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Quality of care for children with malaria at private health facilities in Uganda: A cross sectional study

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Introduction

Malaria is among the leading causes of morbidity and mortality in Uganda, contributing to up to 50 percent of outpatient visits, and 20 percent of hospital admissions and hospital deaths — primarily in children under five and pregnant women.[1] In 2018–2019, nearly 60 percent of under-fives sought care and advice from private health facilities (HFs).[2] While the National Malaria Control Division (NMCD) recognizes the invaluable role of private HFs in providing care to children under five,[3,4] national efforts in malaria-related capacity development have largely centered on public-sector facilities. Quality of care within Uganda's private HFs remains largely undocumented. This study, therefore, aims to assess the quality of care at private HFs and the factors impacting effective case management.

Methods

- Setting: nine districts in the mid-western region of Uganda.
- We conducted a mixed-methods cross-sectional baseline assessment in October 2018 using qualitative and (standard interviewer-administered, pre-tested questionnaire with open-ended questions).
- We used a purposive sample of 135 private HFs (134 clinics and one hospital) and interviewed the most senior staff member per facility.
- We determined the proportion of health workers that adequately provided malaria case management according to national standards.

Results

- Sixty-seven percent of HFs had access to malaria management protocols, while 62 percent actually used them.
- Forty-nine percent of HFs received malaria-related in-service training in the 12 months prior to the study, while 41 percent received training on malaria treatment protocols.
- Eighty-three percent demonstrated correct malaria definition, and 40 and 85 percent prescribed the correct first-line treatment for uncomplicated and complicated malaria, respectively.
- Factors such as inadequate staff knowledge, patients' medication requests and ability to pay, and drug stock-outs contributed to sub-optimal malaria management practices.
- Though an estimated 48 percent of HFs had proper data quality management systems and 45 percent submitted reports to the national district health information system, just 28 percent submitted monthly aggregate data and 19 percent submitted weekly surveillance data.

Conclusion

Private HF workers' knowledge and practices on malaria case management within this region are sub-optimal. Low reporting rates of malaria surveillance data make accurately assessing Uganda's malaria disease burden difficult, posing a challenge to comprehensive planning and implementation of a national malaria control program. The NMCD could use the study results to target specific areas of focus to strengthen malaria case management in private HFs.

References

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Sub-optimal knowledge, practices and healthcare system support in private health facilities impact on the provision of quality malaria case management in Uganda

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Supplementary visual

Table 1: Assessment of malaria service delivery at health facilities

Assessment area	Number (n=135)	Percentage (95 percent confidence interval)
Malaria treatment policy and guidelines		
Availability of malaria treatment protocols/guidelines	95	70.37 (62.02–77.54)
Access to malaria treatment protocols/guidelines	90	66.67 (58.19–74.18)
Use of malaria treatment protocols/guidelines	83	61.48 (52.91–69.40)
Awareness of malaria test and treat policy	91	67.41 (58.96–74.86)
Staff training and mentorship		
Received malaria-related training in the last 12 months	66	48.89 (40.19–57.63)
Received training on malaria treatment protocols/guidelines	55	40.74 (32.37–49.53)
Staff knowledge		
Correct malaria definition	112	82.96 (75.54–88.88)
Correct definition of uncomplicated malaria	54	40.00 (31.67–48.79)
Correct definition of complicated/severe malaria	115	85.19 (78.05–90.71)
Malaria laboratory practices		
Presence of malaria laboratory services	133	98.52 (94.75–99.82)
Availability of adequate space for laboratory	102	75.56 (67.42–82.54)
Presence of skilled laboratory personnel	78	57.78 (48.98–66.22)
Training of laboratory staff on malaria testing	54	40.00 (31.67–48.79)
Availability of malaria laboratory testing protocols		
Available and seen	53	39.26 (30.97–48.03)
Available and not seen	22	16.30 (10.50–23.63)
Not available	60	44.44 (35.90–53.24)
Types of malaria tests used		
Microscopy	12	8.89 (4.68–15.01)
Malaria rapid diagnostic tests	52	38.52 (30.28–47.28)
Both	71	52.59 (43.82–61.25)
Anti-malaria drugs stock at facility		
Artemether-lumefantrine tablets	115	85.19 (78.05–90.71)
Quinine (either tablets or injections)	101	74.81 (66.62–81.89)
Artesunate (intravenous)	98	72.59 (64.25–79.91)
Sulphadoxine-pyrimethamine tablets	34	25.19 (18.11–33.38)
Dihydroartemesinin piperaquine tablets	21	15.56 (9.89–22.79)
Chloroquine tablets	4	2.96 (1.00–7.41)

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