Retention and virological outcomes from a PMTCT programme in rural Zimbabwe: 2013 to 2015

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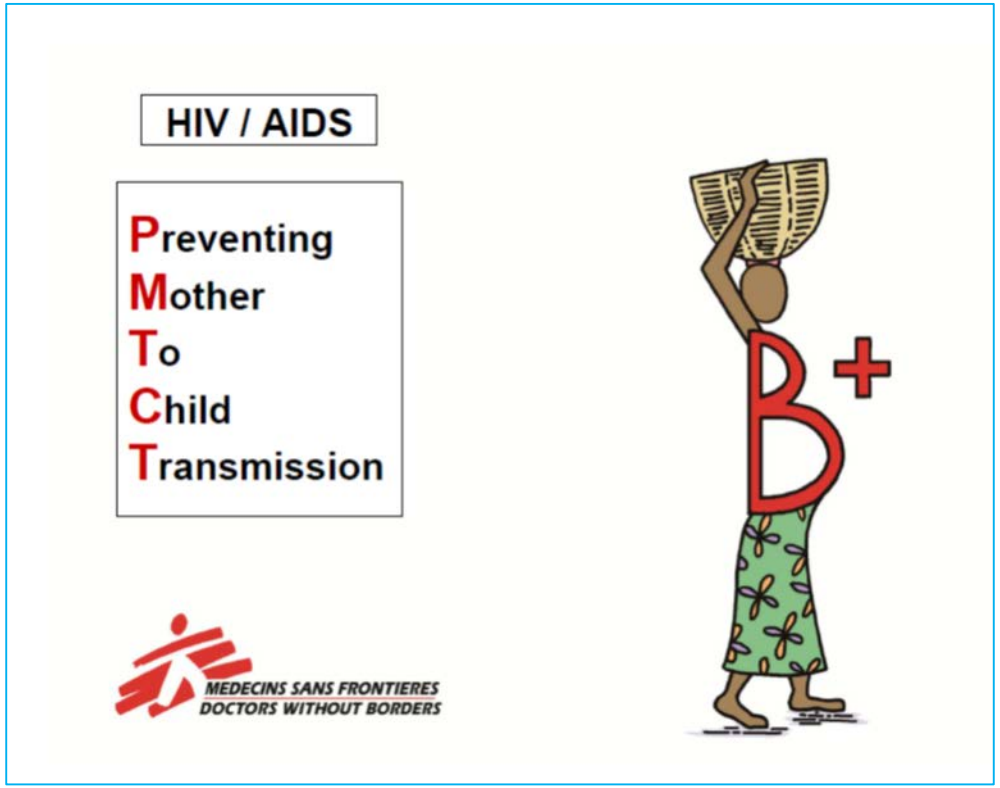
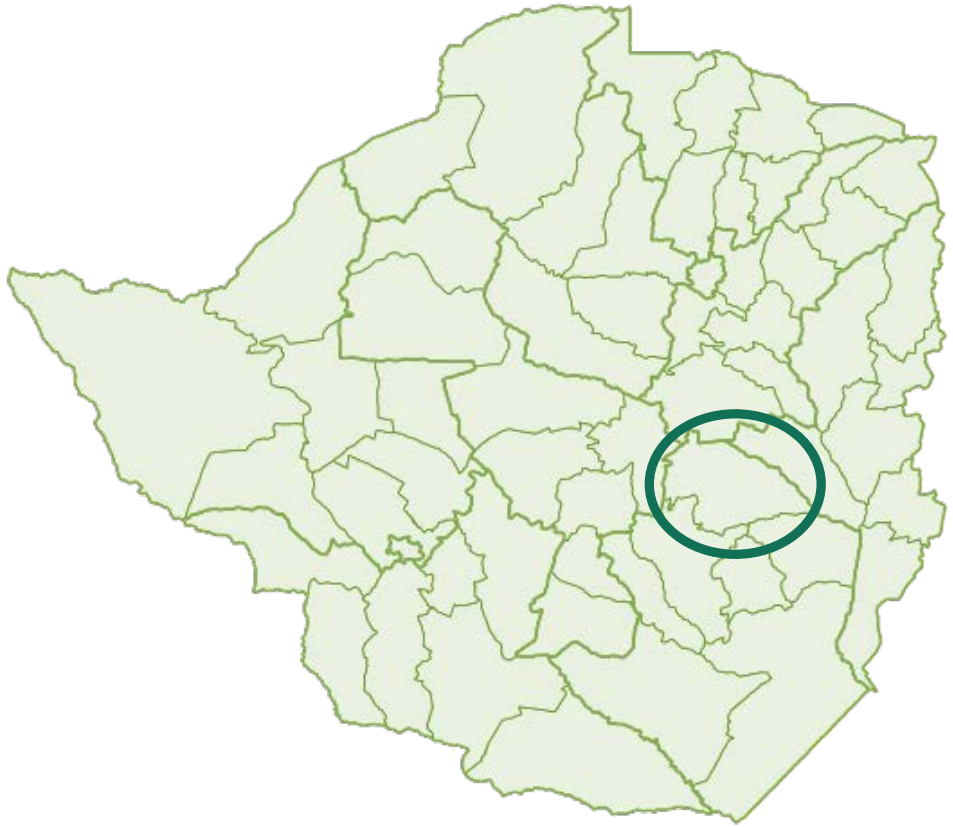
Background

- PMTCT Option B+ introduced in Gutu District, Zimbabwe in July 2013
- Adapted counselling for women entering the PMTCT Option B+ programme, including a rapid ART initiation session
- Viral load testing 3 & 12 months after starting ART, & then annually



Setting: Gutu District, Zimbabwe



- Rural district in Eastern Zimbabwe
- Population: 203 533
- HIV Prevalence: 14.5%
- Analysis included information from 1 district hospital and 9 primary care facilities
- Women aged 15 to 45 years at ART initiation
- Started ART between August 2013 & June 2015, while pregnant or breastfeeding

Objectives

To determine:

- Retention in care (RIC) among women initiated on ART in the PMTCT B+
- Reasons for loss-to-follow-up (LTFU) and factors associated with LTFU
- Viral load coverage & virological suppression 3 and 12 months after starting ART

Methods

- Analyzed electronic medical records in an M&E database & viral load results in a lab database
- Tracing of a sample of 200 women LTFU carried out by phone & home visits by community health workers (CHWs)

Characteristics of women included in the analysis

Age in years, median (IQR)	28 (22 to 33)
Pregnant at initiation, n (%)	435 (73.5%)
WHO Stage 1 or 2, n (%)	574 (98.0%)
CD4 > 500 cells/µl, n (%)	142 (43.7%)

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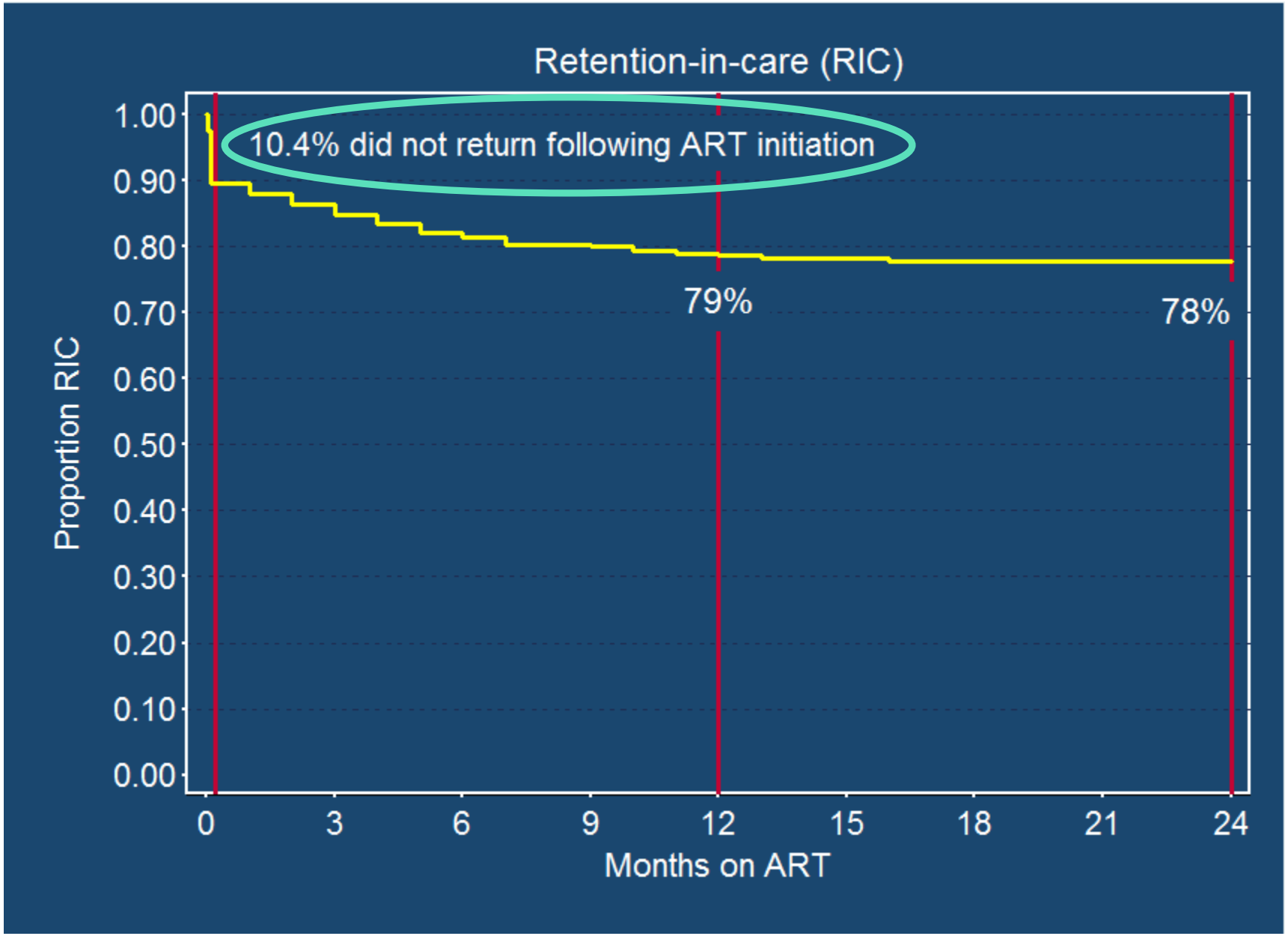
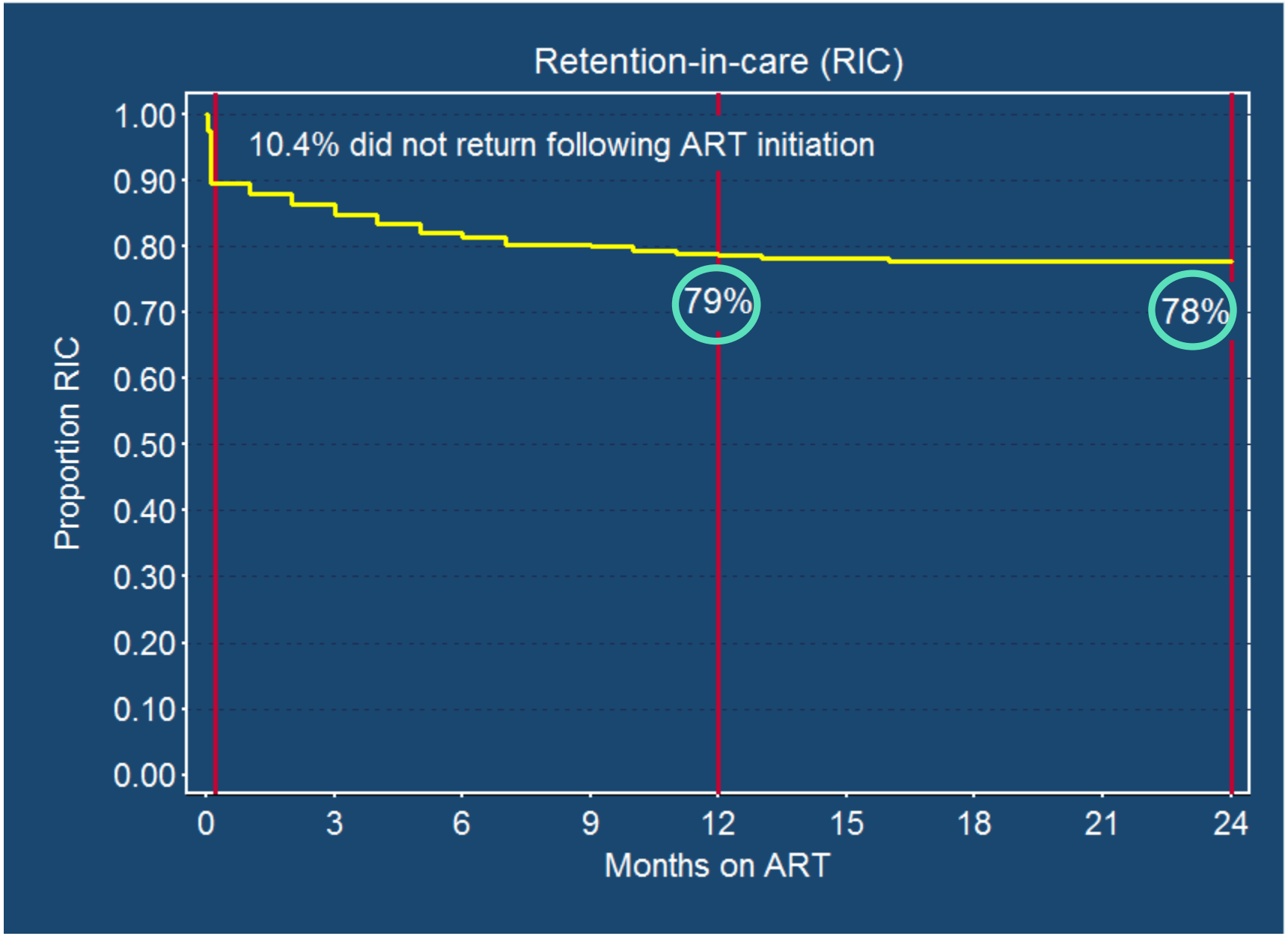

Retention-in-care (RIC)
10.4% did not return following ART initiation
79%
78%
Proportion RIC
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
0
3
6
9
12
15
18
21
24
Months on ART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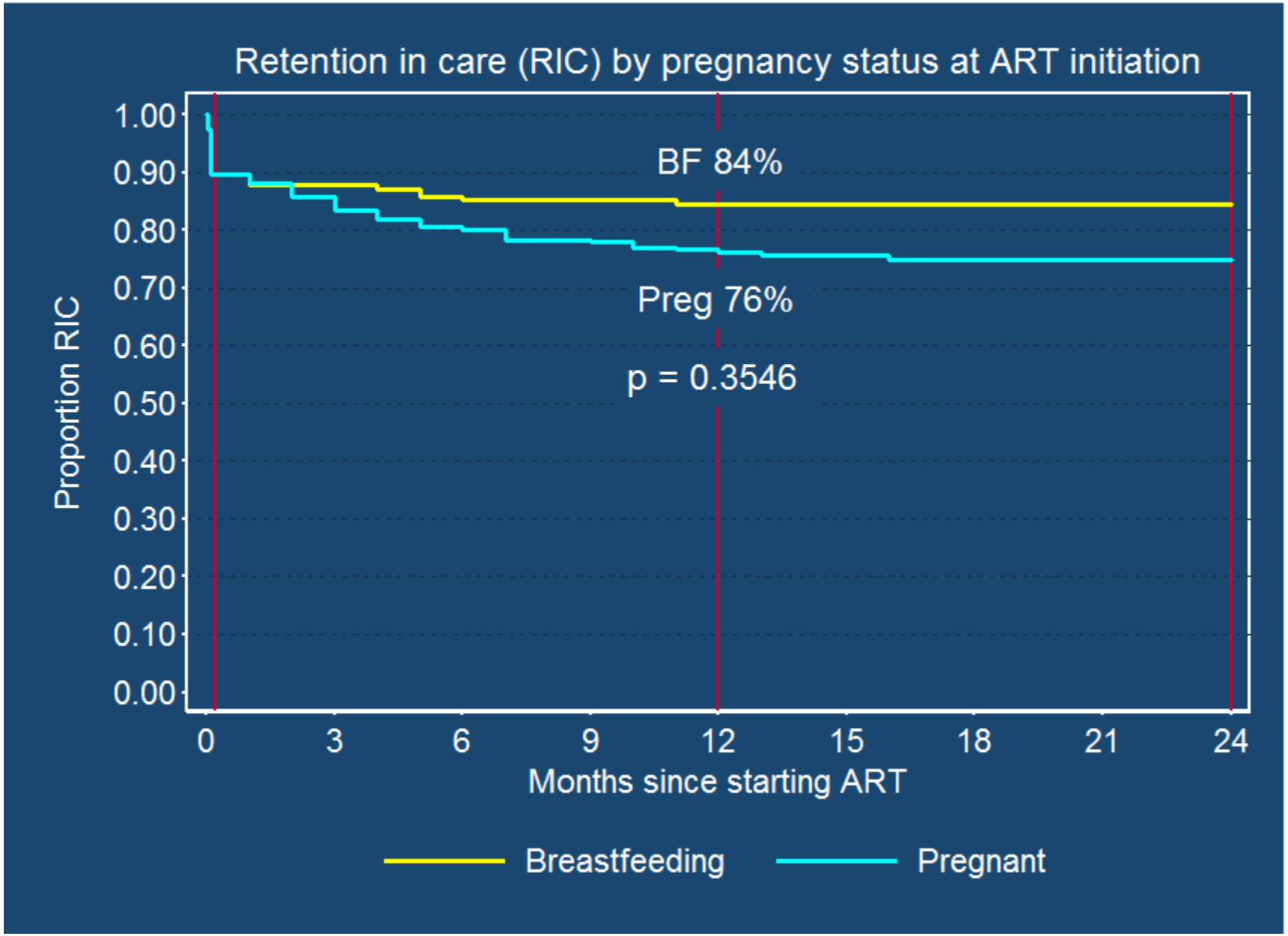
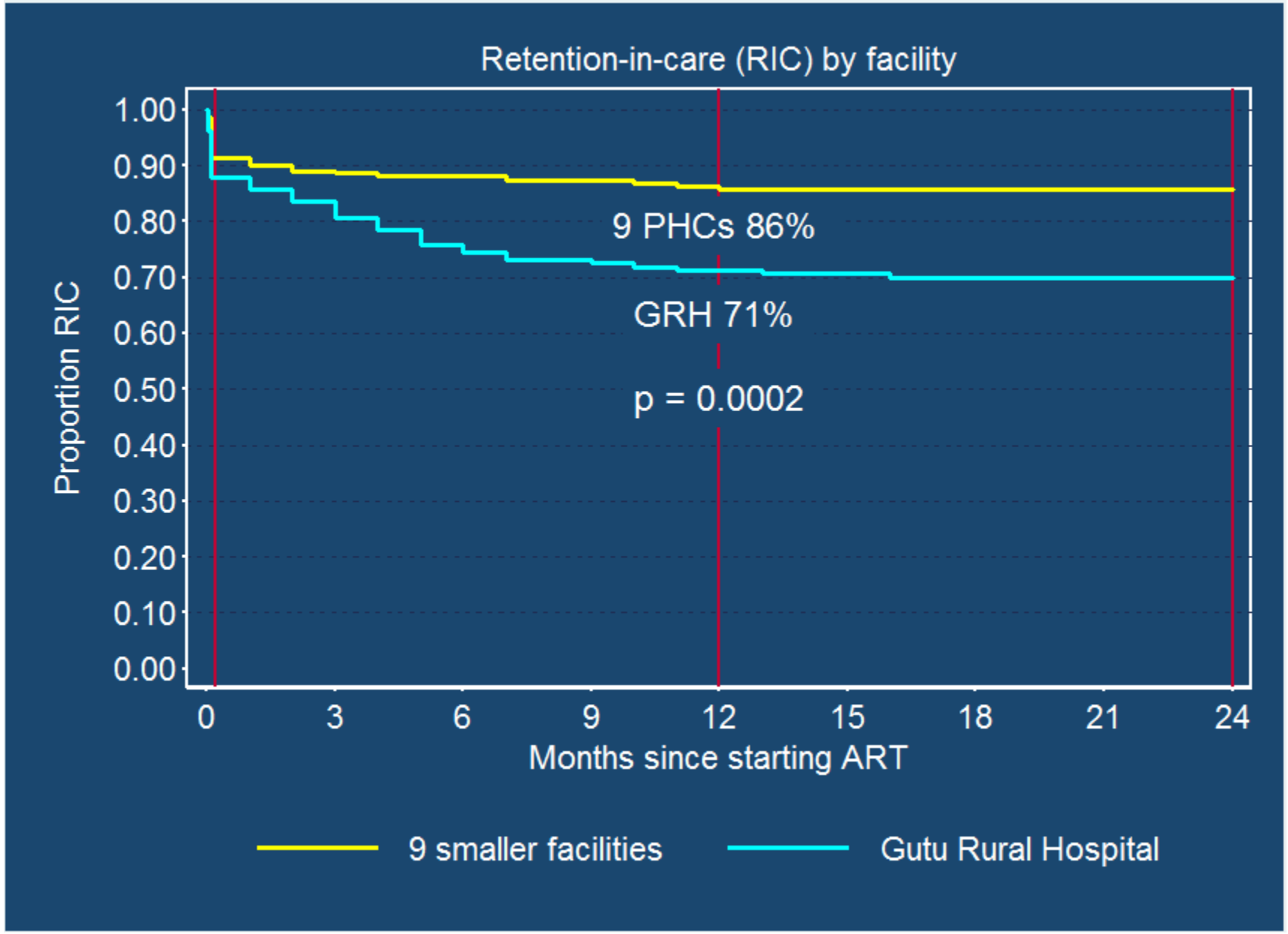
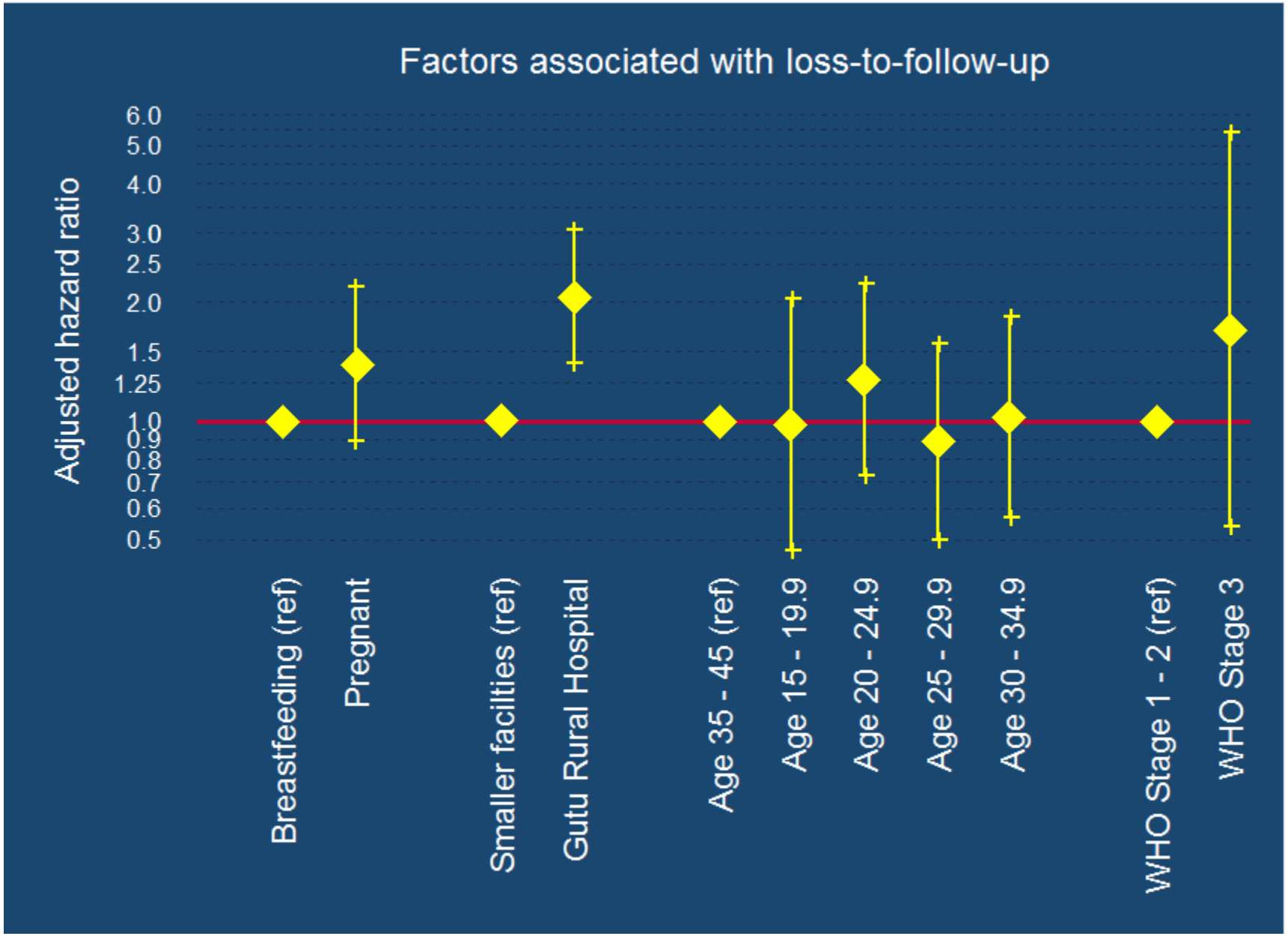
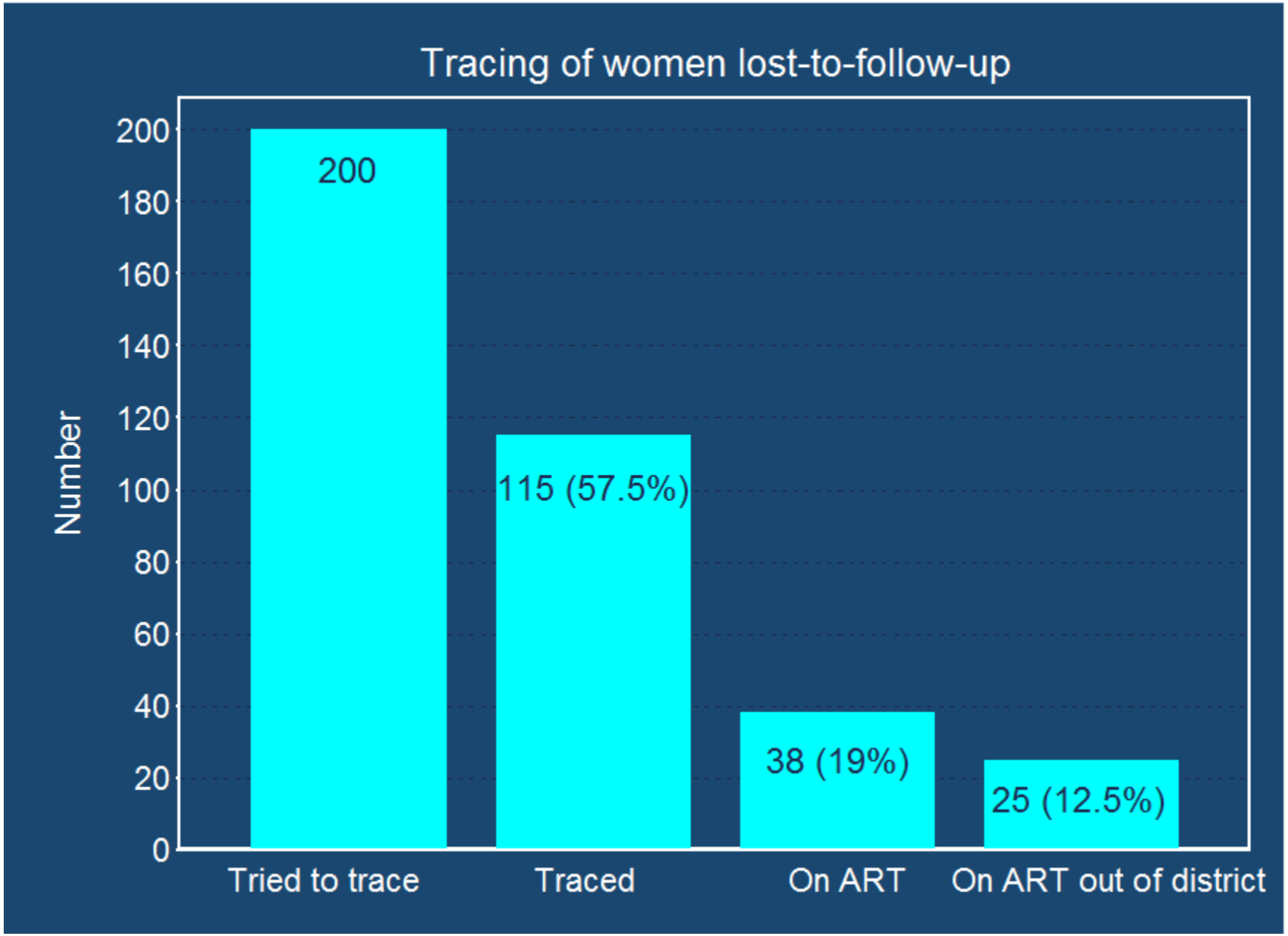
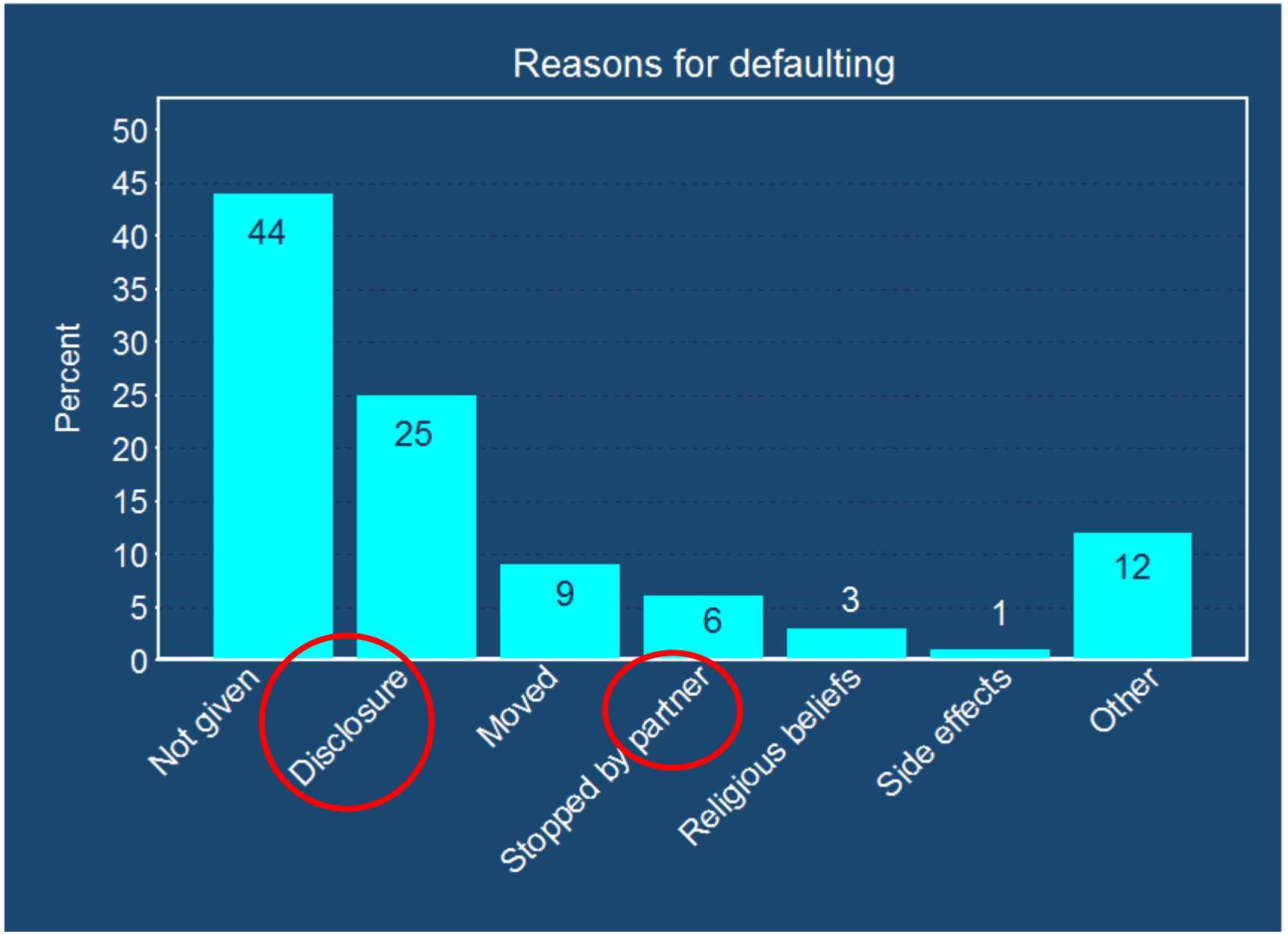
Months on ART


Retention in care (RIC) by pregnancy status at ART initiation
Proportion RIC
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
BF 84%
Preg 76%
p = 0.3546
0
3
6
9
12
15
18
21
24
Months since starting ART
Breastfeeding
Pregnant


Retention-in-care (RIC) by facility
Proportion RIC
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
9 PHCs 86%
GRH 71%
p = 0.0002
0
3
6
9
12
15
18
21
24
Months since starting ART
9 smaller facilities
Gutu Rural Hospital

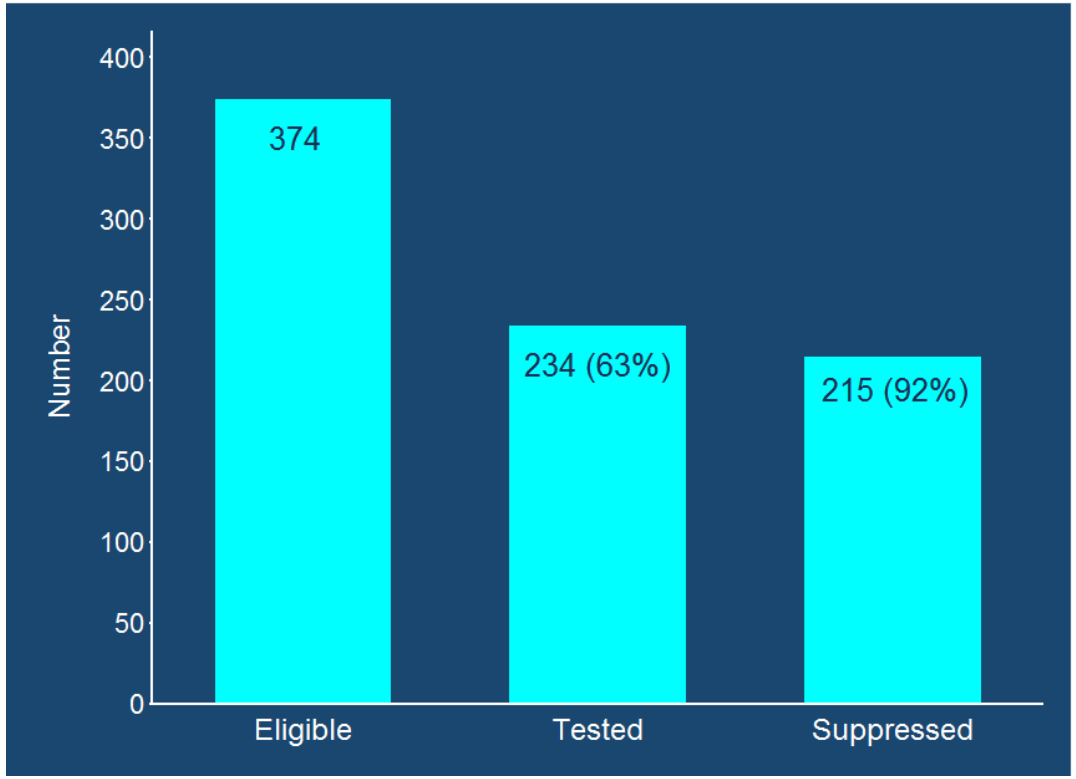

Factors associated with loss-to-follow-up
Adjusted hazard ratio
6.0
5.0
4.0
3.0
2.5
2.0
1.5
1.25
1.0
0.9
0.8
0.7
0.6
0.5
Breastfeeding (ref)
Pregnant
Smaller facilties (ref)
Gutu Rural Hospital
Age 35 - 45 (ref)
Age 15 - 19.9
Age 20 - 24.9
Age 25 - 29.9
Age 30 - 34.9
WHO Stage 1 - 2 (ref)
WHO Stage 3


Tracing of women lost-to-follow-up
Number
200
180
160
140
120
100
80
60
40
20
0
200
115 (57.5%)
38 (19%)
25 (12.5%)
Tried to trace
Traced
On ART
On ART out of district

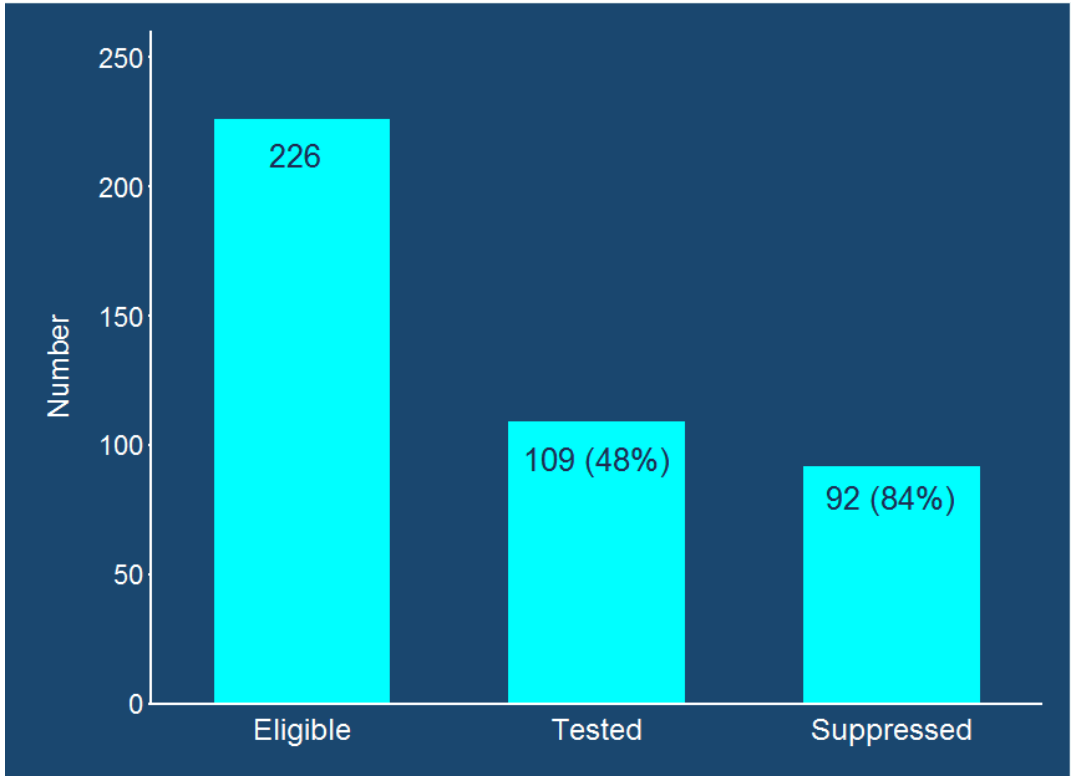

Reasons for defaulting
Percent
50
45
40
35
30
25
20
15
10
5
0
44
25
9
6
3
1
12
Not given
Disclosure
Moved
Stopped by partner
Religious beliefs
Side effects
Other

Coverage of viral load testing & viral suppression

3 months



12 months



Conclusion

- Retention of women started on ART in PMTCT is a challenge
  - Higher risk for those initiated whilst pregnant (aHR 1.4; p = 0.150)
  - Higher risk for those attending Gutu Rural Hospital, the largest facility (aHR 2.1; p <0.001)
- Limitations of facility-based M&E systems to record “silent” transfers
- Disclosure is a common reason for women to be lost to follow-up
- 90% of women suppressed their viral load 3 months after starting ART (meeting 90-90-90 target) BUT this still left 10% of exposed infants were exposed to ongoing risk

Recommendations

- Increased support is needed for counseling at ART initiation & during the first months on ART
- Improve access to counseling in the largest facility – focus on the mobility of patients attending these sites
- Appointment system needs strengthening & systematic defaulter tracing in all facilities