

## METHODS

- **Study area;** Kyaka II refugee settlement
- **Design and method:** Comparative cross-sectional study using sequential explanatory mixed methods
- **Study population:** Refugee CHWs
- **Sample size:** Records of all 247 CHWs, 10KIIs, 7FGDs and 2 IDIs
- **Data analysis:** Quantitative data used modified Poisson regression analysis; qualitative data used thematic analysis.
- **Study** approved by Makerere School of Public Health Research and Ethics Committee

## CONCLUSION AND RECOMMENDATIONS

- CHW performance was better during the cash payment period.
- Performance was determined by CHW education level, side occupation, sex, years of experience, and number of households assigned.
- Cash payments were preferred because they were prompt and more reliable.
- Maintain cash payments in settings with poor digital support systems and infrastructure, gradually transitioning to the inevitable digital payment methods with context-specific designs.
- Incorporate gender-sensitive strategies in the planning and management of community health programs, based on contextual social determinants of health.

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