

Nigeria HPN Multi-Activity Evaluation Annual Review Meeting (June 29, 2022)

Annual Reviews: *Effectiveness of HPN Activities*
Session 3





Assessing the effectiveness of HPN activities on providers' knowledge, attitudes, and practices: Baseline findings



Evaluation question and presentation objectives

After this presentation, participants will be able to:

EQ1: Did **malaria and other health and service delivery outcomes** improve more from baseline to end line in local government authorities (LGAs)/states where an integrated approach was implemented, a disease-focused approach was implemented, or a combination of the two?

01

Discuss the findings on provider training, norms, and attitudes, with a focus on state-level differences.

02

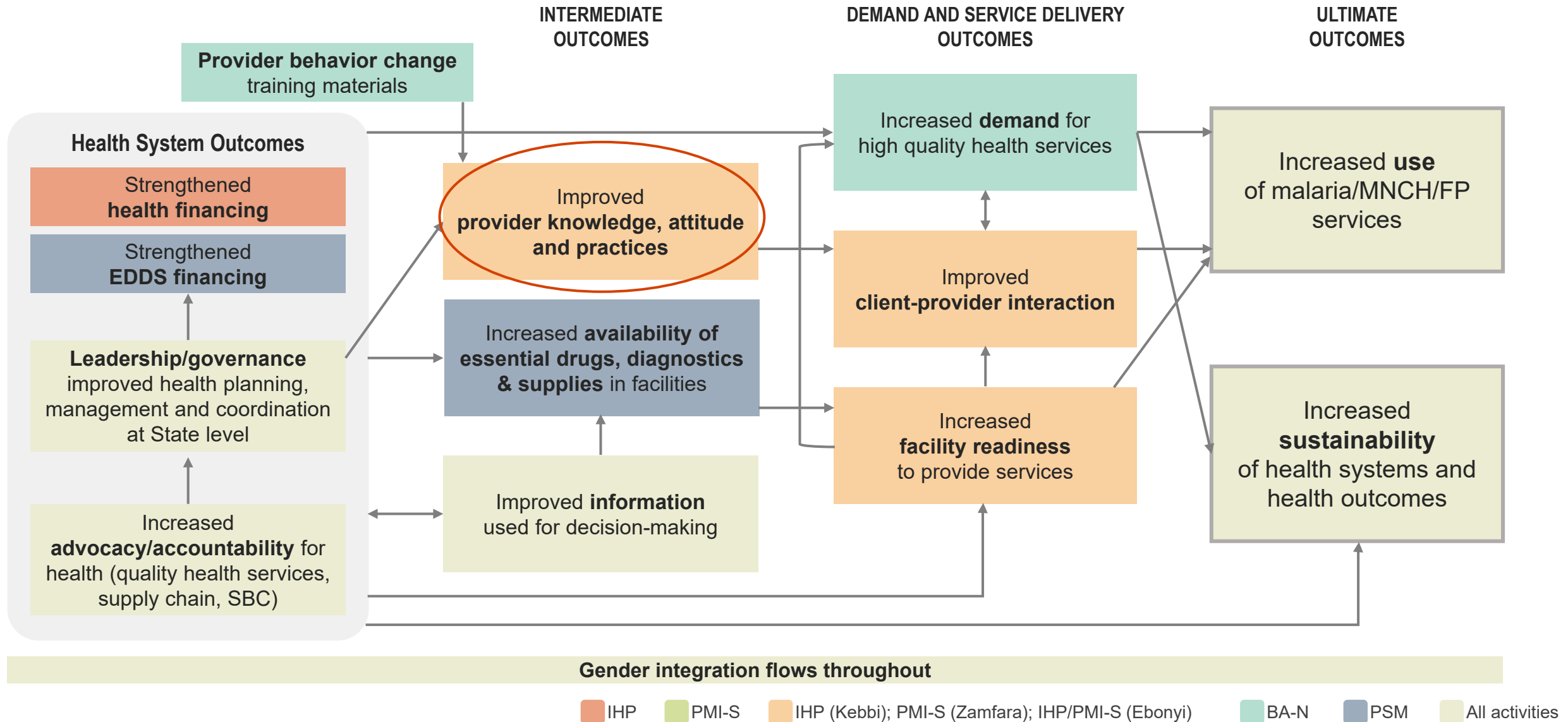
Discuss the findings on quality of care from clinical vignette assessments, with a focus on state-level differences.

03

Consider how these findings could be applied to HPN Activity programming, including annual work planning processes.



Where does provider KAP fit in the evaluation TOC?





Provider survey approach

- 4 modules: Background, Training, Clinical Vignettes, and Provider Attitudes and Norms
- Up to 5 providers/facility interviewed. Eligibility criteria included:
 - Present at facility on day of survey
 - Provide out-patient services
 - See sick children, ANC, and/or family planning patients
- Fieldwork: July 1 – August 12, 2021

	Ebonyi	Kebbi	Zamfara
# PHCs	120	120	120
# Providers	354	371	345



Analytical Approaches

- Baseline results: descriptive statistics by state
- Vignette scores: Rubric used to develop scores by domain for each vignette

Limitations

- Evaluation baseline is not a baseline for individual Activities
- Clinical vignette, provider norms, and gender attitudes measurement approaches capture hypothetical reported behaviors, not actual behaviors
- Providers may not report everything they would do spontaneously in the vignettes (front of mind responses)
- Security instability in Zamfara and northern Kebbi LGAs

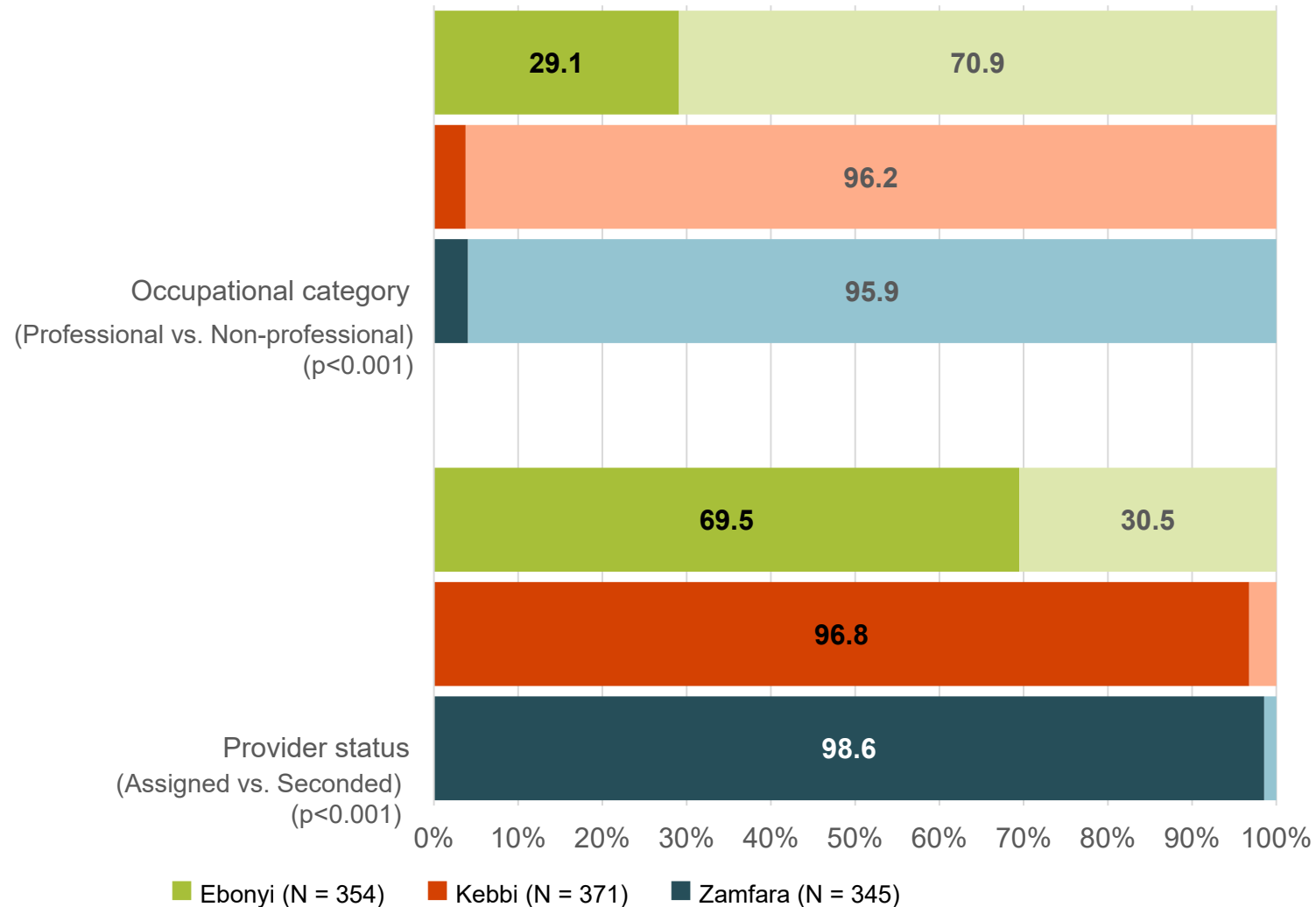


Results: Provider Background



Occupational Category and Status

Occupational category and provider status, by state ($p=0.007$)

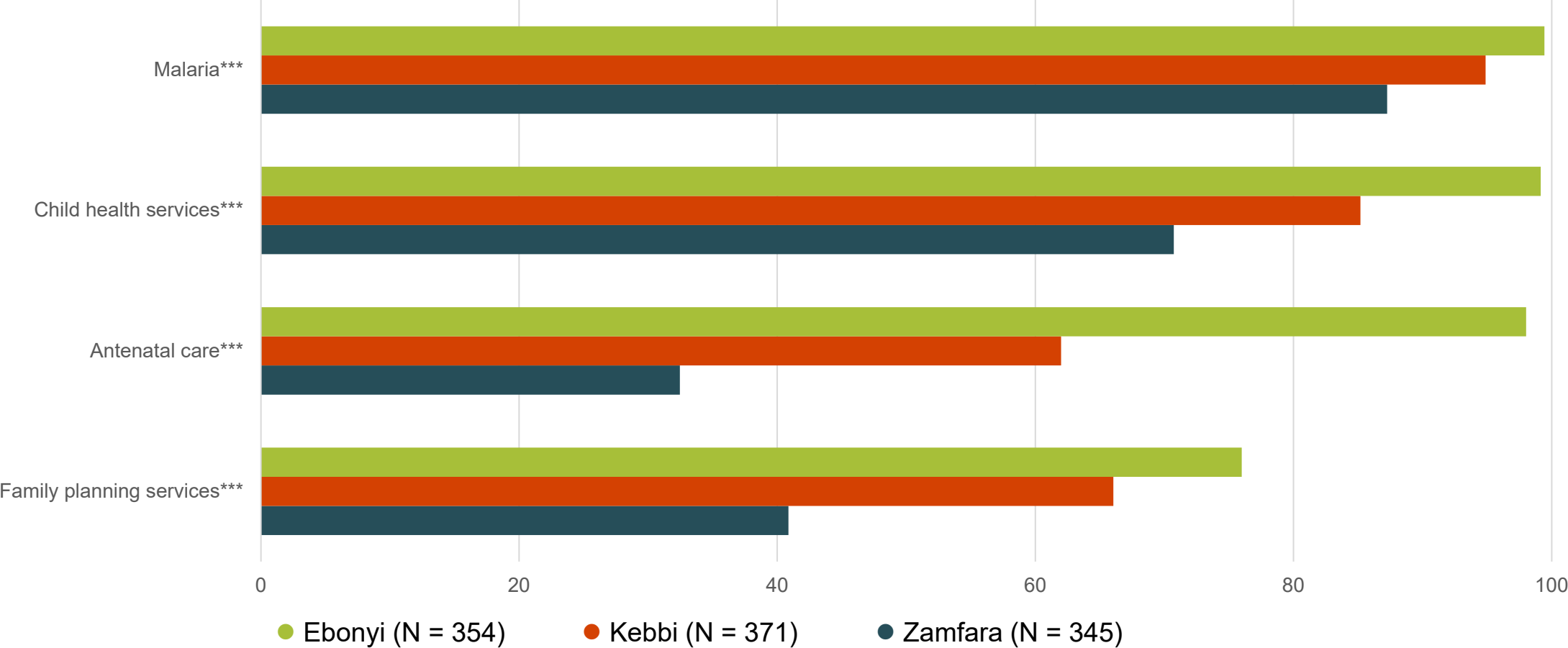


- Nearly **30%** of providers interviewed in Ebonyi were professional health workers, compared to **4%** in Kebbi and Zamfara
- Almost all providers in Kebbi and Zamfara are **assigned** to their current facility, compared to 30% who are **seconded** in Ebonyi



Services Provided

Services health worker personally provides in current position at facility, by state



Chi-squared significance test among states. + $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$



Results: Training

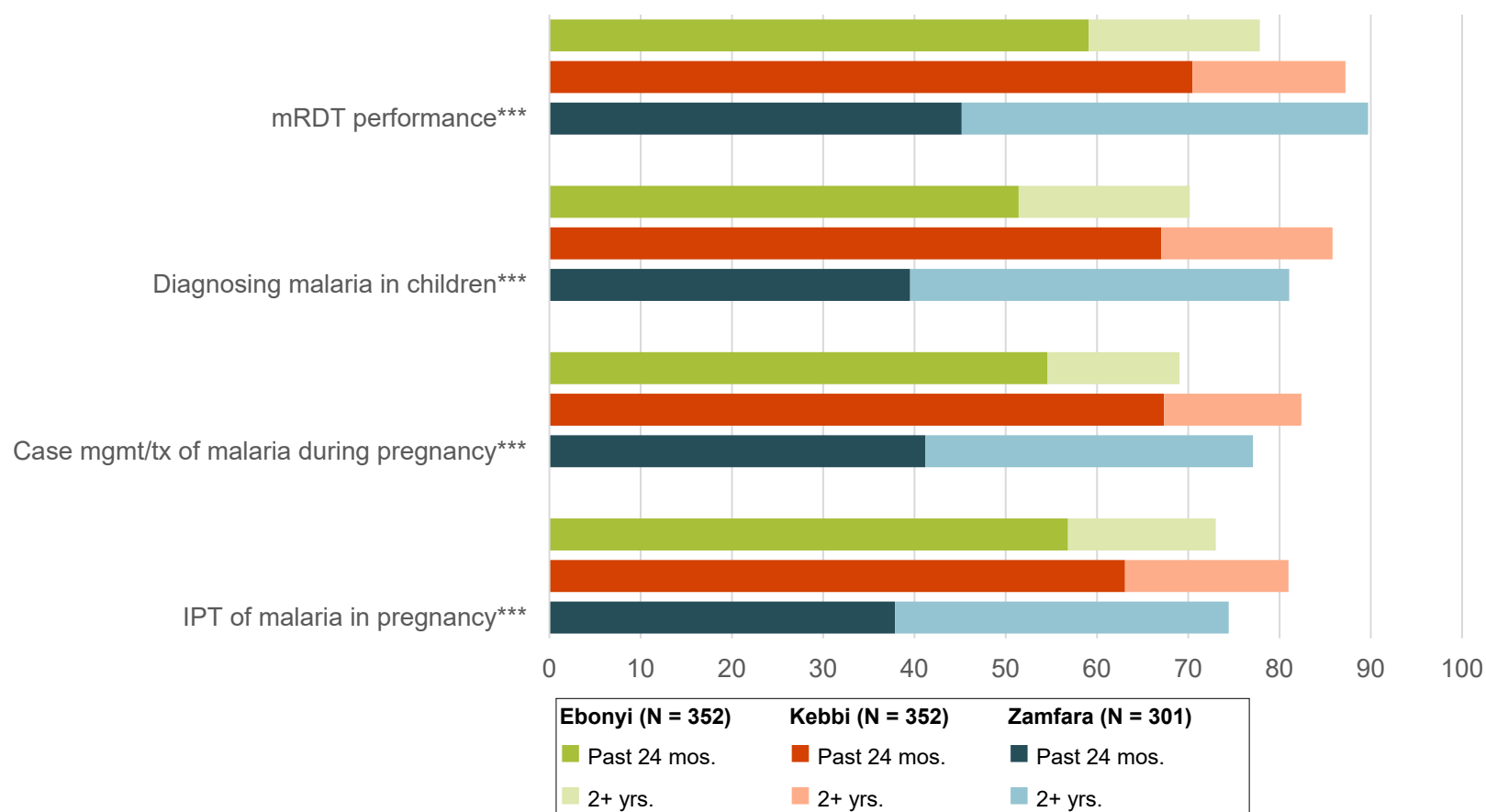
Malaria



Health worker personally diagnoses and/or treats malaria in current position at health facility: 99% Ebonyi, 95% Kebbi, and 87% Zamfara ($p<0.000$)

Malaria providers reported receiving training in any of the specified malaria topics: 79% Ebonyi, 89% Kebbi, and 95% Zamfara ($p<0.000$)

Percent of malaria providers who received training on malaria topics, by state



- Training highest in Kebbi, particularly recent training
- Zamfara malaria training levels also high
- Malaria training levels highest across all states compared to child health, family planning (FP), and antenatal care (ANC) service trainings

Chi-squared significance test among states. + $p<0.1$, * $p<0.05$, ** $p<0.01$, *** $p<0.001$

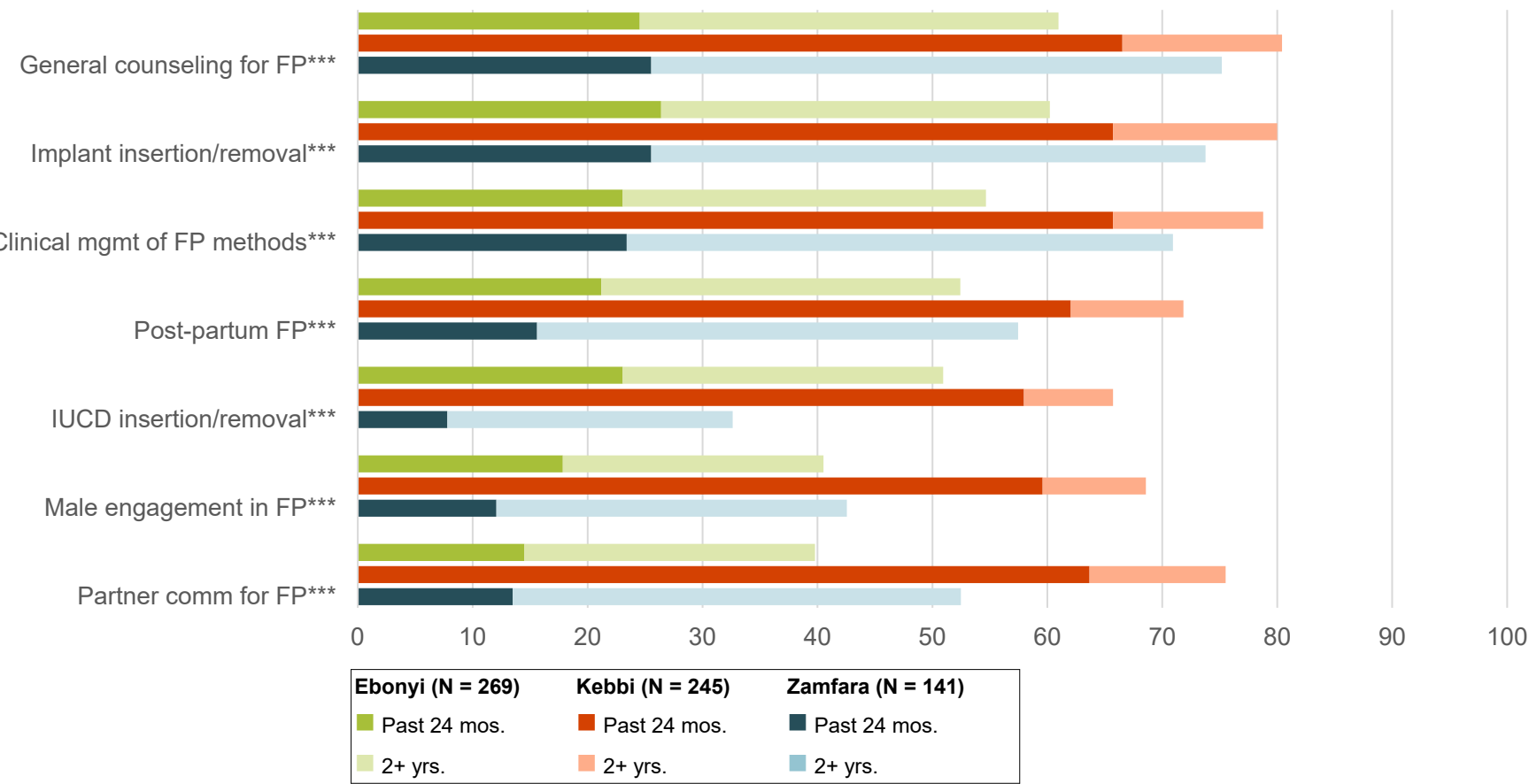


Family Planning Services

Health worker personally provides FP services in current position at health facility: 76% Ebonyi, 66% Kebbi, and 41% Zamfara ($p<0.000$)

FP providers reported receiving training in any of the specified FP topics: 65% Ebonyi, 84% Kebbi, and 81% Zamfara ($p<0.000$)

Percent of FP providers who received training on FP topics, by state



- Most FP training in Kebbi is recent
- Training over two years ago high in Zamfara
- Male engagement and partner communication training low in Ebonyi and Zamfara

Chi-squared significance test among states. + $p<0.1$, * $p<0.05$, ** $p<0.01$, *** $p<0.001$

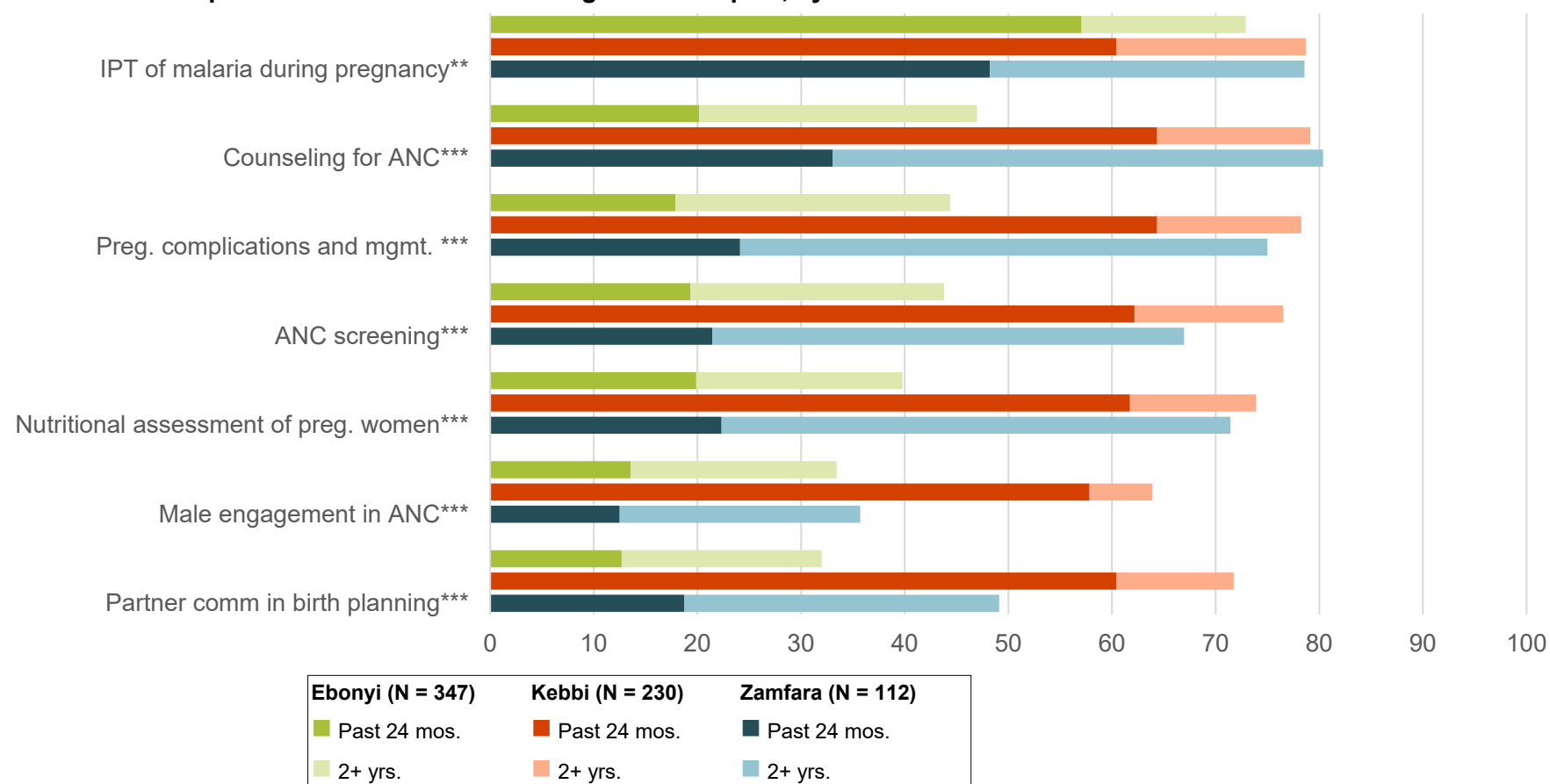


Antenatal Care Services

Health worker personally provides antenatal care (ANC) services in current position at health facility: 98% Ebonyi, 62% Kebbi, and 32% Zamfara ($p<0.000$)

ANC providers reported receiving training in any of the specified ANC topics: 77% Ebonyi, 90% Kebbi, and 93% Zamfara ($p<0.000$)

Percent of ANC providers who received training on ANC topics, by state



- Low ANC service provision in Zamfara, but providers have generally moderate-high levels of training
- Most Kebbi training is recent
- Male engagement and partner communication training low in Ebonyi and Zamfara

Chi-squared significance test among states. + $p<0.1$, * $p<0.05$, ** $p<0.01$, *** $p<0.001$

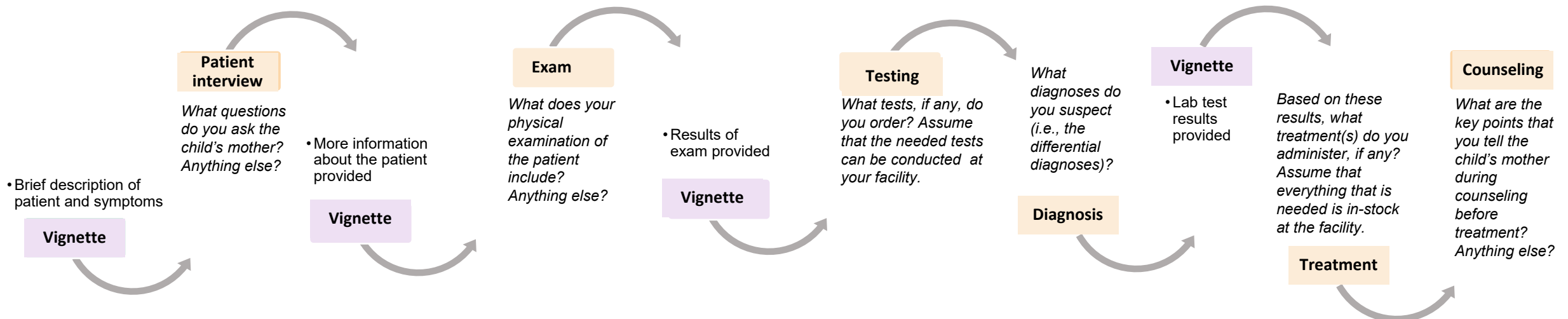


Results: Clinical Vignettes



Vignette Structure

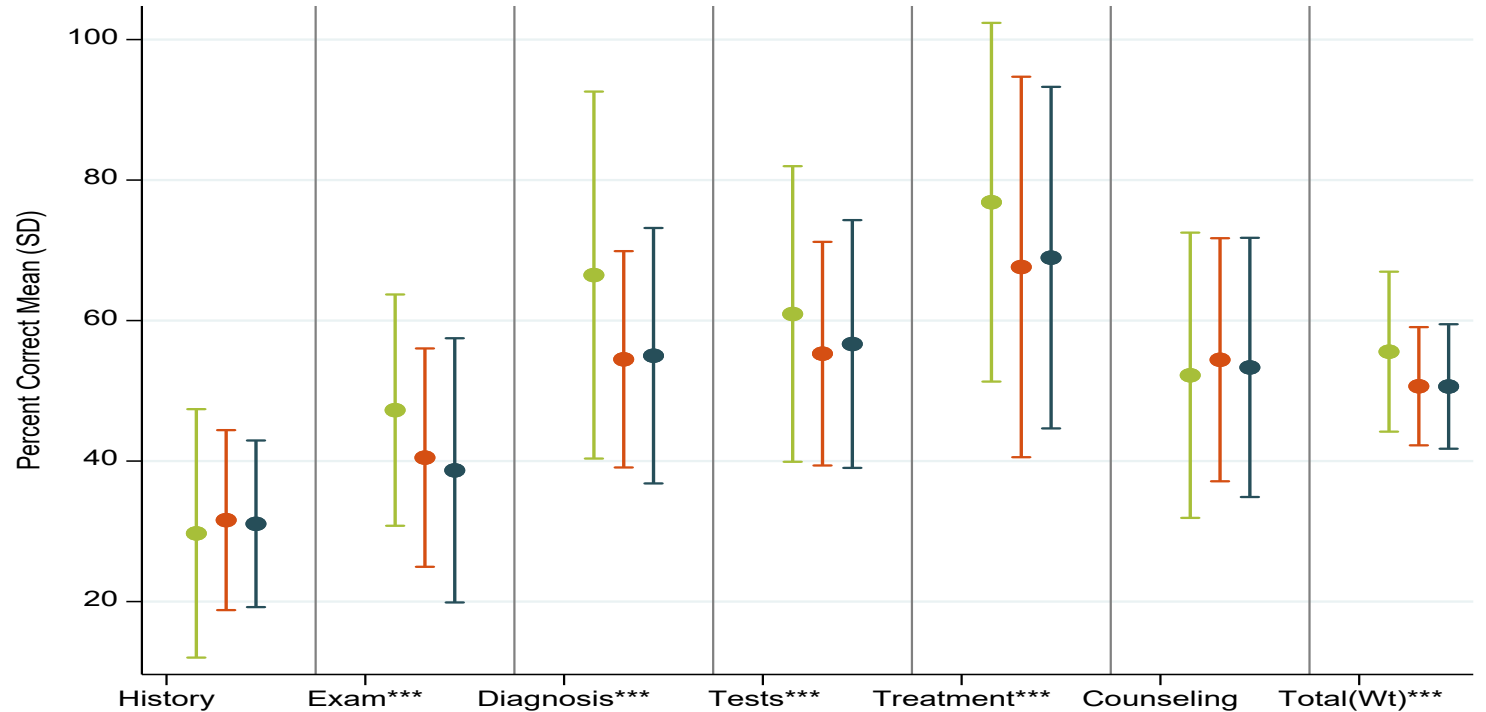
- Sections sequentially presented following typical sections of a medical visit
- Series of short descriptions of patient and symptoms, followed by questions to elicit a detailed explanation of steps
- After answering, provider given next narrative that typically contains information they should have elicited in previous questions





Child Health Vignette - Malaria

Child health: Domain and weighted total scores



	● Ebonyi (N=352)	● Kebbi (N=312)	● Zamfara (N=240)	P-value
Weighted total	55.6	50.7	50.6	0.000

Notes: *** p<0.001

Overall

- Ebonyi providers performed best in majority of domains
- Kebbi and Zamfara similar results across domains

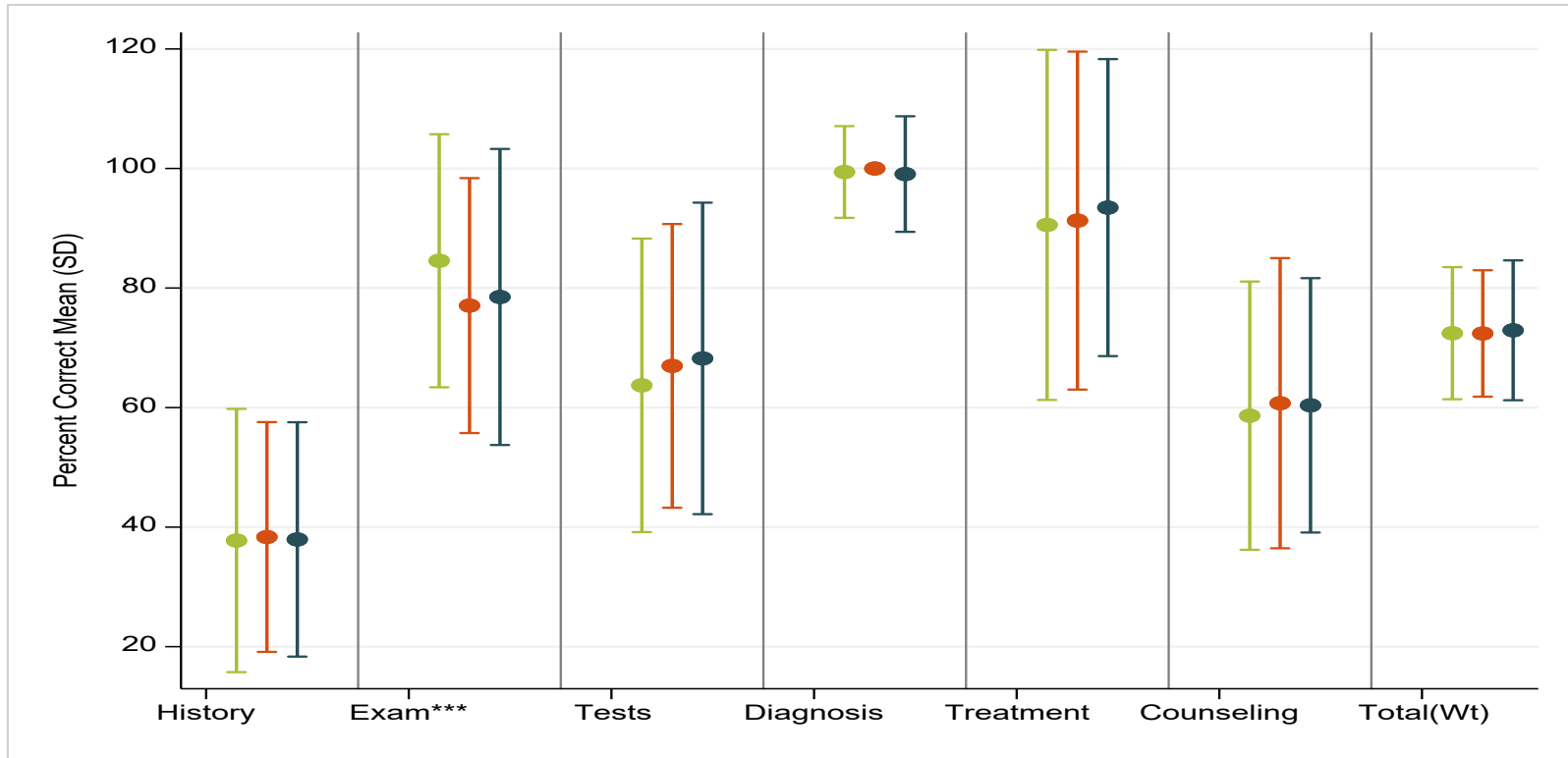
Counseling

- Low diagnosis disclosure – around 5% in Ebonyi and Zamfara, and only 2 providers in Kebbi
- Critical to counsel on avoiding drug resistance – only about 1/3rd of providers in each state would discuss the importance of finishing medication as prescribed



ANC: Malaria in Pregnancy Vignette

ANC-MIP: Domain and weighted total scores



Overall

- All three states perform similarly across the domains

Testing

- Malaria testing was nearly universal across the three states, despite MIP protocol to provide curative antimalarial doses to pregnant women beginning in the second trimester without testing for malaria

Limitation

- Vignette focuses on general ANC practices and was not tailored to the standard MIP/IPTp protocol for 2nd and 3rd trimester ANC visits

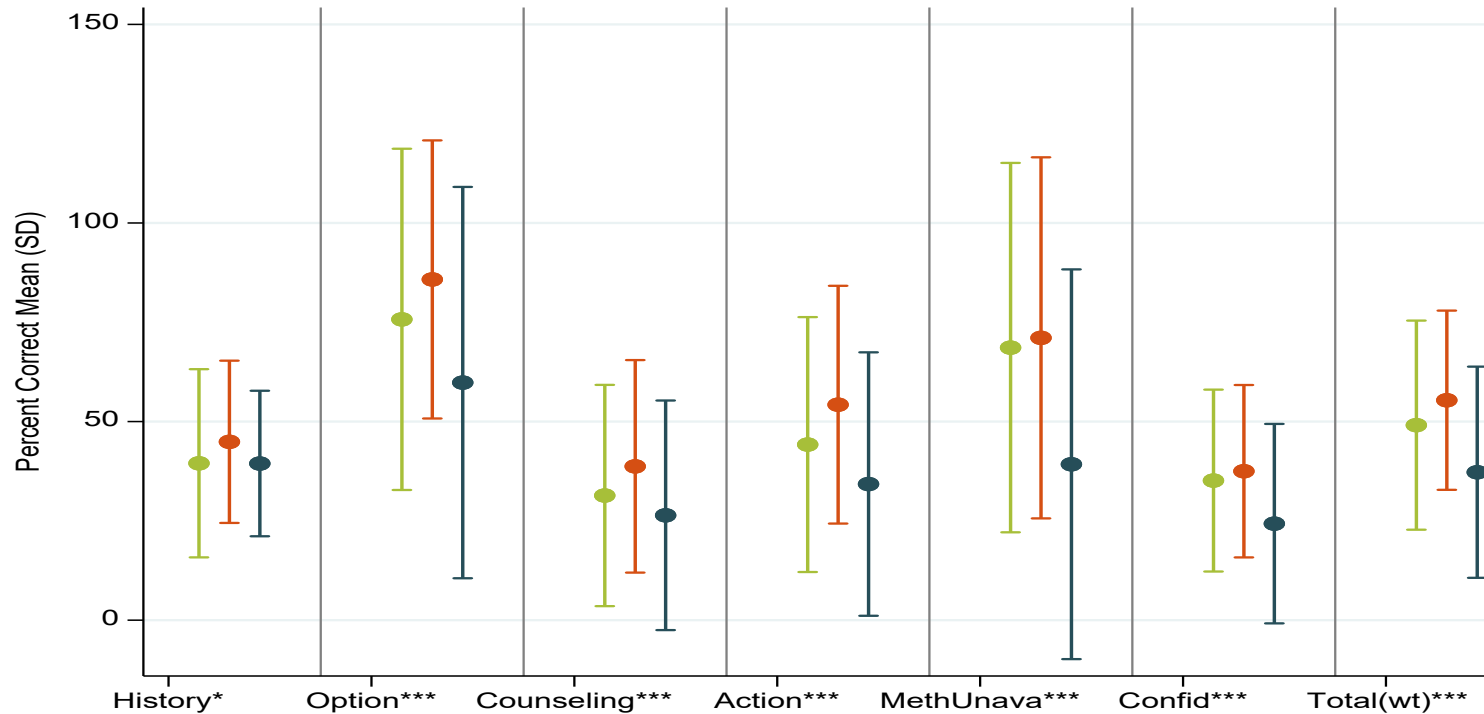
	● Ebonyi (N=339)	● Kebbi (N=218)	● Zamfara (N=107)	P-value
Weighted total	72.4	72.4	72.9	0.910

Notes: *** $p < 0.001$



Family Planning Side Effects Vignette

FP-SE: Domain and weighted total scores



Overall

- Kebbi providers performed best in all domains

Options

- 40% of providers in Zamfara and 24% in Ebonyi would not offer another FP method
 - “side effects are normal”

Counseling

- Most providers in Ebonyi and Kebbi focus counseling on the methods available at the PHC on day of visit

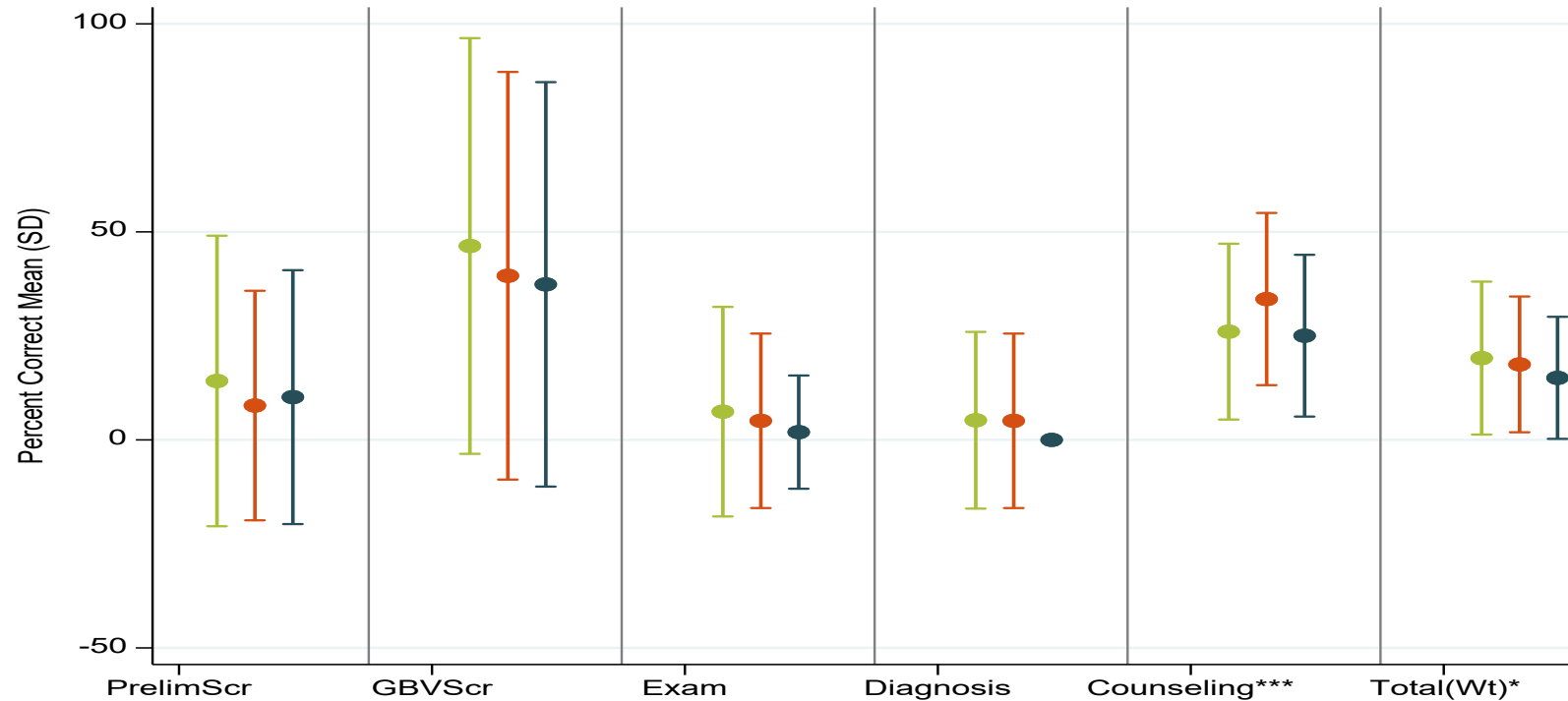
	● Ebonyi (N=239)	● Kebbi (N=204)	● Zamfara (N=107)	P-value
Weighted total	49.1	55.4	37.2	0.000

Notes: * $p < 0.05$; *** $p < 0.001$



Gender-Based Violence Vignette Content

GBV: Domain and weighted total scores



Overall

- Ebonyi providers performed best in majority of domains, followed closely by Kebbi providers but scores are low.

Diagnosis

- Fewer than 5% of providers in Ebonyi and Kebbi diagnosed explicit GBV, and none diagnosed GBV in Zamfara

	● Ebonyi (N=339)	● Kebbi (N=218)	● Zamfara (N=107)	P-value
Weighted total	19.7	18.1	14.9	0.044

Notes: * $p < 0.05$; *** $p < 0.001$

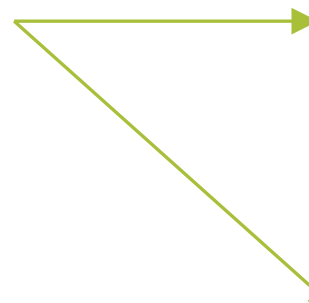


Results: Attitudes and Norms



Provider Attitudes and Norms

- Are provider attitudes different from community norms?
 - **Topic 1.** Malaria case management
 - **Topic 2.** FP
 - **Topic 3.** ANC
- Reporting
 - **Provider Attitudes:** % strongly agree/agree
 - **LGA Norms:** % every time/most times



Provider Attitudes

Please describe how strongly you agree or disagree with the following statements

- *Strongly agree, agree, disagree, strongly disagree*

LGA Norms

Please describe how often you think other providers in this LGA perform the following activities

- *Every time, most times, half of the time, rarely, never*

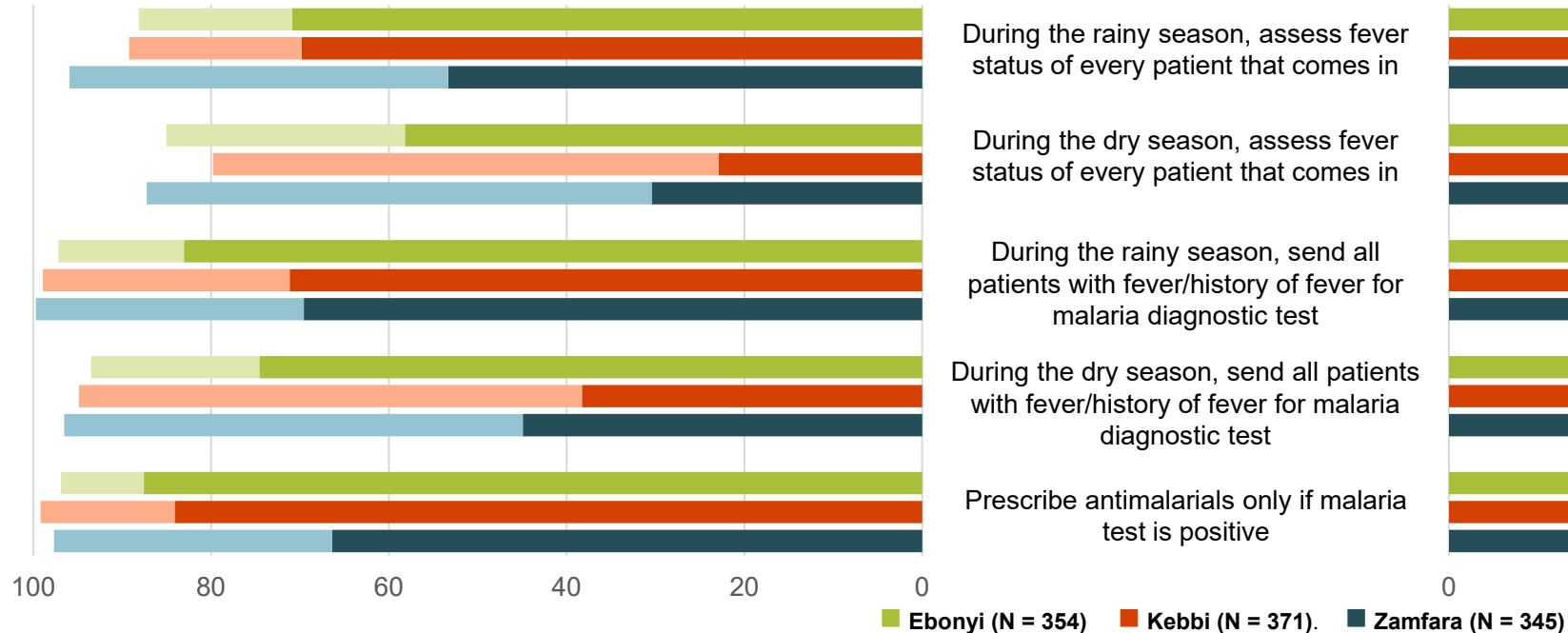


Malaria Case Management

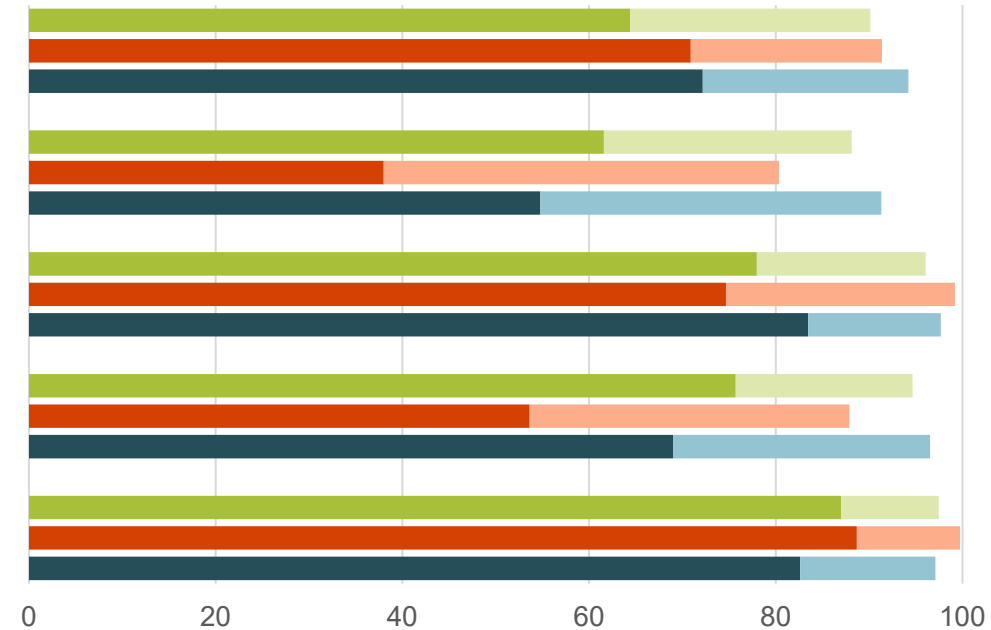
- Malaria case management attitudes and norms are generally positive at Evaluation baseline
- Provider attitudes generally align with corresponding community norm

Provider attitudes and norms for malaria case management topics, by state

Provider Attitudes: Strongly Agree/Agree



LGA Norms: Every/Most times



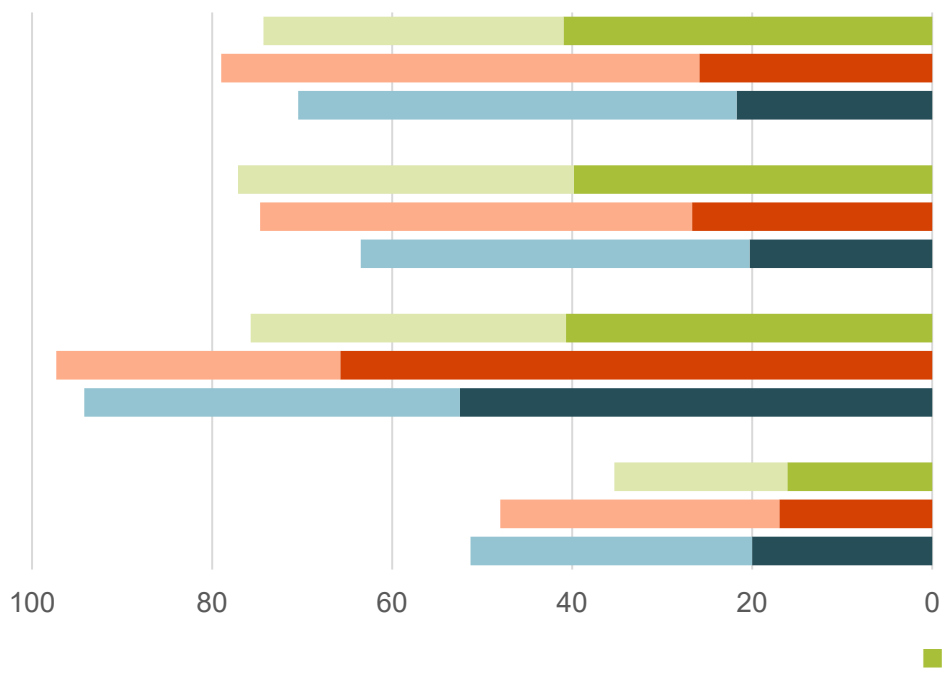


Family Planning

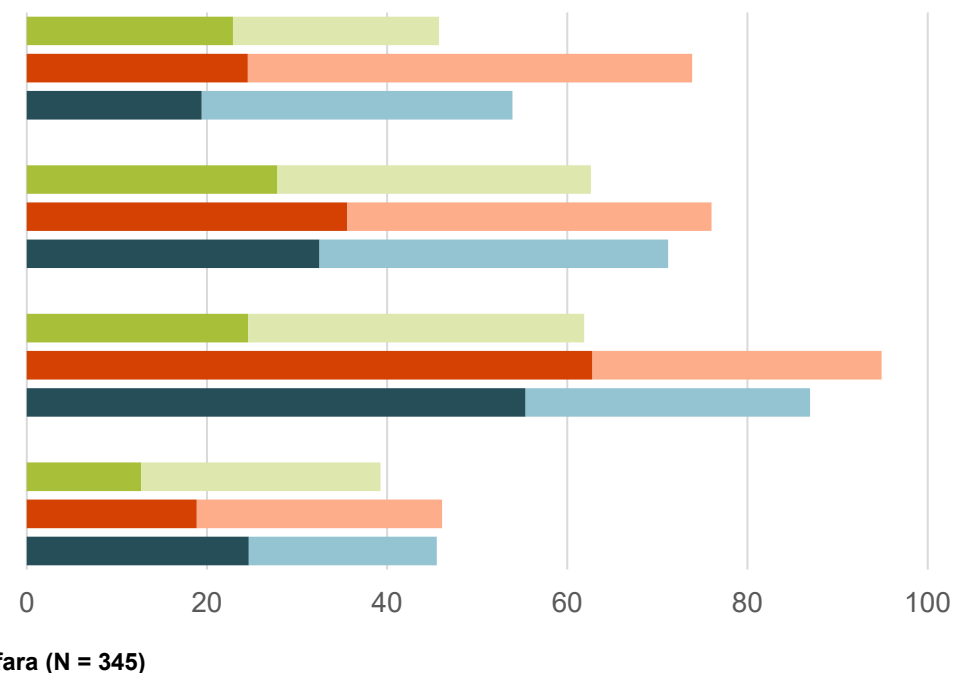
- Provider attitudes are more progressive than LGA norms around offering contraceptives to women under 18 in **Ebonyi** and **Zamfara**, but less progressive around requiring partner consent for contraceptives
- Lowest levels of agreement with attitudes and norms around offering contraceptives to unmarried women

Provider attitudes and norms for family planning topics, by state

Provider Attitudes: Strongly Agree/Agree



LGA Norms: Every/Most Times

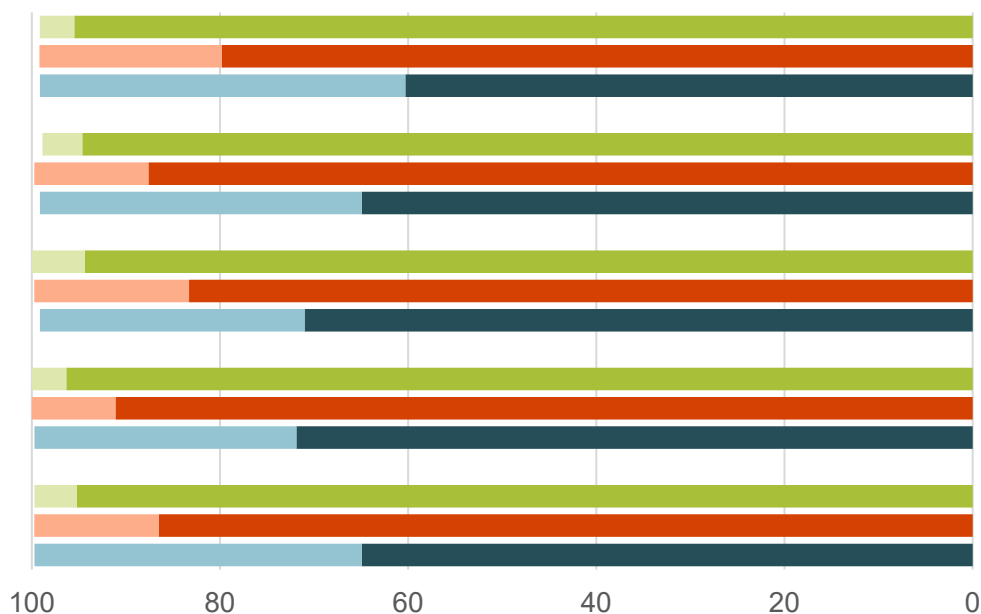


Antenatal Care

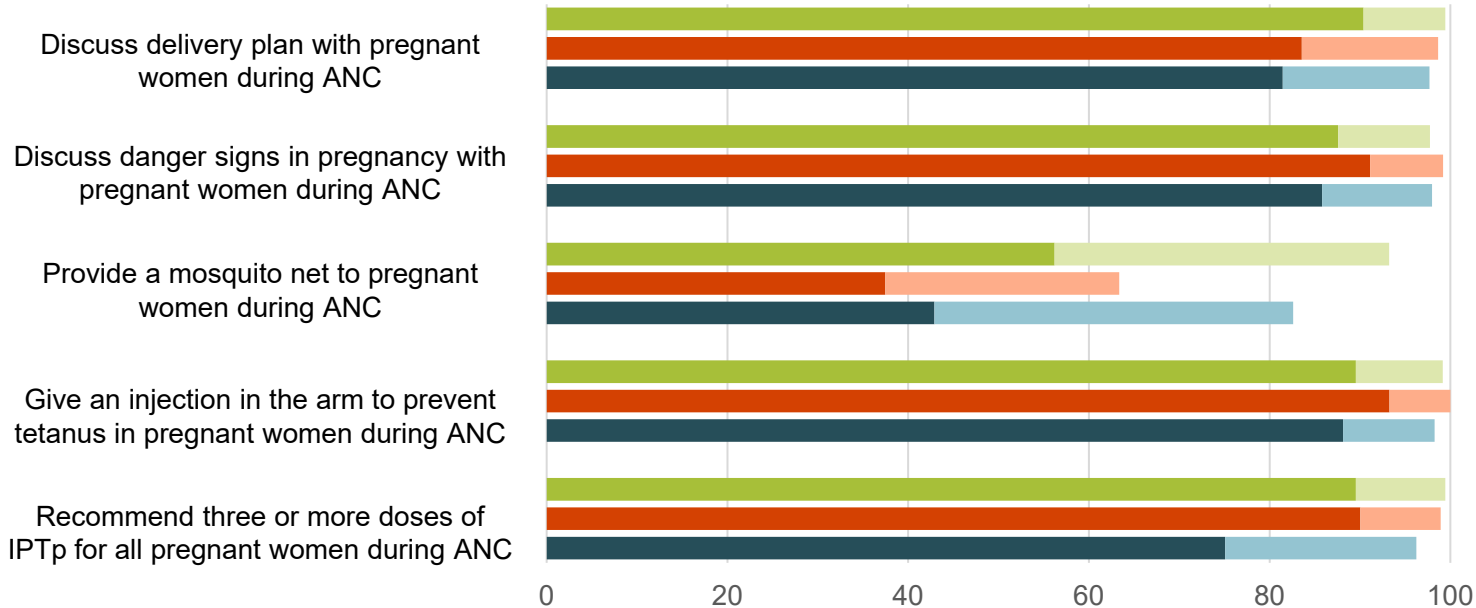
- ANC provider attitudes are universally positive at Evaluation baseline
- LGA norms also positive, slightly less so than provider attitudes
- Exception: LGA norms around mosquito net provision are less positive across all states, particularly Kebbi

Provider attitudes and norms for ANC topics, by state

Provider Attitudes: Strongly Agree/Disagree



LGA Norms: Every/Most Times



■ Ebonyi (N = 354) ■ Kebbi (N = 371) ■ Zamfara (N = 345)



Gender Attitudes and Norms

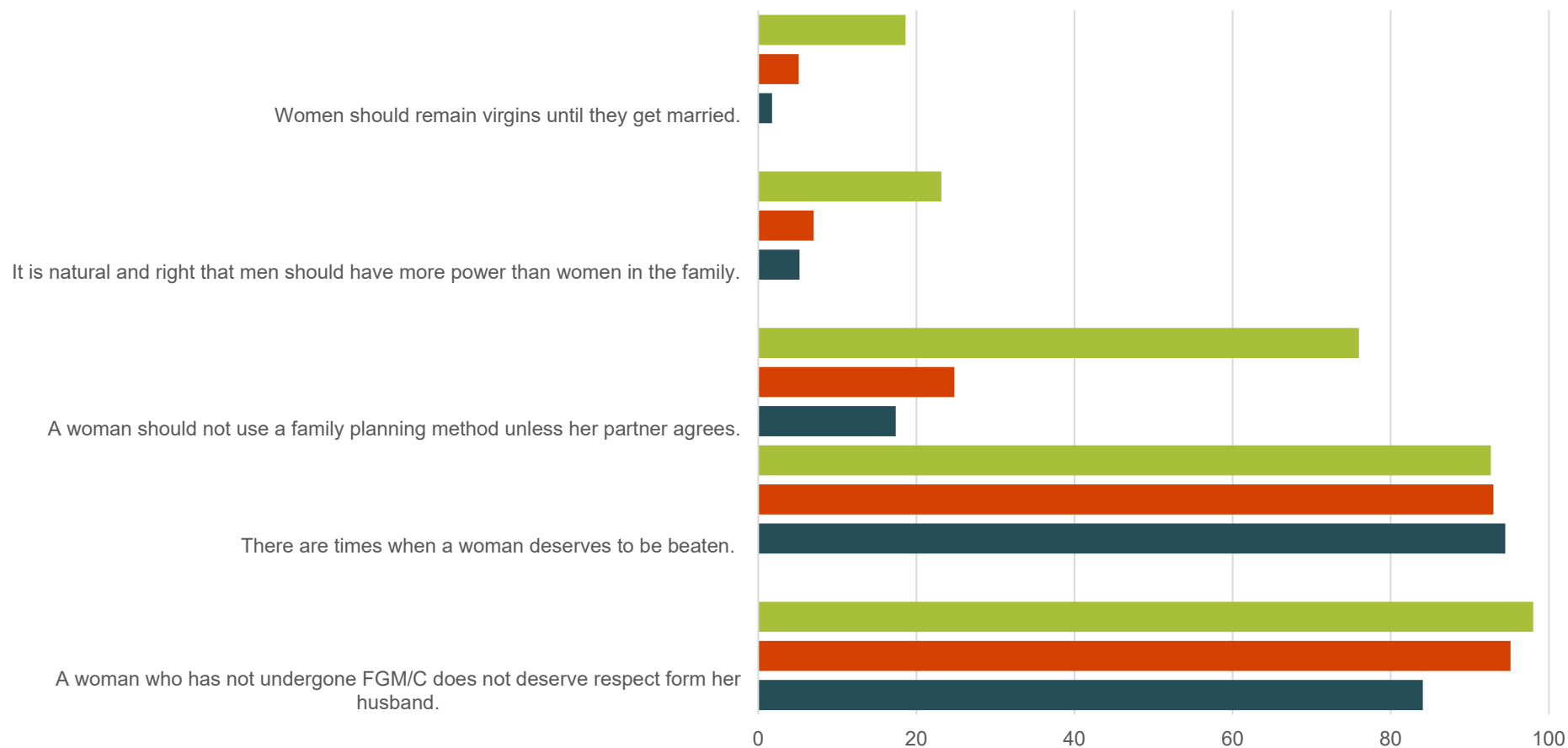
- Health workers asked to describe how strongly they agree or disagree with statements
 - **Section 1.** Provider gender attitudes, all providers
 - **Section 2.** Other providers in LGA who provide similar services, all providers
 - **Section 3.** Other providers in LGA who provide FP and/or ANC services, asked only of FP/ANC providers
- Exploratory factor analysis to refine scales and assess Cronbach's alpha (scale internal consistency or reliability)

Provider Gender Attitudes



Percent of providers who disagree/strongly disagree with statement, by state

Example Statements:



- Index: Higher score/ disagreement indicates **more** gender equitable attitude, range 1-4

– **Ebonyi**: 3.1

– **Kebbi**: 2.6

– **Zamfara**: 2.4

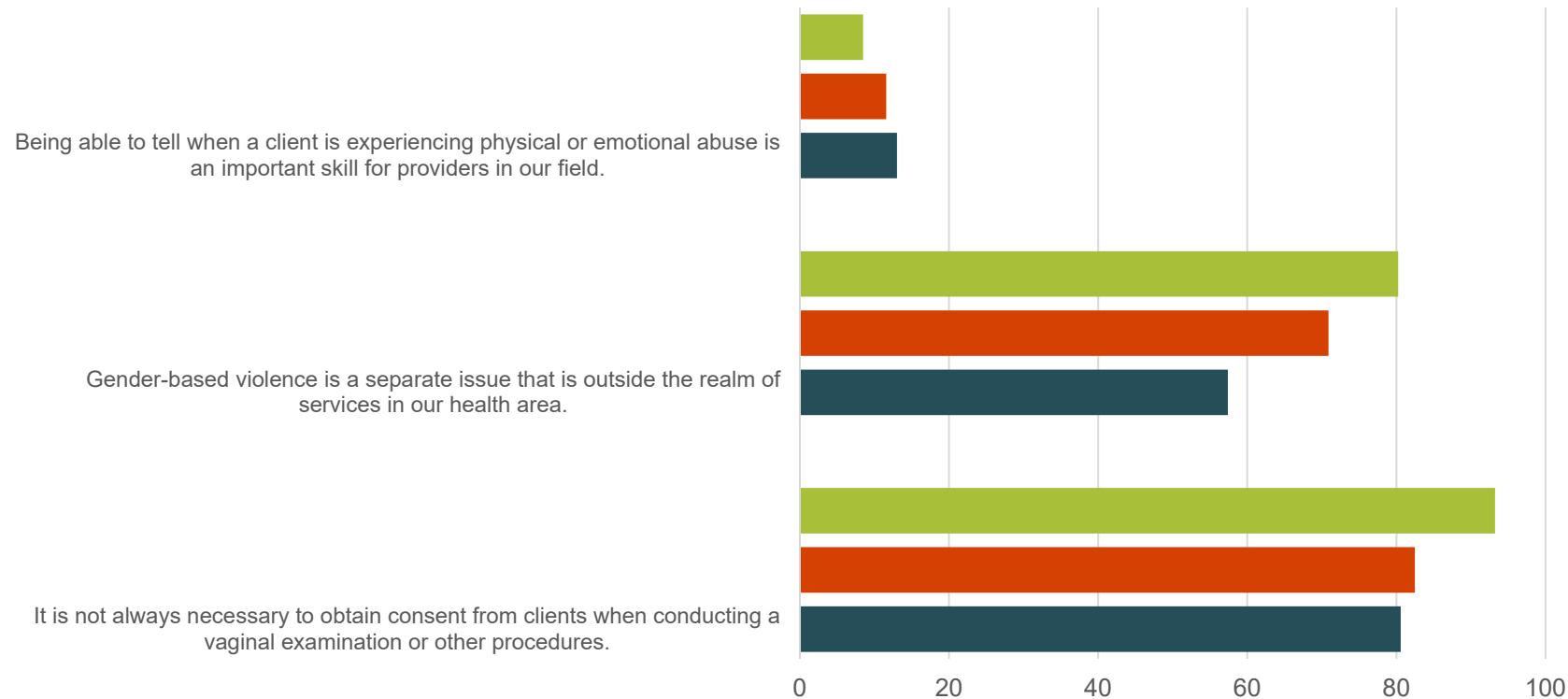


Gender-Sensitive Community RMNH QOC Norms

Percent of providers who disagree/strongly disagree with statement, by state

Example Statements:

The clinicians in this LGA believe that . . .



Index: Higher score/disagreement indicates **more** gender equitable norms, range 1-4

– **Ebonyi**: 3.3

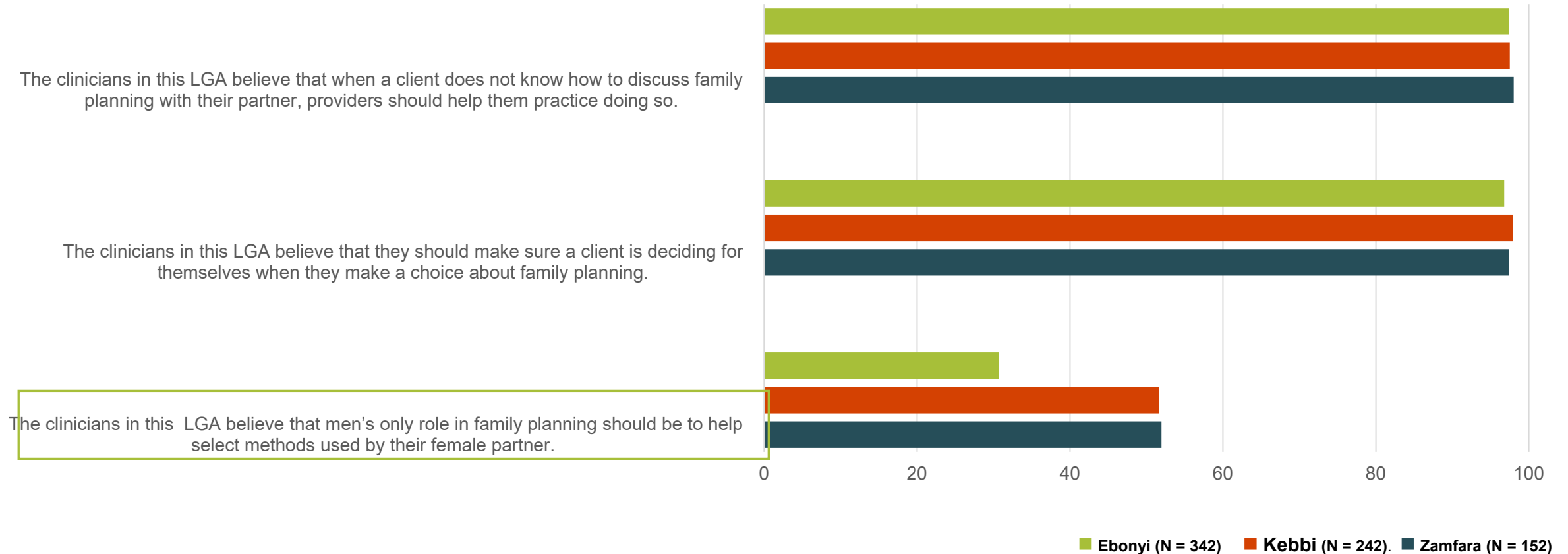
– **Kebbi**: 2.9

– **Zamfara**: 2.7



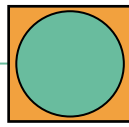
Perceived Gender-Sensitive FP/ANC Service Provision Community Norms

Percentage of health workers who strongly agree/agree with statements on FP/ANC provider norms in their LGA, by state





Conclusions



Conclusions

- Training is generally more recent in Kebbi (as expected) and often higher levels of training in Kebbi than in Ebonyi and Zamfara
- Indicators related to malaria (training, vignettes, attitudes and norms) tend to be highly positive in all three states
 - Not a lot of room for improvements over time
- More variation in indicators for ANC, FP
 - Providers in Zamfara tend to be weaker on vignette indicators than providers in Ebonyi and Kebbi
 - Providers in Ebonyi often have similar results on vignette indicators to providers in Kebbi even though they have less training (but more professional providers in Ebonyi)
 - Little variation in attitudes and norms for ANC; more variation for FP



Conclusions related to gender

- Training on gender issues (GBV, male involvement in FP) low except in Kebbi where it is moderate
- Few providers screened for GBV in hypertension/GBV ANC vignette
 - Highest in Ebonyi although training highest in Kebbi
- Gender norms among providers are most gender equitable in Ebonyi and least gender equitable in Zamfara



This presentation was produced with the support of the United States Agency for International Development (USAID) under the terms of the Data for Impact (D4I) associate award 7200AA18LA00008, which is implemented by the Carolina Population Center at the University of North Carolina at Chapel Hill, in partnership with Palladium International, LLC; ICF Macro, Inc.; John Snow, Inc.; and Tulane University. The views expressed in this publication do not necessarily reflect the views of USAID or the United States government.

www.data4impactproject.org





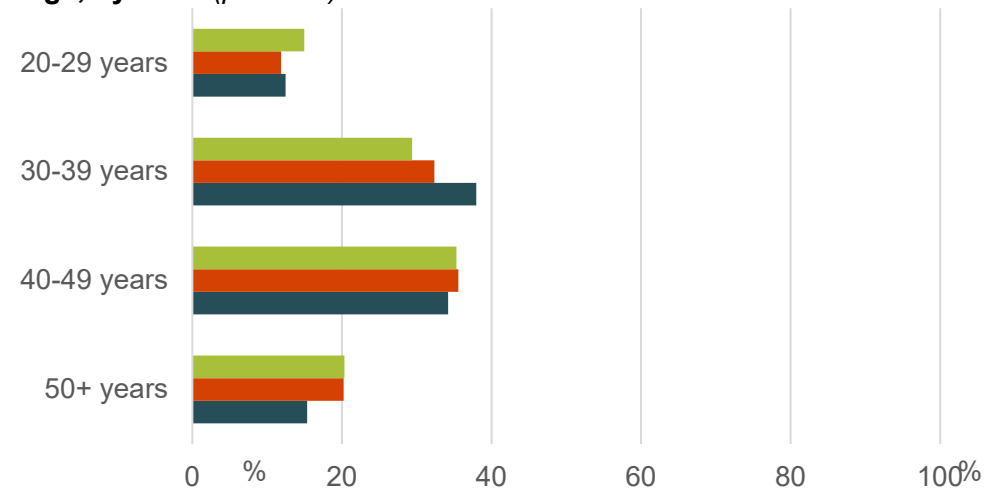
Demographics

Provider survey sample distribution

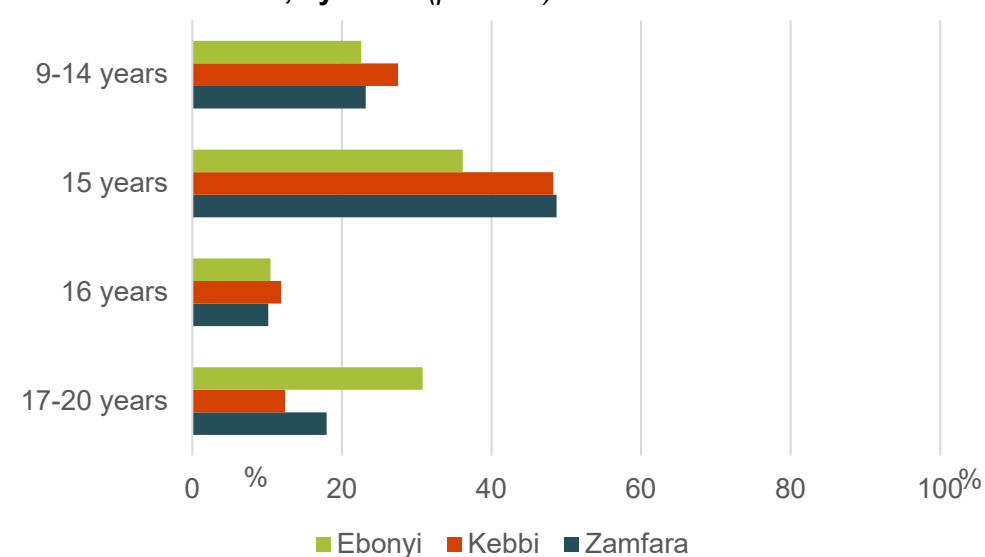
	Ebonyi	Kebbi	Zamfara
# providers	354	371	345
% Female	91.81	57.41	33.62
% Male	8.19	42.59	66.38

- ~ 1/3 of interviewed providers from each state (N = 1,070)
- Over 90% of health workers are female in Ebonyi, compared to 57% in Kebbi and 34% in Zamfara
- **40 years** – average provider age
 - Similar age distributions across states
- **15 years** – average years education
 - Notable differences in distributions across states
 - Health workers in Ebonyi have more education

Age, by state ($p=0.196$)



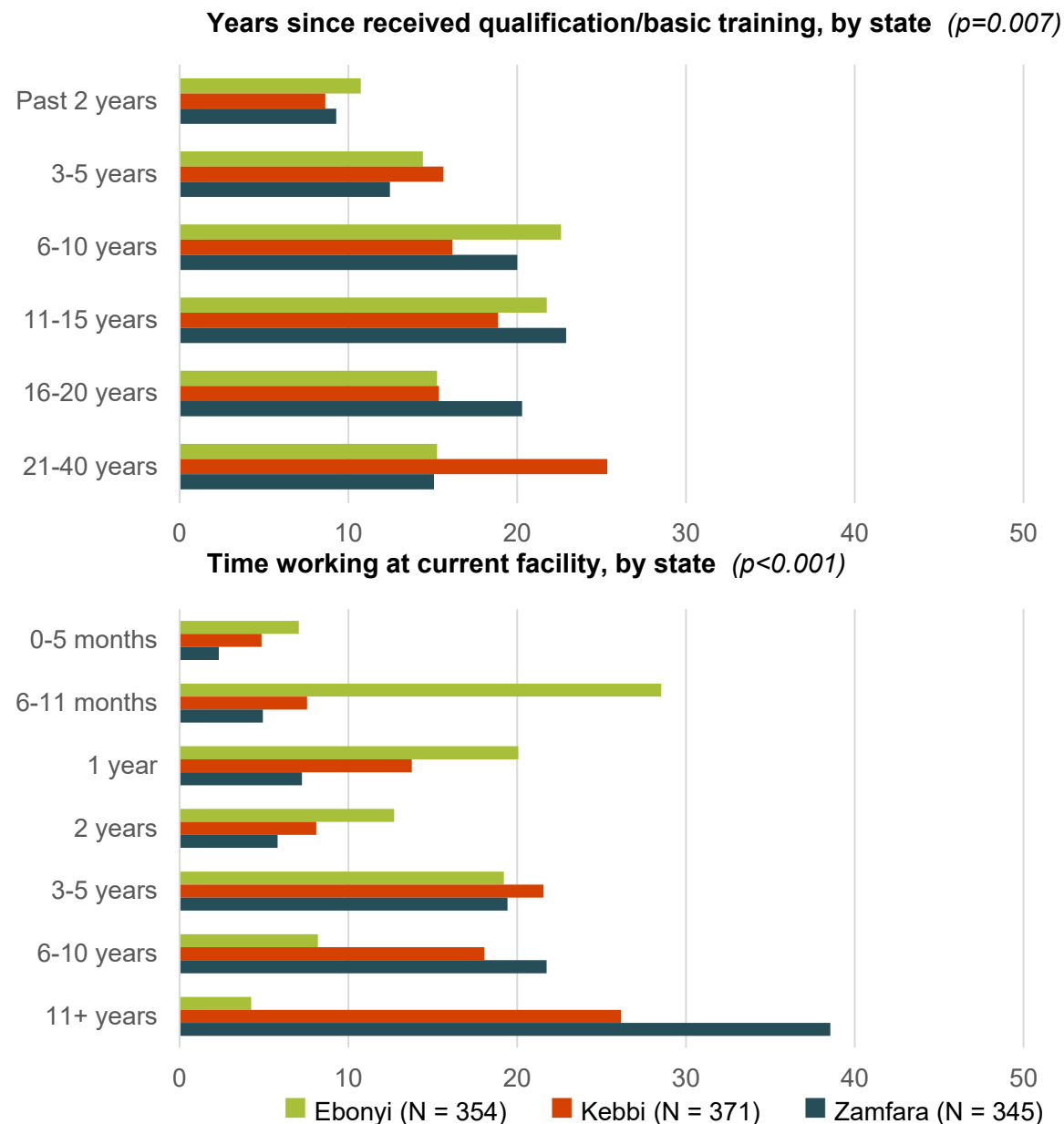
Years of education, by state ($p<0.001$)





Experience and Tenure

- Average **13 years** since providers received qualifications or basic training
- Ebonyi providers have **shorter tenure** at current facility compared to providers in Kebbi and Zamfara
 - Ebonyi: average 3 years, 30% 6-11 months
 - Kebbi: average 8 years, 26% 11+ years
 - Zamfara: average 10 years, 39% 11+ years
- Providers are more likely to be seconded in Ebonyi (31%), which may explain why they have been at their current facility for a shorter time

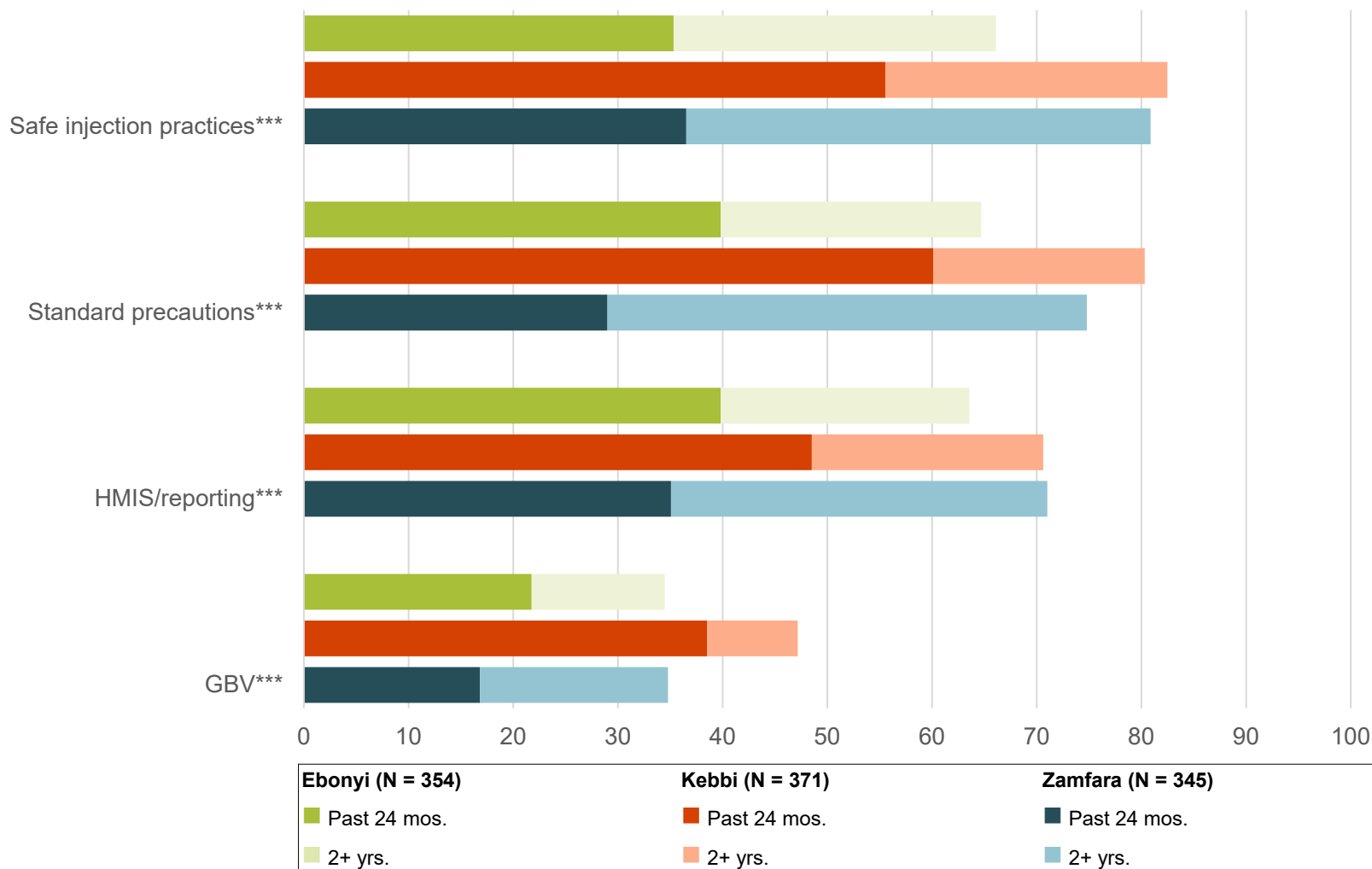




General Training

Health workers reported receiving training in any of the specified general topics: 81% Ebonyi, 88% Kebbi, and 88% Zamfara ($p=0.008$)

Percent of health workers who received training on general topics, by state



- Training levels highest in Kebbi, particularly **recent** training (IHP has been here longer)
- Zamfara training levels also high (reflects multiple partners working in state)
- Gender-based violence (GBV) training universally low



Vignette Approach

Eligible respondents

- Providers eligible to complete vignette if they self-report regularly providing the relevant service

Scoring

- Preliminary analysis: frequencies of raw responses to each vignette question (presented to USAID/Nigeria in October 2021)
- Revised frequency analysis: reviewed and coded “other” categories
- Preliminary rubric and scores for vignettes → stakeholder and expert review
- Final revised vignette rubrics and weighted scores

Analysis

- Cross-tabulation and chi-square significance testing of rubric domains by state
- Significance testing and graphical presentation of mean (SD) percentage of points attained in each rubric domain and overall vignette
- Overall vignette scores weighted such that each domain contributed an equal proportion to the total score

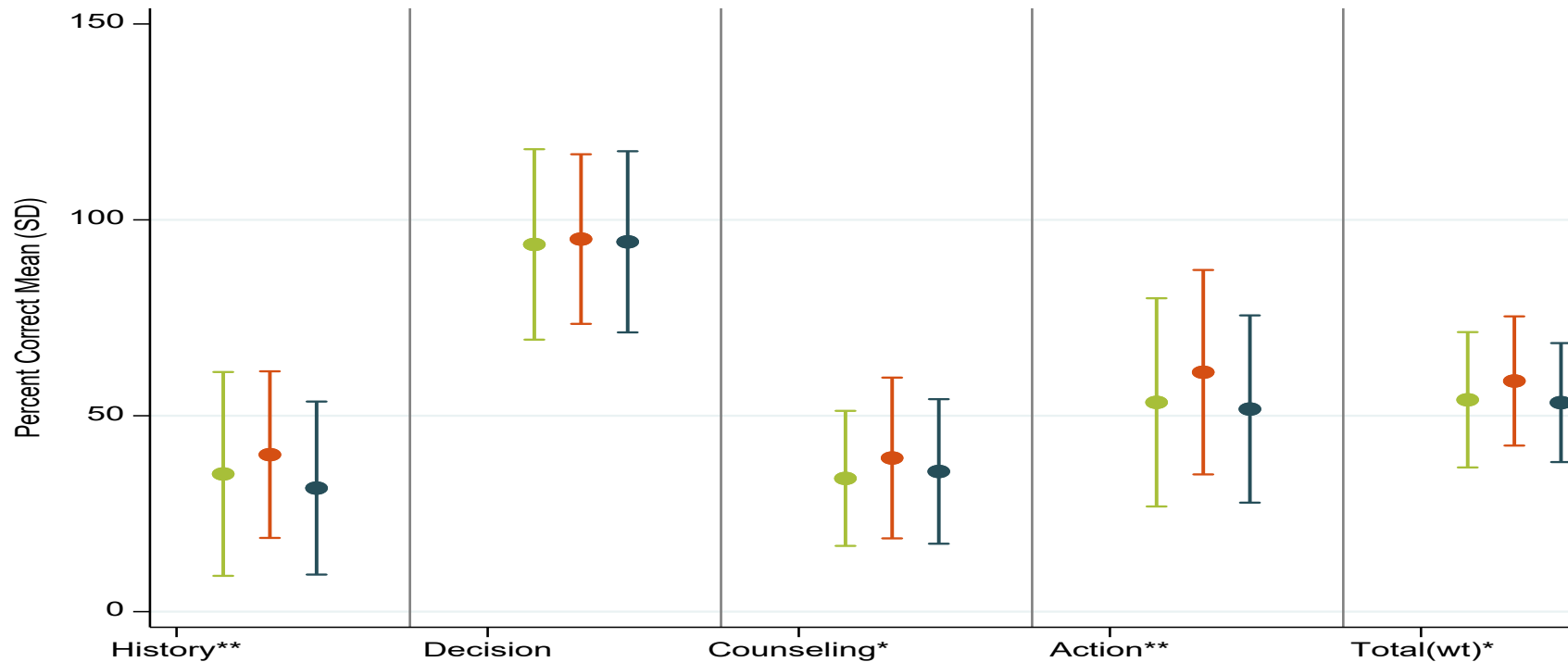
Percent of providers eligible to respond to vignettes

Clinician regularly provides . . .	Ebonyi (N = 354)	Kebbi (N = 371)	Zamfara (N = 345)
Child health services for fever	99.4%	84.1%	69.6%
ANC services	95.8%	58.8%	31.0%
FP services	67.5%	55.0%	31.0%



Post-partum Family Planning Vignette

PPFP: Domain and weighted total scores



	● Ebonyi (N=239)	● Kebbi (N=204)	● Zamfara (N=107)	P-value
Weighted total	54.1	58.9	53.4	0.003

Notes: * $p < 0.05$; ** $p < 0.01$

Overall

- Kebbi providers performed best in all domains

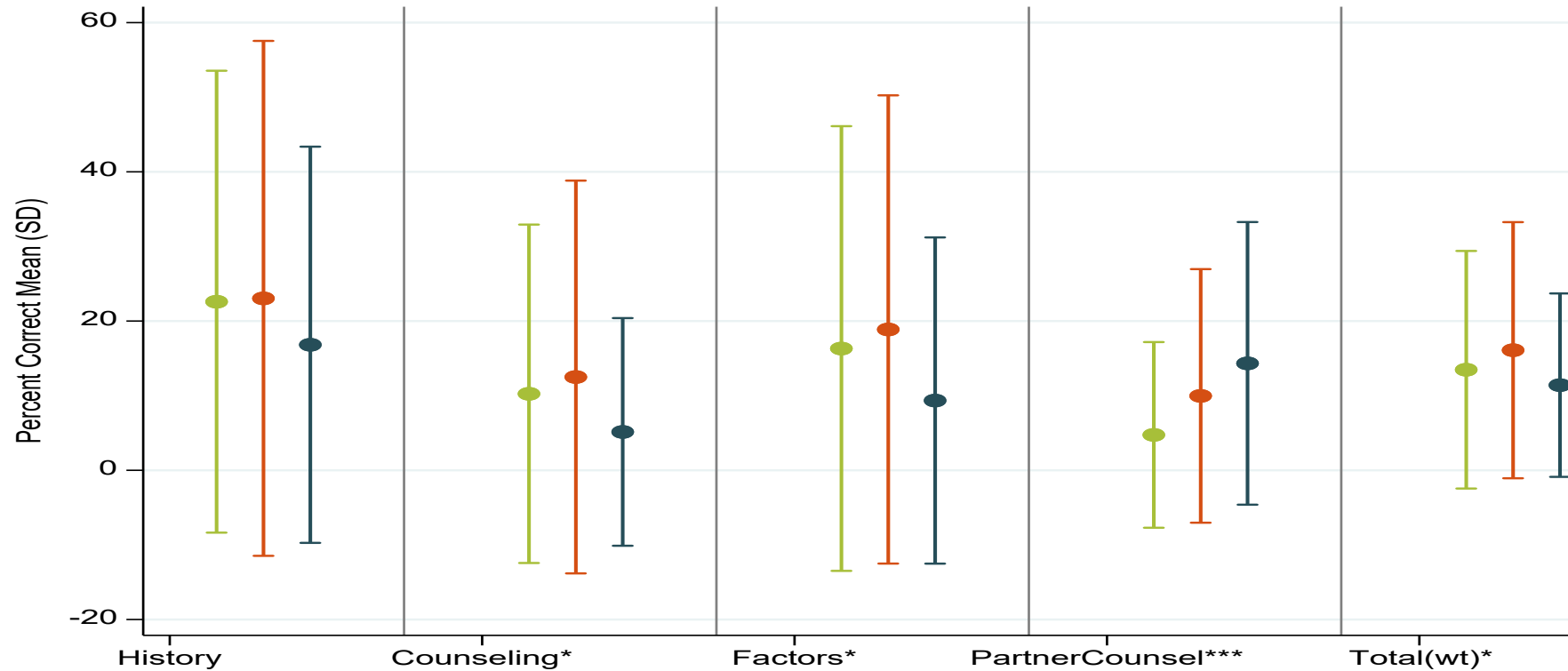
Counseling

- Nearly all providers (> 94%) would counsel the client in choosing a post-partum contraceptive method



Male Engagement in FP Vignette Content

MEFP: Domain and weighted total scores



Overall

- Male engagement in FP scores generally low across the three states

	● Ebonyi (N=239)	● Kebbi (N=204)	● Zamfara (N=107)	P-value
Weighted total	13.5	16.1	11.4	0.035

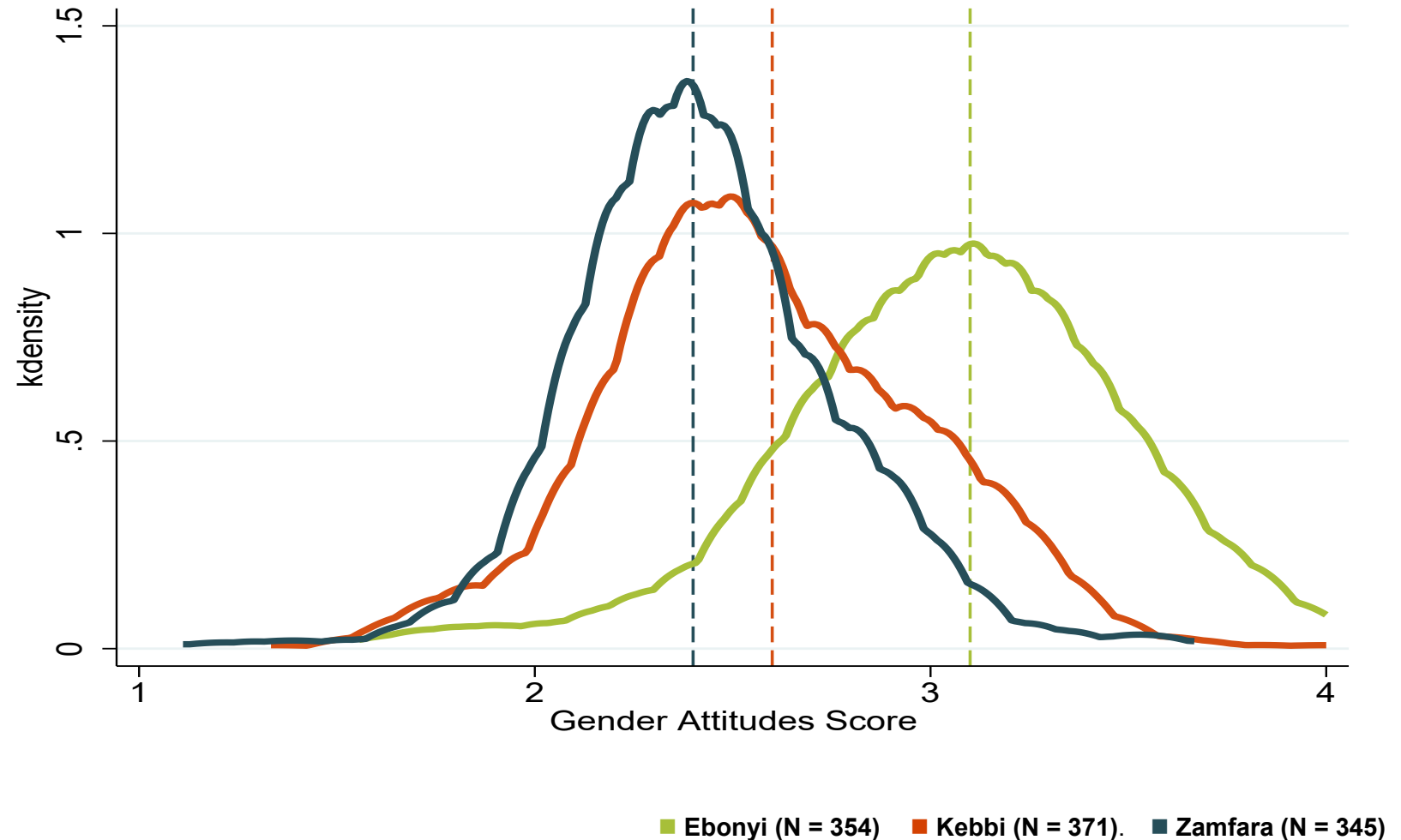
Notes: * $p < 0.05$; *** $p < 0.001$

Provider Gender Attitudes



- 13 statements related to RMNH service provision and QOC → EFA resulted in nine-item gender attitude scale (Cronbach's alpha = 0.74)
- Higher score/disagreement indicates **more** gender equitable attitude, range 1-4
 - **Ebonyi**: 3.1
 - **Kebbi**: 2.6
 - **Zamfara**: 2.4

Distribution of EFA-adjusted provider gender attitudes scores, by state



Notes: Vertical dashed lines indicate state-level mean scores.

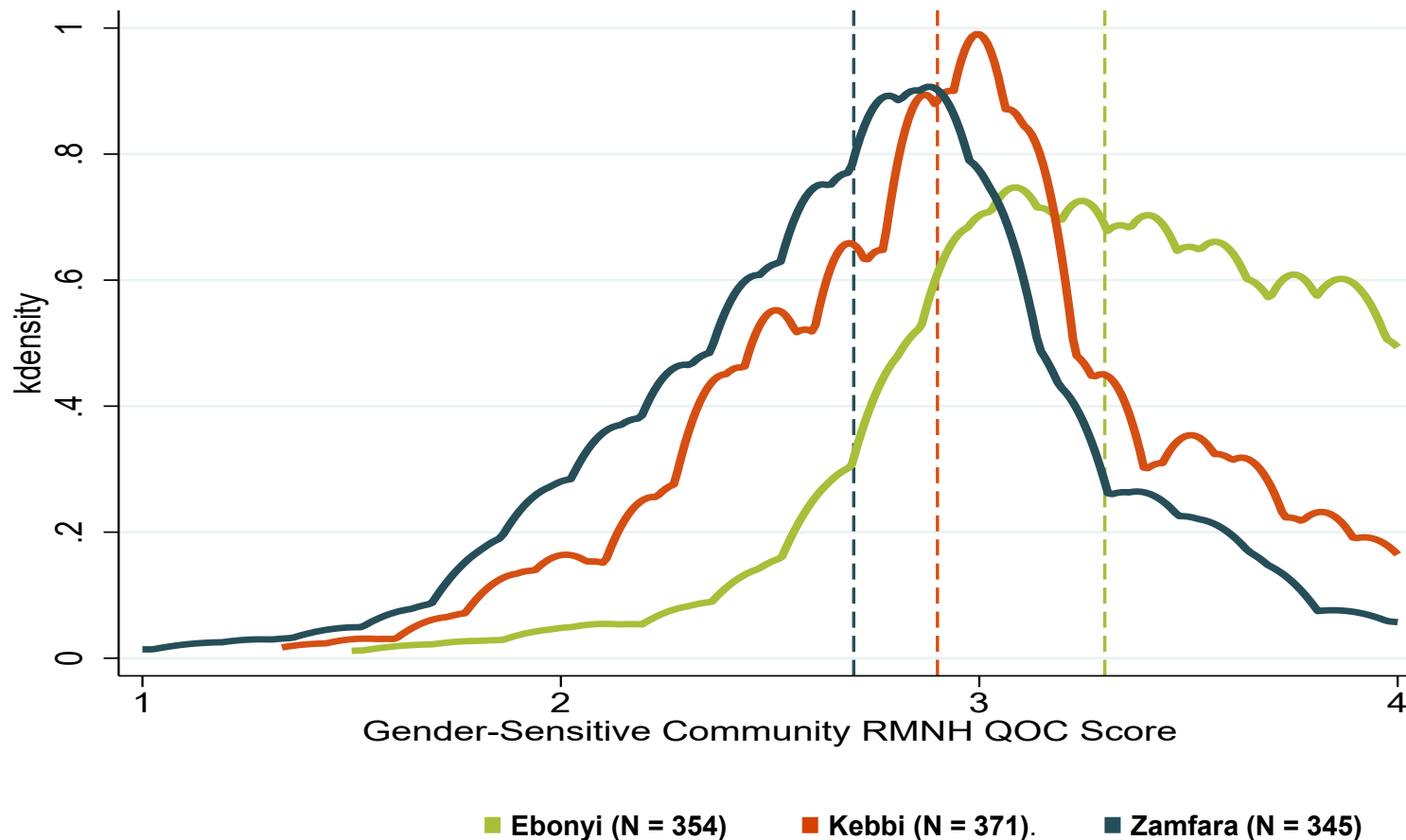


Gender-Sensitive Community RMNH QOC Norms

- Nine statements: Attitudes and beliefs about gender-sensitive communication, addressing GBV, and promoting individual agency → EFA yielded six-item scale (Cronbach's alpha = 0.77)
- Higher score/disagreement indicates **more** gender equitable norms, range 1-4

- **Ebonyi**: 3.3
- **Kebbi**: 2.9
- **Zamfara**: 2.7

Distribution of EFA-adjusted LGA Gender Norms Score, by State



Notes: Vertical dashed lines indicate state-level mean scores.