Psychosocial influences on modern contraceptive use in Sokoto, Kebbi and Zamfara States

Breakthrough RESEARCH Nigeria
Behavioral Sentinel Surveillance (BSS) Survey
Key Baseline Results

Webinar Series – September 2020
Family Planning

USAID
Tulane University
Population Council
Breakthrough ACTION + RESEARCH
Webinar overview

• About Breakthrough RESEARCH

• What is the Behavioral Sentinel Surveillance (BSS) survey?

• Focus on family planning
  • How did formative research inform the BSS survey?
  • Ideational metrics
  • Key BSS findings
  • SBC program implications

• Future work
About Breakthrough RESEARCH and Breakthrough ACTION
Breakthrough RESEARCH

- USAID’s flagship project for social and behavior change (SBC) research and evaluation
- Five-year project: August 2017 to July 2022
- B-R Nigeria activity start: January 2019
  B-R Nigeria office opened: September 2019
- Close collaboration with sister project Breakthrough ACTION and other IPs
Breakthrough ACTION in Nigeria

- USAID’s flagship project for social and behavior change (SBC)

**Overall Result**
- Increase the practice of 17 priority health behaviors in the areas of maternal, newborn, and child health plus nutrition (MNCH+N), family planning and malaria

**Intermediate Results**
- Improved individual and social determinants of health
- Strengthened SBC coordination and collaboration among USG partners
- Strengthened SBC capacity of national and sub-national public sector entities
Priority Behaviors for Integrated SBC

**Milestones**

**Pre-pregnancy**
- Use a modern contraceptive method, including long-acting reversible contraceptives (LARCs), to avoid pregnancy for at least 24 months after a live birth
- Attend a complete course of ANC
- Take intermittent preventive treatment of malaria (IPTp) during ANC visits

**Pregnancy**
- Attend a health facility for delivery and/or deliver with a skilled attendant
- Provide essential newborn care immediately after birth
- Initiate exclusive breastfeeding within 1 hour after delivery

**Childbirth**
- Breastfeed exclusively for six months after birth

**First 6 months**
- Feed adequate amounts of nutritious, age-appropriate foods to children from 6 to 24 months of age, while continuing to breastfeed
- Complete full course of timely vaccinations for infants and children under 2 years

**6 – 24 months**
- Caregivers provide appropriate treatment for children with diarrhea at onset of symptoms
- Seek prompt and appropriate care for signs and symptoms of malaria

**2 – 5 years**
- Accept and adhere to the full course of seasonal malaria chemotherapy for eligible children
Coordinated Multi-Channel Approach

Umbrella strategy with an overarching brand encompassing all the included health topics.

- **Community Mobilization**
  - Community Social Behavior Change (SBC)
  - Community Capacity and Sustainability
- **Mass Media** (Radio, Print, TV, Social Media)
- **Mobile/Digital** (SMS and IVR)
- **Advocacy targeting**- Religious, Traditional and Opinion Leaders
- **Provider Behavior Change**
Breakthrough ACTION implements SBC programs in 11 States and FCT

Breakthrough RESEARCH will implement the study in Kebbi and Sokoto (integrated) and Zamfara (malaria-only)
Family Planning:
Background and formative research
Nigeria situation

- **Total Fertility Rate (TFR):** Nigeria currently has one of the highest fertility rates in the world, with the northwest region experiencing the highest rates.
  - The total fertility rate in the northwest of the country is 6.6 live births per woman
  - Women 40-49 years old average 8.3 births in their reproductive lifetimes (2018 NDHS)

- **Maternal Mortality:** Nigeria currently has more maternal deaths annually than any other country in the world and has the fourth highest maternal mortality ratio.

- **Contraceptive Prevalence:** Only 6.2% of married women in the northwest are currently using any form of modern contraception, and the majority of married women - 68.7% - report no need for family planning for either spacing or limiting
Religious and traditional beliefs are highly valued and strongly influence how maternal and child health is practiced.

There is significant trust and reliance on God’s Will to decide how many children a couple will have.

The use of modern contraceptive methods for childbirth spacing is increasing but often still done in secret, and traditional methods are also commonly used.

Some women would like to use modern contraception but are denied permission by their husband.

A lack of spousal communication about contraception inhibits planning for pregnancy.

What is the Behavioral Sentinel Surveillance (BSS) Survey?
<table>
<thead>
<tr>
<th><strong>BSS design</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Study population</strong></td>
</tr>
</tbody>
</table>
| **Study design** | Cross-sectional (baseline, midline, endline)  
Quasi-experimental and dose-response designs  
Baseline conducted in September 2019; midline and endline planned |
| **Sample size** | 3,043 women with a child under 2 years |
| **Sampling method** | 108 wards across three states;  
Random selection of women with children under 2 years |
| **Data analysis** | Univariate & bivariate analysis; Mixed-effects logistic regression models; Post-estimation predicted probabilities |
Theory of Strategic Communication and Behavior Change

- Survey questions were intended to measure constructs of these domains for MNCH+N, FP and malaria
- Questionnaire was developed jointly with BA/N
## Family Planning ideational metrics

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Domain</th>
<th>Likert-scale statement or question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive</td>
<td>Knowledge</td>
<td>What are the benefits of contraception for children? For a woman?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Side effects from using contraception are normal and usually go away in a few months.</td>
</tr>
<tr>
<td></td>
<td>Contraceptive myths</td>
<td>Use of some contraceptives can make a woman permanently infertile.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contraceptives can harm a woman’s womb.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contraceptives can reduce a man’s sexual urge.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Contraceptives can cause cancer.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Women who use contraceptives may become promiscuous.</td>
</tr>
<tr>
<td>Values</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beliefs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional</td>
<td>Self-efficacy</td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>Social influence</td>
<td></td>
</tr>
</tbody>
</table>

Key programmatic questions

1. Behavioral patterns
What percentage of women are using modern contraception? What are the key behavioral patterns by geography or by sociodemographic characteristics?

2. Knowledge and Beliefs
Are respondents aware of different methods of contraception and their benefits? Are certain myths held by respondents that could impede progress? Do people approve of family planning?

3. Barriers
How do both demand-side (e.g., opposition, knowledge, socioeconomic characteristics) and supply-side (e.g., access, quality, cost) factors augment or impede the uptake of contraceptive services?

4. Social Influence and Decision-Making
How do contraceptive decisions get made in households? Who influences women’s contraceptive use?

5. Ideational Relationships
How important are the individual components of the theory of strategic communication for contraceptive use? What ideations should SBC programs target to maximize impact?

6. SBC Program Potential
What is the potential impact of SBC programs to spur behavior change?
Family Planning

Key findings
1. Behavioral patterns
## Current Modern Contraceptive Use

<table>
<thead>
<tr>
<th>Percentage of women 15-49 years who are currently using any method of modern contraception</th>
<th>Kebbi</th>
<th>Sokoto</th>
<th>Zamfara</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>%</strong></td>
<td><strong>N</strong></td>
<td><strong>%</strong></td>
<td><strong>N</strong></td>
<td><strong>%</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>9.1</td>
<td>974</td>
<td>11.9</td>
<td>1,021</td>
</tr>
<tr>
<td><strong>Household wealth quintile</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lowest</strong></td>
<td>2.4</td>
<td>284</td>
<td>9.2</td>
<td>324</td>
</tr>
<tr>
<td><strong>Highest</strong></td>
<td>18.0</td>
<td>176</td>
<td>30.5</td>
<td>155</td>
</tr>
<tr>
<td><strong>Maternal education, highest level attended</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>None</strong></td>
<td>6.2</td>
<td>739</td>
<td>9.5</td>
<td>85</td>
</tr>
<tr>
<td><strong>Secondary or higher</strong></td>
<td>3.0</td>
<td>102</td>
<td>39.8</td>
<td>58</td>
</tr>
</tbody>
</table>

Clear inequities (in all states) across education levels.
## Intentions to Use Modern Contraception in next 6 months

<table>
<thead>
<tr>
<th>Proportion of women 15-49 years not currently using modern contraception who said they are likely to start in the next 6 months</th>
<th>Kebbi</th>
<th>Sokoto</th>
<th>Zamfara</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>13.7</td>
<td>884</td>
<td>7.8</td>
<td>1,064</td>
</tr>
<tr>
<td><strong>Household wealth quintile</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lowest</td>
<td>8.4</td>
<td>263</td>
<td>11.8</td>
<td>334</td>
</tr>
<tr>
<td>Highest</td>
<td>33.3</td>
<td>166</td>
<td>32.1</td>
<td>151</td>
</tr>
<tr>
<td><strong>Maternal education, highest level attended</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>19.4</td>
<td>667</td>
<td>11.5</td>
<td>843</td>
</tr>
<tr>
<td>Secondary or higher</td>
<td>28.5</td>
<td>95</td>
<td>18.2</td>
<td>58</td>
</tr>
</tbody>
</table>

Clear inequities (in all states) across wealth and education levels.
Contraceptive Outcomes by Geography

Modern Contraceptive Prevalence

Approval of Contraception

Discussions with Husbands about Contraception
Injectables are the most commonly used method.
Implants are next most commonly used.

Among 13% currently using contraception,

Percentage of married women 15-49 years using any method of modern contraception, by type and state.
Lactational Amenorrhea Method

- Only 8 women in the sample reported using LAM.
- LAM was explained during the interview as:
  “Up to six (6) months after childbirth, a woman can use a method that requires that she feeds the baby with only breastmilk (no other formula, water or other food) and that her menstrual period has not returned.”
- Use of LAM may be underestimated; 37.5% of women with a child < 6 months say they are exclusively breastfeeding.
- Even though they are exclusively breastfeeding, these women actually have higher modern contraceptive use than women who are not exclusively breastfeeding – 14.5% versus 9.0%.
Desire to space is the main reason for using modern contraception. Limiting is not commonly cited.
Government is the principal source of family planning.

**Choice of Contraceptive Provider**

Percentage of married women 15-49 years choosing specific contraceptive providers, by state.
2. Knowledge and Beliefs
Contraceptive benefits for future children

Only a minority of women are unable to cite a health benefit of contraceptive use for future children. Most women cite better growth as a benefit. Others cite non-health benefits.

Percentage of married women 15-49 years who reported any benefit of contraceptive use to future children, by benefit state

- Better growth: Kebbi 57.1%, Sokoto 52.3%, Zamfara 63.0%
- Better nutrition: Kebbi 18.4%, Sokoto 18.4%, Zamfara 19.6%
- Better overall health: Kebbi 27.8%, Sokoto 24.4%, Zamfara 16.1%
- Better survival chance: Kebbi 6.8%, Sokoto 9.8%, Zamfara 10.3%
- More attention by mother: Kebbi 20.7%, Sokoto 20.2%, Zamfara 21.5%
- Better education: Kebbi 3.7%, Sokoto 3.3%, Zamfara 2.4%
- More opportunities: Kebbi 1.0%, Sokoto 10.0%, Zamfara 2.0%
Contraceptive benefits for the mother

Similarly, only a minority of women are unable to cite a health benefit of contraceptive use for the mother. Providing a rest period is the most often cited benefit.

Percentage of married women 15-49 years who reported any benefit of contraceptive use to herself, by benefit and state.
Contraceptive Myths

Less than one out of three women believe common contraceptive myths.

Percentage of married women 15-49 years who believe contraceptive myths, by myth and state

- Use of some contraceptives can make a woman permanently infertile
- Contraceptives can harm a woman's womb
- Contraceptives can reduce a man's sexual urge
- Contraceptives can reduce a woman's sexual urge
- Contraceptives can cause cancer
- Contraceptives can give you deformed babies
- Women who use contraception end up with health problems
- Women who use contraceptives may become promiscuous

Kebbi  Sokoto  Zamfara
Ideations: Values, Norms, Self-Efficacy and Beliefs

Percentage of married women 15-49 years by ideational construct

VALUE: Couples who use FP have a better quality of life
BELIEF: It is important that couples discuss FP
VALUE: Do you approve of using FP for spacing?
NORM: Religious leaders should speak publicly about FP
NORM: Most couples in my community use FP for spacing
SELF-EFFICACY: Confident to convince your husband to use FP
SELF-EFFICACY: Confident to use FP
3. Barriers
Reasons for Not Using Modern Contraception

Percentage of married women 15-49 years not currently using modern contraception, by reason for non-use

- Up to God
- Respondent opposes
- Husband opposes
- Breastfeeding
- Fear of infertility
- Fear of side effects
- Knows no method
- Costs too much
- Facility too far

Kebbi ▪ Sokoto ▪ Zamfara
Difficulties faced obtaining current method

Difficulties were not commonly reported.

Fear of partners knowing was the principal difficulty, although facility-level impediments also mattered.
4. Social influence and decision-making
Who decides if you use a contraceptive method?

Few women are able to solely decide about FP. Husbands make more solo decisions than women except in Zamfara. Joint decision-making is most common.

Kebbi:
- Mainly your decision: 45.1%
- Mainly your Partner's decision: 23.1%
- Both decide Together: 31.9%

Sokoto:
- Mainly your decision: 57.5%
- Mainly your Partner's decision: 17.2%
- Both decide Together: 25.4%

Zamfara:
- Mainly your decision: 56.0%
- Mainly your Partner's decision: 17.0%
- Both decide Together: 27.0%
Discussions with husbands are rare.

Few couples talk about fertility goals.

More couples, but still few, discuss contraceptive use.

Percentage of married women 15-49 years who held discussions with husbands, by state

- Kebbi: 5.0%
- Sokoto: 7.0%
- Zamfara: 8.4%

Ever talked to your husband/partner about the number of children to have

- Kebbi: 16.3%
- Sokoto: 16.3%
- Zamfara: 26.8%

Ever talked with husband/partner about using modern contraception

- Kebbi: 16.3%
- Sokoto: 16.3%
- Zamfara: 26.8%
Family planning outcomes among those who did and did not discuss FP with husbands

Women who discuss FP with their husbands have better FP outcomes.

Caution should be taken because this may not be a causal relationship.
5. Ideational Relationships
Ideations and Modern Contraceptive Use

IPC: Women who discussed FP were 3.3x more likely to use FP

Values: Women who approve of FP are 2.9x more likely to use FP

Social: Women who are influenced by health providers are 1.4x more likely to use FP

All differences in likelihood (except those with “X”) are statistically significant at <0.05 level in mixed-effects logistic regression analysis adjusted for ideational and sociodemographic variables, e.g. wealth, age, employment and education (respondent and spouse)
Ideations and Discussions with Husband about FP

**Values:** Women who approve of FP are **2.6x** more likely to discuss FP.

**Social:** Women whose husbands influence FP decisions are **1.3x** more likely to discuss FP.

**Self-efficacy:** Women who are confident about using FP are **1.4x** more likely to discuss FP.

All differences in likelihood (except those with “X”) are statistically significant at <0.05 level in mixed-effects logistic regression analysis adjusted for ideational and sociodemographic variables, e.g. wealth, age, employment and education (respondent and spouse).
Ideations and Approval of Family Planning

**IPC:** Women who have discussed FP are 1.6x more likely to approve of FP.

**Knowledge:** Women who do not believe contraceptive myths are 1.3x more likely to approve.

All differences in likelihood (except those with “X”) are statistically significant at <0.05 level in mixed-effects logistic regression analysis adjusted for ideational and sociodemographic variables, e.g. wealth, age, employment and education (respondent and spouse).
Outcomes tend to be better if there is joint decision-making about contraceptive use.
6. SBC Program Potential
Improved FP Outcomes by Ideational Factors

Percentages represent predicted likelihoods from mixed random effects logistic regression models evaluated at different values of model covariates

- **Use of contraception**
  - Baseline: 13.4%
  - + Correct Knowledge & Myths: 26.6%
  - + Approval, Beliefs: 32.5%
  - + Self Efficacy: 63.6%

- **Discuss FP**
  - Baseline: 22.3%
  - + Correct Knowledge & Myths: 24.4%
  - + Approval, Beliefs: 40.6%
  - + Self Efficacy: 47.8%
  - + Social Influences: 69.2%

- **Approve of FP**
  - Baseline: 43.2%
  - + Correct Knowledge & Myths: 58.1%
  - + Approval, Beliefs: 75.2%
  - + Self Efficacy: 87.0%
  - + Social Influences: 94.5%

Percentages represent predicted likelihoods from mixed random effects logistic regression models evaluated at different values of model covariates.
Program Implications
Program implications

Low and inequitable modern contraception use in the study area

- Vast majority of women are not currently using modern contraception, and there is low approval for family planning among respondents.
- Common reasons for non-use: fatalism, spousal opposition and breastfeeding.
- Most ideations – across cognitive, social and emotional domains – are associated with a wide range of FP outcomes for SBC programs to target in their activities.

Improve social acceptance, dispel myths and improve approval of FP

- SBC programs must work on improving social acceptance of FP and dispel myths (e.g. contraception causes cancer or infertility). Health providers will play an important role.

- Improved knowledge and supportive beliefs could also help build positive perceptions of contraception and improve respondent approval of family planning
Program implications

Spousal support is critical for contraception use

- SBC programs could maximize impact by engaging spouses in promotion activities.
- Spouses play an outsized role in FP decisions and their support is critical for uptake.
- More research is needed to better understand male ideations in order to target SBC programs for this key stakeholder group.

SBC has potential to substantially improve FP outcomes

- Simulations suggest that better knowledge of FP benefits and more accurate risk perceptions would notably impact a range of FP outcomes with the largest effects of coming from increased respondent approval and couples’ collaboration.
- Simulations also suggest most sizeable impacts come from improved cognitive (e.g. beliefs, values), emotional (e.g. self-efficacy) and social (e.g. spousal support) factors.
What’s next?
Next steps

- Conduct BSS analyses to inform SBC program adaption and scale-up
- Prepare manuscripts and research briefs to disseminate results
- Plan the BSS midline survey (although delays due to COVID19)
- Present BSS results by specific health area in our webinar series
## Future webinar events

<table>
<thead>
<tr>
<th>Webinar Topic</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global webinar – BSS results overview</td>
<td>June 11</td>
</tr>
<tr>
<td>National webinar – BSS results overview</td>
<td>June 25</td>
</tr>
<tr>
<td>Pregnancy and childbirth</td>
<td>July 23</td>
</tr>
<tr>
<td>Breastfeeding</td>
<td>August 6</td>
</tr>
<tr>
<td>Vaccination</td>
<td>August 20</td>
</tr>
<tr>
<td>Sick child care-seeking and treatment</td>
<td>Sept 3</td>
</tr>
<tr>
<td>Malaria</td>
<td>Sept 17</td>
</tr>
<tr>
<td>Family planning</td>
<td>Sept 30</td>
</tr>
<tr>
<td>Inequalities</td>
<td>Oct 7</td>
</tr>
</tbody>
</table>
Future work and significance

• BSS baseline results are a first step for assessing the effectiveness and cost-benefit of integrated versus malaria-only SBC programs in Nigeria

• Highlight ideations and behaviors during this baseline period to inform SBC program scale-up and adaption

• Present new ideational metrics across MNCH+N areas and quantify their relationship with behavioral outcomes to test behavioral change theories

• Link BSS results with routine program data or health facility records to examine impact of supply- and demand-side factors on service use
Project Team

Paul L. Hutchinson, Tulane University (PI)
Paul C. Hewett, Population Council (co-PI)
Emily White Johansson, BR Nigeria/Tulane
Elizabeth Omoluabi, CRERD
Akanni Akenyemi, CRERD

Dele Abegunde, BR Nigeria/Population Council
Dominique Meekers, Tulane University
Udochisom Anaba, BR Nigeria/Tulane
Stella Babalola, Johns Hopkins University

Acknowledgements

Ian Tweedie, BA Nigeria
Mathew Okoh, BA Nigeria
Shittu Abdu-Aguye, BA Nigeria
THANK YOU

This presentation is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the terms of the Breakthrough RESEARCH Project (No. AID-0AA-A-17-00018). The contents are the responsibility of Breakthrough ACTION + RESEARCH and do not necessarily reflect the views of USAID or the United States Government.

ABOUT BREAKTHROUGH ACTION + RESEARCH

Breakthrough ACTION and Breakthrough RESEARCH are USAID’s flagship programs for social and behavior change working to increase the practices of priority health behaviors for improved health and development outcomes.

https://breakthroughactionandresearch.org/