



# **An Action Research to Reduce the Vulnerability of AYP to HIV Infection in Selected States of Nigeria: An Overview**

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# Background

- Based on projected 2013 estimates, about 3.3 million Nigerians currently live with HIV
- It is estimated that 220,394 new HIV infections occurred in 2013 with a total of 210,031 AIDS related deaths
- The HIV burden is still higher for women than men across most age groups,
- The HIV burden among adolescent males aged 15-19 years and young men aged 20-24 years in 2012 was 2.9%
- Corresponding figures for 15-19 year old girls and 20-24 year old young women stood at 2.5% and 3.7% respectively

# Problem Statement

- Adolescent and young people (AYP) are especially at risk of HIV & AIDS, whether in school or out of school
- The vulnerability of the young females is even more acute.
  - ▣ Early exposure to sex is a risk factor for STIs/HIV
  - ▣ Older men target young girls as sex partners
  - ▣ Some cultural factors make young women vulnerable e.g. early marriage to older men, especially those in polygamous unions
- Young women are also disproportionately affected by sexual violence and its complications.

# Justification

- Nigeria is committed to All In!, a United Nations' global initiative to address HIV among AYP.
- The initiative aims to ensure that adolescents infected and affected by HIV are not left behind in interventions
- Despite the myriad of programmes offering HIV related interventions in Nigeria,
  - ▣ the level of knowledge of the infection among young people
  - ▣ their uptake of counselling and testing services, and
  - ▣ access to other prevention and care services remain inadequate

## Justification (contd.)

- It is presumptuous to think that HIV interventions targeting the general population will meet the needs of the AYP
- This reality informed the development of the National HIV Strategy for AYP with broad strategies and proven interventions
- However, there is the gap of the 'how best' to reach the AYP with these interventions. For instance:
  - ▣ how to identify the adolescents living with HIV and put them in care?
  - ▣ how to increase utilization of condoms among the sexually active AYP?
  - ▣ how to reach AYP- especially, vulnerable girls with SBCC messages in the form acceptable to them

## Justification (contd)

- The in-school AYP were reached with Family Life and HIV Education (FLHE) with its attendant challenges while out of school AYP had minimal exposure to HIV programming.

# Goal



- By the end of 2017, 20% of Adolescents and young people (15-24 years old) (AYP) especially vulnerable girls and young women in two selected LGAs of 4 States receive a package of comprehensive HIV prevention services based on diagnostic research

# Aim and Objectives

## **Aim**

- The aim of the action research is to reduce the vulnerability of adolescent girls and young women to HIV & AIDS infection through action research.

## **Specific Objectives**

- Identify factors (individual, social, environmental and systemic) that increase adolescent girls and young women's vulnerability to HIV & AIDS.
- Develop and implement actionable HIV-related intervention models to address the vulnerabilities of adolescent girls and young women to HIV & AIDS infection.
- Assess the effectiveness of the HIV & AIDS intervention models in the target population

# Definition of Action Research

- Action research is known by many other names, including participatory research, collaborative inquiry, emancipatory research, action learning, and contextural action research, but all are variations of same theme
- Put simply, action research is “learning by doing” - a group of people identify a problem, do something to resolve it, see how successful their efforts were, and if not satisfied, try again
- While this is the essence of the approach, there are other key attributes of action research that differentiate it from common problem-solving activities that we all engage in every day.

# Definition of Action Research (contd.)

- "Action research...aims to contribute both to the practical concerns of people in an immediate problematic situation and to further the goals of social science simultaneously
- Thus, there is a dual commitment in action research to study a system and concurrently to collaborate with members of the system in changing it in what is together regarded as a desirable direction
- Accomplishing this twin goal requires the active collaboration of researcher and client, and thus it stresses the importance of co-learning as a primary aspect of the research process."

# Study Design

- The action research employed **a quasi-experimental, non-equivalent control group study design**
- Two LGAs in each state of study were purposively selected to serve as the experimental LGAs while an LGA with similar characteristics was selected to serve as the control LGA.

# Study Design

- The non-equivalent control group design is particularly suited to introducing an intervention into (say an LGA) when one wants to compare the programme effects in that LGA against a similar, but not necessarily equivalent LGA where there is no intervention
- The study and control LGAs were not contiguous and were sufficiently distant from each other to reduce contamination from the movement of residents.

# Study location

| State     | LGA                  |
|-----------|----------------------|
| Akwa-Ibom | Ikot-Ekpene          |
|           | Oron                 |
|           | Eket (control)       |
| FCT       | Bwari                |
|           | Gwagwalada           |
|           | Abaji (control)      |
| Kaduna    | Chikun               |
|           | Lere                 |
|           | Sabon'gari (control) |
| Oyo       | Ogbomosho North      |
|           | Ibadan North         |
|           | Afijio (control)     |

# Baseline Assessment



- In this phase, we used questionnaire survey and qualitative methods (PLAs, FGDs, KIIs and IDIs) to gather data on situational analysis of female AYP vulnerabilities to HIV infection at the study and control sites.
- Further, bio-testing of respondents was done to determine the burden of HIV in the study locations

# Household Questionnaire Survey

- **Target population:** Female AYP aged 15-24 years
- **Sample size determination:**
  - ▣ A minimum sample size of 302 was calculated using appropriate methods and this was increased to 360 to allow for non response
  - ▣ For robust interpretation of data at the local government level, 360 female AYP aged 15-24 years were interviewed per LGA.
  - ▣ Sample size per state was thus 1080, and 4320 in the 4 states.

# Household Questionnaire Survey

- The instrument for the household survey was a pre-tested, interviewer-administered questionnaire (adapted from various research instruments that have been used and validated in the country)

# HIV Testing

## □ **HIV testing:**

- ▣ All eligible females who agreed to answer questions on the behavioural component were counselled for HIV testing
- ▣ Consent of the respondents or legal representative were sought and obtained
- ▣ The testing approach involved the following steps:
  - Pre- test counselling: provided by the Counsellor-tester
  - Field testing and QA: conducted using the Standard Operating Procedure (SOP) for each test kit.
  - Post-test counselling: All tested clients were given post-test counselling, disclosure of results were done after the last day of data collection.

# Qualitative Study

- A method-mix was used including:
  - ▣ Participatory Learning and Action (PLA) techniques with AYP
  - ▣ In-depth Interviews (IDIs) with community gate keepers (influential persons living within the community whose opinions may significantly represent the opinions of the people living in the community)
  - ▣ Key Informant Interviews (KIIs) with other community stakeholders (e.g. Health workers)

# Qualitative Study

- 36 AYP were recruited purposively in each LGA and divided into 3 groups
  - (adolescent girls (15-19 yrs),
  - young women (20-24 yrs) and
  - young men (18-24 yrs) to participate in the PLA sessions
- A fourth group made up of females (15-24 years) identified to be at higher risk of contracting HIV
  - Engaging in transactional sex and multiple partnering;
  - High rate of partner change;
  - Females whose occupations put them at risk including female hawkers around high risk locations, bar maid, food vendors, domestic helps etc.

# Qualitative Study

- In addition, a fifth group of about 8-10 older men (aged 30-40yrs) were recruited to also partake in the PLA/FGDs because of their role in the vulnerability of girls and young women in matters of HIV infection/ STIs.
- About 14 other adult gate keepers and stakeholders partook in the IDIs and KIIs in each LGA:
  - ▣ Religious leaders, traditional leaders, teachers, media practitioners, parents, youth leaders, LGA health workers, HIV programmers, Community development officers

# Intervention phase

- The goal of the intervention phase was to develop and implement actionable HIV-related intervention models to address the vulnerabilities of adolescent girls and young women to HIV & AIDS infection
- The approach adopted was the Breakthrough Series Collaborative

# Approach

- The baseline assessment adopted a **sequential mixed method** approach
  - Where the intention was to quantify the real problems amongst AYPs;

**And**

- Use the qualitative approach to throw up possible solutions through participatory methods with the AYPs.

# Approach

- **The** intervention phase expanded the participatory approach by designing specific interventions to reduce the vulnerability of AYP using the context of the problems found at the base line
- The problems called '**Change Topics**' and the solutions '**Change Ideas**'

# The Breakthrough Series Collaborative

## Methodology

- The Breakthrough Series (BTS) collaborative (Learning Collaborative) is an improvement approach that relies on the spread and adaptation of existing knowledge to multiple settings simultaneously, to accomplish a common aim.
- Methodology developed in 1995 by the Institute for Healthcare Improvement (IHI) and Associates in Process Improvement (API)
- More than 800 teams from over 500 health care organizations have participated in BSCs led by IHI in over 30 different topics

# Definition of Terms in Intervention Phase

- ❑ Change Concept: An overarching model for improvement
- ❑ Change topic: Objective findings of problems from baseline research for which interventions can be carried out
- ❑ Contextual factors: These are local findings or circumstances that surround the change topic in the location where the problem/challenge was identified.
- ❑ Change Idea: Specific and innovation adaption of the change concept to local situation
- ❑ Change package: A collection/combination of change ideas that have been tested and found to give the desired change and thus can be scaled up

Change topic

Contextual factors

Change ideas

Reduced condom  
accessibility to age  
group 15-19 years

-Discrimination by  
condom sales  
personnel

-Use of condom  
vending machine

Sensitizing condom  
sales rep against  
discrimination.

- Distribution of  
condoms by peers.

# The AYP Action Research Change Concept

- The change concept for the AYP Action research was the Minimum Prevention Package of Intervention (MPPI)
- MPPI is a strategy to operationalize the combination prevention framework in Nigeria, using information about the drivers of the epidemic as it relates to various target populations.
- It recognises the processes of behaviour change and structural and environmental influencers of behaviour.
- MPPI is hinged on 3 main interventions:
  - ▣ Behavioural
  - ▣ Biomedical and
  - ▣ Structural

# Learning Sessions



- Learning sessions were fora for sharing knowledge; discussing methodology and planning for the PDSA cycles (action periods of intervention)
- Teams came together for three two-day Learning Sessions over the course of five months, beginning, middle and end of BTS

# Scoring of Change topics

## Impact

- Prevalence
  - ▣  $\geq 50\%$  : 3
  - ▣ 21-49% : 2
  - ▣ 0-20% : 1
- PH importance
  - ▣ High : 3
  - ▣ Low : 1.5

## Feasibility

- Ease of intervening
  - ▣ Very easy to implement : 2
  - ▣ Not easy to implement : 1
- Time interval for results
  - ▣ Results achievable in  $<4$  wks: 2
  - ▣ Results not achievable in 4 wks: 1

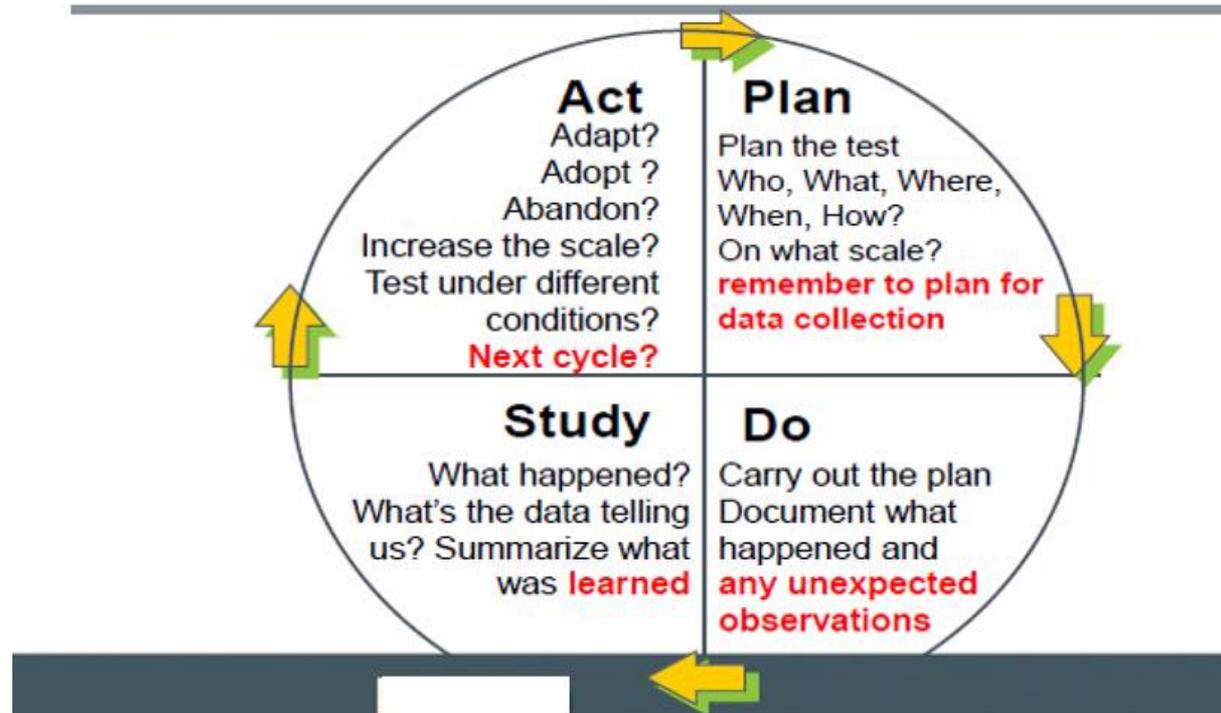
# Prioritization Matrix

| <b>List of change topics</b> | <b>Prevalence of the problem</b> | <b>Importance (Public Health) of the problem</b> | <b>Ease of intervening</b> | <b>Time interval for result</b> | <b>Total points</b> |
|------------------------------|----------------------------------|--|----------------------------|---------------------------------|---------------------|
|                              |                                  |  |                            |                                 |                     |
|                              |                                  |  |                            |                                 |                     |
|                              |                                  |  |                            |                                 |                     |
|                              |                                  |  |                            |                                 |                     |

# AYP learning sessions

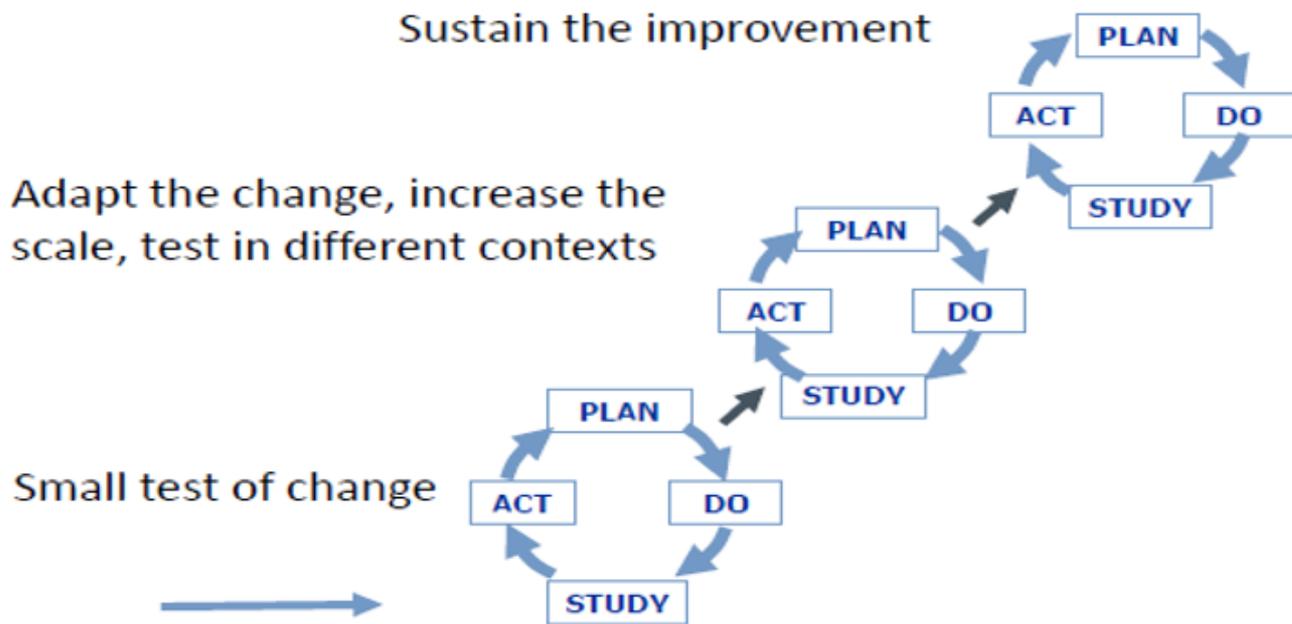
- Adolescents who were purposively selected, with the collaboration of partnering local CSOs, held parallel learning sessions during all 3 learning sessions
- The meetings were facilitated by a youth facilitator
- Objectives include
  - ▣ Validate problems/change topics identified from research
  - ▣ Develop change ideas that fed into the site specific change packages
- The youth facilitator made presentation of findings at the larger group learning sessions

## The Plan-Do-Study-Act (PDSA) Cycle



# Rapid Change Cycle

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# Possible outcomes of change ideas



- ❑ Implemented as is it (adopt)
- ❑ Modified (adapt)
- ❑ Increase in scope (expand)
- ❑ Tested under other conditions
- ❑ Dropped (abandon)

# The End line Assessment

- The end-line phase employed the use of similar instruments used at baseline to collect data at end-line, from same locations, based on same sample size, but not the same individuals
- However, an additional section was added to the household questionnaire that assessed exposure of respondents in communities to intervention in order to examine the reach of the interventions
- Qualitative methods now devoid of PLAs because all learning sections had been concluded; only FGDs, KIs and IDIs.

# The End line Assessment

- An additional group of PLHIV was added to FGD sessions based on field findings during intervention
- Having implemented several solutions in different places, the end line survey sought what might have changed in the research locations since the baseline assessment
- In order to assess this change and to be able to situate them in the context in which they occurred as well as the reach of the interventions and perhaps the effect, we used a **Concurrent Mixed Method** in the end line assessment.

THANKS FOR LISTENING



# Weighting of vulnerability factor

- Weighting was derived from consensus of content-experts who were members National Prevention Technical Working Group headed by the National AIDS Control Agency (NACA).
- Twenty expert-members were asked to score each factor over ten points with respect to the degree to which they consider that it confers vulnerability to acquiring HIV.
- Mean scores were calculated across each factor and the mean scores were converted to have a denominator of one

# Weights of vulnerability factors

| S/No | Vulnerability factor    | Weight |
|------|-------------------------|--------|
| 1    | Unprotected sex         | 0.9    |
| 2    | Rape                    | 0.9    |
| 3    | Ever had STI            | 0.8    |
| 4    | Transactional sex       | 0.8    |
| 5    | Multiple sex partner    | 0.8    |
| 6    | Low HIV risk perception | 0.7    |
| 7    | Substance use           | 0.7    |
| 8    | Gender based violence   | 0.7    |
| 9    | Early sex debut         | 0.7    |
| 10   | Inter-generational sex  | 0.6    |
| 11   | Poverty                 | 0.6    |
| 12   | Teenage pregnancy       | 0.6    |
| 13   | Early marriage          | 0.5    |
| 14   | Incest                  | 0.4    |