

Quality Assessment of PMTCT Data Documentation among User and Non-User Data Clerks in a Nigerian PMTCT Program 1.043_HHR

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Background

High-quality routine data is needed to track progress and identify gaps in national PMTCT programs. In many resource limited settings like Nigeria, the quality of data obtained from health facilities (HFs) has been poor. One of the major challenges is the documentation workload in addition to non-utilization of data generated at the HF level.

During the rollout of a large PMTCT implementation research study, we piloted a comprehensive Mother-Infant Pair (MIP) register at study sites. Data quality of MIP records was assessed by type of data clerk (DC) (User vs Non User) documenting the data.

Methods

The MIP register was adapted from multiple pre-existing registers used to capture PMTCT data. We piloted the register at 20 rural HFs and retrospectively reviewed records collected over an 18-month period. At 10 of the HFs, MIP register data was routinely used to provide patient care; at the other 10, the data was only collected for reporting. Data documentation for 20 predefined indicators (10 maternal and 10 infant) was assessed for 10 randomly-selected clients at each HF. A score of 1 and 0 were assigned for complete and incomplete documentation, respectively. The level of completeness between the two groups was compared using proportions and t test at $p=0.05$.

Findings

Of the 20 indicators assessed, "Client Name" had the highest level of completeness for both User and Non-User DCs, at 97% and 98% respectively. Level of completeness for most indicators along the PMTCT cascade were all higher for User vs Non-User DCs, respectively: "Maternal ART start date": 81% vs 71%; "Infant feeding option": 72% vs 28%; "Delivery Date:" 84% vs 38%; "Date infant nevirapine given": 77% vs 31%. **Table 1** displays detailed results. Overall, the mean score was significantly higher for User DCs [73.40 (SD±14.94)] than Non-User DCs [47.35 (SD ±4.94); $p=0.002$].

Table 1: Documentation of data quality assessment indicators

PMTCT Data Elements	User data clerks n (%)	Non-user data clerks n (%)
Maternal Indicators		
Name of client	97 (97.0)	98 (98.0)
Antenatal care (ANC) no.	95 (95.0)	93 (93.0)
ART start date	81 (81.0)	71 (71.0)
Estimated date of delivery	87 (87.0)	81 (81.0)
Disclosure status	87 (87.0)	76 (76.0)
Booking date	89 (89.0)	92 (92.0)
Date of ANC visit	85 (85.0)	88 (88.0)
Date of next appointment	77 (77.0)	68 (68.0)
Date of postnatal visit	59 (59.0)	18 (18.0)
Date of next appointment	54 (54.0)	13 (13.0)
Infant indicators		
Date infant delivered	84 (84.0)	38 (38.0)
Infant nevirapine given	77 (77.0)	36 (36.0)
Date nevirapine given	75 (75.0)	31 (31.0)
Septin given	53 (53.0)	18 (18.0)
Infant feeding option	72 (72.0)	28 (28.0)
Date EID done/Age	52 (52.0)	11 (11.0)
Immunization	49 (49.0)	21 (21.0)
Date of visit/age	66 (66.0)	24 (24.0)
Purpose of visit	66 (66.0)	23 (23.0)
Date of next appointment	63 (63.0)	19 (19.0)
Total score	1,468	947
Mean score (SD)	73.40 (14.94)	47 (31.48)

Interpretation

The quality of documented PMTCT data was higher among DCs who routinely used the data. This suggests that registers developed for manual documentation should also be functional with respect to delivery of care. Simplifying PMTCT data collection tools and making them user-friendly for case management is likely to improve the quality of data reported.

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