Nigeria - Multiple Indicator Cluster Survey/National Immunization Coverage Survey 2016-17, Fifth round (MICS) and NICS (third Round)

National Bureau of Statistics (NBS) - Federal Government of Nigeria

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Overview

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Overview

ABSTRACT
Executive Summary

Introduction

This report is based on the Nigeria Multiple Indicator Cluster Survey (MICS 5) 2016-17, conducted between September 2016 and January 2017 by National Bureau of Statistics (NBS), with technical and financial support from UNICEF, WHO, UNFPA, Bill and Melinda Gates Foundation, Save One Million Lives and NACA. The survey provides statistically sound and internationally comparable data essential for developing evidence-based policies and programmes, and for monitoring progress toward national goals and global commitments. Among these global commitments are those emanating from the World Fit for Children Declaration and Plan of Action, the goals of the United Nations General Assembly Special Session on HIV/AIDS, the Education for All Declaration and the Millennium/Sustainable Development Goals (MDGs/SDGs). The Nigeria Multiple Indicator Cluster Survey 2016-17 has been designed to measure achievements of MDGs and provide baseline for SDGs. More specifically, Nigeria MICS 2016-17 will assist UNICEF in monitoring and evaluating its country programmes including those on child survival, development, protection and rights of children, women and men.

The 2016-17 Nigeria National immunisation Coverage Survey (NICS) was embedded within the Nigeria Multiple Indicator Cluster Survey (MICS) 2016-17 and designed to provide routine immunisation vaccination coverage in children aged 12 to 23 months at the national level, 36 States and the Federal Capital Territory (Abuja). MICS is a household survey designed to provide information on indicators related to the situation of children, women and men.

Survey Objectives

The objectives of Nigeria Multiple Indicator Cluster Survey (MICS) 2016-17 and NICS 2016/17 are to:

(1) Provide up-to-date information for assessing the situation of children and women in Nigeria

(2) Generate data for the critical assessment of the progress made in various programme areas, and to identify areas that require more attention

(3) Contribute to the generation of baseline data for the SDG

(4) Provide data needed for monitoring progress toward goals established in the post Millennium Declaration and other internationally agreed goals, as a basis for future action

(5) Provide disaggregated data to identify disparities among various groups to enable evidence based actions aimed at social inclusion of the most vulnerable.

(6) Provide reliable data for: a. Immunisation coverage of children age 12 to 23 months for the basic antigens: BCG, DPT 1-3, OPV 0-3, Measles

b. Immunisation coverage of children age 12 to 23 months for complementary antigens: Yellow fever, Hepatitis B and Vitamin A

(7) Estimate the trend of Immunisation coverage since 2006

(8) Provide a geographical database on Immunisation coverage (for mapping)

(9) Determine the most frequent obstacles to utilization of Immunisation services

(10) Provide information on reasons for utilization or non-utilization of Immunisation services

Sample and Survey Methodology

MICS sample design

The Nigeria MICS 2016-17 was designed to provide estimates for a number of indicators on the situation of children women and men at national, urban/rural, states and for the six geopolitical zones. States in each zone were identified as the main sampling strata and were also the principal units in which Nigeria MICS 2016-17 indicators were reported while enumeration areas (EAs) within each state were used as the primary sampling units (PSUs). The sample size computation of the Nigeria MICS 2016-17 was based on the estimated prevalence of stunting in children aged below five years of age – it was proposed that 60 randomly selected EAs per state would be sufficient for estimating MICS indicators at state level. In Kano and Lagos states the respective state bureaus of statistics requested for larger sample sizes to allow for reporting of indicators by senatorial districts. A senatorial district is an administrative region represented by a senator in Nigeria; there are three (3) senatorial districts in each of the 36 states and one senatorial district in the FCT (Abuja). The sample required to allow for reporting by senatorial district level in both Kano and Lagos was 120 EAs. The combined sample of 60 enumeration areas per state and 120 enumeration areas in Lagos and Kano is referred to as as the “MICS sample”.

NICS (National Immunisation Coverage Survey) Sample design

The Nigeria NICS 2016-17 sample design based on precise estimation of pentavalent 3 vaccination coverage within ±10% in each state (reporting domain). When the proposed MICS samples were evaluated, it was realised that the “MICS sample” would not have been sufficient to estimate state vaccination coverage for children aged 12 to 23 months in 20 out of the 37 states based on the desired precision parameters. These states were Abia, Akwa Ibom, Anambra, Bayelsa, Benue, Cross River, Delta, Edo, Ekiti, Enugu, Imo, Kogi, Kwara, Ogun, Ondo, Osun, Oyo, Plateau, Rivers and FCT (Abuja). Consequently, to enable precise estimation of vaccination indicators in each state, supplemental sampling was conducted to meet the requirements for vaccine coverage estimation, in the 20 whose MICS 2016-17 was deficient. Immunisation indicators in these 20 states were estimated from analysis of the combined sample (supplemental sample + original MICS sample), while estimation of other MICS indicators these 20 states were done exclusively using the MICS sample.

Questionnaires

Nigeria MICS 2016-17 questionnaires

Questionnaires for the Nigeria, MICS 2016-17 were based on adaptations of standard MICS questionnaires and were used to collect data on household and individual level parameters including information on immunisation status of children aged 12 to 23 months.

A household questionnaire was administered to the household head or their representative to ascertain household level characteristics such as the size of the household, household composition, occupation of household head, household asset ownership and access to water and sanitation. Individual level question o3 months and that only components of the questionnaire collecting age, gender and vaccination status were administered.

The questionnaires used in Nigeria, NICS 2016/17 were based on the MICS5 questionnaire adapted for Nigeria. NICS 2016/17 was based on information collected from a household and an immunisation questionnaire. The household questionnaire was used to collect socio-demographic information and other general characteristics on all members of the household (usual residents), household and the dwelling units. Responses needed for computation of immunisation coverage indicators were contained in the household questionnaire and in the under-five questionnaire from the MICS set of questionnaires

Fieldwork and Data Processing

Training for the fieldwork was conducted in thirty-one (31) days in August 2016. The data were collected by 78 teams; each team comprised of four interviewers, one driver, the measurer and a supervisor. Fieldwork began in September, 2016 and concluded in January 2017. Using Computer Assisted Personal Interviewing (CAPI), the data were electronically captured from the field and transmitted to a central server, using CSPro CAPI application, Version 5.0. Data were analysed using the Statistical Package for Social Scientists (SPSS) software, Version 21. Model syntax and tabulation plans developed by UNICEF

MICS team were customized and used for this purpose.

Data management and analysis

Data were simultaneously collected in the core (MICS) and in the supplemental EAs by teams of enumerators who had attended similar training. All data were collected electronically using CAPI program designed using CSPro and running on tablet computers. Collected data were synchronized with a centralized, password protected server managed by NBS. Data processing included identification and resolution of inconsistencies and recoding of variables. Following data cleaning, two datasets were generated:

1) MICS dataset containing data collected only from the core (MICS) EAs

MICS dataset was used for the analysis of all non-immunisation related indicators in the Nigeria MICS 2016-17 report and table CH.1: of the child health chapter while the MICS/NICS dataset was used for generation of tables CH.2A to CH.2F of the same report. In addition, further analysis of the MICS/NICS dataset is presented as a separate report Nigeria, National Immunisation Coverage Survey 2016/17, Final Report.

MICS dataset can be found on the Nigeria Data Archive (NADA) page hosted on the NBS website

2) MICS/NICS dataset which was an aggregation of data collected from the core (MICS) EAs and the supplemental EAs.

Link to MICS/NICS dataset can be found here

A variable labelled source is used to identify whether data for an observation was collected from the core (MICS) EAs or from the supplemental EAs. In the Nigeria MICS 2016-17 report, table CH.1 has been generated from the core MICS sample and includes 5577 children aged between 12 and 23 months. Tables CH2.A to tables CH2.F are computed from the combined sample of core MICS enumeration areas and the supplemental enumeration of 6268 children aged between 12 and 23 months. Given that tables CH.2.1 to CH.2.6 have been produced from a larger sample, their estimates have much narrower confidence bounds especially for state level estimates.

Steps for combining data from core (MICS) EAs and data from supplemental (NICS) EAs to

1) Filter CH dataset from core EAs and extract data for children aged between 12 and 23 months and keeping only variables related to child demographic characteristics and immunisation.

2) Combine data from core EAs and data from supplemental EAs

Characteristics of Households

The age structure of Nigeria shows a largely young population. Of the 182,165 household members enumerated, forty-Seven percent of the population are under the age of 15 years, contributing to the high dependency ratio in Nigeria. Households are traditionally headed by men, but a substantial proportion, about fifteen percent, of households were headed by women. Majority of Nigerian, 63.4 percent of households, reside in rural areas. Twenty-two percent of the household heads had no education, while 19.3 had primary education, 26.7 percent with Secondary / Secondary-technical and 16.3 percent had higher education.

Characteristics of Women, Men and Under five Children

Women: Majority of the woman are married, with 7 in 10 women age 15-49 years being currently married. About 23 percent of them had no education, 14.4 percent with primary education, while 36.3 had secondary education and 10.2 percent had higher education. Sixty-four percent of women resides in the rural areas.

Men: In contrast to the women, about half of eligible men were never married. Among the eligible men, 10.3 percent of them had no education, 13.2 percent with primary education, while 45.2 had secondary education and 17.3 percent had higher education. Similar to the women, most men, sixty-three percent, resides in the rural areas.

Children: There is a somewhat higher proportion of children in the rural areas, 69.5 percent, compared to the adult population. Likewise, a higher proportion of children under 5 years old were in the poorest households, 23 percent,

compared to 17.8 percent in the richest households.

Child Mortality

MICS 5 estimate of neonatal mortality rate is 39 per 1,000 live births, while Infant mortality rate is 70 per 1,000 live births. This implies that 1 in 15 livebirths in Nigeria die before their first birthday according to the MICS5 2016-17 survey. Also, under-five mortality rate is estimated to be 120 per 1,000 live births – 1 in 9 live births die before their fifth birthday.

Urban-rural mortality differential is pronounced across early childhood age groups. As expected, mortality rates in urban areas are lower than rural areas in Nigeria. Also, mortality is higher in the poorer households, as one out of 6 children who lives in the poorest household in Nigeria die before their fifth birthday. Nine states in the northern region have higher U5 mortality rates than the national average: Nasarawa, Niger, Bauchi, Gombe, Jigawa, Kano, Katsina, Kebbi, and Zamfara. To achieve SDG 3.2, there must be at least 50 percent reduction in early childhood mortality rates before 2030 across all groups.

Nutrition

Three in ten children under 5 years have acute or chronic malnutrition. Two in 5 children under five years are stunted and 1 in 5 children under 5 years are severely stunted. Fourteen in 36 states in Nigeria have wasting prevalence that are classified as serious for public health significance. Mothers with at least secondary education have higher proportion of obese children than those with lower and non-formal education.

Quite a low proportion of mothers, three out of 10, initiated early breastfeeding as recommended by WHO, however, 7 in 10 mothers eventually initiated breastfeeding within 24 hour of birth delivery. The 24 percent exclusive breastfeeding rate is yet to meet the WHO Global nutrition target of 50 percent. One in two infants is predominantly breastfed while just one in five is exclusively breastfed.

Salt Iodization

Iodized salt containing 15 ppm or more are consumed in 69 percent of sampled household with higher prevalence in South South and South East. There was slight variation in households using adequately iodized salt in urban and rural areas. Richer households consume adequately iodized salt more than others in poorer wealth quintile.

Low Birth Weight

Only one in 4 live births were weighed at birth, and fifteen percent of these births are classified as low weight because they are less than 2,500 grams at birth. Although more babies are weighed at birth in the southern part of the country, the proportion of low birth weights babies is less than 20 percent across all the geopolitical zones in Nigeria.

Child health

Vaccination coverage is an important indicator of Immunization, one of the cost-effective means of ending preventable deaths of newborn and under 5 children. Eighteen percent of children age 12-23 months received all recommended vaccination by their first birthday in the survey. Specific vaccine coverage for children age 12-23 months at any time before the survey are 53.1 percent for Tuberculosis; 34 percent coverage for polio, 34.4 percent coverage for pentavalent vaccine, 41.8 percent coverage for Measles and 39 percent coverage for yellow fever. The MICS 2016-17 survey also showed that about half of women with a live birth in the last two years prior to the survey received antenatal tetanus toxoid, which protected against neonatal tetanus.

In terms of malaria prevention during pregnancy, only one out of six women received adequate doses (three or more) of SP/Fansidar during their last pregnancy that led to live birth in the last two years. Reported illnesses in under-five children, two weeks preceding survey, are diarrhoea in 14.3 percent, ARI in 3 percent, and malaria fever in 25.4 percent of children under five.

Water and Sanitation

Access to safe and clean drinking water and sanitation is essential to human health. Sixty-four percent of household members use improved sources of drinking water. Only 2.3 percent of households using unimproved drinking water sources have appropriate water treatment method. About fifty-two percent of household population use improved sanitation facility, mostly using pit latrine with slab and flush or pour flush into septic tank. 2 in 3 household members use shared improved sanitation facilities. Overall, 26.5 percent of households have both improved drinking water source and improved sanitation facility. One in 10 households have a specific place for handwashing where water and soap or other cleansing agents are

present. There are differentials across social groups in Nigeria.

E.Coli contaminated drinking water is high and of public health concern as 90.8 percent of household members in Nigeria drink faecal contaminated water. Percentage of Household with improved drinking water sources accessible on the premises, available when needed, and free from faecal contamination is remarkably low 3.7 percent.

Reproductive Health

Fertility is high in the Nigerian population, as a woman will have about 6 children over her childbearing years. Adolescent birth rate is 120 per 1,000 women in the 15-19 age group. Adolescent fertility differentials per 1,000 women age 15-19 are: 59 in urban; 154 in rural; 35 in the richest quantile; 199 in the poorest quantile; 9 in women with higher education; 232 in women with non-formal education. Also, three in 10 women age 20-24 have had a live birth before age 18.

One out of 8 women currently married or in union are using contraception (13.4 percent). Unmet need for family planning in Nigeria is 27.6 percent. The most commonly used contraceptive methodis injectable (4.3% percent). Contraceptive prevalence ranges from 7.6 percent in North-East to 25.8 percent in South-West. About 21 percent of married women in urban areas and 10 percent in rural areas use a method of contraception. Adolescents are far less likely to use contraception than older women.

About 65.8 percent received antenatal care from a skilled provider and 49.1 percent of women with a live birth in the last two years had adequate antenatal visit (four or more antenatal visits). Two out of 5 of births were delivered by skilled personnel- doctor, nurse, midwife or auxiliary midwife. Assistance by skilled birth attendant is as low as 23.6 percent in North-West and as high as 90.7 percent in the South-East. 37.5 percent of women age 15-49 used health facility for their last delivery;24.4 percent in public health facilities and 13.1 percent in private health facilities.

Early childhood development

One out of 3 children attends organized early childhood education programme in Nigeria, with more children in Southern regions than Northern part. About two-thirds (62.8 percent) of the children have an adult household member engage them on four or more activities that promote learning and school readiness. Involvement of biological father and mother in activities that support early learning is as low as 10.8 percent and 28.1 percent respectively. Only 5.6 percent of the children live in households where there are at least 3 children’s books accessible to the child. Three in 5 children age 36-59 months are developmentally on track in at least three of the four early childhood development domains. One third of children were left with inadequate care either by being left alone or in the care of another child.

Literacy and Education

The percentage of young people age 15-24 years who can read a short simple statement about everyday life or who attended secondary or higher education was used in the survey to estimate literacy rate. Literacy rate is 59.3 percent for women and 79.9 percent for men age 15-24. The rate is very low among young women and men in Niger, Bauchi, Gombe, Yobe, Jigawa, Katsina, Kebbi, Sokoto and Zamfara, which are all in the Northern region of Nigeria. School readiness is also low as 39 percent of children in the first grade of primary school attended pre-school the previous year.

Net intake rate in primary education is 39.4 percent. One third of children of school-entry age were enrolled in first grade of primary school. Three in 5 of primary school age children and two in 5 secondary school age children are currently attending school. 94 percent of children reach final grade (primary 6) in government-owned primary school.

Primary school completion rate is 63 percent. This implies that six in 10 children of primary completion age of 11 years are in the last grade of primary education. Transition rate to secondary school is 49 percent. Gender parity for primary school is 0.95, and 0.97 for secondary school.

Child protection

Forty-seven percent of children under age 5 have their birth registered under civil authority. About 50 percent of children are involved in child labour, while 39 percent are working under hazardous condition. In Nigeria, about 85 percent of children age 1-14 years were subjected to at least one form of violent discipline.

Early marriage and domestic violence

The percentage of women who married before age 15 years in Nigeria is 18.5 percent. Forty-four percent of women age 20-49 years married before age 18 years. About 18.4 percent of women had some form of female genital mutilation. One in three women in Nigeria feel that a husband/partner is justified in hitting or beating his wife in at least one of the five

situations.

HIV/AIDS and Sexual Behaviour

Majority of young people have heard of HIV/AIDS but few have correct and comprehensive knowledge of the disease. Twenty-nine percent of women and thirty-four percent of men have knowledge of the two main ways of HIV prevention. About half of the women can identify the 3 ways of HIV transmission from mother to child. Stigma and discrimination is still high in Nigeria because only one in ten persons in Nigeria have accepting attitude towards people living with HIV.

Seven out of ten men and six out of ten women know where to do HIV test. In addition, only 1 in 7 have been tested and know the result of test in the last 12 months. More men know where to go for test, but more women actually do the test before or in the last 12 months to the survey.

Early sexual debut is higher in the Northern Nigeria, among female age 15-24 who do not have formal education, married, live in poorest wealth quintile household and in rural areas. Other risk factors for HIV/AIDS are having multiple sexual partner and sex with a non-marital, non-cohabiting partner, as well as age-mixing among sexual partner; very few women age 15-49 (2 percent) had sex with more than one partner in the last 12 months. Percentage of men (11 percent) who were engaged in the same risky sexual behaviour is higher than female. Age mixing is a common practice as 2 in 5 young women (41 percent) age 15-24 reported that they had sex with a man 10 or more years older. Age mixing is notably high in North West, rural areas, among ever married women, no education women and poor households.

Sixty-one percent of young men and 47 percent of young women who had sex with non-marital and non-cohabiting partners reported use of condom during the last sex in the last 12 months preceding the survey. Condom use among different social groups who are involved in non-regular sex is specifically higher in South East, urban areas, age group 23-24 year, never married, higher education and richest wealth index quintile household.

Access to Mass Media and Use of Information/Communication Technology

Exposure to specific media (newspapers/magazines, radio and television) at least once a week among young people is low - 5.5 percent of young women and 18.5 percent of young men. South west has the highest media exposure: 91.7 percent of males and 80.7 percent of female exposed to at least one of the three media sources in a week. Exposure to computer and the internet is also low.

13.4 percent of young women and 20.6 percent of young men had used computer during the last 12 months. Also, 17.3 percent of young women and 32 percent of young men had used the internet during the last 12 months.

Subjective well-being

At least nine in 10 young women and men age 15-24 years are very or somewhat happy. Young people who are happy are more than those who are satisfied with life, and those who are satisfied with life are more than those who perceived a better life. Zamfara (97.8 percent) and Akwa-Ibom (99.6 percent) have the highest percentage of young women and men who have overall life satisfaction respectively. Seven in 10 young women and men perceived that their lives improved during the last one year and expect that it will get better after one year.

Tobacco and Alcohol Use

Use of tobacco products is higher among men than women in the last one month: 6.9 percent of men and 0.3 percent of women use Tobacco products. Proportion of people age 15-49 who smoked a whole cigarette before age 15 years is 1.6 percent of men and 0.2 percent of women.

Use of alcohol is also higher among men than women in the last one month as 19.4 percent of men use alcohol while 6.4 percent of women use alcohol. Percentage of people age 15-49 who had at least one alcoholic drink whole before age 15 years is 5.5 percent of men and 3.3 percent of women.

KIND OF DATA
Sample survey data [ssd]

UNITS OF ANALYSIS
Individuals and Households.

Scope

NOTES
The scope of the Multiple Indicator Cluster Survey Questionnaires and Questionnaires for Suplemental Enumeration Area include:

1. Household questionnaire - used to collect basic demographic information on all the household members (usual residents), household characteristics, Education, Selection of one child for child labour/discipline, Child labour, Child discipline, Household characteristics, Insecticide treated nets, Water and Sanitation, Handwashing, Salt Iodization.

2. Individual women questionnaire - administered in each household to all women age 15-49 years; It includes Woman's information panel, Woman's background, Access to mass media and use of information/communication technology, Fertility/Birth history, Birth history, Desire for last birth, Maternal and Newborn health, Post-natal health check, Illness symtoms, Contraception, Unmet neeed, Female genital mutilation/cutting, Attitudes towards domestic violence, Marriage/Union, Sexual behaviour, HIV/AIDS, Tobacco and Alchol use, Life Satisfaction.

3. Individual men questionnaire - administered to all men age 15-49 years in every other(one in every two) households; it includes Man's information panel, Man's background, Access to mass media and use of information/communication technology, Fertility, Attitudes towards domestic violence, Marriage/Union, Sexual behaviour, HIV/AIDS, Circumcision, Tobacco and Alchol use, Life Satisfaction.

4. Under-5 children questionnaire - administered to mothers or caretakers of all children under 5 years of age living in sampled households.It includes Under-five child information panel, Age, Birth registration, Early childhood development, Breastfeeding and dietary intake, Immunization, Care of illness, Anthropometry.

TOPICS

Topic	Vocabulary	URI
Nutrition	World Bank	
Education	World Bank	
Water	World Bank	
HIV/AIDS	World Bank	
Information & Communication Technologies	World Bank	
Health	World Bank	
Population & Reproductive Health	World Bank	
Gender	World Bank	
Environmental Health/ Pollution Management	World Bank	

KEYWORDS
Number of women age 15-49 years, Number of men age 15-49, Number of children under age 5, What is the highest level of school (name) has attended?, Highest grade completed at that level, Ever breastfeed, Ever circumcised, Avoid pregnancy, Has immunization card, Antenatal care, Main source of drinking water, Daughters not living with you, Sons living with you, Nets, Kind of toilet facility, Mother tongue, Tested for hiv/aids, Medical support, Sons living not with you, Place of delivery, Religion, Geographic Coverage, Area, Child weighed at birth, Condom, Hours worked

Coverage

GEOGRAPHIC COVERAGE (1)
National Coverage

GEOGRAPHIC COVERAGE (2)
Zonal Level

GEOGRAPHIC COVERAGE (3)
State Level

GEOGRAPHIC COVERAGE (4)
Senatorial District (Lagos and Kano states)

UNIVERSE
The Survey covered members of all selected Household (usual residents), all women age 15-49 years, all men age 15-49 years in every other(one in every two) households and all children aged 0-59 months.

Producers and Sponsors

PRIMARY INVESTIGATOR(S)

Name	Affiliation
National Bureau of Statistics (NBS)	Federal Government of Nigeria

OTHER PRODUCER(S)

Name	Affiliation	Role
United Nations Children's Fund	UNICEF Nigeria	Technical Assistance in Stakeholder's meeting and Monitoring

FUNDING

Name	Abbreviation	Role
Bill and Melinda Gates Foundation	Bill Gates	Funding partner
United Nations Children's Fund	UNICEF	Sponsor
Save One Million Lives	SOML	Funding partner
United Nations Population Fund	UNFPA	Funding partner
World Bank	WB	Funding partner
World Health Organization	WHO	Funding partner

OTHER ACKNOWLEDGEMENTS

Name	Affiliation	Role
National Population Commission (NPopC)		Steering Committee
National Primary Health Care Development Agency (NPHCDA)		Steering Committee
Central Bank of Nigeria (CBN)		
Federal Ministry Of Health		Steering Committee
Federal Ministry of Education		Steering Committee
The National Planning Commission (NPC)		Steering Committee
Lagos State Government		Steering Committee
Kano State Government		Steering Committee
Federal Ministry of Agriculture and Water Resources		Steering Committee
The Office of the Senior Special Adviser to the President on the Millennium Development Goals (OSSAP)		supports gathering of data on socio-economic indicators
United Nations Programme on HIV/AIDS (UNAIDS)		
United Nations Development Programme (UNDP)		
United Nations Population Fund (UNFPA)		
United Nations General Assembly Special Session on HIV/AID (UNGASS)		
United Nations and International Organizations (UNIO)		

Name	Affiliation	Role
West and Central Africa Regional Office (WCARO)		
World Fit for Children (WFFC)		

Metadata Production

METADATA PRODUCED BY

Name	Abbreviation	Affiliation	Role
National Bureau of Statistics	NBS	Federal Government of Nigeria	Documentation, Review and Dissemination of the study
United Nations Children's Fund	UNICEF	UNICEF Nigeria	Review of the metadata

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Sampling

Sampling Procedure

The sample for the Nigeria MICS 2016-17 was designed to provide estimates for a large number of indicators on the situation of children and women at the national, rural/urban, states as well as the 6 geopolitical
zones of Nigeria. The states within each zone were identified as the main sampling Strata while the Enumeration Areas (EAs) within each state were identified as the Primary Sampling Units (PSUs). The EAs were selected from the National Integrated Survey of Households round 2 (NISH2) master sample, based on a list of EAs prepared for the 2006 Population Census. Two stage sampling was conducted with the first stage being the selection of EAs within the strata while the second stage was the selection of households within each EAs.

Within each state, 60 EAs were selected systematically from the NISH2 master sample, apart from Lagos and Kano states where 120 EAs (respectively) were sampled. The larger sample size for Lagos and Kano states was based on requests by the respective State governments to have sufficient sample to enable disaggregation of indicators at senatorial district level. After a household listing was carried out within the selected EAs, a systematic sample of sixteen (16) households was drawn in each sample EA. The sample was stratified by state and is not self-weighting. For reporting of results, sample weights were applied. Out of 2340 EAs selected for coverage, 2,239 were listed and covered during the fieldwork period. A total of 101 EAs could not be enumerated because they were inaccessible due to insecurity especially in Borno, Yobe and Adamawa states. A more detailed description of the sample design can be found in Appendix A

The Nigeria MICS 2016-17 was implemented jointly with the National Immunisation Coverage Survey (NICS) which was designed to provide estimates of vaccine coverage for the country. However, the sample size for MICS 2016-17 was not sufficient to estimate state level vaccination coverage for children aged 12 to 23 months in twenty states, namely: Abia, Akwa ibom, Anambra, Bayelsa, Benue, Cross River, Delta, Edo, Ekiti, Enugu, Imo, Kogi, Kwara, Ogun, Ondo, Osun, Oyo, Plateau, Rivers and FCT (Abuja). Consequently, supplemental sampling was conducted to meet the requirements for vaccine coverage estimation, in these
twenty states.

NICS (National Immunisation Coverage Survey) Sample design
The Nigeria NICS 2016-17 sample design based on precise estimation of pentavalent 3 vaccination coverage within ±10% in each state (reporting domain). When the proposed MICS samples were evaluated, it was realised that the “MICS sample” would not have been sufficient to estimate state vaccination coverage for children aged 12 to 23 months in 20 out of the 37 states based on the desired precision parameters. These states were Abia, Akwa Ibom, Anambra, Bayelsa, Benue, Cross River, Delta, Edo, Ekiti, Enugu, Imo, Kogi, Kwara, Ogun, Ondo, Osun, Oyo, Plateau, Rivers and FCT (Abuja). Consequently, to enable precise estimation of vaccination indicators in each state, supplemental sampling was conducted to meet the requirements for vaccine coverage estimation, in the 20 whose MICS 2016-17 was deficient. Immunisation indicators in these 20 states were estimated from analysis of the combined sample (supplemental sample + original MICS sample), while estimation of other MICS indicators these 20 states were done exclusively using the MICS sample.

Deviations from Sample Design

No deviation from the Sample Design.

Response Rate

Out of 37,440 households sampled, 35,747 households were visited, 34,289 were found to be occupied and 33,901 were successfully interviewed, representing a household response rate of 98.9 percent.
In the interviewed households, 36,176 women (age 15-49 years) were identified. Of these, 34,376 were successfully interviewed, yielding a response rate of 95.0 percent within the interviewed households.
The survey also sampled men (age 15-49), but required only a subsample. All men (age 15-49) were identified in 17,868 households selected for the men questionnaire; 16,514 men (age 15-49 years) were
listed in the household questionnaires. Questionnaires were completed for 15,183 eligible men, which corresponds to a response rate of 91.9 percent within eligible interviewed households.
There were 28,578 children under age five listed in the household questionnaires. Questionnaires were completed for 28,085 of these children, which corresponds to a response rate of 98.3 percent within
interviewed households.

Overall response rates of 93.9, 90.9 and 97.2 are calculated for the individual interviews of women, men, and under-5s, respectively

Table HH.1: Results of household, women's, men's and under-5 interviews
Number of households, women, men, and children under 5 by interview results, and household, women's, men's and under-5's response rates, Nigeria, 2016-17

Area	Geopolitical zone						
Total	Urban	Rural	North central	North east	North west	South east	South south	South west
Households								
Expected sample	37,440	12,240	25,200	6,720	5,760	7,680	4,800	5,760	6,720
Actual sample	35,747	11,991	23,756	6,552	4,620	7,586	4,752	5,626	6,611
Occupied	34,289	11,311	22,978	6,318	4,447	7,424	4,593	5,387	6,120
Interviewed	33,901	11,104	22,797	6,244	4,396	7,395	4,524	5,354	5,988
HH response rate	98.9	98.2	99.2	98.8	98.9	99.6	98.5	99.4	97.8
Women								
Eligible	36,176	11,689	24,487	7,462	5,469	9,765	3,753	4,918	4,809
Interviewed	34,376	10,965	23,411	7,013	5,223	9,376	3,645	4,728	4,391
Women's response rate	95.0	93.8	95.6	94.0	95.5	96.0	97.1	96.1	91.3
Women's overall response rate	93.9	92.1	94.9	92.9	94.4	95.6	95.7	95.5	89.3
Men								
Eligible	16,514	5,450	11,064	3,468	2,559	4,356	1,568	2,253	2,310
Interviewed	15,183	4,890	10,293	3,184	2,452	3,935	1,481	2,173	1,958
Men's response rate	91.9	89.7	93.0	91.8	95.8	90.3	94.5	96.4	84.8
Men's overall response rate	90.9	88.1	92.3	90.7	94.7	90.0	93.0	95.9	82.9
Children under 5								
Eligible	28,578	7,612	20,966	5,474	4,855	9,662	2,399	3,187	3,001
Mothers/caretakers intervd.	28,085	7,471	20,614	5,347	4,733	9,519	2,383	3,172	2,931
Under-5's response rate	98.3	98.1	98.3	97.7	97.5	98.5	99.3	99.5	97.7
Under-5's overall response rate	97.2	96.4	97.5	96.5	96.4	98.1	97.8	98.9	95.6

For the National Immunization Coverage Survey (NICS) 2016/17, from the 40,518 interviewed households, 6,360 mothers/caretakers of children age 12 to 23 months were identified. Of these, 6,268 were successfully interviewed, yielding a response rate of 98.3 percent within interviewed households.
Also, Out of a total of 44,960 households planned for selected for coverage, 42,981 were canvassed but only 41,059 were found to be occupied. Of these, 40, 518 were successfully interviewed for a household response rate of 98.7 percent.

Weighting

Sample weights were calculated for each of the data files.
Sample weights for the household data for 34 states (excluding Kano and Lagos) and Abuja FCT were computed as the inverse of its probability of selection (calculated by multiplying the probabilities at each sampling stage); In the case of the states of Kano and Lagos, the NISH2 master sample EAs were stratified by senatorial district and the EAs were selected separately within each senatorial district. The basic weight for the MICS 2016 sample households is the inverse of the overall probability of selection.

Following the adjustment of the raw household weights for non-response, these weights are generally normalized (standardized) so that relative weights are used for the analysis of the survey data. In this way the sum of the relative weights is equal to the number of sample households at the national level. The household weights were normalized by dividing each weight by the average weight at the national level (that is, the sum of the weights for all sample households divided by the number of sample households).

The non-response adjustment factors for the individual women, men, and under-5 questionnaires were applied to the adjusted household weights. Numbers of eligible women, men, and under-5 children were obtained from the roster of household members in the Household Questionnaire for households where interviews were completed.
The women, men and child weights are normalized in the same way as the household weights. In this case the full (raw) weights were divided by the average women, men or child weight, respectively. Sample weights were appended to all data

sets and analyses were performed by weighting households, women, men, or under-5s with these sample weights.

MICS sample was not self-weighting, sampling weights were computed for use in subsequent analysis. Cluster-based (EA) weights were computed by normalising the product of the reciprocal of the sampling probability and the response rate. The main component of the sampling weights is the reciprocal of the sampling fraction employed while selecting the number of households in a sampling stratum (state) and PSU (enumeration area).

The sampling fractions correspond to the probability of sampling enumeration areas in a state and the probability of sampling households within an enumeration area respectively. Enumeration area (EA) sampling probability was computed at state level as the proportion of enumeration areas selected for each state and the number of enumeration areas in the state as per the 2006 National Population Census master sampling frame while the household sampling probability was computed as the fraction of number of households selected per enumeration area (16) divided by the number of households in the enumeration area updated during household listing exercise. As there was a difference in the number of EAs selected in the MICS and MICS/NICS sample in states where supplemental sampling was conducted, naturally, the sampling probability within the MICS dataset would differ from the sampling probability in the MICS/NICS. Sampling weights in the states with no supplemental sampling, on the other hand, were similar in both the MICS and MICS/NICS dataset.

Questionnaires

Overview

Four sets of questionnaires were used in the MICS 2016-17:
1. Household questionnaire - used to collect basic demographic information on all the household members (usual residents) and household characteristics;
2. Individual women questionnaire - administered in each household to all women age 15-49 years;
3. Individual men questionnaire - administered to all men age 15-49 years in every other(one in every two) households;
4. Under-5 children questionnaire - administered to mothers or caretakers of all children under 5 years of age living in sampled households.

The Household Questionnaire included the following modules:
- Household Information Panel
- List of Household Members
- Education
- Child Labour
- Child Discipline
- Household Characteristics
- Insecticide Treated Nets
- Water and Sanitation
- Handwashing
- Salt Iodization
- Water Quality Test

Individual Women questionnaire included the following modules:
- Woman Information Panel
- Woman’s Background
- Access to Mass Media and Use of Information/Communication Technology
- Fertility/Birth History
- Desire for Last Birth
- Maternal and Newborn Health
- Post-natal Health Checks
- Illness Symptoms
- Use of Contraception
- Unmet Need for Contraception
- Female Genital Mutilation/Cutting
- Attitudes Toward Domestic Violence
- Marriage/Union
- Sexual Behaviour
- HIV/AIDS
- Tobacco and Alcohol Use
- Life Satisfaction

Individual Men questionnaire included the following modules:
- Man Information Panel
- Man’s Background
- Access to Mass Media and Use of Information/Communication Technology
- Fertility
- Attitudes Toward Domestic Violence
- Marriage/Union
- Sexual Behaviour
- HIV/AIDS
- Circumcision
- Tobacco and Alcohol Use
- Life Satisfaction

Under 5 Children questionnaire included the following modules:
- Under Five Information Panel
- Age

- Birth Registration
- Early Childhood Development
- Breastfeeding and Dietary Intake
- Immunization
- Care of Illness
- Anthropometry

The questionnaires are based on the MICS5 questionnaire model (English version), customised and pretested in Cross River, Enugu, Gombe, Lagos, Kaduna, Kano, Nasarawa and Oyo states in April, 2016. Based on the results of the pre-test, modifications were made to the wording of the questionnaires. A copy of the Nigeria MICS questionnaires is provided in Appendix F.
In addition to the administration of questionnaires, salt iodization and water quality tests were conducted. Weight and height of children age under 5 years were also measured.
Details of the tests and measurements are provided in the respective sections of the report.

Data Collection

Data Collection Dates

Start	End	Cycle
2016-09-12	2017-01-30	92

Time Periods

Start	End	Cycle
2018-01-05		5 years

Data Collection Mode

Computer Assisted Personal Interview [capi]

DATA COLLECTION NOTES

Training for the fieldwork was conducted for thirty-one (31) days in August 2016. Training included lectures on interviewing techniques and contents of the questionnaires. Mock interviews among trainees were also conducted to gain practice in asking questions. Towards the end of the training period, trainees spent 2 days in field practice in purposively selected residential areas in 2 communities in each of the 6 training
locations in Keffi (Nasarawa state), Gombe (Gombe state), Kano (Kano state), Enugu (Enugu state), Ikeja (Lagos state) and Calabar (Cross River state).

The data were collected by 78 teams; each team comprised four interviewers, one driver, one measurer and a supervisor. Fieldwork began in September, 2016 and was concluded in January 2017.
Using Computer Assisted Personal Interviewing (CAPI), the data were electronically captured from the field and transmitted to a central server, using CSPro CAPI application, Version 5.0. Being the first time of using CAPI, the programme was pretested to know the effectiveness and efficiency of the device. Using CAPI to captured data helps in reducing error associated with paper questionnaire such as omission and skipping errors.

Data Collectors

Name	Abbreviation	Affiliation
National Bureau of Statistics	NBS	Federal Government of Nigeria

SUPERVISION

- The data were collected by 78 teams;
- Each team comprised four interviewers, one driver, the measurer and a supervisor
- Interviewers comprised of 4 personnel -1 male and 3 females
- The measurer/water quality tester - female (the measurer also serve as water quality tester)
- Supervisor - could be male or female
- Each team were assigned with a mini bus, provision was made for hard to reach clusters. Boat and life jacket provided for the riverine areas, four wheel vehicles for the desert and motorcycles were also provided for places where vehicles cannot reach.

Supervisor:
The supervisor's duties included:
- Coordination of activities of the team on the field
- Alllocate jobs to the team members
- Editor to the team by receving job from each member,
- Review their work and instruct interviewers on any observation.

The Monitoring Headquarter staff monitored in all the thirty six States and FCT to enhance quality data assurance from the field. In addition, the following level of officers were involved in the monitoring exercise:-
- Six (6) NBS zonal controllers
- Thirty seven (37) state officers
- Thirty seven (37) NBS Headquarters Monitors
- Twelve (12) CAPI managers will manage CAPI related issues

- Thirty six Directors of State Statistical agencies (SSA)
- UNICEF Country and Field office staff
- Donor agencies supporting MICS
- Independent monitors
- Six representatives from the MDAs

Two (2) CAPI managers managed each zone and solved any CAPI related issues during data collection.
Check the Manual of Instructions for further explanation.

Data Processing

Data Editing

The use of CAPI has definitely eased the Editing process. However, the supervisor acted as an editor on the field by searching through each file and any observation noticed were taken care of before the job is sent to the designated server. In the office was another level of editing by ICT experts assigned to observe the data and communicate any issue to the interviewers.

Data Editing was carried by ICT Experts which involved number of stages throughout the survey. They include:
a) Data Verification and Cleaning
b) Structural checking of data files using SPSS syntax
c) Data Validation Exercise

Other Processing

Data were analysed using the Statistical Package for Social Scientists (SPSS) software, Version 21. Model syntax and tabulation plans developed by UNICEF MICS team were customized and used for this purpose.

Data Appraisal

Estimates of Sampling Error

The sample of respondents selected in the Multiple Indicator Cluster Survey (MICS) 2016 is only one of the samples that could have been selected from the same population, using the same design and size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between the estimates from all possible samples. The extent of variability is not known exactly, but can be estimated statistically from the survey data.

The following sampling error measures are presented in this appendix for each of the selected indicators:

1. Standard error (se): Standard error is the square root of the variance of the estimate. For survey indicators that are means, proportions or ratios, the Taylor series linearization method is used for the estimation of standard errors. For more complex statistics, such as fertility and mortality rates, the Jackknife repeated replication method is used for standard error estimation.

2. Coefficient of variation (se/r) is the ratio of the standard error to the value (r) of the indicator, and is a measure of the relative sampling error.

3. Design effect (deff) is the ratio of the actual variance of an indicator, under the sampling method used in the survey, to the variance calculated under the assumption of simple random sampling based on the same sample size. The square root of the design effect (deft) is used to show the efficiency of the sample design in relation to the precision. A deft value of 1.0 indicates that the sample design of the survey is as efficient as a simple random sample for a particular indicator, while a deft value above 1.0 indicates an increase in the standard error due to the use of a more complex sample design.

4. Confidence limits are calculated to show the interval which contains the true value of the indicator for the population, with a specified level of confidence. For MICS results 95% confidence intervals are used, which is the standard for this type of survey. The concept of the 95% confidence interval can be understood in this way: if many repeated samples of identical size and design were taken and the confidence interval computed for each sample, then 95% of these intervals would contain the true value of the indicator.

For the calculation of sampling errors from MICS data, programs developed in CSPro Version 5.0, SPSS Version 21 Complex Samples module and CMRJack have been used.

Details of the sampling errors are presented in the sampling errors table in the report presented in the external resources.

Other forms of Data Appraisal

Series of tables and graphs were generated.

Related Materials

Questionnaires

MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016, HOUSEHOLD QUESTIONNAIRE

Title	MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016, HOUSEHOLD QUESTIONNAIRE
subtitle	MICS5-HOUSEHOLD QUESTIONNAIRE-2016
Author(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Date	2016-06-01
Country	Nigeria
Language	English
Contributor(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Publisher(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Description	MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016-17 HOUSEHOLD QUESTIONNAIRE Household questionnaire - used to collect basic demographic information on all the household members (usual residents) and household characteristics
Table of contents	HOUSEHOLD INFORMATION PANEL HH .....1 SELECTION OF ONE CHILD FOR CHILD LABOUR/CHILD DISCIPLINE SL .....6 CHILD LABOUR CL .....7 CHILD DISCIPLINE CD .....9 HOUSEHOLD CHARACTERISTICS HC .....10 INSECTICIDE TREATED NETS TN .....14 WATER AND SANITATION WS .....16 HANDWASHING HW .....19 SALT IODIZATION SI 20
Filename	MICS5 2016-17 Questionnaire for Household Pilot Survey.pdf

MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016, QUESTIONNAIRE FOR INDIVIDUAL WOMEN

Title	MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016, QUESTIONNAIRE FOR INDIVIDUAL WOMEN
subtitle	MICS5-QUESTIONNAIRE FOR INDIVIDUAL WOMEN-2016
Author(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Date	2016-06-01
Country	Nigeria
Language	English
Contributor(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Publisher(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Description	MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016-17 QUESTIONNAIRE FOR INDIVIDUAL WOMEN This questionnaire was administered in each household to all women age 15-49 years;

Table of contents	WOMAN'S INFORMATION PANEL WM .....1 WOMAN'S BACKGROUND WB .....2 ACCESS TO MASS MEDIA AND USE OF INFORMATION/COMMUNICATION TECHNOLOGY MT .....3 FERTILITY/BIRTH HISTORY CM .....4 DESIRE FOR LAST BIRTH DB .....9 MATERNAL AND NEWBORN HEALTH MN .....10 POST-NATAL HEALTH CHECKS PN .....15 ILLNESS SYMPTOMS IS .....19 CONTRACEPTION CP .....20 UNMET NEED UN .....21 FEMALE GENITAL MUTILATION/CUTTING FG .....23 ATTITUDES TOWARD DOMESTIC VIOLENCE DV .....26 MARRIAGE/UNION MA .....27 SEXUAL BEHAVIOUR SB .....28 HIV/AIDS HA .....30 TOBACCO AND ALCOHOL USE TA .....33 LIFE SATISFACTION LS 38
Filename	MICS5 2016-17 Questionnaire for Individual Women.pdf

MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016, QUESTIONNAIRE FOR INDIVIDUAL MEN 2016-17

Title	MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016, QUESTIONNAIRE FOR INDIVIDUAL MEN 2016-17
subtitle	MICS5-QUESTIONNAIRE FOR INDIVIDUAL MEN-2016
Author(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Date	2016-06-01
Country	Nigeria
Language	English
Contributor(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Publisher(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Description	MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016-17 QUESTIONNAIRE FOR INDIVIDUAL MEN This questionnaire was administered to all men age 15 through 49

Table of contents	MAN'S INFORMATION PANEL .....1 MAN'S BACKGROUND .....2 ACCESS TO MASS MEDIA AND USE OF INFORMATION/COMMUNICATION TECHNOLOGY MMT .....3 FERTILITY .....4 ATTITUDES TOWARD DOMESTIC VIOLENCE MDV .....6 MARRIAGE/UNION MMA .....7 SEXUAL BEHAVIOUR MSB .....8 HIV/AIDS MHA .....10 CIRCUMCISION MMC .....12 TOBACCO AND ALCOHOL USE TA .....13 LIFE SATISFACTION MLS 18
Filename	MICS5 2016-17 Questionnaire for Individual Men.pdf

MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016, QUESTIONNAIRE FOR CHILDREN UNDER FIVE 2016-17

Title	MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016, QUESTIONNAIRE FOR CHILDREN UNDER FIVE 2016-17
subtitle	MICS5-QUESTIONNAIRE FOR CHILDREN UNDER FIVE-2016-17
Author(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Date	2016-06-01
Country	Nigeria
Language	English
Contributor(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Publisher(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Description	MULTIPLE INDICATIOR CLUSTER SURVEY(MICS5) 2016-17 QUESTIONNAIRE FOR CHILDREN UNDER FIVE This questionnaire was administered to all mothers or caregivers who care for a child that lives with them and is under the age of 5 years
Table of contents	UNDER-FIVE CHILD INFORMATION PANEL .....1 AGE .....2 BIRTH REGISTRATION .....3 EARLY CHILDHOOD DEVELOPMENT .....4 BREASTFEEDING AND DIETARY INTAKE .....7 IMMUNIZATION .....10 CARE OF ILLNESS .....14 ANTHROPOMETRY 21
Filename	MICS5 2016-17 Questionnaire_for_Children Under 5 Years.pdf

MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) HOUSEHOLD WATER QUALITY QUESTIONNAIRE 2016

Title	MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) HOUSEHOLD WATER QUALITY QUESTIONNAIRE 2016
subtitle	MICS5-HOUSEHOLD WATER QUALITY QUESTIONNAIRE-2016
Author(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Date	2016-01-01
Country	Nigeria
Language	English
Contributor(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Publisher(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Description	MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) HOUSEHOLD WATER QUALITY QUESTIONNAIRE 2016 This questionnaire form is to be used for households that have been selected for water quality testing.

Table of contents	HOUSEHOLD INFORMATION PANEL .....1 WATER QUALITY TESTING WQ .....2 WATER QUALITY TESTING RESULTS WQ 5
Filename	MICS5 2016-17 Water Quality Questionnaire.pdf

Reports

MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016-17 NATIONAL REPORT FINAL REVIEW

Title	MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016-17 NATIONAL REPORT FINAL REVIEW
subtitle	MICS5-2016-17-NATIONAL REPORT FINAL REVIEW
Author(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Date	2018-05-01
Country	Nigeria
Language	English
Contributor(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF) , Federal Ministry of Health (FMoH) , Federal Ministry of Water Resources (FMWR) , Federal Ministry of Education , National Agency for the Control of Aids (NACA) , National Pr
Publisher(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Description	Multiple Indicator Cluster Survey (MICS5) 2016-17 National Report Final Review

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Filename MICS5 2016-17 NIGERIA FINAL REVIEW.pdf

MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016-17 NATIONAL SURVEY FINDINGS (REVISED EDITION)

Title	MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016-17 NATIONAL SURVEY FINDINGS (REVISED EDITION)
subtitle	MICS5-2016-17-NATIONAL SURVEY FINDINGS (REVISED EDITION)
Author(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Date	2018-07-01
Country	Nigeria
Language	English
Contributor(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Publisher(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Description	MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016-17 NATIONAL SURVEY FINDINGS (REVISED EDITION)
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Filename	MICS5 2016-17 NATIONAL SURVEY FINDINGS (REVISED EDITION).pdf

MULTIPLE INDICATOR CLUSTER SURVEY 2016-17 LAGOS STATE FINAL REVIEW

Title	MULTIPLE INDICATOR CLUSTER SURVEY 2016-17 LAGOS STATE FINAL REVIEW
subtitle	MICS5-2016-17-LAGOS STATE-FINAL REVIEW
Author(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Date	2018-05-01
Country	Nigeria
Language	English
Contributor(s)	National Bureau of Statistics (NBS) , Lagos Bureau of Statistics (LBS) , United Nations Children's Fund (UNICEF)
Publisher(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Description	MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016-17, LAGOS STATE FINAL REVIEW As part of devolving the reporting domain to the lower level in Lagos State, sample was taken at the Senatorial district level in order to disaggregate the data at both state and senatorial district. In the history of MICS Nigeria, this is the first time the reporting domain is taking to senatorial level.

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MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016-17 KANO STATE

FINAL REVIEW

Title	MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016-17 KANO STATE FINAL REVIEW
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Author(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Date	2018-05-01
Country	Nigeria
Language	English
Contributor(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF) , Kano State Bureau of Statistics
Publisher(s)	National Bureau of Statistics (NBS)
Description	MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016-17 KANO STATE FINAL REVIEW As part of devolving the reporting domain to the lower level in Kano State, sample was taken at the Senatorial district level in order to disaggregate the data at both state and senatorial district. In the history of MICS Nigeria, this is the first time the reporting domain is taking to senatorial level.

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Title	NIGERIA NATIONAL IMMUNIZATION COVERAGE SURVEY (NICS) 2016/17 FINAL REPORT
subtitle	NICS 2016/17 FINAL REPORT
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Language	English
Contributor(s)	National Primary Healthcare Development Agency (NPHCDA)
Publisher(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Description	This is the Final Report of Nigeria National Immunization Coverage Survey (NICS) 2016-17

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MULTIPLE INDICATOR CLUSTER SURVEY(MICS5) NIGERIA 2016 MANUAL OF INSTRUCTIONS

Title	MULTIPLE INDICATOR CLUSTER SURVEY(MICS5) NIGERIA 2016 MANUAL OF INSTRUCTIONS
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Language	English
Contributor(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Publisher(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Description	MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) 2016-17 MANUAL OF INSTRUCTIONS This is an instruction manual that was used to train the Interviewers, Supervisors, Monitoring & Evaluation Officers for the MICS5 2016-17 Field work exercise.

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MULTIPLE INDICATOR CLUSTER SURVEY(MICS5) MANUAL FOR WATER QUALITY TESTING

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Language	English
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Publisher(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Description	MULTIPLE INDICATOR CLUSTER SURVEY (MICS5) MANUAL FOR WATER QUALITY This Manual is intended for all MICS field staff and outlines the required steps that need to be taken during MICS data collection in order to accurately assess drinking water quality. Measurers in particular should carry these instructions with them in the field and review them regularly to make sure they are always following the correct procedures. Supervisors should also frequently refer to this Manual in the field when observing the work of measurers.
Table of contents	INTRODUCTION TO THE MANUAL .....2 GENERAL PRECAUTIONS FOR MEASURERS .....3 COLLECTION OF SAMPLES .....4 WATER QUALITY TESTING .....5 INTERPRETING RESULTS .....8 DISPOSAL OF USED COMPACT DRY PLATES 9
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MULTIPLE INDICATOR CLUSTER SURVEY (MIC5)-NATIONAL IMMUNIZATION COVERAGE SURVEY (NICS) 2016-17 STUDYDOC

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Date	2019-02-11
Country	Nigeria
Language	English
Contributor(s)	National Bureau of Statistics (NBS) , United Nations Children's Fund (UNICEF)
Publisher(s)	National Bureau of Statistics (NBS)
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Missing coordinates from MICS5/NICS Clusters/EAs

Title	Missing coordinates from MICS5/NICS Clusters/EAs
Author(s)	GRID3 Contact Dale Rhoda. Dale.Rhoda@biostatglobal.com
Date	2019-02-11
Country	Nigeria
Language	English
Contributor(s)	National Bureau of Statistics GRID3
Publisher(s)	National Bureau of Statistics
Description	This spreadsheet gives an overview of the number of EAs from the 2016-17 MICS/NICS for which GPS coordinates are missing. For the GRID3 neighborhood type analysis, it would be good to use some means to identify the LGA / Ward / Settlement of each EA as well as one latitude / longitude that is thought to fall within the EA.

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