1997 INTEGRATED BASELINE HEALTH SURVEY: KANO (OCTOBER / NOVEMBER, 1997)

BASICS - NIGERIA

Adapted from USAID IBHS, 1995

1997 INTEGRATED BASELINE HEALTH SURVEY:KANO
BASICS-NIGERIA (OCTOBER/NOVEMBER, 1997)

HOUSEHOLD QUESTIONNAIRE**

** TO BE ADMINISTERED TO THE HEAD OF HOUSEHOLD OR SPOUSE OF HEAD OR ANY MEMBER OF THE HOUSEHOLD ABOVE 18 YEARS OF AGE

IDENTIFICATION	
HOUSEHOLD IDENTIFICATION NUMBER	1 1 1 1 1 1
USAID ZONE NUMBER	1 1
STATE.....	1 1
ENUMERATION/CLUSTER NUMBER	1 1 1
HOUSEHOLD NUMBER	1 0 1 7
PLACE OF INTERVIEW	1 1 1 Gama B
LOCAL GOVERNMENT AREA.....	Nassarawa
HOUSEHOLD ADDRESS	PHC/ARSLG/01/016/640
SECTOR (urban=1, periurban=2, rural=3)	1 1 1
NAME OF HEAD OF HOUSEHOLD	Alhaji Hassan
SEX OF HEAD OF HOUSEHOLD (male=1, female=2)	1 1
AGE OF RESPONDENT (AGE IN COMPLETED YEARS)	1 2 5 7

INTERVIEWER VISITS	1	2	FINAL VISIT
DATE:	6/11/97		
INTERVIEWER'S NAME:	Hadiza		
INTERVIEWER'S No.	R-A-03		
LANGUAGE OF INTERVIEW:	Hausa		
RESULT:	1		

*RESULT CODES
1. COMPLETE
2. NOT AT HOME
3. POSTPONED
4. REFUSED
5. INCOMPLETE
88. OTHER_____ [Specify]

Supervisor's signature: Aisha

Date: 7 / 11 / 97 (Day / Month / Year)

Supervisor's Name: Br. Dele Ajeda

Supervisor's No: 51

Field Editor:_____

Adapted from USAID IBHS, 1995

Section 1. Household Roster

HOUSEHOLD ID No. 07

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
#	Name of Resident [If Visitor be not a usual resident, write "Visitor" in a space below]	Relation to Head of Household What is relation of (Name) to Head of Household [See codes below]	Residence Does (Name) usually live here? Yes No 1 2	Sex M F 1 2	Age In Year	If Female is 15-49 years of age: asks: Does she have a child 0-59 months? Yes No 1 2	Circle all eligible Females below
01	Alhaji Hassa	01	1	1	46		01
02	Maryam	02	1	2	25	2	02
03	Nura	10	1	1	10		03
04							04
05							05
06							06
07							07
08							08
09							09
10							10
11							11
12							12
13							13
14							14
15							15
16							16
17							17
18							18
19							19
20							20
21							21
22							22

Codes for Col 3:
01 = Head of Household
02 = Wife or Husband
03 = Son or Daughter
04 = Son or Daughter-in-Law
05 = Grand Child
06 = Parent
07 = Parent In Law
08 = Brother or Sister
09 = Other Relative
10 = Adopted/Foster Child
11 = Not Related
88 = DK

HOUSEHOLD ID No. 07

SECTION 2. HOUSEHOLD INVENTORY [OBSERVE AND CIRCLE APPROPRIATE NUMBER(S) PROMPT WHERE NECESSARY

Q5. What are the means of transportation owned by you or any other member of your household? (CIRCLE ALL THAT APPLY):
1. Automobile 2. Motorcycle 3. Bicycle 4. Boat 5. Donkey/Camel/horse
6. None 88. Other._____

Q6. What media sources do you or any member of this household have access to? (CIRCLE ALL THAT APPLY):
1. Functional Radio 2. Functional TV 3. Newspaper 4. None
88. Other_____

Q7. What is the main source of energy for cooking in this household?
1. Coa /Charcoal 2. Firewood 3. Kerosine
4. Gas 5. Electricity 88. Other._____

Q8. What is the main source of water for domestic use in this household?
1. Piped tap water 2. Borehole 3. Well 4. Rain Water 4.Surface water/Stream
6. Water truck 88. Other._____

Q9. What is the main source of water for drinking in this household?
1. Piped tap water 2. Borehole 3. Well 4. Rain Water 4.Surface water/Stream
6. Water truck 88. Other._____

Q10. Do you have the following commodities/materials in your household? (PROMPT)
1. Soap Y/N 2. Sugar Y/N 3. Salt Y/N 4. Bed nets for adults & children Y / N
5. Bed nets for baby (colt) Y/N 6. Window/Door nets Y/N 7. Bed net for adult(s) only Y / N

1997 INTEGRATED BASELINE HEALTH SURVEY:KANO
BASICS-NIGERIA (OCTOBER/NOVEMBER, 1997)
INDIVIDUAL QUESTIONNAIRE**

** TO BE ADMINISTERED TO ALL FEMALES AGED 15 TO 49 YEARS IN THE HOUSEHOLD

IDENTIFICATION	
INDIVIDUAL IDENTIFICATION NUMBER	_____
HOUSEHOLD IDENTIFICATION NUMBER	_____
USAID ZONE NUMBER	__
STATE.....	__
ENUMERATION/CLUSTER NUMBER	___
HOUSEHOLD NUMBER	___
INE NUMBER OF ELIGIBLE WOMAN (FROM HOUSEHOLD SCHEDULE)	___
PLACE OF INTERVIEW	
LOCAL GOVERNMENT AREA	
SECTOR (urban=1, periurban=2, rural=3)	__
HOUSEHOLD ADDRESS	____
NAME OF HEAD OF HOUSEHOLD	
AGE OF RESPONDENT (AGE IN COMPLETED YEARS)	___

INTERVIEWER VISITS			
	1	2	FINAL VISIT
DATE OF INTERVIEW:			
INTERVIEWER'S NAME:			
INTERVIEWER'S No:			
LANGUAGE OF INTERVIEW:			
RESULT:			

*RESULT CODES

1. COMPLETE
2. NOT AT HOME
3. POSTPONED
4. REFUSED
5. INCOMPLETE
88. OTHER_____ [Specify]

_____
Supervisor's signature:

Date:____/____/____
Day Month Year

Supervisor's Name:_____ Supervisor's No._____

Field Editor:_____

Adapter From USAID IBHS, 1995

SECTION 1. BACKGROUND OF RESPONDENT INDIVIDUAL ID NO. _____

Q101. What is your date of birth: DAY: ____ MONTH: ____ YEAR: ___ 77. DK
[PROBE: if day, month, or year of birth are unknown, leave blank] IF DATE KNOWN, SKIP TO Q103)--->

Q102. [ESTIMATE AGE OF RESPONDENT]: 25 YEARS 77. DK

Q103. What is the highest level of school that you attended? (IF NO SCHOOLING, SKIP TO Q105) -------->
1. No schooling 2. Formal Primary 3. Formal Secondary 4. Beyond Secondary
5. Koranic Primary 6 Koranic Secondary 77. DK 88. Other Local Koranic School

Q104. What is the highest (class/form/year) you completed at that level?____ class ___ form ___ year

Q105. What types of new information did you receive in the last 6 months (either by yourself or with others, either inside or outside the home)? (CIRCLE ALL THAT APPLY)
1. Health 2.Education 3. Politics 4. Business 5.Sports 6. Agriculture
7. Religion (77.None/DK) 88. Other _____ (IF NONE/DK. SKIP TO Q107) ---------->

Q106. What were the sources of this new information? (CIRCLE ALL THAT APPLY)
1. Radio 2. Television 3. Newspaper/magazine
4. Friends/Relation 5. Organized meeting/Workshop 6. Town Crier 88. Other ____

Q107. What is your present marital status?
1. Single (2.Married) 3. Living together 4. Divorced
5. Separated 6. Widowed 88. Other _____ (IF 1, 3 OR 9, SKIP TO Q109)--------->

Q108. How many years were (have) you (been) married? 10 year married ____ 77.DK

Q109. What kind of work do you do?
(1.Housewife) 2. Trading 3. Farming/Fishing 4. Office work (clerical)
5. Office work (Admin/Managerial 6. Teacher 7. Professional (doctor, nurse, lawyer, etc
8. Professional (hairdressing, seamstress etc) 9. Housemaid 88. Other _____
(IF HOUSEWIFE, SKIP TO Q111) ---------->

Q110 What is your employment status? 1. Employer 2. Employee 3. Self employed 4. Apprentice
5. Unpaid family worker 88. Other _____

Q111. During past 6 months did you earn your own income (in cash, commodities or credit?
[Y /(N)/ DK] IF NO, GO TO Q114) ---------->

Q112. Did you decide how that income was used? [Y/(N)/DK]

Q113. Did you decide to save some of that income? [Y /(N)/DK]

Q114. Do you have access to a local saving scheme (either traditional cooperative thrift or modern banking)?
[Y / (N) DK] IF NO, GO TO Q116) ---------->

Q115. Which one(s) do you have access to? (CIRCLE ALL THAT APPLY)
1. Traditional cooperative thrift 2. Modern banking 88. Other _____

Q116. Do you have access to credit facilities? [Y /(N)/ DK] IF NO, GO TO Q118) ---------->

Q117. Which one(s) do you have access to? (CIRCLE ALL THAT APPLY)
1. Traditional cooperative thrift 2. Modern banking 3. Micro-credit 88. Other_____

Q118. Do you believe that you are entitled to contribute to household decisions about:
a) Your own health care needs [(Y)/N/DK] b) How you do your work [(Y)/N/DK]
c) How you use your time [(Y)/N/DK] d) Your education/Training needs [(Y)/N/DK]

Q119. Do you actually contribute to household decisions about:
a) Your own health care needs [Y/(N)/DK] b) How you do your work [Y/(N)/DK]
c) How you use your time [Y/(N)/DK] d) Your education/Training needs [Y/(N)/DK]

SECTION 2. REPRODUCTIVE HISTORY OF RESPONDENT INDIVIDUAL ID NO. _____

[Now I would like to ask you some questions relating to pregnancy and child bearing]

Q201. Have you ever been pregnant? Y /(N)/DK (IF NO, GO TO Q220) ----------->
[I would like to ask about all the children with whom God has blessed you. Please do not feel that I am counting your children, but it is very important to obtain complete information on childbearing in this State. God will certainly bless and protect your children]

Q202. Have you ever had a live birth? Y/N (IF NO, GO TO Q212)----------->

Q203. How many of your own sons live with you? No._____

Q204. How many of your own daughters live with you? No._____

Q205. How many of your own sons are alive but do not live with you? No._____

Q206. How many of your own daughters are alive but do not live with you? No._____
[It does happen that sometimes children die. I pray that this never happens to you. If it already has, may it never happen again to you. It may be very painful to talk about and we are very sorry to bring back these bad memories, but it will help the government, community, and others to take measures to improve the health of the mothers so that all babies born are blessed with life].

Q207. Have you ever given birth to a boy or a girl who was born alive but later died? [Y/N]
(IF NO, PROBE: Was there any baby who cried out or showed signs of life but who only survived a few hours or days? Y/N] (IF NO, GO TO Q210) ----------->

Q208. How many boys have died? No..... Q209. How many girls have died? No.....

Q210. (SUM ANSWERS TO Q203, Q204, Q205, Q206, Q208 AND Q209; THEN ENTER TOTAL.....)
Q211. (Now, I will like to ask more detailed questions about the children you gave birth to in the past ten years)

Table 1. Birth History [complete information over last 10 years for each child starting with most recent birth]

NAME OF CHILD (1 = YOUNGEST)	SEX M F 1 2	DATE OF BIRTH M:N:Y	IS CHILD ALIVE NOW, YES NO-> 1 2	IF YES, AGE OF CHILD NOW YES NO 1 2	IF NO, AGE AT DEATH YRS MNS 1 2	RESIDENT OF HOUSEHOLD NOW? YES NO 1 2
1						
2						
3						
4						
5						
6						
7						
8						

Q212. During the last 5 years, did you have any pregnancy that was not completed?
[Y / N / DK] (IF N/DK, SKIP TO Q214) ----------->

Q213. How many pregnancies were not completed? # _____ 77. DK

INDIVIDUAL ID NO. _____

Q214. Are you currently pregnant? [Y /N /DK] (IF NO, GO TO Q218) ---------->

Q215. How many months pregnant are you? -------# months

Q216 At the time you became pregnant, did you want to become pregnant then, did you want to wait until later, or did you not want to become pregnant at all? 1. Then 2. Later 3. Not at all

Q217. How much longer would you like to have waited?
1. _____months 2.____ Years 77.DK (GO TO Q220)---------->

Q218.At the time you became pregnant with (NAME, LAST CHILD), did you want to become pregnant then, did you want to wait until later or did you want to wait until later or did you want no more children at all?
(IF THEN OR NO MORE, SKIP TO Q220) ------>
1. Then 2. Later 3. No more children

Q219. How much longer will you like to have waited
1. _____ months 2.____years 77.DK

Q220. Have you and your spouse/partner ever discussed the number of children you would like to have?
[Y/(N)/DK/NA]

Q221. How many (more) children would you like to have?

(RECORD TOTAL NUMBER) ____# 77. DK (95) Up to God

How many males? ___# 77. DK (95) Up to God

How many female? ___# 77. DK (95) Up to God

Q222. How many children would you advise your son/daughter to have?
Total # _____ Males # _____ Females _____
80. No preference (77)DK 88. Other _____

SECTION 3. MATERNAL MORTALITY

Q301. How many live births did your mother have?
3

Q302. How many of these live births are girls?
2 77. DK (IF 1, SKIP TO SECTION 4) ---->

Q303. How many of the female children are now living?
2

Q304. Was (Has) any of your sisters ever (ever been) pregnant? [(Y)/N/DK] (IF NO, SKIP TO SECTION 4) ---->

Q305. Did (Has) any of your sisters ever give (ever given) birth? [(Y)/N/DK]

Q306. Did any of your sisters experience complications/difficulties during childbirth? [Y/(N)/DK]
If Yes, What ? 1. PPB____ 2. VVF____ 3. Other ____

Q307. Did any of your sisters die during child birth? [Y/(N)] (IF NO, SKIP TO SECTION 4) ------->

Q308. How many of your sisters died during or within 6 wks after child birth?

INDIVIDUAL NO. _____

SECTION 4. ACCESSIBILITY OF HEALTH SERVICES (SKIP Q405, Q406 IF RESPONDENT HAS NEVER BEEN PREGNANT; CODE AS 777 IF DISTANCE OR TIME IS UNKNOWN; WRITE NA FOR NON-APPLICABLE; PUBLIC /PRIVATE REFERS TO FACILITY; WRITE NAME OF FACILITY WHERE NECESSARY)

	In Distance (km)	In Time (Min)	Public (1)	Private (2)
Q401. How far away is the nearest hospital/clinic that you usually go to anytime you or your child were (seriously) ill?	10Km	1hr	1	
Q402. How far away is the nearest health centre that you usually go to anytime you or your child were seriously ill?	5Km	30m	1	
Q403. How far away is the nearest community-based health worker that you you usually go for advice anytime you or your child were ill?				
Q404. How far away is the nearest pharmacy or patent medicine shop that you usually visit to obtain medicine prescribed for you or your child's illness?	2Km	10m		1
Q405. How far away is the nearest hospital/clinic/maternity centre that you usually go to anytime you were pregnant?				
Q406. How far away is the nearest Traditional Birth Attendant/Midwife/Doctor that you usually go to for advice during pregnancy or assistance during delivery?				
Q407. How far away is the nearest family planning counselling service centre that you or your partner would go to if you needed to seek family planning services?				

Q408. Is there a Community Development Committee in your neighborhood? [Y /(N) DK]

SECTION 5. TETANUS TOXOID (TT) HISTORY OF RESPONDENT:

Q501. Have you ever received Tetanus Toxoid Injections? [Y/(N)/DK] (IF NO, SKIP TO SECTION 12, IF HAD CHILD 1-5 YEARS: GO TO SECTION 7)

[Ask to see the respondent's or youngest child's immunization card. Copy dates of TT injections. If there is no card, ask respondent whether she has ever received tetanus toxoid injection (if ever pregnant or during sher last pregnant or while pregnant with her youngest child).]

TETANUS TOXOID HISTORY: MOTHER	DATE FROM CARD DAY/MONTH/YEAR	RESPONDENT'S RECALL YES/NO
TT1		
TT2		
TT3		
TT4		
TT5		

IF NEVER PREGNANT, SKIP TO SECTION 12; IF NO SURVIVING CHILD 0 - LESS THAN 5 YEARS, SKIP TO SECTION 12)——>

INDIVIDUAL ID NO._____

SECTION 7: PERINATAL CARE, BREAST FEEDING AND NUTRITIONAL HISTORY

INTERVIEWER, FROM THE TABLE IN SECTION 2, WRITE DOWN THE AGE OF THE LAST CHILD IN MONTHS] _____ #(< 60 MONTHS)

Q701. Where did you receive antenatal care when you were pregnant with (NAME)? (CIRCLE ALL THAT APPLY)
1. Government Health Centre/Hospital 2. Government Maternity Clinic 3. Private Health Centre/Hospital
4. Private Maternity Clinic 5. No antenatal care 6. Church
7. Mosque 8. No where 88. Other _____

Q702. Where did you deliver (NAME)?
1. Government Health Centre/Hospital 2. Government Maternity Clinic 3. Private Health Centre/Hospital
4. Private Maternity Clinic 5. At Home 6. Church 7. Mosque 88. Other _____

Q703. Who assisted with the delivery of (NAME)?
1. Trained Nurse/Midwife/Doctor 2. TBA 3. Relative 4. Neighbor/Friend
5. Delivered baby alone 88. Other _____ (IF NOT TBA, SKIP TO Q705) ------>

Q704. Did he/she have/bring a kit [Y /N/DK]

Q705. What was used to cut the cord?
1. Scissors 2. Blade 3. Knife 77.DK 88. Other _____

Q706. After delivery of (NAME), were you advised by anyone to put him/her immediately (within 1 hr) to the breast? [Y / N / DK / Not applicable] (IF NO, SKIP TO Q710) ---------->

Q707. Who advised you to put (NAME) to the breast?
1. Nurse/Midwife 2. TBA 3. Friends/Neighbor 4. Relative 5. Religious Leader 88. Other _____

Q708. Do you know why you were asked to put (NAME) to the breast? [Y/N DK/NA] (IF NO, SKIP TO Q710)------>

Q709. Why? _____

Q710. Have you ever breast fed (NAME)? [Y / N /] [IF NO, SKIP TO Q715

Q711. How long after delivery did you start to breast feed (NAME)?
1. Immediately 2. Less than 1 hour 3. Between one and six hour
4. Between Six hours and one day 5. More than one day 6. Never breast fed 77. DK
[IS (NAME) AGED LESS THAN 24 MONTHS? [Y / N] (IF NO, SKIP TO Q713)]

Q712. Are you currently breast feeding (NAME)? Y / N / Not Applicable]

Q713. How long did you exclusively breast feed (NAME)? [without any other food/fluid]
_____# Days ____ # Weeks ____# Months 66 Still practicing exclusive breast feeding 77. DK

Q714. At what age of (NAME) did you stop or do you intend to stop breast feeding _____# wks _____ # Months

Q715. Have (Did) you given (give) (NAME) water or any other fluid (in the first six months of life)? [Y / N / DK]

Q716. Have you ever bottle fed (NAME)? [Y / N /] (IF NO, SKIP TO Q718) ---------->

Q717. At what age did you start to bottle feed (NAME)?
1. Immediately after birth 2. Less than 1 week 3. Less than 2 weeks
4. Less than 1 month 5. After ____ # months (GO TO Q719)

Q718. At when age do you intend to start to bottle feed (NAME)? (IF 5, 6 OR 77, SKIP TO Q720) ---------->

1. Less than 1 week 2. Less than 2 week 3. Less than 1 month
4. After _____ # months 5. Baby won't accept bottle 6. No intention 77.DK

Q719. At what age did you stop (or intend to stop) to bottle feed (NAME)?

1. At ____ # weeks _____# months 77.DK

Q720. Did you refrain from eating certain foods during, or up to 6 weeks after, your last pregnancy? [Y / N /DK]
(IF NO GO TO SECTION 8) ---------->

Q721. Why? _____

Q722. [If answer to Q721=traditional belief, ask] Did you act on this traditional belief based on your own decision, or was this action decided for you by others (husband, family, or community)? [CIRCLE ALL THAT APPLY]

1. Own decision 2. Husband's decision 3. Family decision 4. Community decision
88. Other _____

INDIVIDUAL ID NO._____

IF NO CHILD AGED 12-23 MONTHS, SKIP TO SECTION 9; IF NO CHILD 0-59 MONTHS, SKIP TO SECTION 12)

SECTION 8. CHILD IMMUNIZATION HISTORY [COMPLETE SECTION FOR YOUNGEST CHILD(REN) 12-23 MONTHS OF AGE NAMED IN BIRTH HISTORY TABLE: PLEASE INDICATE NUMBER OF CHILDREN AGED 12-23 MONTHS _____#

Q801. Has/Have (NAME(s) ever received any immunizations? [Y/N/DK] (IF NO, GO TO SECTION 9)

Q802. Does/Do (NAME(s) have immunization card(s)? [Y/N/Lost] Confirm]

Q804. [IS CARD A NATIONAL PHC CHILD HEALTH CARD? (Y/N/DK]

Q804 COMPLETE IMMUNIZATION TABLE(S) BELOW: If card available, fill in dates below. If no card, ask the mother about each vaccine]

(CHILD 1) Name of Child _____ Child Line # _____

Vaccine	Date from Card Day/Month/Year	Mother's Recall Y/N	Where was immunization received?	How did you learn that you should take (NAME) for this immunization?
BCG	D	R	W	IF
DPT1				
DPT2				
DPT3				
Polio 0 (Birth)				
Polio 1				
Polio 2				
Polio 3				
Measles				

CODES FOP PLACES OF IMMUNIZATION):

1. Outreach/Campaign 2. Public/Government Hospital 3. Public/Government Health Centre
4. Private Hospital 5. Private Maternity Home 6. Church 7. Mosque 88. Other _____

CODES FOR SOURCES OF INFORMATION ON IMMUNIZATION):

1. Village Health Worker 2. Radio / Television 3. Poster 4. Told at Clinic 5. Friend/Neighbor
6. Mobile Van 7. Religious Leader 6. School teacher 77. DK 7. Mosque

SEE CODES ABOVE FOR PLACES OR IMMUNIZATION & SOURCES OF INFORMATION)

CHILD 2) Name of Child _____ Child Line _____#

Vaccine	Date from Card Day/Month/Year	Mother's Recall Y/N	Where was immunization received?	How did you learn that you should take (NAME) for this immunization?
BCG				
DPT1				
DPT2				
DPT3				
Polio 0 (Birth)				
Polio 1				
Polio 2				
Polio 3				
Measles				

INDIVIDUAL ID NO. _____

SECTION 9. FEBRILE EPISODE/MALARIA CHILD 1)
[complete for each child < 60 months in birth history table, starting with youngest child]
Child's Name:_____ Child # _____

Q901. Did (Name) have fever in the last 2 weeks?[Y/N/DK] IF NO, GO TO Q917)---------->

Q902. How many days did (NAME's) fever last?
1. Child has fever Now 2. One to three days 3. Four to six days 4. One to two weeks 77.DK

Q903. What other symptoms/signs were present? [CIRCLE RESPONSE BELOW | Prompt only after the mother has answered
a. Shivering ..... Y N DK
b. Diarrhoea ..... Y N DK
c. Vomiting ..... Y N DK
d. Cough ..... Y N DK
e. Difficult/Rapid Breathing... Y N DK
f Convulsions..... Y N DK
g Skin rash ..... Y N DK
h. Restlessness ..... Y N DK
i. Other (specify) _____

Q904 Do you think (NAME's) fever was severe? [Y / N / DK | (If NO, SKIP TO GO Q906) .....>

Q905. If yes, why do you think it was severe? [CIRCLE ALL ANSWERS GIVEN BY MOTHER]
1. Child was shaking 2. Child had convulsion 3. Child wouldn't drink/such 4. Fever lasted a long time
5. Child had diarrhoea 6. Child felt hot 7. Child has fast breathing 77. DK 88. Other_____

Q906. What did you do for (NAME's) fever at home before you went to anyone else for help?

Gave medicine	1	12	---> GO TO Q907
Gave sponge bath	2	22	---> GO TO Q910
Increased fluids/breast milk	3	32	---> GO TO Q910
Continued Feeding semi/solid foods	4	42	---> GO TO Q910
Gave Herbs	6	62	---> GO TO Q910
Nothing	6	62	---> GO TO Q917
Other, specify:	88 _____	88_____	

Q907 What type of medicine did you give (NAME's)? [CIRCLE ALL ANSWERS GIVEN] (IF NOT 1, NOR 2 SKIP TO Q910)------->
1. Antimalaria tablet* 2. Antimalaria syrup* 3. Antibiotic
4. Paracetamol 77. DK 88. Other _____

Q908. What type of malaria medicine did you give (NAME's)? [DO NOT PROMPT, ASK TO SEE DRUG]
1. Chloroquine 2. Fasidar 3. Darapin 4. 77. DK 88. _____

Q909 Where did you obtain the malaria medicine?
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post 4. Village Health worker
5. Chemist/Pharmacy 6. Travelling drug seller 7. Traditional Healer 88. Other _____

Q910 Did you take (NAME anywhere for treatment of this illness?
[Y/N/DK [F NO GO TO Q917)------>

Q911 Where did you first take (NAME) for treatment of this illness? (IF NOT 1, NOR 2 NOR 3 SKIP TO Q913)---------->
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post 4. Village Health worker
5. Chemist/Pharmacy 6. Travelling drug seller 7. Traditional Healer 88. Other _____

Q912. Was (NAME) admitted? [Y / N/ DK]

Q913 Where did you last take (NAME) for treatment of this illness? (IF NOT 1, NOR 2 NOR 3 SKIP TO Q915)---------->
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post 4. Village Health worker
5. Chemist/Pharmacy 6. Travelling drug seller 7. Traditional Healer 88. Other _____

Q914. Was (NAME) admitted? [Y / N/ DK]

Q915. On which day of the illness did you first take (NAME) for treatment?
1. First Day 2. Second Day 3. Third Day 4. Four Days 77. DK Other _____

Q916. For how many days did (NAME) receive treatment for this illness?
0. Now under treatment 1. One Day 2. Two days 3. Three days
4. Four days 5. Five to seven days 6. One to two weeks 77. DK

Q917. What do you think causes malaria? [CIRCLE ALL THAT APPLY)
1. Sun 2. Overlook 3. Mosquitoes 4. Standing water 77. DK 88. Other _____

Q918. Has Name ever had as blood transfusion [Y / N/ DK]

SECTION 10. DIARRHOEA DISEASE (CHILD 1) [FILL OUT FOR EACH CHILD < 60 MONTHS IN BIRTH HISTORY TABLE, STARTING WITH YOUNGEST CHILD] Child's Name:_____ Child # _____ INDIVIDUAL ID NO. _____

Q1001. Did (Name) have Diarrhoea in the last 2 weeks? [Y/N/DK] IF NO, DK, GO TO SECTION 11)---------->

Q1002. How many days did (NAME's) Diarrhoea last?
1. Child has Diarrhoea Now 2. One to three days 3. Four to six days 4. Between 1 and 2 weeks 77.DK

Q1003. Was there Mucous in (NAME's) stool? [Y / N/ DK]

Q1004. Was there blood in (NAME's) stool? [Y/N/DK]

Q1005. Do you think (NAME's) diarrhoea was severe? [Y /N /DK] (If NO, GO TO Q1007) ---------->

Q1006. Why do you think (NAME's) diarrhoea was severe? [CIRCLE ALL ANSWERS GIVE]
1. Vomiting > 3 days 2. Child had fever 3. Mucous in stools 4. Blood in stool 5. Lasted long time
6. Child looked dried out 7. Unable to drink the diarrhoea? 8. Child was weak 77. DK 88. Other _____

Q1007. Were you breast-feeding (NAME) before the diarrhoea started? [Y/N/DK] (If No, GO TO Q1009)

Q1008. Did you continue breast-feeding (NAME) during the diarrhoea? [Y/N/DK]

Q1009. What did you give (NAME) at home for the diarrhoea before you went to anyone else for help?

	Mothers Responses	Prompted Responses	
* Sugar Salt Solution (SSS)	01	012	---> If "Yes", GO TO Q1011, if "No" GO TO Q1010
* ORS	02	022	---> If "No" GO TO Q1010, If "Yes" GO TO Q1013
Increased fluids/breast milk	03	032	
Continued Feeding semi/solid foods	04	042	
Antibiotic	05	052	
Paracetamol	06	062	
Kaolin	07	072	
Herbs/Traditional Medicine	08	082	
Enema	09	062	
Nothing	10	xxxx	
Other	_____	88 _____	882_____

Q1010. Have you ever heard of either SSS or ORS that is used to treat child diarrhoea? [Y/N/DK] ----. (GO TO Q1021)--->

Q1011. You said that you used SSS to treat (NAME's) diarrhoea. How did you learn to prepare it?
1. VHW 2. Government Clinic/Hospital 3. Private Clinic/Hospital 4. Chemist
5. Family/friends 6. Television/Radio 88. Other _____

Q1012 (Ask mother to demonstrate how much water, sugar, and salt to use in the preparation of SSS) Circle Y or N after observation if correct or not]:----> Water [Y/N] Sugar [Y/N] Salt [Y/N]
(UNLESS ORS WAS ALSO MENTIONED, SKIP TO Q1015).....>

Q1013. You said that you used ORS to treat (NAME's) diarrhoea. How did you learn to prepare it?
1. VHW 2. Government Clinic/Hospital 3. Private Clinic/Hospital 4. Chemist
5. Family/friends 6. Television/Radio 88. Other _____

Q1014. [Ask mother to bring water container for preparing ORS and show how much water to use] [CORRECT?] [Y/N]

Q1015. On what day of the diarrhoea did you first give (NAME) SSS or ORS? 1. Day 1 2. Day 2 3. Day 3 4. Day 4+ 77. DK

Q1016. How often did you give SSS or ORS each day? (1). after each episode (2). 2-5 Times (3). 6-9 Times
(4). 10 or more times (77). DK

Q1017. How much did you give each time you gave it? (1). 1-9 teaspoons (2). 10-20 teaspoons (3). Half a cup
(4). about a cup (5). More than a cup (77). DK

Q1018. Do you think the SSS/ORS was effective in treating the diarrhoea? [Y/N/DK] (If NO, SKIP To Q1020) --------->

Q1019. Why do you think it was effective? 1. Diarrhoea stopped 2. Child remained active 3. Child didn't loose appetite
77. DK 88. Other _____ (GO TO Q1021) ---------->
Q1020. Why do you think it was not effective? 1. Diarrhoea persisted 2. Vomiting continued 77. DK 88. Other _____

Q1021. Did you take (NAME) anywhere for the treatment of this illness? [Y/N] [IF NO, SKIP TO SECTION 11] --------->
Q1022. Where did you first take (NAME) for treatment of this illness?
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post 4. Village Health worker
5. Chemist/Pharmacy 6. Traditional Healer 77. DK 88. Other _____
Q1023. Where did you last take (NAME) for treatment of this illness?
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post 4. Village Health worker
5. Chemist/Pharmacy 6. Traditional Healer 77. DK 88. Other _____

INDIVIDUAL ID NO._____

SECTION 11. ACUTE RESPIRATORY INFECTION (CHILD 1)

[FILL OUT FOR EACH CHILD < 60 MONTHS IN BIRTH HISTORY TABLE, STARTING WITH YOUNGEST CHILD]

Child's Name:_____ Child # _____

Q1101. Did (Name) have Cough and rapid breathing (when not crying) during the last 2 weeks? [Y/N/DK] IF NO, GO TO NEXT CHILD OR SECTION 12)———>

Q1102. How many days did (NAME's) Cough and Rapid Breathing last? 1. Child has it Now 2._____# days 77.DK

Q1103. What other symptoms/signs were present? [Prompt after the mother has answered]

	Y	N	DK
a. Difficult breathing	—	—	—
b. Unable to drink (or suckle)	—	—	—
c. Abnormally sleepy/difficult to wake	—	—	—
d. Convulsions/fits	—	—	—
e. Restlessness	—	—	—
f. Fever	—	—	—
g. Skin rash	—	—	—
h. Diarrhoea	—	—	—
i. Other (specify)	—	—	—

Q1104. Do you think the illness was severe? [Y /N /DK[(If NO, GO TO Q1106) ---------->

Q1105. Why do you think it was severe? [CIRCLE ALL ANSWERS GIVEN]
1. Fast Difficult/Breathing 2. Child had fever 3. Unable to drink/suckle 4. Blood in stool
5. Lasted long time 4. Child was weak 5. Child having fits/convulsion 88. Other _____

Q1106. Were you breast-feeding (NAME) before the illness started? [Y/N/DK] (If No, GO TO Q1108)-------->

Q1107. Did you continue breast-feed (NAME) during the illness? [Y/N/DK]

Q1108. What did you give (NAME) at home for the illness? (CIRCLE ALL THAT APPLY) [Confirm]

	Mothers Responses	Prompted Responses
Increased intake of fluids/breast milk	1	032
Continued Feeding semi/solid foods	2	042
Cough Syrup	3	052
Chloroquine	4	062
Cotrimoxazole (Septrin)	5	072
Other Antibiotic	6	082
Paracetamol (Panadol	7	062
Herbs/Traditional Medicine	8	xxxx
Nothing	9	062
Other, (Specify):	88_____	88 _____ 882_____

Q1109. Did you take (NAME) anywhere for treatment of this illness? [Y/N/DK] (If NO, GO TO NEXT CHILD OR SECTION 12)—>

Q1110. Where did you take (NAME) for treatment of this illness? (If NOT 1, 2 NOR 3, GO TO Q1112) ---------->
1. Government Clinic/Hospital 3. Private Clinic/Hospital 3. Health Centre/Health Post
4. Village Health Worker 5. Chemist/Pharmacy 6. Traditional Healer 77. DK 88. Other _____

Q1112. Where did you last take (NAME) for treatment of this illness? (IF NOT 1, 2 NOR 3, GO TO Q1112) ------->
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post
4. Village Health Worker 5. Chemist/Pharmacy 6. Traditional Healer 77. DK 88. Other _____

Q1113. Was (NAME) admitted? [Y / N/ DK]

Q1114. For how many days did (NAME) receive treatment for this illness?
0. Child still under treatment 1. One day 2. Two days 4. Three Days
4. Four days 5. Five to seven day 6. One to two weeks 77. DK

Q1115. On which day of the illness did you take (NAME) for treatment?
1. First Day 2. Second Day 3. Third day 4. After the Third Day 77. DK

INDIVIDUAL ID NO. _____

SECTION 9. FEBRILE EPISODE/MALARIA CHILD 2)
[complete for each child <60 months in birth history table, starting with youngest child]
Child's Name:_____ Child # _____

Q901. Did (Name) have fever in the last 2 weeks?[Y/N/DK] IF NO, GO TO Q917)———>

Q902. How many days did (NAME's) fever last?
1. Child has fever Now 2. One to three days 3. Four to six days 4. One to two weeks 77.DK

Q903. What other symptoms/signs were present? [CIRCLE RESPONSE BELOW] Prompt only after the mother has answered

a. Shivering	Y	N	DK
b. Diarrhoea	Y	N	DK
c. Vomiting	Y	N	DK
d. Cough	Y	N	DK
e. Difficult/Rapid Breathing...	Y	N	DK
f Convulsions.....	Y	N	DK
g Skin rash	Y	N	DK
h. Restlessness	Y	N	DK

i. Other (specify) _____

Q904 Do you think (NAME's) fever was severe? [Y / N / DK] (If NO, SKIP TO GO Q906) .....>

Q905. If yes, why do you think it was severe? [CIRCLE ALL ANSWERS GIVEN BY MOTHER]
1. Child was shaking 2. Child had convulsion 3. Child wouldn't drink/such 4. Fever lasted a long time
5. Child had diarrhoea 6. Child felt hot 7. Child has fast breathing 77. DK 88. Other_____

Q906. What did you do for (NAME's) fever at home before you went to anyone else for help?

Gave medicine	1	12	—> GO TO Q907
Gave sponge bath	2	22	—> GO TO Q910
Increased fluids/breast milk	3	32	—> GO TO Q910
Continued Feeding semi/solid foods	4	42	—> GO TO Q910
Gave Herbs	6	62	—> GO TO Q910
Nothing	6	62	—> GO TO Q917
Other, specify:	88 _____	88_____	

Q907 What type of medicine did you give (NAME's)? [CIRCLE ALL ANSWERS GIVEN] (IF NOT 1, NOR 2 SKIP TO Q910)———>
1. Antimalaria tablet* 2. Antimalaria syrup* 3. Antibiotic
4. Paracetamol 77 DK 88. Other _____

Q908 What type of malaria medicine did you give (NAME's)? [DO NOT PROMPT, ASK TO SEE DRUG]
1. Chloroquine 2. Fasidar 3. Darapin 4. 77. DK 88. _____

Q909 Where did you obtain the malaria medicine?
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post 4. Village Health worker
5. Chemist/Pharmacy 6. Travelling drug seller 7. Traditional Healer 88. Other _____

Q910 Did you take (NAME anywhere for treatment of this illness?
[Y/N/DK [F NO GO TO Q917)——>

Q911 Where did you first take (NAME) for treatment of this illness? (IF NOT 1, NOR 2 NOR 3 SKIP TO Q913)———>
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post 4. Village Health worker
5. Chemist/Pharmacy 6. Travelling drug seller 7. Traditional Healer 88. Other _____

Q912. Was (NAME) admitted? [Y / N/ DK]

Q913 Where did you last take (NAME) for treatment of this illness? (IF NOT 1, NOR 2 NOR 3 SKIP TO Q915)———>
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post 4. Village Health worker
5. Chemist/Pharmacy 6. Travelling drug seller 7. Traditional Healer 88. Other _____

Q914. Was (NAME) admitted? [Y / N/ DK]

Q915. On which day of the illness did you first take (NAME) for treatment?
1. First Day 2. Second Day 3. Third Day 4. Four Days 77. DK Other _____

Q916. For how many days did (NAME) receive treatment for this illness?
0. Now under treatment 1. One Day 2. Two days 3. Three days
4. Four days 5. Five to seven days 6. One to two weeks 77. DK

Q917. What do you think causes malaria? [CIRCLE ALL THAT APPLY)
1. Sun 2. Overlook 3. Mosquitoes 4. Standing water 77.DK 88. Other _____

Q918. Has Name ever had as blood transfusion [Y / N/ DK]

INDIVIDUAL ID NO. _____

SECTION 10. DIARRHOEA DISEASE (CHILD 2) [FILL OUT FOR EACH CHILD < 60 MONTHS IN BIRTH HISTORY TABLE, STARTING WITH YOUNGEST CHILD] Child's Name:_____ Child # _____

Q1001. Did (Name) have Diarrhoea in the last 2 weeks? [Y/N/DK] IF NO, DK, GO TO SECTION II)———>

Q1002. How many days did (NAME's) Diarrhoea last?
1. Child has Diarrhoea Now 2. One to three days 3. Four to six days 4. Between 1 and 2 weeks 77.DK

Q1003. Was these Mucous in (NAME's) stool? [Y / N/ DK]

Q1004. Was there blood in (NAME's) stool? [Y/N/DK]

Q1005. Do you think (NAME's) diarrhoea was severe? [Y /N /DK] (If NO, GO TO Q1007) ———>

Q1006. Why do you think (NAME's) diarrhoea was severe? [CIRCLE ALL ANSWERS GIVE]
1. Vomiting > 3 days 2. Child had fever 3. Mucous in stools 4. Blood in stool 5. Lasted long time
6. Child looked dried out 7. Unable to drink the diarrhoea? 8. Child was weak 77. DK 88. Other _____

Q1007. Were you breast-feeding (NAME) before the diarrhoea started? [Y/N/DK] (If No, GO TO Q1009)

Q1008. Did you continue breast-feeding (NAME) during the diarrhoea? [Y/N/DK]

Q1009. What did you give (NAME) at home for the diarrhoea before you went to anyone else for help?

	Mothers Responses	Prompted Responses	
* Sugar Salt Solution (SSS)	01	012	—> If "Yes", GO TO Q1011, if "No" GO TO Q1010
* ORS	02	022	—> If "No" GO TO Q1010, If "Yes" GO TO Q1013
Increased fluids/breast milk	03	032	
Continued Feeding semi/solid foods	04	042	
Antibiotic	05	052	
Paracetamol	06	062	
Kaolin	07	072	
Herbs/Traditional Medicine	08	082	
Enema	09	062	
Nothing	10	xxxx	
Other	_____	88 _____	882_____

Q1010. Have you ever heard of either SSS or ORS that is used to treat child diarrhoea? [Y/N/DK] —. (GO TO Q1021)—>

Q1011. You said that you used SSS to treat (NAME's) diarrhoea. How did you learn to prepare it?
1. VHW 2. Government Clinic/Hospital 3. Private Clinic/Hospital 4. Chemist
5. Family/friends 6. Television/Radio 88. Other _____

Q1012 (Ask mother to demonstrate how much water, sugar, and salt to use in the preparation of SSS) Circle Y or N after observation if correct or not]:—> Water [Y/N] Sugar [Y/N] Salt [Y/N]
(UNLESS ORS WAS ALSO MENTIONED, SKIP TO Q1015).....>

Q1013. You said that you used ORS to treat (NAME's) diarrhoea. How did you learn to prepare it?
1. VHW 2. Government Clinic/Hospital 3. Private Clinic/Hospital 4. Chemist
5. Family/friends 6. Television/Radio 88. Other _____

Q1014.[Ask mother to bring water container for preparing ORS and show how much water to use] [CORRECT?] [Y/N]

Q1015. On what day of the diarrhoea did you first give (NAME) SSS or ORS? 1. Day 1 2. Day 2 3. Day 3 4. Day 4+ 77. DK

Q1016. How often did you give SSS or ORS each day? (1). after each episode (2). 2-5 Times (3). 6-9 Times (4).10 or more times (77). DK

Q1017. How much did you give each time you gave it? (1). 1-9 teaspoons (2). 10-20 teaspoons (3). Half a cup (4). about a cup (5). More than a cup (77). DK

Q1018. Do you think the SSS/ORS was effective in treating the diarrhoea? [Y/N/DK] (If NO, SKIP To Q1020) ———>

Q1019. Why do you think it was effective? 1. Diarrhoea stopped 2. Child remained active 3. Child didn't loose appetite 77. DK 88. Other _____ (GO TO Q1021) ————————>

Q1020. Why do you think it was not effective? 1. Diarrhoea persisted 2. Vomiting continued 77. DK 88. Other _____
Q1021. Did you take (NAME) anywhere for the treatment of this illness? [Y/N] [IF NO, SKIP TO SECTION II] ———>
Q1022. Where did you first take (NAME) for treatment of this illness?
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post 4. Village Health worker
5. Chemist/Pharmacy 6. Traditional Healer 77. DK 88. Other _____
Q1023. Where did you last take (NAME) for treatment of this illness?
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post 4. Village Health worker
5. Chemist/Pharmacy 6. Traditional Healer 77. DK 88. Other _____

INDIVIDUAL ID NO._____

SECTION 11. ACUTE RESPIRATORY INFECTION (CHILD 2)
[FILL OUT FOR EACH CHILD < 60 MONTHS IN BIRTH HISTORY TABLE, STARTING WITH YOUNGEST CHILD]

Child's Name:_____ Child # _____

Q1101. Did (Name) have Cough and rapid breathing (when not crying) during the last 2 weeks? [Y/N/DK] IF NO, GO TO NEXT CHILD OR SECTION 12)-------->

Q1102. How many days did (NAME's) Cough and Rapid Breathing last? 1. Child has it Now 2._____# days 77.DK

Q1103. What other symptoms/signs were present? [Prompt after the mother has answered]

	Y	N	DK
a. Difficult breathing			
b. Unable to drink (or suckle)			
c. Abnormally sleepy/difficult to wake			
d. Convulsions/fits			
e. Restlessness			
f. Fever			
g. Skin rash			
h. Diarrhoea			
i. Other (specify)			

Q1104. Do you think the illness was severe? [Y /N /DK] (If NO, GO TO Q1106) ---------->

Q1105. Why do you think it was severe? [CIRCLE ALL ANSWERS GIVEN]
1. Fast Difficult/Breathing 2. Child had fever 3. Unable to drink/suckle 4. Blood in stool 5. Lasted long time
4. Child was weak 5. Child having fits/convulsion 88. Other _____

Q1106. Were you breast-feeding (NAME) before the illness started? [Y/N/DK] (If No, GO TO Q1108)-------->

Q1107. Did you continue breast-feed (NAME) during the illness? [Y/N/DK]

Q1108. What did you give (NAME) at home for the illness? (CIRCLE ALL THAT APPLY) [Confirm]

	Mothers Responses	Prompted Responses
Increased intake of fluids/breast milk	1	032
Continued Feeding semi/solid foods	2	042
Cough Syrup	3	052
Chloroquine	4	062
Cotrimoxazole (Septrin)	5	072
Other Antibiotic	6	082
Paracetamol (Panadol	7	062
Herbs/Traditional Medicine	8	xxxx
Nothing	9	062
Other, (Specify):	88_____	88 _____ 882_____

Q1109. Did you take (NAME) anywhere for treatment of this illness? [Y/N/DK] (If NO, GO TO NEXT CHILD OR SECTION 12)--->

Q1110. Where did you take (NAME) for treatment of this illness? (If NOT 1, 2 NOR 3, GO TO Q1112) ---------->
1. Government Clinic/Hospital 3. Private Clinic/Hospital 3. Health Centre/Health Post
4. Village Health Worker 5. Chemist/Pharmacy 6. Traditional Healer 77. DK 88. Other _____

Q1112. Where did you last take (NAME) for treatment of this illness? (IF NOT 1, 2 NOR,3, GO TO Q1112) ------->
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post
4. Village Health Worker 5. Chemist/Pharmacy 6. Traditional Healer 77. DK 88. Other _____

Q1113. Was (NAME) admitted? [Y / N/ DK]

Q1114. For how many days did (NAME) receive treatment for this illness?
0. Child still under treatment 1. One day 2. Two days 4. Three Days.
4. Four days 5. Five to seven day 6. One to two weeks 77. DK

Q1115. On which day of the illness did you take (NAME) for treatment?
1. First Day 2. Second Day 3. Third day 4. After the Third Day 77. DK

INDIVIDUAL ID NO. _____

SECTION 9. FEBRILE EPISODE/MALARIA CHILD 3)
[complete for each child <60 months in birth history table, starting with youngest child]
Child's Name:_____ Child # _____

Q901. Did (Name) have fever in the last 2 weeks?[Y/N/DK] IF NO, GO TO Q917)--------->

Q902. How many days did (NAME's) fever last?
1. Child has fever Now 2. One to three days 3. Four to six days 4. One to two weeks 77.DK

Q903. What other symptoms/signs were present? [CIRCLE RESPONSE BELOW] Prompt only after the mother has answered

a. Shivering	Y	N	DK
b. Diarrhoea	Y	N	DK
c. Vomiting	Y	N	DK
d. Cough	Y	N	DK
e. Difficult/Rapid Breathing...	Y	N	DK
f Convulsions.....	Y	N	DK
g Skin rash	Y	N	DK
h. Restlessness	Y	N	DK

i. Other (specify) _____

Q904 Do you think (NAME's) fever was severe? [Y / N / DK] (If NO, SKIP TO GO Q906) .....>

Q905. If yes, why do you think it was severe? [CIRCLE ALL ANSWERS GIVEN BY MOTHER]
1. Child was shaking 2. Child had convulsion 3. Child wouldn't drink/such 4. Fever lasted a long time
5. Child had diarrhoea 6. Child felt hot 7. Child has fast breathing 77. DK 88. Other_____

Q906. What did you do for (NAME's) fever at home before you went to anyone else for help?

Gave medicine	1	12	—> GO TO Q907
Gave sponge bath	2	22	—> GO TO Q910
Increased fluids/breast milk	3	32	—> GO TO Q910
Continued Feeding semi/solid foods	4	42	—> GO TO Q910
Gave Herbs	6	62	—> GO TO Q910
Nothing	6	62	—> GO TO Q917
Other, specify:	88 _____	88_____	

Q907 What type of medicine did you give (NAME's)? [CIRCLE ALL ANSWERS GIVEN] (IF NOT 1, NOR 2 SKIP TO Q910)------>
1. Antimalaria tablet* 2. Antimalaria syrup* 3. Antibiotic 4. Paracetamol 77 DK 88. Other _____

Q908 What type of malaria medicine did you give (NAME's)? [DO NOT PROMPT, ASK TO SEE DRUG]
1. Chloroquine 2. Fasidar 3. Darapin 4. 77. DK 88. _____

Q909 Where did you obtain the malaria medicine?
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post 4. Village Health worker
5. Chemist/Pharmacy 6. Travelling drug seller 7. Traditional Healer 88. Other _____

Q910 Did you take (NAME anywhere for treatment of this illness?
[Y/N/DK [F NO GO TO Q917)——>

Q911 Where did you first take (NAME) for treatment of this illness? (IF NOT 1, NOR 2 NOR 3 SKIP TO Q913)------->
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post 4. Village Health worker
5. Chemist/Pharmacy 6. Travelling drug seller 7. Traditional Healer 88. Other _____

Q912. Was (NAME) admitted? [Y / N/ DK]

Q913 Where did you last take (NAME) for treatment of this illness? (IF NOT 1, NOR 2 NOR 3 SKIP TO Q915)------->
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post 4. Village Health worker
5. Chemist/Pharmacy 6. Travelling drug seller 7. Traditional Healer 88. Other _____

Q914. Was (NAME) admitted? [Y / N/ DK]

Q915. On which day of the illness did you first take (NAME) for treatment?
1. First Day 2. Second Day 3. Third Day 4. Four Days 77. DK Other _____

Q916. For how many days did (NAME) receive treatment for this illness?
0. Now under treatment 1. One Day 2. Two days 3. Three days
4. Four days 5. Five to seven days 6 One to two weeks 77.DK

Q917. What do you think causes malaria? [CIRCLE ALL THAT APPLY)
1. Sun 2. Overlook 3. Mosquitoes 4. Standing water 77.DK 88. Other _____

Q918. Has Name ever had as blood transfusion [Y / N/ DK]

INDIVIDUAL ID NO. _____

SECTION 10. DIARRHOEA DISEASE (CHILD 3) [FILL OUT FOR EACH CHILD < 60 MONTHS IN BIRTH HISTORY TABLE, STARTING WITH YOUNGEST CHILD] Child's Name:_____ Child # _____

Q1001. Did (Name) have Diarrhoea in the last 2 weeks? [Y/N/DK] IF NO, DK, GO TO SECTION II)-------->

Q1002. How many days did (NAME's) Diarrhoea last?
1. Child has Diarrhoea Now 2. One to three days 3. Four to six days 4. Between 1 and 2 weeks 77.DK

Q1003. Was there Mucous in (NAME's) stool? [Y / N/ DK] Q1004. Was there blood in (NAME's) stool? [Y/N/DK]

Q1005. Do you think (NAME's) diarrhoea was severe? [Y /N /DK] (If NO, GO TO Q1007) ------->

Q1006. Why do you think (NAME's) diarrhoea was severe? [CIRCLE ALL ANSWERS GIVE]
1. Vomiting > 3 days 2. Child had fever 3. Mucous in stools 4. Blood in stool 5. Lasted long time
6. Child looked dried out 7. Unable to drink the diarrhoea? 8. Child was weak 77. DK 88. Other _____

Q1007. Were you breast-feeding (NAME) before the diarrhoea started? [Y/N/DK] (If No, GO TO Q1009)

Q1008. Did you continue breast-feeding (NAME) during the diarrhoea? [Y/N/DK]

Q1009. What did you give (NAME) at home for the diarrhoea before you went to anyone else for help?

	Mothers Responses	Prompted Responses	
* Sugar Salt Solution (SSS)	01	012	—> If "Yes", GO TO Q1011, if "No" GO TO Q1010
* ORS	02	022	—> If "No" GO TO Q1010, If "Yes" GO TO Q1013
Increased fluids/breast milk	03	032	
Continued Feeding semi/solid foods	04	042	
Antibiotic	05	052	
Paracetamol	06	062	
Kaolin	07	072	
Herbs/Traditional Medicine	08	082	
Enema	09	062	
Nothing	10	xxxx	
Other	_____	88 _____	882_____

Q1010. Have you ever heard of either SSS or ORS that is used to treat child diarrhoea? [Y/N/DK] —. (GO TO Q1021)—>

Q1011. You said that you used SSS to treat (NAME's) diarrhoea. How did you learn to prepare it?
1. VHW 2. Government Clinic/Hospital 3. Private Clinic/Hospital 4. Chemist
5. Family/friends 6. Television/Radio 88. Other _____

Q1012 Ask mother to demonstrate how much water, sugar, and salt to use in the preparation of SSS) Circle Y or N after observation if correct or not]:—> (UNLESS ORS WAS ALSO MENTIONED, SKIP TO Q1015).....>

Water [Y/N]	Sugar [Y/N]	Salt [Y/N]

Q1013. You said that you used ORS to treat (NAME's) diarrhoea. How did you learn to prepare it?
1. VHW 2. Government Clinic/Hospital 3. Private Clinic/Hospital 4. Chemist
5. Family/friends 6. Television/Radio 88. Other _____

Q1014. [Ask mother to bring water container for preparing ORS and show how much water to use] [CORRECT?] [Y/N]

Q1015. On what day of the diarrhoea did you first give (NAME) SSS or ORS? 1. Day 1 2. Day 2 3. Day 3 4. Day 4+ 77. DK

Q1016. How often did you give SSS or ORS each day? (1). after each episode (2). 2-5 Times (3). 6-9 Times (4). 10 or more times (77). DK

Q1017. How much did you give each time you gave it? (1). 1-9 teaspoons (2). 10-20 teaspoons (3). Half a cup (4). about a cup (5). More than a cup (77). DK

Q1018. Do you think the SSS/ORS was effective in treating the diarrhoea? [Y/N/DK] (If NO, SKIP To Q1020) ------->

Q1019. Why do you think it was effective? 1. Diarrhoea stopped 2. Child remained active 3. Child didn't loose appetite 77. DK 88. Other _____ (GO TO Q1021) ---------->

Q1020. Why do you think it was not effective? 1. Diarrhoea persisted 2. Vomiting continued 77. DK 88. Other _____

Q1021. Did you take (NAME) anywhere for the treatment of this illness? [Y/N] [IF NO, SKIP TO SECTION II] ------->

Q1022. Where did you first take (NAME) for treatment of this illness?
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post 4. Village Health worker
5. Chemist/Pharmacy 6. Traditional Healer 77. DK 88. Other _____

Q1023. Where did you last take (NAME) for treatment of this illness?
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post 4. Village Health worker
5. Chemist/Pharmacy 6. Traditional Healer 77. DK 88. Other _____

INDIVIDUAL ID NO._____

SECTION 11. ACUTE RESPIRATORY INFECTION (CHILD 3)
[FILL OUT FOR EACH CHILD < 60 MONTHS IN BIRTH HISTORY TABLE, STARTING WITH YOUNGEST CHILD]

Child's Name:_____ Child # _____

Q1101. Did (Name) have Cough and rapid breathing (when not crying) during the last 2 weeks? [Y/N/DK] IF NO, GO TO NEXT CHILD OR SECTION 12)———>

Q1102. How many days did (NAME's) Cough and Rapid Breathing last? 1. Child has it Now 2._____# days 77.DK

Q1103. What other symptoms/signs were present? [Prompt after the mother has answered]

	Y	N	DK
a. Difficult breathing	—	—	—
b. Unable to drink (or suckle)	—	—	—
c. Abnormally sleepy/difficult to wake	—	—	—
d. Convulsions/fits	—	—	—
e. Restlessness	—	—	—
f. Fever	—	—	—
g. Skin rash	—	—	—
h. Diarrhoea	—	—	—
i. Other (specify)	—	—	—

Q1104. Do you think the illness was severe? [Y /N /DK[(If NO, GO TO Q1106) ———>

Q1105. Why do you think it was severe? [CIRCLE ALL ANSWERS GIVEN]
1. Fast Difficult/Breathing 2. Child had fever 3. Unable to drink/suckle 4. Blood in stool
5. Lasted long time 4. Child was weak 5. Child having fits/convulsion 88. Other _____

Q1106. Were you breast-feeding (NAME) before the illness started? [Y/N/DK] (If No, GO TO Q1108)———>

Q1107. Did you continue breast-feed (NAME) during the illness? [Y/N/DK]

Q1108. What did you give (NAME) at home for the illness? (CIRCLE ALL THAT APPLY) [Confirm]

	Mothers Responses	Prompted Responses
Increased intake of fluids/breast milk	1	032
Continued Feeding semi/solid foods	2	042
Cough Syrup	3	052
Chloroquine	4	062
Cotrimoxazole (Septrin)	5	072
Other Antibiotic	6	082
Paracetamol (Panadol	7	062
Herbs/Traditional Medicine	8	xxxx
Nothing	9	062
Other, (Specify):	88_____	88 _____ 882_____

Q1109. Did you take (NAME) anywhere for treatment of this illness? [Y/N/DK] (If NO, GO TO NEXT CHILD OR SECTION 12)—>

Q1110. Where did you take (NAME) for treatment of this illness? (If NOT 1, 2 NOR 3, GO TO Q1112) ———>
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post
4. Village Health Worker 5. Chemist/Pharmacy 6. Traditional Healer 77. DK 88. Other _____

Q1112. Where did you last take (NAME) for treatment of this illness? (IF NOT 1, 2 NOR 3, GO TO Q1112) ———>
1. Government Clinic/Hospital 2. Private Clinic/Hospital 3. Health Centre/Health Post
4. Village Health Worker 5. Chemist/Pharmacy 6. Traditional Healer 77. DK 88. Other _____

Q1113. Was (NAME) admitted? [Y / N/ DK]

Q1114. For how many days did (NAME) receive treatment for this illness?
0. Child still under treatment 1. One day 2. Two days 4. Three Days
4. Four days 5. Five to seven day 6. One to two weeks 77. DK

Q1115. On which day of the illness did you take (NAME) for treatment?
1. First Day 2. Second Day 3. Third day 4. After the Third Day 77. DK

INDIVIDUAL ID NO. _____

SECTION 12. HIV/AIDS/STD PREVENTION AND FAMILY PLANNING/CHILD SPACING

1201. Have you ever heard about Sexually Transmitted Diseases? [Y/N/ DK] (If NO, SKIP TO Q1208)----------->

1202. Mention two types of Sexually Transmitted Disease 1._____ 2. _____

1203. [FOR EACH STD MENTIONED, ASK FOR TWO SYMPTOMS AND CONFIRM CORRECT OR NOT]

STD1. a. _____ b. _____ CORRECT? [Y / N]

STD2. a. _____ b. _____ CORRECT? [Y / N]

1204. Have you or your partner ever contracted a Sexually Transmitted Diseases? [Y/N]

1205. Where did you (CAN SOMEONE) seek treatment?
1. Government Health Centre/Hospital 2. Private Health Centre/Hospital 3. Government Antenatal Clinic
4. Private Antenatal Clinic 5. Government Family Planning Clinic 6. Private Family Planning Clinic
7. Pharmacy 8. Patent Medicine Shop 9. Market 10. Husb's/Wife's place of work
11. Friends 12. Traditional healer 13. Community-Based Distributor/VHW 14. No treatment 77. DK
88. Other (specify) _____

1206. Name two ways in which STDs are transmitted.

1. _____
2. _____

1207. Name two ways in which STDs are prevented.

1. _____
2. _____

1208. Have you ever heard about HIV or AIDS? [Y/N/DK] (If NO, SKIP TO Q1211) ----------->

1209. Name two ways in which HIV is transmitted.

1. Through Sexual intercourse
2. barber with infected blades

1210. Name two ways in which HIV is prevented.

1. Husband shunned Stranger to their wives
2. use new blades for barbing

INDIVIDUAL ID NO ----------

[Now let us focus more specifically on child spacing or family planning methods - the various ways or methods that a couple can use to delay or avoid pregnancy. First ask Q1211. Do not read any method names; wait for her response. Circle 1 (Yes, Spn) for all methods mentioned spontaneously. Then go down the column reading each method not mentioned spontaneously, and circle 2 (Yes, Ast) if the method is recognized with assistance, and 3 (No) if it was not recognized. Then, for any method recognized, ask Q1212, and circle the appropriate number in the box in the Table below.)

Q1211. Which ways or methods do you know. Q1212. Have you ever used this method?

Type of Method	Method Known? Yes (Spn)	Yes (Ast)	No	Ever Used? Yes	/No
1. Female sterilization: Surgical procedure: i.e tubal ligation	1	2	(3)	Y	(N)
2. Male sterilization: Surgical procedure, i.e. vasectomy	1	2	(3)	Y	(N)
3. Norplant: Implanted device in the upper arm which prevents pregnancy for 3 or 5 years	1	2	(3)	Y	(N)
4. Injection: Prevents pregnancy for several months e.g. 3-monthly depoprovera, 2 monthly noristerat	1	(2)	3	Y	(N)
5. Pill: Taken daily, e.g. Lo-femenal, Noriday, Neogynon, Mircogynon	1	(2)	3	Y	(N)
6. IUD/Coil: Small loop or coil placed inside the womb of the woman by a Doctor or Nurse	1	(2)	3	Y	(N)
7. Condom/Durex: Rubber stealth used by men during sexual intercourse	1	2	(3)	Y	(N)
8. Diaphragm, foam, jelly: Placed inside the vagina of the woman prior to sexual intercourse	1	2	(3)	Y	(N)
9. Foaming tables: Placed inside the vagina of the woman prior to sexual intercourse	1	2	(3)	Y	(N)
10. Rhythm method: Avoidance of intercourse during woman's fertile days	1	2	(3)	Y	(N)
11. Withdrawal: Pulling out of the penis from the vagina before ejaculation	1	2	(3)	Y	(N)
12. Periodic abstinence: Men and Women abstain from intercourse for a period of time	1	2	(3)	Y	(N)
13. Traditional methods: herbs, waist band, belts etc	1	(2)	3	Y	(N)
14. Lactational Amenorrhoea Method (LAM): contraception through intensive breast feeding during the first six months after the birth	1	2	(3)	Y	(N)
15. Other ways: (Specify)	1	2	3	Y	N

Q1213. [HAS RESPONDENT EVER GIVEN BIRTH? [Y/(N)]: IF NO SKIP TO Q1218) ----------->

Q1214. Did you receive counselling on FP from a trained provider during the first 6 weeks after the delivery of your last child? [Y/N/DK]

Q1215. Have you used any form of contraception since the birth of your last child? [Y/N/DK] (IF NO GO.Q1217) ---------->
Q1216. Which method did you use? [Choose type of method from FP Table above]
1. 2. 3. 4. 5. 6. 7. 8. 9
10. 11. 12. 13. 14. 88. Other (Specify) _____

Q1217. Why not? _____
(GO TO Q1218)----------->

Q1218. Are you (or your partner) currently using something or any method to avoid getting pregnant? [Y/(N)/DK]
(IF NO, SKIP TO Q1222) ---------->

INDIVIDUAL ID NO. _____

Q1219. Which methods are you currently using? [Choose from methods listed in table above, and circle ALL appropriate answers below]
1. 2. 3. 4. 5. 6. 7. 8. 9
10 11 12 13. 14. 88. Other (Specify) _____

Q1220. How long have you (or your partner) continuously been using the methods identified in Q1219?

____Weeks ____ Months ____ Years 77. DK

Q1221. Where did you (or your partner) get the method you are currently using? (CIRCLE ONLY ONE ANSWER)
1. Government Health Centre/Hospital 2. Private Health Centre/Hospital 3. Government Antenatal Clinic
4. Private Antenatal Clinic 5. Government Family Planning Clinic 6. Private Family Planning Clinic
7. Pharmacy 8. Patent Medicine Shop 9. Market 10. Husb's/Wife's place of work
11. Friends 12. Traditional healer 13. Community-Based Distributor/VHW 77. DK
88. Other (Specify) _____

[GO TO SECTION 13] ---------->

Q1222. Do you or your partner intend to use a method of contraception in the future? [Y/N/DK] (IF NO, SKIP TO SECTION 13) ---------->

Q1223. Which method(s) do you intend to use? (Choose from methods listed in FP Table above)

1. 2. 3.
4 5. 6.
7. 8. 9.
10. 11. 12.
13. 14. 88. Other (specify) _____

INDIVIDUAL ID NO. _____

SECTION 13. ANTHROPOMETRIC MEASURES: (to be completed at end of interview)

[Supervisor: take measurements for the 3 youngest children < 5 years of age and mother and record below]

Record Weights Below kg (00.0)		Record Height (or Length) Below in Cm (000.0)	
4. Weight of Mother 50.____kg	5. Weight of Child 1 ___:___ kg AGE_____ months	8. Height of Mother 142 kgs	9. Height (Length) of Child 1 ___:___ Cm
	6. Weight of Child 2 ___:___kg AGE _____ months	N/C 142cm	10. Height Length of Child 3 ___:___ Cm
	7. Weight of Child 3 ___:___ kg AGE_____ months		11. Height (Length) of Child 3 ___:___ Cm

. Birth Weight of Child
(if available, record below)

Child 1 ___:___kg
Child 2 ___:___kg
Child 3 ___:___kg

INTEGRATED BASELINE HEALTH SURVEY
(1995)

DRAFT REPORT

(Community Based Household Assessment)

Prepared by
Dr. 'Kale Feyisetan
Dr. Hezekiah Adesina
Dr. Akin Akinyemi
Jossey Ogbuanoh
Program Coordination Unit

Survey Funded through the United States Agency for International Development

February 27, 1996.

C O N T E N T S

INTEGRATED BASIC HEALTH SURVEY 1995 REPORT

ACKNOWLEDGMENTS

The Program Coordination Unit wishes to acknowledge the input by all the Implementing Partners in the design of the survey, production of questionnaire and the implementation of the survey work. Particularly we acknowledge the input of the Center for Disease Control branch in Lagos for providing a lot of the questions that went into the NGO Management Assessment tool.

The unit particularly acknowledges the resource inputs of the following IPs through support for various parts of the survey both in cash and through the use and support of their staff: Center for disease Control, Johns Hopkins University/Population Communication Services, BASICS.

Thanks are due to Charles Oliver - a Technical Adviser to the Program Coordination Unit provided to us by the Mission in Lagos and to Diana Silimperi from BASICS. Dr. Stella Goings for technical direction as the need arose.

We acknowledge the encouragement from the Felix Awantang, Chief of Health, Population and Nutrition Office and his geographical program managers .

Our thanks go to the NGOs, the state and the heads of villages of the communities used for the survey without whom the survey will not have been possible

We must not forget the Survey Zonal Managers and their assistants.

We thank everyone else.

Dr. Kale Feyisetan
Technical Director/Consultant
IBHS, 1995.

Program Coordination Unit

EXECUTIVE SUMMARY

The purpose of the survey was to have in place baseline information on areas within which USAID Nigerian Program will be implemented in the next couple of years. At the end of the period of intervention, impact of the Mission support will be easier to assess. The study aimed at using community level assessments and Non-Governmental Organizations (NGO) management structure and performance assessments to explore fertility trends, maternal and child health care and their impact on the morbidity status of the mother and child. Information on "Women Decision-Making Indicators" and perceived sources and types of new bodies of information accessed in the six months prior to the survey , AIDS/HIV and Sexually Transmitted Diseases (STDs) were also collected.

Survey methodologies used were basically interviews, observations, record analysis, and anthropometric measurements. A Consultant, Dr. Kale Feyisetan, a renowned social scientist(demographer) and a highly skilled computer expert was the overall technical director. He supervised survey design, questionnaire production, training of interviewers and also supervised the field work. Data entry was carried out by clerks who were trained by him. He was also responsible for data processing using the data entry check procedures to ensure the quality of data analyzed was satisfactory.

The survey provided some lessons to guide future surveys of this nature. These will need to be taken into consideration when follow-up repeat surveys are to be carried out in the nearest future. These include:

1. Getting permission from the government (Ministry of Health , -Federal, State and local government), National Population Commission functionaries at the three tiers of government of Nigeria including their zonal offices. Securing permission was the singularly most difficult problem encountered. It tasked the skills of the survey managers and the entire Program Coordination Unit (PCU) staff at Lagos and the field, and the USAID front Office to resolve issues with some of the more difficult states.

2. Sourcing of materials by the Logistics Support Unit (LSU) of the USAID facilitated the commencement of survey within a short notice. A well articulated logistics support especially in the field of transportation and the provision of a mechanism for fund disbursement was very helpful. The assistance provided by UNICEF(Ibadan Zonal Office) and the CDC for some of the instruments for taking anthropometric measurements saved us from what could have been a serious handicap.

3. Having a consultant who supervised the data collation and processing in house assured a data set of reasonable quality to analyze.

4. Report preparation in-house by the PCU with inputs from various USAID staff was found to be more useful than contracting the whole survey out.

Findings

1. Sample is not representative of Nigerian Population and it should not therefore be used for that purpose. The sampling frame is the catchment areas of operations of USAID supported NGOs in the various zones within their 14 states of operations. Table A.1 compares it with the recently carried out National Demographic and Health Survey (1990)

Table A. 1

Background Characteristics of surveyed women, age 15-49 years

Background Characteristics	NDHS(1990)	IBHS(1995)
No of women interviewed	8781	7481
Percent Urban	**24.9**	**74.6**
Percent with no education	57.2	17.8
Percent completed primary or higher	32.8	69.8
Percent completed secondary of higher	**10.2**	**43.9**
Percent currently married	78.3	72.3
Percent ever married	82.8	77

The sample is largely urban, the women are more educated than those of NDHS and those of the average population; A fifth of the sample is made-up of adolescents (15-49 years old) 60% of the women are income earners howbeit from petty trading. Ninety(93%) three percent decide on how to spend the income earned and 91% of them believe that they have the right to contribute to household decisions on women health care needs, and the same proportion believe they have the right to decide how women should do their work and how women use their time.

Zonal differences occur in the background characteristics of the samples i.e. Lagos and South-West are more urban than North and South-East. Women in the northern sample are more exposed to Koranic education (38%) and less to secondary education (19%) than those in the other zones (0.3-0.6% for Koranic education and 50-51% for secondary education and above secondary. There are more married women from the north (83%) compared to those from the south (65-70%). See Table 2.1 (in the Annex) for more details.

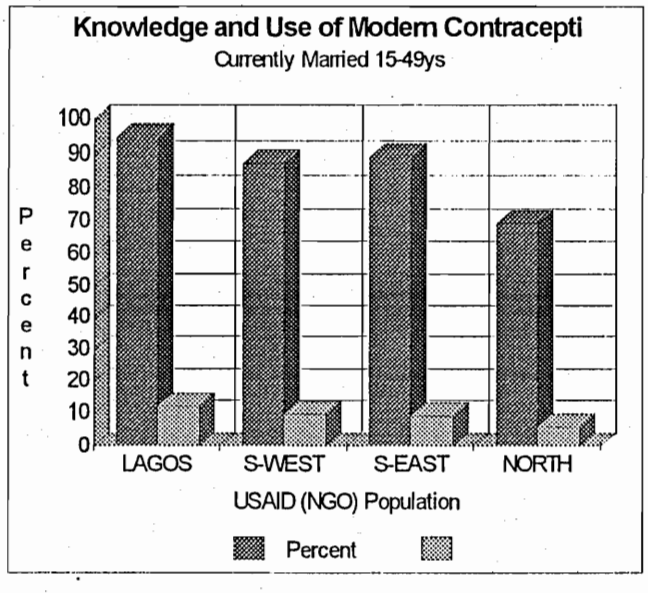

Figure A.1: **Knowledge and Use of Modern Contraceptives**

Subsequent interpretation of the data should bear in mind the specific characteristics of this segment of womenfolk who will no doubt exist among the population.

Fertility Trend

A quarter of the women have already had 5 or more children . 80% of the women know at least one modern method of family planning; 19% currently use any method whilst 9% use modern method. Those using the effective and more reliable methods -Pills, injectables, Intrauterine devices (IUD) and voluntary contraception amount to about 6% .Women use modern methods when counseled postpartum than when not counseled. Those with exposure to more years of formal education (96%) know about a modern method than those without schooling (73%) or those with those with exposure to Koranic education(85%). The married know more and use more family planning than the unmarried. Figure A.1 summarizes the zonal differences. The taller bars represents knowledge of at least a modern method by currently married en whilst the shorter bars represents the current use of modern contraception.

High Risk Births Two thirds of the births to the women interviewed were high risk in nature. Every tenth adolescent already had a live birth, every fifth woman had the following birth less than 24 months after the previous ones.

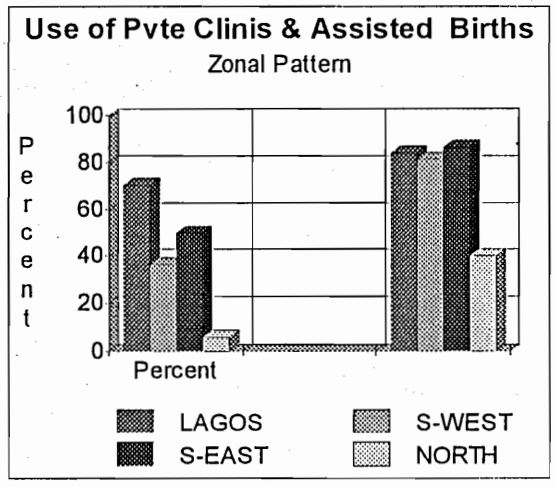

Figure A.2

Between 2% and 7.6% had the full 2 doses of tetanus toxoid which is meant to protect the mother and the neonate against tetanus.

A quarter of the children born to these mothers were delivered without the assistance of trained attendants. . In the north half of the deliveries were unassisted by trained assistants.

40% of the deliveries take place in private hospitals or clinics. Zonal differences occur as shown Figure A.2 on the left. The block on the far left of the graph represents proportion of the women using private hospitals or clinics for antenatal care whilst the block on the right side of the graph indicate the proportion of deliveries assisted by a trained attendant. Trained attendant include traditional birth attendant. Utilization of health facilities is less with adolescents than in other age-groups.

Child Health care

Women do not breast feed their children as expected; they do not get them immunized; Frequency of common ailments- fever, diarrhea and acute respiratory infections are high yet mothers do not give appropriate home treatment for these diseases. A third of them rely on hospital or health care facility to manage the sick children. The children are stunted early in life. The details of the findings are in Table A.2.

Ten (10%) percent of women breast-feed exclusively in the first month. For the remaining three months that they are supposed to breast-feed, the proportion giving exclusive breast-feed is less than 5%.

A quarter of the children had three doses of the triple antigen and oral Polio vaccines. Twenty (20%) percent had immunization against measles . Percent of children fully immunized is less than 20%.

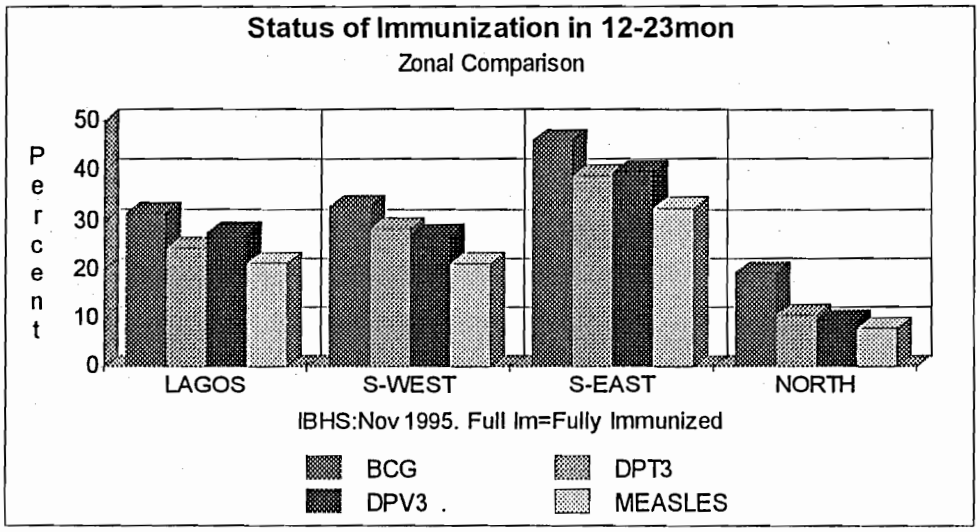

Figure A. 3: **Vaccination Status by Age and Antigen**

Figure EX. 2 shows the trend by zones. It shows the very low levels in the north compared to other zones. Immunization rates are higher among children of mothers with formal education (30%) when compared with those without any schooling (12-19%). Proportion of immunized children among the adolescent mothers is less than the average for older mothers.

COMMON CHILDHOOD DISEASES: FREQUENCY AND HOME MANAGEMENT

Fever, Diarrhea, Acute Respiratory Diseases

Frequency of these ailments were determined by asking the mothers for their frequency two weeks before the survey. A third of these children experienced episodes of fever, and a tenth of them experienced episodes of diarrhea and a tenth also experienced symptoms of acute respiratory infection. The frequencies for the northern sample were higher than for the southern sample. The frequencies of these diseases were more in the children 6-23 months when compared to older children.

Correct home treatment

Less than 1% gave correct home treatment for fever; 10% for diarrhea whilst 20% percent gave correct home treatment for acute respiratory infections. About a third of the mothers decided to seek help in a health center..

The major cause of poor home treatment is the failure to add fluids and food to the specific treatment regimens for the diseases.

A possible impact of high frequency of these childhood ailments and their inappropriate home treatment is malnutrition.

Nutritional Status of Children

The figures in the table shows the level of moderate nutritional status in the children surveyed.

This table shows that within the first five months of life, a fifth of the children are already showing evidence of chronic malnutrition (stunting) and the proportion persists and increases as the children get older. Acute loss of weight get imposed on this especially during the second half of the first year of age into the second year of life. By the end of the second year a quarter are already underweight for their ages.

	0-5	6-11m	12-23m	24-35m	36-47
Underwt	2.9	13.8	23.8	27	26.2
Wasting	4.5	9.6	12.8	8.7	9.5
Stunting	20.9	32.3	44.5	38.1	42.4

Table A.2: Malnutrition Status of Children , 0-24 months

The figures for the north (31%)are underweight (where antenatal care , assistance at delivery by trained staff are lowest) than in the other three zones (15%, 17%,22%). They are also worse in the children of the adolescent mothers

Mortality Statistics The mortality statistics in this survey are so ridiculously low both for infant and childhood mortality that analysis has been suspended. The cause of the low figures are possibly due to the quality of the responses obtained from the respondents.

Access to Information

The survey explored the process of decision-making and empowerment from the accessibility to information and awareness of rights and privileges.

(a) Exposure to information

Forty-two (42%) percent of the women interviewed were not exposed or did not consider the information accessed as new bodies of information in the 6 months that preceded the survey. The north had a higher percentage of access to new body of information than any other zone.

Politics was identified by a third of the women as providing the largest new body of information during the same period. This was a uniform finding throughout all the zones from where the sample was drawn.

Information on **health (18.6%), Education** (17%), and **Religion** (11%) provided other common sources of new information. The mix varied from zone to zone.

Sources of information: Radio (65.9%) and Television (38%) constituted the two major sources of information. "Friends and Relations" was the third commonest method of

accessing new bodies of information. The level of education sometimes brought T.V higher up as the source of information.

(b) Income Earning and Rights over Use

Sixty-two (62%) of the women interviewed earned income, 61% are self-employed and 12% are artisans in hairdressing, sewing, but trading was the singularly largest type of trade. Majority of the women perceive they have the right to use and that they are exercising the right to use the money the way they liked.

(c) Contribution to decision-making on women's health care needs, planning the use of time and educational needs.

The women in this sample contribute to decision-making on matters relating to their health and training needs. 90% claim that they have a say in determining their health needs whilst 82% claim they contribute to decisions relating to their training needs. As early as adolescents stage of life , the women interviewed believed in their rights to be part of family decision-making process.

The health situation in Nigeria is in a deplorable situation; women know about family planning but are not using. The level of use of modern effective methods is very low. Nigerian mothers have children without adequate supervision both at antenatal or during delivery by trained assistants. The level of immunized children is not enough to avoid a possible disaster should there be epidemic of any of the common childhood diseases. The children that fall victims to common ailments are not properly managed at home and only a third get referred for help leaving two-thirds without appropriate care.

There is general awareness of the right of women to be part of the decision making process in their families. They believe they have the right to spend their money the way they like and should be involved in matters relating to them be it health or education.

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1

Introduction

Background

"The goal of USAID-Nigeria's (USAID-N) program of action is a more productive society contributing to market-oriented economic growth.. The sub-goal of reduced fertility and decreased morbidity and mortality is driven by two strategic objectives: (a) increased voluntary use of family planning, and (b) improved maternal and child health practices (USAID-Nigeria Revised Country Implementation Strategy Update).

Initially, USAID-Nigeria worked with the various tiers of governments in Nigeria in the implementation of its activities. However, after an exhaustive review of governments' activities and commitments to the health sector in recent years, it was concluded that the public sector's capacity to provide health services has been deteriorating despite significant donor inputs. Political and economic factors have contributed to a precipitous decline in capacity such that the public sector has been rendered incapable of delivering adequate health services. The failure in the ability of the public sector to provide adequate health care services has led to a shift to the use of private sector services. The willingness of the private health sector providers to provide adequate health services through coordination of activities and collaboration with one another is reflected in their determination to come under a few umbrella organizations. Discussions with the private sector providers indicate that a lot could be achieved through them if more donor inputs are made available to them.

In view of the deteriorating capacity of the public sector and the increasing capacity of the private sector to deliver health care services, USAID-Nigeria designed a new strategic implementation plan that incorporates the following principles:

(a) In order to reach the programmatic goals established in the Country Program Strategic Plan 1992 (CPSP, 1992) and project papers, USAID-Nigeria will aggressively seek to develop sustainable, community responsive programs of service delivery in and through the private, non-Governmental (commercial and not-for-profit) sector. The principal thrust of the revised strategy will be a shift of implementation modality away from the public sector with concerted implementation through non-governmental programs.

(b) USAID-Nigeria will continue to maintain a cooperative relationship and policy dialogue with the Government of Nigeria, necessary for program implementation.

(c) USAID-Nigeria will rely on its Implementing Partners (US Collaborating Agencies - CAs-, Nigerian and US NGOs) to "get the job done", i.e. be the assistance delivery vehicle. This will require an investment in strengthening the management capability and sustainability of these organizations. Targets detailed in the Nigeria CPSP will be modified to reflect a shift in emphasis from strengthening public sector management to strengthening and maximizing the sustainability of these private sector organizations.

(d) USAID-Nigeria will focus on the development of indigenous Nigerian organizations by encouraging partnerships with US organizations and carefully monitored programs of institutional development.

(e) USAID-Nigeria will be responsible for effectively coordinating the work of the Implementing Partners to fulfill the strategic objectives.

(f) USAID-Nigeria will maximize the integration of the family planning, child survival and HIV/AIDS prevention strategies to maximize efficiency and assistance delivery. Additional targets in the Nigeria CPSP will be developed to reflect this emphasis on integration.
Several program indicators were developed to monitor and assess the impact of the program initiated with the non-governmental agencies.

Estimation of Catchment Area

The shift in implementation strategy from collaboration with public institutions to collaboration with non-governmental, community-based organizations (NGOs) necessitated a re-determination of the catchment areas (the population being covered or likely to be covered by the NGOs). Such a re-determination of catchment population is necessary for the determination of appropriate denominators for the baseline and subsequent assessment of program impact. When the Federal and State Government institutions were the collaborating agencies, the whole country (or State) could be assumed as the catchment area for the programs of USAID-N. However, such an assumption could no longer hold for programs that are initiated with privately managed non-governmental organizations that may have discrete foci of service delivery. The activities of some of these non-governmental, community-based organizations might not extend beyond several kilometers around their locations.

One of the major pre-survey activities of the Program Coordinating Unit (PCU) was to determine the catchment areas for the activities of the Implementing Partners and their collaborating NGOs. Based on the recommendation of the Consultant to the unit, a rapid assessment of the coverage areas was undertaken through the collection of relevant data from the individual NGOs in the four survey regions. Data were collected on location of NGOs, the areas of coverage (streets or wards in cities and towns, or villages) and the segment of the population (youths, women, transport workers etc.) being covered - the target populations. Data collected from the NGOs provided an adequate assessment of the proportion of each local government area (or state) covered by the activities of the NGOs as well as an insight into the extent of overlapping in coverage areas. PCU field staff were involved in the collection of data.

The Integrated Baseline Health Survey (IBHS)

Most of the non-governmental organizations are located in the urban areas with populations that are more educated, are engaged in non-farming activities and have greater access to health care facilities than their rural counterparts. With about 70 percent of the country's population in the rural areas, the demographic and health characteristics of Nigeria's population cannot, therefore, be adequately reflected by the characteristics of the population in the catchment areas. The perceived difference between the socio-demographic composition of the catchment population and that of the entire country led to the conclusion that data generated from a representative sample of Nigeria cannot be used as the baseline data for the Assessment of Program Impact Indicators. There was thus the need to conduct another survey that can yield

adequate baseline information on the various fertility, health, family planning and morbidity indices.

Objectives of the Integrated Baseline Health Survey

In order to effectively plan, manage, and evaluate the impact of their program activities, USAID and the collaborating agencies need baseline information on:

(i) knowledge and use of family planning,
(ii) mothers' knowledge and perceptions of childhood diseases, and their health care practices, and,
(iii) the population's knowledge of the transmission and prevention of HIV/AIDS.

As earlier indicated, data from previous studies cannot be used for these purposes.

The Integrated Baseline Health Survey was, therefore, conducted, among other things, to:

- establish a baseline against which changes in the fertility, family planning, health and morbidity indices can be measured at a later date;
- gather relevant data that can be used to meet the reporting requirements of USAID-Nigeria to Washington
- collect relevant data that can be used to influence program decisions on health information, education and communication.

Organization of the Survey

All survey activities were coordinated by the PCU Task Team. In addition to staff of the PCU, the task team also consisted of technical experts from different Implementing Partners - CDC-N, BASICS and JHU. The administrative head of the Task Team was the PCU Manager while a technical coordinator was appointed to coordinate the technical aspect of the survey. The task team met regularly to discuss the various survey activities.

1. Survey Design

The survey was designed in such a way that the lowest level of validity would be the USAID zone (later referred to as region). The zones are Lagos, North (Jigawa, Kano, Katsina, Kebbi and Sokoto States), South-East (Abia, Anambra, Benue, Cross-River and Enugu States) and South-West (Ondo, Osun and Oyo States). Within each zone, validity relates to areas covered by various collaborating agencies through the private sector activities. The design has an advantage of maximally showing the impact of program efforts since areas not covered by the activities of the collaborating agencies were not included in the survey.

The cluster sampling procedure was adopted and thirty clusters were surveyed in each zone. This procedure has the practical advantage of yielding representative sample of coverage areas without requiring a prior listing of all elements. This sampling technique is usually recommended for less developed countries like Nigeria where accurate census data are often unavailable and transportation is difficult. We chose the minimum recommended number of 30 clusters per zone to minimize cost and survey time. Although sampling efficiency increases as the number of clusters increases, we were convinced that efficiency has not been compromised for cost. By aggregating the weighted contributions from each zone, the national figure was obtained. It should be noted that this design is incapable of detecting intra-zonal variations since validity is limited to the zonal level. In addition, special target

populations (such as commercial sex workers, long distance truck drivers, etc. that are important to AIDSCAP) were not adequately represented thus limiting the utility of the data to Implementing Partners that work with very special target groups.

2. Selection of clusters

A list of population units covered by the activities of the collaborating agencies was drawn within each zone. The smallest population unit is the enumeration area. The estimated population of each unit was written next to the population unit and a cumulative population was obtained by summing the population of the various population units. The cumulative population for all units in the zone was then divided by 30 to obtain the sampling interval. A table of random numbers was used to select a number between one and the sampling interval. The number was used to select the first population unit to be surveyed. The sampling interval was then added to the first number to identify the second population unit This process was repeated until all the 30 clusters had been selected (see Table A1 in the appendix).

3. The Survey Instrument

Two types of questionnaires were used to collect data in the IBHS: the household questionnaire and the individual questionnaire.

A. The Household Questionnaire

The household was defined to include all persons sharing a common living space and common source of food. Defined as a housekeeping unit, members of the extended family who do not live in the housing unit where the primary respondents are located were not included.

The household questionnaire was administered in order to collect information on all usual household residents. In addition, the household questionnaire also served to identify primary respondents to whom the individual questionnaires were administered. The information on the household schedule was obtained from the head of household, spouse of head or an adult child (preferably over the age of 18 years).

B. The individual questionnaire

The individual questionnaire was administered only to females aged 15 to 49 years. All females aged 15 to 49 years in each household were interviewed. In addition to the section on the characteristics of the respondent, the individual questionnaire also has sections on Reproduction, Breast Feeding and Nutrition, Accessibility of Health Services, Maternal Health, Health Care for children under the age of five years, Family Planning and Height and Weight of children under five.

4. The required number of interviews per cluster

Usually, the required number of interviews depends on the perceived (or estimated) baseline levels of health care utilization and the expected changes in those levels during the course of the program. The IBHS Survey was designed to detect a crude increase of 20 percent points during the project life in the proportion of children adequately treated at home for fever or diarrhea. Table 1.1 shows the total number of children under five (N) and the number of women that are needed in each USAID zone for the different baseline levels. The table was constructed from various assumptions on: 1) the incidence of fever or diarrhea in the two weeks preceding a survey, and 2) the proportion of children adequately treated for diarrhea or fever.

Cluster sampling requires larger samples than simple random sampling in order to account for concentrations of characteristics (known as pocketing or clustering) that may occur in some clusters and not in others. The extent of pocketing can vary widely for different variables and must be measured empirically. Experience has shown that the use of a design effect (DE) of 4 in sample size calculations will be adequate for all indicators of interest in this survey. However, other indicators, especially the prevalence of childhood diseases, have a much higher degree of pocketing and, therefore, require much larger samples.

Table 1.1.

Total Number of children under 5 years of age (N) and number of women (W) to be surveyed per USAID zone

Estimated lowest incidence (diarrhea or fever)	Proportion of children under five treated correctly at home							
	10%	20%	30%	40%	50%	60%	70%	80%
10% N	194	2560	2930	305	293	2560	194	1080
(c)	65	86	98	102	98	86	65	36
W	242	3200	3665	381	366	3200	242	1350
(w)	81	107	123	128	123	107	81	45
15% N	129	1707	1954	203	195	1707	129	721
(c)	44	57	65	68	65	57	44	24
W	162	2135	2445	254	244	2135	162	905
(w)	54	72	82	85	82	72	54	31
20% N	970	1280	1461	152	146	1280	970	540
(c)	33	43	49	51	49	43	33	18
W	121	1600	1830	191	183	1600	121	675
(w)	41	54	61	64	62	54	41	23
25% N	776	1024	1172	122	117	1024	776	432
(c)	26	35	40	41	40	35	26	15
W	970	1280	1465	152	146	1280	970	540
(w)	33	43	49	51	49	43	33	18
%	647	854	977	1017	977	854	647	360
N	22	29	33	34	33	29	22	12
(c)	810	1068	1225	1275	122	1068	810	450
W	27	36	41	43	41	36	27	15
(w)								

Notes: (c) = Number of children to be surveyed per survey cluster (EA.)
(w) = Number of women to be surveyed per survey cluster (EA.)

It should be emphasized that calculations were based on the need to have enough cases in all subgroups for which separate analyses are required: mothers, surviving children with diarrhea or fever in the two weeks preceding survey. To obtain a sufficiently large sample size that will permit statistically significant findings among various population subgroups, the usual procedure is to start the determination of the sample size from the number of cases that will be needed (usually referred to as the denominator) to detect significant differences in the events with low prevalence. When there are chains of events that are closely linked to one another, the usual procedure is to start with the last chain that needs the smallest sample size and work upwards using the appropriate conversion factors to obtain an adequate sample size for all groups. Of all the groups identified in this survey, the smallest is the group of children who received correct home treatment for diarrhea or fever. We first determined, therefore, the number of children with diarrhea or fever that will permit detection of significant changes between the first and the follow-up surveys. The procedure for obtaining the data in Table 1.1 is presented at the end of this chapter.

3. Training of Survey Personnel and Field work

Training of survey personnel was undertaken at two levels: Training of Trainers and Training of supervisors and interviewers. The Training of Trainers was conducted between September

4 and 5, 1995 for zonal coordinators and field officers. During training, participants reviewed the adequacy of the community-based survey instrument in measuring the API indicators. By incorporating suggestions from the workshop participants, a revised version of the questionnaire was developed. In addition to the review of the survey instrument, the workshop participants also deliberated on the strategies to be adopted in the training of field workers in the different zones between September 9 and 17, 1995

Between September 9 and 17, 1995, the field workers (supervisors and interviewers) were trained in all the four zones. To ensure that all relevant topics were covered and that similar training procedures were adopted across the zones, a time-table of activities that was followed in all the four zones was developed. It should be emphasized that during training, the field workers suggested some revisions either in the wording or sequencing of some questions on the basis of their experience with the communities they were to work with. Some of the suggestions were incorporated.

At the end of training, the field workers undertook a pretest of the community based survey instrument in areas not selected for the actual field work. Unfortunately the pretest could not be analyzed as anticipated due to time constraints. Pretest activities ended on September 22 and actual field work started on October 2. Field activities ended on October 23, 1995. At the end of field work, 7485 women had been successfully interviewed.

Data Processing

Data entry commenced on November 6, 1995 following a training of data entry clerks on November 2 and 3, 1995. Data analysis started shortly after data entry has been completed.

Notes on the Calculation of the Sample Size

(a) Different estimates of the proportions of under-five children who had diarrhea or fever in the two weeks preceding a survey and the proportions that received correct home treatment were assumed.

(b) An increase of 20 percentage points in the proportion of children correctly treated for diarrhea or fever during the intervention period was assumed. Based on recent studies, the current rate was taken as 10%.

(c) A level of significance of 5% and a power of test of 80% were also assumed.

(d) Using these assumptions, the sample size for the correct home treatment of fever or diarrhea was calculated using the formula:

$$n = [DE * \{[Z_{1-\alpha}\sqrt{2*P^*(1-P^*)}] + [Z_{1-\beta}\sqrt{(P_1(1-P_1) + (P_2(1-P_2))}]\}^2]/(P_1 - P_2)^2$$

Where:

n is the number of cases of either diarrhea or fever needed to detect significant changes in the correct home treatment of diarrhea or fever.

DE is the design effect, a factor included to compensate for the loss of precision which results from using a cluster sample instead of a simple random sample. Design effect usually varies from one variable to another. A design effect of 4 was assumed for this survey.

$Z_{1-\alpha}$ is the value of Z (read on the abscissa - horizontal axis - of the standardized normal curve) for a given cut-off point of the distribution, the significance level (set at 5%) for this survey. Because of the selective interest in documenting changes in one direction, i.e., if the practice improved over time), Z is found in the one-tail table. For $\alpha = .05$, $Z_{1-\alpha} = 1.645$.

$Z_{1-\beta}$ is the value of Z (read on the abscissa of the standardized normal curve) for a given cut-off point of the distribution, the power (1-beta). For the reasons given for $Z_{1-\alpha}$, the value of $Z_{1-\beta}$ is also read in the one-tail table. Because the table covers only the values of the distribution between 0.000 and 0.500, Zbeta for (1-beta) > 0.500 is found by adding a minus sign to the value of Z read in the table for beta. For a power of test set at 80%, $Z_{1-\beta} = 0.842$.

P_1 is the baseline proportion of cases (diarrhea and/or fever) assumed to have correct home treatment.

P_2 is the expected proportion of cases (diarrhea and/or fever) that would have correct home treatment) at the time of the follow-up survey.

P^* is the average proportion, $(P_1 + P_2)/2$.

(e) The total sample size for all under-five children was obtained by adjusting n by the conversion factor which is (100/15).

(f) The total number of women to be interviewed was determined by adjusting the number of under-five children by a conversion factor which is (100/80). The 1990 NDHS survey revealed that there are on the average 80 under-five children to 100 women of childbearing ages.

It is demonstrated from previous studies that as much as 5-10% of the total questionnaires may not be completed properly during community surveys of this magnitude. In order to compensate for questionnaires which may not be correctly completed by interviewers and whose errors may not be detected by the supervisors, it is necessary to multiply the estimated number of women to be interviewed by a correction factor of 1.08. Hence, we went out to interview a minimum of 1,750 women or 59 women per cluster after rounding off. Thus, nationwide, approximately 7,000 women were to be surveyed in the 4 USAID zones.

CHAPTER 2

Background Information on Respondents

In this chapter, we present information on the background characteristics of the primary respondents - women aged 15 to 49 years. Information on the background characteristics permits an examination of differentials which are often used to interpret survey findings. While the four middle columns of Table 2.1 show the distributions of respondents in each zone by selected demographic and socio-economic characteristics, the last column shows the distributions of all women according to the background characteristics.. The selected background characteristics include age, place of residence (rural or urban) education, occupation, employment status and some fertility indices.

Age

Data on age were obtained in two ways: adequate response to the question "What is your date of birth?", and estimates of age using calendar of historical events. Age was estimated through the historical calendar method only for respondents who did not give actual dates of birth or know their age. Interviewers, supervisors and survey coordinators in each zone prepared a calendar of historical events and they were adequately trained on the use of the calendar to estimate age.

The first panel of Table 2.1 shows the five-year age distribution of interviewed women in each zone and in the zones combined. Except in the North, the percentage of women in each age group increases until after age 29 when it starts to decline. Only the pattern of age distribution in the North is consistent with the expected pattern in an expanding population where succeeding generations are expected to be more in number than preceding ones. A plausible explanation for the pattern of age distribution between 15 and 29 in Lagos, South-East and South-West is that younger women in these zones, majority of who are either in school or working outside the home, are more difficult to locate than their older counterparts. The pattern of age distribution depicted by all women (last column) reflects the pattern in Lagos, South-East and the South-West.

Place of Residence

Panel 2 of Table 2.1 shows that 74.6 percent of all women reside in the urban areas while another 14.1 percent reside in peri-urban areas (last column). In the regions, the percentage residing in the urban areas ranges from 50.5 in the South-East (the least urbanized) to 99.6 in Lagos (the most urbanized). For all women, only 11.2 percent live in the rural areas. The rural-urban composition of the sampled population does not actually reflect the rural-urban composition of the population of Nigeria. As at 1990, only 24.9 percent of Nigeria's population lived in the urban areas (FOS/IRD/Macro International, 1992). As indicated in chapter 1, the rural-urban composition of the sampled population reflects the fact that most of the non-governmental organizations around which the sampled populations live are in the urban areas.

Education

The distribution of women by the highest level of education attained is shown in panel 3 of Table 2.1. To obtain data on education, all women were asked to state their highest level of school attended. Those with primary or higher education were also asked to state the highest class or year completed at that level. Even though some educational categories have very few cases, we have decided not to re-group educational categories at this stage. It should be noted that the secondary education category includes respondents with secondary or teacher-training education, and the beyond secondary category includes all respondents with university, polytechnic or other post-secondary technical education.

It is discernible from panel 3 of Table 2.1 that unlike the findings in previous studies (see for instance, FOS/IRD, *op cit*), there are more educated women in our sample population. The percentage of women with formal primary education and above ranges from 34 percent in the North (if one excludes the 38.1 percent with Koranic primary) to 83.1 percent in Lagos. The percentages of women with formal primary education and above actually indicate that the sampled population is more educated than the general population of Nigeria. Koranic education, as a separate system of education, is only predominant in the North.

Economic Activity Variables

Occupation

One of the indices of female status is economic activity (see Feyisetan, 1988, 1990). Respondents were asked to state the kind of work they do and their employment status. Panel 4 of Table 2.1 shows that about 82 percent[1] of all women are engaged in one activity or the other. The percentage of women who work (that is, combine economic activity with domestic activities) varies between 59.8 percent in the North and 94.2 percent in the South-West.

The distribution of women by occupation shows that approximately two-fifths of all women are engaged in trading (mostly small-scale retail) activities. Across the regions, the percentage of women engaged in trading ranges from 30.6 in the South-East to 49.0 in the South-West. The other main occupations are hair dressing, farming (especially in the South-East and South-West), and teaching. Some women are also found in high-paid professional jobs.

Employment Status

Women who work were also asked to state their employment status (that is their relative positions in the place of work). Panel 5 of Table 2.1 shows that majority of the women are self employed. This is expected since majority of women are traders or professional hairdressers/seamstresses. Women in lagos, the North and the South-West, are, however, more likely to be in self employment than women in the South-East. Considerable percentages of women are also employees and unpaid family workers. There are also a few employers.

Marriage and Fertility Variables

Marital Status

In societies where childbearing traditionally takes place almost exclusively within marriage and where adoption of contraception is low, a major determinant of fertility is marital status together with the age at which women enter into marriage unions. Panel 6 of Table 2.1 shows

[1] This percentage excludes women who did not respond to the question on economic activity.

that 77 percent of all women have ever been married[2] and that 72.8 percent are currently married. These percentages are much lower than the corresponding figures of 82.8 percent and 78.3 percent observed for Nigeria in 1990 (FOS/IRD/Macro, 1992). There are significant regional variations in the percentage ever and currently married especially between the South and the North. While about one-quarter of the women in the South are yet to marry, only one-ninth of the women in the North have never married.

Ever Pregnant and Ever had a Live Birth

Women were asked to state whether they have ever been pregnant. The seventh panel of Table 2.1 shows that 76 percent of all women have experienced one or more pregnancies. The pattern of regional variation in the percentage of women who have ever been pregnant is as found for marital status: the percentage of women who have ever been pregnant is lowest in the South-East (70.7) and is highest in the North (82.0).

It is shown in panel 8 of Table 2.1 that not all women who have ever been pregnant have had a live birth. While 76.1 percent of all women have experienced at least a pregnancy, the percentage of all women that have had one or more live births is 72.5[3]. The figures for the regions indicate that the percentage of women who have had at least a live birth is highest in the North.

Children Ever Born

One of the indicators of fertility is children ever born. Since this study does not focus much on fertility, detailed analysis of fertility variables is not undertaken at this stage[4]. Panel 9 of Table 2.1 indicates that 27.6 percent of all women have not had a live birth[5]. The percentage of women having children declines as parity increases in all the zones. However, the fact that more than one-quarter of women still have 5 or more live births suggests high fertility in the surveyed population[6].

[2] Women who claimed to be living together with men are included in the categories of ever married and currently married.

[3] Women who have never been pregnant are included in the category "never had a live birth"

[4] Detailed analysis of fertility (for instance, the estimation of ASFR, TFR, and the determination of factors that influence fertility in the study areas) will be undertaken in subsequent analyses.

[5] This figure includes women who have never been pregnant or have been pregnant but never had a live birth.

[6] The cut-off point of five or more children is influenced by the fact that the National Policy on Population recommends a maximum of four children per woman by the year 2000.

CHAPTER 3

Family Planning

In this chapter, a brief discussion of knowledge and use of contraception is undertaken. In the discussion of the major family planning related API indicators, attempts are made to examine variations in contraceptive knowledge and use by three crucial variables: region of residence, education and age.

Knowledge of Contraception

A major precondition for contraceptive use is a knowledge of contraceptive methods. Thus, information about knowledge of family planning methods was collected by asking the respondent to mention ways or methods that a couple can use to keep from getting pregnant or prevent a birth. For each method not mentioned spontaneously, the interviewer gave a description of it to determine whether the respondent knows or has heard of it. Standard descriptions of these methods were provided in the questionnaire.

Levels of contraceptive knowledge by region of residence are presented in Table 3.1.a. Panel A shows the level for all women and Panel B shows the level for currently married women. Panel A shows that approximately 84 percent of all women have heard of at least one modern method of contraception[1]. Knowledge of modern method of contraception is highest in Lagos (94.1%) and lowest in the North (68%). 74 percent of all women (66.3% in the North, 70.1% in the South-West, 75.4% in the South-East and 83.6% in Lagos) have heard of at least one traditional method of contraception[2],[3]. It is shown in Panel A that 12 percent of all women do not know any modern or traditional method. The proportion of women with no knowledge of a modern or traditional method is highest in the North. Panel B shows that the level of contraceptive knowledge is higher among currently married women. In all the four regions, contraceptive knowledge among currently married women is higher than among all women. The pattern of regional differential in contraceptive use among currently married women is as found for all women.

Levels of contraceptive knowledge by education of respondents are presented in Table 3.1.b. Panel A shows the level for all women and Panel B shows the level for currently married women. An examination of levels across formal levels of education (no formal education, formal primary, formal secondary and beyond secondary) reveals a monotonic increase in levels of knowledge of modern or traditional method as education increases. This observation is true for all women and currently married women. For all levels of education, contraceptive knowledge is higher among currently married women. It is important to note also that women

---

[1] Modern methods of contraception include female sterilization, male sterilization, norplant, injection, the pill, IUD, condom, diaphragm and foaming tablets.

[2] Traditional methods include Rhythm, withdrawal, periodic abstinence, traditional practices such as wearing of rings and waist bands and administration of herbs, lactational amenorrhea method)

[3] Please note that the two categories "knows at least a modern method" and "knows at least a traditional method" are not mutually exclusive. Majority of women know both modern and traditional methods.

with Koranic secondary education are more likely than those with Koranic primary education to know at least one modern or traditional method of contraception.

Current Use of Contraception

An important objective of this study is to determine current levels of contraceptive use in the catchment population. Although several questions were asked on ever and current use of contraception, the discussion in this section focuses only on current use of contraception.

Table 3.2.a. shows percentage distribution of all women by contraceptive method currently used. The first row **(any method)** indicates the overall levels of current use by region and for all women combined. It is discernible from the table that 19.3 percent of all women in the catchment population currently use contraception. Although this figure is indicative of a low level of contraceptive use (especially since the catchment population lives around facilities that provide family planning services), it is much higher than the 7.5% level recorded in 1990 for all women in Nigeria (FOS/IRD/Macro International, 1992). Current use of contraception among all women is highest in Lagos (27.6%) and is lowest in the North (9.1%). An examination of method mix indicates that majority of women who use contraception use the traditional methods in the South-East. In Lagos, almost as many women use traditional methods (14.5%) as are using modern methods (13.1%). In the North and South-West, greater proportions of women use the modern methods.

The percentage distribution of currently married women by contraceptive method currently used is presented in Table 3.2.b. By comparing Tables 3.2.a and 3.2.b. it is observed that current use of contraception is higher among currently married women in all the regions[4]. The higher level of contraceptive use among currently married women in this survey suggests a positive correlation between knowledge and use: it was shown in Tables 3.1.a and 3.1.b that higher proportions of currently married women know at least a method of contraception. In addition, conditions under which family planning services are currently being provided in the country put never-married women (who form a significant proportion of currently unmarried women) at a disadvantage. Regional variations in current use of contraception and in method mix among currently married women are as found for all women.

In many societies, especially in Sub-Saharan Africa, the idea of using contraception presupposes that the couple has had some children[5]. Thus, younger women who have just started their families are less likely to use contraception, especially the more effective ones. Table 3.2.c shows that, for all women, contraceptive use increases as age increases up to the late thirties; after age 40, contraceptive use declines. With respect to method mix, the following patterns emerge: (i) women above age 34 are more likely to use long lasting modern methods (mainly female sterilization, injection and IUD); (ii) women between 25 and 39 years are more likely to use the pill and the condom - these are likely perceived as more convenient methods to space births; (iii) use of traditional methods is uncorrelated with age after age 24. The various patterns of relationship between age and levels of use (or method used) tend to suggest that contraceptive use is basically driven by the desire to space births. The declines in levels of use after age 40 may be due to the fact that many women reach menopause shortly after age 40 and hence do not need to use contraception to avert pregnancies. The

[4] This finding is inconsistent with that of the 1990 NDHS. In 1990, it was shown that currently married women had a lower level of contraceptive use than all women. The 1990 result was attributed to the high level of contraceptive use among the never-married women.

[5] This assumption will hold if contraception is used only to space or to limit child bearing and not for the prevention of sexually transmitted diseases

differentials in levels of contraceptive use and in methods used by age among currently married women are as found for all women (see Table 3.2.d).

Table 3.2.e shows levels of current use of contraception by education. For all women (panel A) and currently married women (panel B) the table shows that formal education is positively correlated with current use of contraception; that is, the higher the level of formal education, the higher the level of use. A minor exception to this pattern of correlation between formal education and contraceptive use is found among all women: women with formal secondary education has lower level of use than those with formal primary education. It is difficult at this stage to proffer reasons for this finding. It is also important to note that at all levels of education, currently married women have higher levels of contraceptive use than all women combined. This finding suggests that being married has a positive impact on contraceptive use.

The role of Counseling in Family Planning

An important factor that can stimulate the use of contraception is an understanding of its advantages. Health providers have a role to play in explaining to women the need to use contraception and the types of methods available. The relative effectiveness and the side effects of each method should also be made known to the client.

In order to determine the impact of counseling on family planning on contraceptive use, respondents who have ever given birth were asked to indicate whether they were given counseling on family planning during the first six weeks after the delivery of the last child. All post-partum women were asked to indicate whether they have used any method of contraception since the birth of the last child and the method used. Information on current use of contraception was also sought from them.

Table 3.3.a shows the percentage distribution of post-partum women by counseling status. The table shows that 34.8 percent of women were given counseling on family planning during the first six weeks after the delivery of the last child; 63.9 percent did not receive such counseling and 1.3 percent did not give any reply. The proportion of post-partum women who received counseling on family planning is, no doubt low in a survey area where over 70 percent of the last births are delivered by trained attendants (see Table 4.2). An examination of counseling status by background characteristics shows that: (i) the probability that a woman would be counseled on family planning is lowest in the North and highest in the South-West; (ii) urban-based women are more likely to be counseled on family planning than their counterparts in peri-urban and rural areas; (iii) education (both formal and Koranic) is positively associated with the probability of being counseled; and, (iv) women between the ages of 25 and 39 years have equal probability of being counseled; below 25, the probability of counseling increases with age and above 39 the probability declines with an increase in age.

Table 3.3.b. shows the percentage of post-partum women that have used modern method of contraception by counseling status. The table shows that women who received counseling on family planning are more likely than those who did not receive counseling to have used modern contraception after the birth of the last child. This finding holds across all levels for all population subgroups. In fact the ratios of counseled users to non-counseled users are higher for population subgroups with low level of counseling: women in the North, rural-based women, women with Koranic primary and secondary education, and 15-19 year-old women.

Fertility Desires

Of interest to studies on family planning are issues of mistimed births and the desire to postpone or limit births. Series of questions are usually asked from respondents in order to determine whether they desire to stop or limit births. In this survey, we asked women to indicate whether they would have liked to postpone or stop child bearing at the time of the last pregnancy or birth. Respondents who desired to have delayed births were asked to state how long they would have liked to wait.

Table 3.4 shows the percentage of currently married women wishing to space or limit births by region of residence. About 15 percent of the women would have liked to wait before the last pregnancy or birth. The percentage ranges from 10.9 in the South-West to 20.2 in the South-East. With respect to limiting births, only 6.2 percent of women would have liked to stop child bearing at the time of the last pregnancy or birth. The percentage willing to stop child bearing ranges from 4.8 in the North to 8.3 in the South-East. Until further work is done on this topic, it will be premature to proffer explanations for the low levels.

High risk fertility

Children born to mothers who are either too young or too old, children born after a short birth interval, children who are of high parity have been found to have higher probabilities of infant and child mortality. Probability of dying increases with the number of risk factors. Thus, children who are born to mothers who are too young after an interval of less than 24 months are more likely to die than children who are born to the same group of mothers but after an interval of 24 or more months. Usually. a mother is classified as too young if she is less than 18 years of age, and too old if she is over 34 years of age at the time of delivery. A short birth interval is defined by a birth occurring less than 24 months after the previous one. A child is classified as being of high birth order if the mother has previously given birth to three or more children.

The percentage distribution of mothers who had one or more births in the five years preceding the survey according to the risk factors is shown in Table 3.5. 37 percent of mothers are not in any risk category. Of those in any risk category, approximately 20 percent are in multiple risk categories.

CHAPTER 4

Maternal and Child Health

A major objective of this study is to examine maternal and child care practices in the survey population. Three aspects of maternal and child health will be examined in this chapter: maternal care, vaccinations and management of childhood diseases. The concern for pre-natal and post-natal care services results from the realization that they influence the growth and survival chances of infants and children. The growth of the fetus and the outcome of pregnancy are usually influenced by the type of antenatal care received by mothers. Similarly, child morbidity and survival are influenced by the type of postnatal care received by the children.

Ante-natal Care

There are two major antenatal care variables in this study: whether a woman received TT2, and source of antenatal care during pregnancy. It should be noted that, unlike previous studies (for example NDHS, 1990), information on antenatal care was collected on the last pregnancy (or second to the last, if the woman was pregnant at the time of the survey)

Table 4.1 shows the coverage of TT2 among women who delivered in the 12 months preceding the survey[1]. Less than 1 out of every 20 women who had a live birth in the 12 months preceding the survey received TT2. This is much lower than the level of coverage for Nigeria in 1990 (NDHS, 1990)[2] Coverage does not appear to vary much by the background characteristics. However, women in the North, women who live in the rural areas and women aged 40 years and above are less likely to receive TT2.

Table 4.2 shows the distribution of last births, in the five years preceding the survey, by source of antenatal care. For approximately 86 percent of births, antenatal care was received from public hospitals and clinics (46.1 percent) or from private hospitals and clinics (40.4). Although antenatal care was not received for only 6.7 percent of all births, there are marked differences in the proportions of births for which there was no antenatal care by background characteristics. For instance, births to women in the North are less likely than births in the other regions to receive any type of antenatal care. Similarly, births to adolescent mothers (15-19) and very old mothers (45-49) are also less likely than births to mothers in other age groups to receive antenatal care. Education of mother and living in the urban areas are also found to enhance the probability of receiving antenatal care.
There are also differentials in sources of antenatal care by background characteristics. While approximately 71 percent of births to women in Lagos received antenatal care from private hospitals and clinics, only 6 percent of births to women in the North received antenatal care from the private health providers. In the North, over two-thirds of births received antenatal care from the public hospitals and clinics. Majority of births in the South-West received antenatal care from the public health providers and in the South-East, the majority of births

[1] Coverage was determined only by the ability to produce a vaccination card. The woman's verbal report was not used as it is prone to timing and misclassification errors.

[2] NDHS recorded a coverage of 40.9 percent for all births in the five years preceding survey

received antenatal care from the private health providers. The public and private health providers are equally likely to be patronized in the urban areas for antenatal care; however, majority of births in the peri-urban and rural areas received antenatal care from the public health providers. Education of mother (formal or Koranic) is also positively associated with the probability of receiving antenatal care from the private health providers.

Delivery Variables

Delivery variables usually describe the conditions under which a baby was born as well as the attributes of the baby at birth. Delivery variables usually include place of delivery, assistance at delivery, instrument for cutting umbilical cords, maturity of fetus at birth, size at birth. As with antenatal care variables, an examination of delivery variables is necessitated by their strong impact on child survival chances. In this section, we shall only examine the type of assistance mothers received during delivery.

Table 4.3 shows the percentage distribution of last births in the five years preceding the survey by the type of assistance their mothers received during delivery and background characteristics. Approximately three-quarters (73.4%) of all births were delivered with the assistance of trained attendants[3] The type of assistance mothers received during delivery varies by background characteristics. For instance, births to women in the North are less likely to be delivered with the assistance of trained attendants: while over four-fifths of births in Lagos, South-East and South-West were delivered with the assistance of trained attendants, only two-fifths of births in the North were delivered with the assistance of trained attendants. Also, births to women in the peri-urban and rural areas are less likely than births to women in the urban areas to be delivered with the assistance of trained attendants.

Education of the mother (formal or Koranic) is also positively associated with the probability of receiving assistance from trained attendants during delivery. The relative disadvantage of births to adolescent mothers (15-19) should be particularly noted. Not only do these births have the least probability of receiving any form of antenatal care, they are also least likely to be delivered with the assistance of trained attendants.

Vaccinations

It has been noted that children in Nigeria and other less developed countries suffer from virulent but preventable attacks of infectious and parasitic diseases. Among the great killers of children in these countries are six vaccine preventable diseases: measles, pertusis, tetanus, tuberculosis, diphtheria and polio. In order to determine the extent of immunization against these diseases, mothers were asked to provide information on the vaccination statuses of their surviving children aged between 12 and 23 months at the time of the survey. Information provided by the mothers permits a determination of the level of vaccination coverage.

Information on vaccination coverage was collected in two ways: from records on vaccination cards (indicated on Table 4.4 as CARD) and, where cards are not available, from mother's report (referred to as RECALL on Table 4.4). Since not much confidence can be placed on information from mothers' recall, especially because such reports are prone to errors of

[3] Trained attendants (doctor, medical doctor, trained nurse/midwife, and trained TBA. To be sure that the traditional birth attendant was trained, respondents were asked to indicate whether he/she had a kit with him/her during delivery. The kit is usually given to a traditional birth attendant after training.

misclassification, our discussion shall be restricted to levels of coverage obtained from the vaccination cards.

DPT3 Coverage

Table 4.4 shows that 26.9 percent of children aged 12-23 months at the time of the survey had received DPT3 vaccination. There are differentials in coverage by background characteristics. For instance, coverage ranges from 10.6 percent in the North (where it is lowest) to 38.9 percent in the South-East (where it is highest). Coverage is almost equal in Lagos and the South-West. The differential in coverage by place of residence is unexpected: children in the rural areas are found to be more likely than children in the urban areas to receive DPT3 vaccination. While children of adolescent and very old mothers (above age 45) are less likely than children of middle-aged mothers to receive DPT3 vaccination, education of mother is positively associated with the probability of receiving the vaccination.

OPV3 Coverage

Twenty six percent of children aged 12-23 months at the time of the survey have also received OPV3 vaccination. Coverage is lowest in the North (9.5%) and is highest in the South-East (39.7%). Coverage is almost equal in Lagos (27.7%) and the South-West (27.2%). It is also shown that rural children are more likely than the urban children to receive OPV3 vaccination. The patterns of differentials in OPV3 coverage by age and education are as found for DPT3 coverage.

Measles

Overall, 21 percent of children aged 12-23 months at the time of the survey have been immunized against measles. The differentials in coverage by background characteristics are as found for DPT3 and OPV3 vaccinations.

Prevalence and Management of Childhood Diseases

Good nutrition, adequate environmental sanitation, and satisfactory pre- and post-natal care services, among others, are usually associated with high child survival chances not because they ensure total absence of susceptibility to disease attacks but because they reduce frequency of susceptibility. Child survival chances still depend, to a large extent, on the quality of the disease management ability of parents (Feyisetan, 1988). In order to assess the quality of mothers' home management of diseases, information was collected on the incidence of certain childhood diseases in the two weeks preceding the survey and on treatment patterns. It is important to note that in this section, reliance is heavily placed on the ability of mothers to recollect events accurately in the two weeks preceding the survey. Information on the prevalence of three major childhood diseases, fever, diarrhea and acute respiratory infections, is presented in Table 4.5.

Overall, 28.2 percent of under five children had fever in the two weeks preceding the survey. Prevalence is highest in the North (39.6%) and is lowest in Lagos (18.2%). In the South-East and South-West, 29.1 percent and 24.8 percent of children, respectively, had a fever in the two weeks preceding survey. While children in the rural areas are most likely to be ill with a fever (36.5%), urban-based children are least likely to be ill with a fever (26.0%). The probability that a child will be ill with a fever is negatively correlated with the education of the mother: an increase in the education of the mother is associated with a decline in the

probability that a child will be ill with a fever. With respect to age of the child, it is noted that children between 6 and 35 months have higher probability than children in other age brackets to be ill with a fever.

Table 4.5 also shows that 10.4 percent of all children under five experienced diarrhea in the two weeks preceding the survey. Regional differential in coverage is only visible between the North and the Southern regions. There are no significant differences by place of residence. The probability of having diarrhea can only be said to be negatively correlated with the education of the mother only if a dichotomy is made between mothers with primary or no education and mothers with secondary or beyond secondary education. Children between 6 and 23 months of age are more likely than children in other age brackets to experience diarrhea. The 6-23 month age brackets coincide with the period of intensive weaning.

Approximately 10 percent of all children under five were also ill with a cough and rapid breathing in the two weeks preceding the survey. Prevalence is lowest in Lagos (3.3%). There are no marked differences in prevalence rates among the three other regions: North (12.8%), South-East (10.8%) and South-West (10.9%). Differentials in prevalence by other background characteristics show that: (i) children in the peri-urban areas are more likely than the urban or rural children to be ill with a cough and rapid breathing; (ii) there seems to be no relationship between mother's education and the probability of being ill with ARI; and, (iii) children in the weaning stages (that is, those aged between 6 and 23 months) are also more likely than children in other age brackets to be ill with a cough and rapid breathing.

We noted above that one of the objectives of the IBHS is to determine whether mothers know the correct home management of the three childhood diseases. In order to achieve this objective, questions were asked on symptoms (to be sure that the mother was able to identify a particular disease) and the types of treatment given. Patterns of treatment for fever, diarrhea and acute respiratory infections are presented in Tables 4.6, 4.7 and 4.8, respectively.

Home Management of Fever

Respondents whose children had a fever in the two weeks preceding the survey were asked to indicate what they did at home. Several treatment options were provided and the options were later grouped into four major ones: administration of anti- malaria drugs, increased feeding/fluids during fever episode, health care seeking in the modern health centers, and other treatments. A distinction was made between correct home treatment and correct home management of fever[4]. Correct home treatment of fever is defined as the administration of adequate dosage of anti malaria drugs and increased feeding/fluids during fever episodes. Mothers are classified as having correct home management of fever if they gave correct home treatment or took the child to a modern health provider on noticing danger signs.

Table 4.6 shows that 27.7 of children who were ill with fever in the two weeks preceding the survey were given adequate dosage of anti-malaria drugs. The percentage varies by region, place of residence, education and age of mother. For instance, children with fever in the South-East and South-West are less likely than those in the North and Lagos to receive anti-malaria drugs. Similarly, compared with children with fever in the urban and peri-urban areas, lower proportion of children in the rural areas received anti-malaria drugs. Education of

[4] This distinction is made for all the childhood diseases.

mother is positively associated with the administration of anti-malaria drugs and children of teenage mothers are least likely to receive anti- malaria drugs

Increased feeding and increased fluids during episodes of fever are important components of the correct home treatment of fever. Mothers were asked to indicate whether they continued to feed the child with breast milk and solids during the fever episode. Less than 1 percent of children with fever had mothers who continued to feed them or increased the amount of fluids given to them during the episode. This finding indicates that mothers are only knowledgeable in the administration of drugs and not in the other essential components of correct home treatment. As noted above, correct home treatment is defined as the administration of adequate anti-malaria drugs and continued feeding of the child. About 1 in 300 (0.3%) children had a mother who administered adequate dosage of anti-malaria drugs and continued feeding or increased fluids during the fever episode. A major policy implication of this finding is that more emphasis should be placed on the training of mothers to appreciate other components of the home treatment of fever.

The second to the last column of Table 4.6 shows that 32 percent of all children had mothers who had correct home management of fever. The large difference between the percentage of children who received correct home treatment and the percentage with mothers who had correct management of fever is attributed to the fact that a high percentage of children were taken to the modern health centers immediately the mothers noticed some danger signs. There are differentials in the percentage of children whose mothers had correct home management of fever by background characteristics. Children in Lagos and South-West, children in the urban areas, children of educated mothers and children of very old mothers are less likely, than children in other population subgroups, to have mothers who can provide adequate home management of fever.

Home Management of Diarrhea

Mothers whose children had diarrhea in the two weeks preceding the survey were also asked to indicate what they did at home. Several treatment options were also provided and they have been re-classified as follows: administration of Sugar and Salt Solution (SSS); administration of Oral Rehydration Salt (ORS), increased fluids, increased feeding, health care seeking in the modern health centers and other treatments. For diarrhea, correct home treatment is defined as the administration of SSS or ORS, increased fluids and continued feeding of the child. Correct home management refers to either correct home treatment or health care seeking in the modern health centers.

Table 4.7 shows that 31 percent of children who had diarrhea were given SSS and another 16 percent were given ORS. The percentage of children who received SSS or ORS varies by the background characteristics. Administration of SSS is most prevalent in Lagos (42.9%) and is lowest in the South-East (24.8). However, the probability that a child will be given ORS is highest in the North (20%) and is lowest in Lagos (10.3%). Rural children are more likely than those in the urban and peri-urban areas to receive SSS and ORS. While education of mother (especially, formal education) is positively associated with the probability that a child will receive SSS, it does not have a consistent pattern of association with the possibility that a child will be given ORS. Age of the mother appears unrelated to the probability that a child will receive SSS or ORS.

Other components of correct home treatment of diarrhea are continued feeding and increased fluids during diarrhea episode. About 20 percent of children had mothers who increased the

amount of fluids given to them during diarrhea episodes. Feeding at the pre-episode rate was continued for only 16.5 percent of children. There are also differentials in the percentage of children who received continued feeding or increased fluids by background characteristics. For instance children in the North and children in the rural areas are less likely to be fed at the pre-diarrhea episode rate or have an increase in the amount of fluids given to them.

Overall, 12.4 percent of children with diarrhea received correct home treatment; that is 12.4 percent of the children were given SSS or ORS, plus increased fluids and continued feeding. While there are insignificant differences in the proportion of children that received correct home treatment by region and education, there are marked differences by place of residence. Children in the rural areas are significantly more likely to receive correct home treatment of diarrhea.

Lastly, it is discernible from Table 4.7 that approximately 30 percent of the children who had diarrhea had mothers who provided adequate home management. As is found for fever, a high percentage of children were taken to the modern health centers for treatment immediately the danger signs were noticed. Correct home management of diarrhea differs significantly only by place of residence.

Home Management of Acute Respiratory Infections (ARI)

Information was also collected on what mothers, whose children were ill with cough and rapid breathing, did for their children at home. The various treatment options were classified into four: Increased fluids, increased feeding, health care seeking in the modern health centers and other treatments. A child is classified as receiving correct home treatment for ARI if the child received increased feeding fluids and food during ARI episode. A mother is said to have correct home management of ARI if she gives correct home treatment or takes the child to a modern health center for care on noticing the danger signs.

Table 4.8 shows the percentage of children with recent episodes of ARI who received certain types of treatment. Overall, about 27 percent of children who had ARI in the two weeks preceding the survey received increased fluids during the episode. The percentage of children who received increased fluids varies mainly by region and place of residence. While approximately 45 percent of children in Lagos were given more fluids, only 17 percent of the children in the South-East received increased fluids during the last ARI episode. In the North and South-West, the percentages are 23.6 and 34.7 respectively. Children in peri-urban areas are less likely to be given more fluids during an ARI episode. Education and age of mother (especially after age 19) are not significantly associated with the probability that a child with ARI episode will receive increased fluids. It is, however, important to stress that children of teenage mothers are less likely to receive increased fluids during an ARI episode.

One of the recommended measures for the home management of ARI is that a child should be given more food during an episode. Approximately 25 percent of children with recent episodes of ARI were given more food during the last episode. The proportion of children who received more food differs also by region and place of residence. The patterns of difference are as found for increased fluids.

One of every five children (20.4%) who had ARI in the two weeks preceding the survey received correct home treatment. Also, the patterns of differences by background characteristics are as found for the proportions of children that received increased fluids or food. Lastly, we examined the percentage of children with recent episodes of ARI whose

mothers had correct home management of the disease. Approximately 31 percent of the children had mothers with correct home management of ARI. Like the other two diseases, a high percentage of the children were taken to the hospital and clinics immediately danger signs were noticed by the mothers.

Child Nutrition

Child nutrition has two dimensions: the types of food consumed by the child, which may be culturally determined (Mosley, 1984), and the behavioral practices associated with feeding (Feyisetan, 1988). Irrespective of the culture, evidence has shown that adequate infant feeding prevents malnutrition with its concomitant pathologies like infection, disability, stunted growth, morbidity and mortality. Exclusive feeding of babies on breast milk for the first few months of life is claimed to reduce the risk of exposure to infection and this may explain why adequately breast fed babies have been found to suffer less from scurvy, rickets and iron deficiency anemia.

The percentage distribution of last births according to prevalence and duration of exclusive breast feeding is presented in Table 4.9a. Overall, 28.2 percent of births were reported to have been fed only breast milk at any point in time. It is difficult to make any sense out of the high level of non-response at this stage. There are no marked differentials in the percentage of births that have ever been fed only breast milk by background characteristics. However, it is important to note that births in the North are less likely to be fed only breast milk at any point in time.

One of the major objectives of this study is to determine the proportion of infants that are exclusively breastfed for the first four months of life. To achieve this objective, each mother with one or more births in the five years preceding the survey was asked to indicate how long her last birth was fed only breast milk. Table 4. 9a shows that only 3.2 percent of last births were fed only breast milk for four or more months[5]. Although the percentage of infants that have ever been fed only breast milk is lowest in the North, the percentage of infants that were fed on breast milk for four or more months is highest in that region (8.9%). In the South-West, approximately 3 percent of last births were fed only breast milk for four or more months. An examination of differentials by background characteristics reveals that: (i) births in the peri-urban areas are more likely to be fed only beast milk for the four months of life; (ii) young mothers (especially below age 25) are more likely than mothers in other age brackets to feed their babies only breast milk for four or more months. Table 4.9.b merely shows the percentage age distribution of last births that were still being fed only breast milk at the time of the survey. The table shows that approximately 37 percent of the infants are aged 4 or more months.

Nutritional Status

The nutritional status of children is usually perceived to reflect infant and child feeding practices as well as recurrent and chronic infections. An important objective of this study is to assess the nutritional status of children in the survey population. Survey supervisors were adequately trained to collect accurate data on weight and height of children under five in the household. For each woman with one or more live births in the five year preceding the survey,

[5] The percentage increases to about 3.5 if we include children aged 4 or more months who are still being exclusively breastfed.

data were collected on a maximum of three children. The various anthropometric indices were calculated using the EPINUT procedure in EPI Info program.

Three nutritional indices are presented in this report:

- **Height-for-age**. This is an indicator of linear growth retardation (stunting). A child whose height-for-age is 2 or more standard deviations below the mean of the reference population is considered short for his/her age; he/she is referred to as "stunted" or chronically undernourished. A child whose height-for-age is 3 or more standard deviations below the median of the reference population is considered severely stunted. Stunting usually results from the failure to receive adequate nutrition over a long period of time and from recurrent and chronic illness.

- **Weight-for-height**. This is a measure of wasting. Wasting is a reflection of the failure to receive adequate nutrition in the period immediately preceding the survey. It may also reflect recent episodes of illness that have caused loss of weight and onset of undernutrition. A child who is 2 or more standard deviations below the median of the reference population is considered thin; he/she is referred to as wasted. A child whose weight-for -height is 3 or more standard deviations below the median of the reference population is considered severely wasted.

- **Weight-for-age**. This is a composite index of height-for-age and weight-for -height. A child whose weight-for-age is 2 or more standard deviations below the median of the reference population is classified as underweight.

Height-for-age

Table 4.10 shows the percentage distribution of children under five years of age classified as undernourished according to the height-for-age index by selected background characteristics. Approximately 38 percent of all the children are classified as stunted. Of children classified as stunted, approximately 59 percent[6] are severely stunted. These figures suggest that feeding practices for children are poor. Stunting is found in equal proportions among male and female children; however, there are marked differentials by other background characteristics: age of child, region and place of residence. Children who are one or more years old, children who are born in the North and children in the peri-urban areas are more likely to be stunted. "Severe stunting" is positively correlated with " ordinary stunting"

Weight-for-Height

Table 4.11 shows that approximately 10 percent of the children are classified as wasted. Of those classified as wasted, approximately 36 percent are classified as severely wasted. These figures suggest that significant proportion of children in the survey area lacked adequate nutrition shortly before the survey or have just had episodes of illness. Like stunting, wasting is evident in equal proportions between male and female children but significant differentials exist by other background characteristics. Wasting increases significantly with age of the child until after age 24 months when it declines as age increases. Children in the North and South-East are more likely to be wasted than children in Lagos and South-West. Across regions,

[6] Calculated as 22.2% / 37.8%

"severe wasting" is positively correlated with "ordinary wasting". No significant differential is found by place of residence.

Weight-for-Age

The weight-for-age index usually provides less precise information than the height-for-age and the weight-for-height indices because it is a composite index for the long term chronic and recent acute undernutrition. It does not distinguish between a child who is underweight because of stunting and the one who is underweight because of wasting. It is, however a useful tool in clinical settings for continuous assessment of nutritional progress and growth.

Table 4.12 shows that 21.3 percent of children are classified as underweight. Of those classified as underweight, approximately 38 percent are severely underweight. There are no significant differentials in the probability of being underweight by sex of the child and place of residence. However, the likelihood of being underweight varies by age of the child and region of residence. The probability of being underweight increases with age until the third year of life when it tends to flatten out. While the probability of being underweight is highest in the North (31.2%), it is lowest in the South-East (15.4%).

CHAPTER 5

Zonal Outlook

Cluster I: South East

Background Information on the Cluster and the Respondents

This zone is riverine and thickly populated. The population density is highest for the country. The report below is from an analysis done on a 1937 sample of women of reproductive age. The sample was from a catchment area of population covered by Non-Governmental Organizations (NGO) activities in the zone. It is therefore not a representative sample of the entire population in the states covered. The sample is 30% rural , half of the women received formal education beyond secondary level. Half of them are self-employed, a third are traders whilst farming and fishing are the next commonest occupations among the women surveyed.

Fertility Behavior

Two thirds of them are married; 71% have been pregnant but only 68.% have ever had a live birth . This trend is reflected howbeit to various degrees in the overall sample. Some of those who were not married got pregnant and 3% of those who were pregnant never had a live birth. This reflects some measure of unmet need. It is likely that some of the lost pregnancies were unwanted and were therefore got rid off. Almost a third (28.6%) of them have had more than 5 children. The fact that the proportion (51%) having more than secondary education among these women (is higher in this zone than average(46%) for the sample) explains why the pregnancy rate and ever given birth rates are lower in this zone.

Knowledge and Use of Family Planning Methods.

Twenty two percent use a method, 9.2 % of them are using modern methods. These levels are comparable with the average for all the zones. Condom (2.9%), Intrauterine devices (2.5%), Pill(1.8%) and Injections (0.8%) are the commonest methods of modern method in use. Women in the zone use more traditional method (12%) than the average woman interviewed -rhythm, and withdrawal being responsible for this trend. Whilst 8% desire to stop child -bearing, only 1% have accessed Female sterilization. The unmet need in this zone is high: Three quarters of the women interviewed are not using because they (72%) are not wishing to space or limit.

About 40% were counseled post partum about family planning ; 35% used modern contraception when compared to 13 % who used family planning method without having been first counseled in the immediate post partum period. This justifies the need for

enhanced IEC effort especially targeted at postpartum partum women. Because they use more private hospitals(50%) than public (43%) and 87% of their deliveries are supervised by trained staff, an important area of easy access would be through proper orientation of these trained midwives.

Maternal and Child Health Behavior: Immunization Coverage and Home management of Diseases

Women interviewed in this zone use private hospital or clinics more (50%) than average(40%); Only 7.6% received two doses of tetanus toxoid during antenatal care. Births were more assisted by trained help (86%) more than the national average and in fact than in any other zone.

Half of the 406 children whose immunization status were assessed using the cards did not receive any immunization at all whilst 23% were fully immunized. There were more children of the adolescents that did not receive any immunization (74%) compared to older women. Figure 5.1 summarizes the picture.[1]

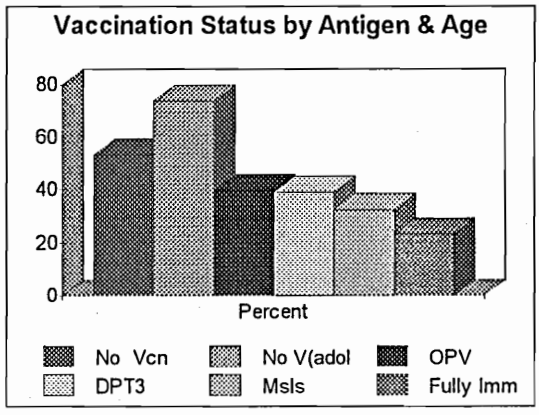

Figure 5.1
Vaccination Status by Age and Antigen

Management of Fever, ARI and Diarrhea

Fever Like the trend in all other parts of the country , correct home management of fever is very inappropriate. Less than a quarter (24%) gave antimalarials ; the message to give more fluids and food has not been understood. Obviously it seems that when the state of the child deteriorates, a third would then rush the child for help outside the home (Correct home management). The levels of home treatment and home management for all the disease states is lowest in this zone compared to others.

Diarrhea Figure 5.2 summarizes the picture with the management of diarrhea in this zonal sample. A quarter received Salt Sugar Solution "SSS" whilst another 16% received Oral rehydration Solution "ORS" as part of home management of diarrhea among the children of the women interviewed. Still less than half (40%) received special solutions which are specifically meant for treatment of diarrhea. After taking into consideration the giving of

[1] "No V(Adol) means children of adolescents that did not receive a single immunization.

fluids and food as supportive treatment, it was found that a little over 10% was all that received correct home treatment.

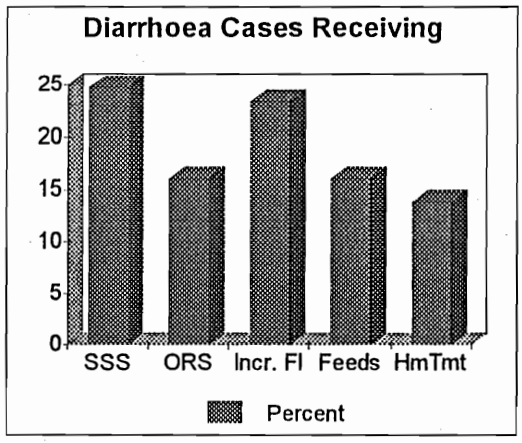

Figure 5.2
Percentage of Diarrhea Cases Receiving the Various Management Types

Acute Respiratory Illness The home handling of this ailment falls far below expectation. a quarter managed this illness correctly at home and less than a fifth added extra water and fluids to the management of this ailment in the child.

The management of these three disease states is very poor. These are the three commonest ailments in children aged 12-23 months. Dehydration superimposed on any of them heightens the mortality differential for this age period. It is therefore mandatory that re-orientation of staff and mothers should be included in program design to ensure that proper communication and education is established to deal with these. Not many health facilities can handle these once they reach severe states; it is therefore better to deal with them at home level to safe unnecessary wastage of life in this age-group.

Breastfeeding and Infant Nutrition

Less than a quarter of the children are exclusively breasted-fed in this zone for the first month of life. Percent exclusively breasted-fed for the remaining three months are dismally low.

The level of stunting is low (22%) compared to a national average of 38%, level of wasting here is 10% which is very comparable to the overall average, while the percentage of underweight children is lowest in this zone.

Breastfeeding as an intervention is a strategy that must receive more attention than it is currently receiving. All over the country, Breast-feeding culture once prevalent among the Africans has been lost. The need for the women to return to work has not made matters easier. It is hoped that part of the women rights which should be fought for is the right to breast-feed in workplaces if they must go to work. Training of health providers to desist from giving wrong advice especially early in the post partum period is required. Policy on breast-feeding which the government of Nigeria has developed should be made mandatory.

AIDS/HIV/STD: Knowledge of and Ability to name common symptoms

Three quarters and above of those interviewed have already heard about the diseases referred to in the subtitle. Less than 15% were able to identify two correct symptoms of the first and second STDs mentioned. Half were able to identify two modes of transmission of HIV/AIDs infection.

Improved Participation of Women in Health Care Decision -Making.

Access to New Bodies of Information in the 6 months preceding survey

Forty-eight (48%) considered information received in the period stated above as being new in this zone. The new bodies of information concerned Politics(31%), Education -(20%) and health (18.6%). mainly. This is in agreement with the overall averages.

Radio was the commonest source of information-61%- (average 66%); followed by "Friends and Relations"- 46.6% (average 32%) with Television as the last of the three commonest sources of the new bodies of information.

Program Implications

Family Planning/ HIV/AIDS

The findings of this survey are rather interesting as they have certain unexplainable peculiarities. Half of the women have more than secondary education but they live in rural/peri-urban setting. They operate within communal environment because trading, fishing and farming tend to keep people together. Also cooperative and age-grade groupings are very popular. All these tally with "Friends and Relations" being the second commonest method of accessing new body of information. It is only in this zone that this trend takes this form. Roman Catholicism is the predominant religion. The religion is positively against child spacing by modern methods. This may account for the relatively low level of use of modern method but a higher level of traditional method being used.

People hear about AIDs but there is need to give more details of how they present as the second level of intervention on creating awareness.

People are able to access information and those knowledgeable about modern and traditional family planning methods are numerous. What does not tally is the use level of 22% with an average modern use level of 9.2%. However when one considers the background of the respondents in this survey, one may be able to explain this tremendous change if it is true. The use of traditional method being higher here is not surprising. This is what the religion primarily supports.

The use of Associations be it economic-based groupings or age-grade groupings is a proven method of quickly accessing communities. NGOs should be aware of this important asset and should capitalize on it

Maternal and Child health

This zone has had the benefit of an effective CCCD program in the recent past and this coupled with the above factor may have accounted for this zone having the highest coverage rate for both maternal and infant immunization in this survey. It was not possible to assess the availability of vaccines in the zones as this may have been the limiting factor to a higher coverage rate. The pattern of life of the people - living in "village communes" and the impact of this in accessing services need to be further studied. Where people are willing to access services as it is evidenced in this zone , any program should mind quality issues: clear policy guidelines, effective cold-chain and a consistent delivery system should be built in as assurances in to the program .

Another advantage in this zone is the level of literacy. This if properly galvanized might make getting vaccines from LGAs relatively easier.

Diarrhea Disease Control Only 8.6% of children assessed had diarrhea during the two weeks before the survey. However there are treatment problems. Unfortunately several factors operate to determine adequacy of adequate case management of diarrhea. If water, salt, ORS sachets are not available either because of purchase or logistical problem, overall management will fall far below expected. If in a literate sample the status of case management is this low, then further analysis would be needed to identify major problems which militate against adequate home treatment of diarrhea cases.

The status of Fever and ARI treatment is only slightly better. Correct education concerning the giving of water and fluids during an acute illness should be built into any integrated intervention. The process of educating mothers should be further analyzed to ensure that learning skills are sharpened.

Breastfeeding and Infant Nutrition and Nutrition Status.

Because of the link of these trio with infant and child mortality, it is compulsory that new strategies be employed to encourage breast-feeding in the country. Low exclusive Breast-feeding level has not improved since the last NDHS survey. Programming in a situation where almost all births are assisted should be less programmatic than when the mothers deliver at home without any assistance. Retraining and emphasis on Breast-feeding should be a major focus of any project supporting nutrition. Weaning diet should be taught as part of the strategy to improve nutrition. Figure 5.3 shows the nutrition status of children under age 5 in this zone.

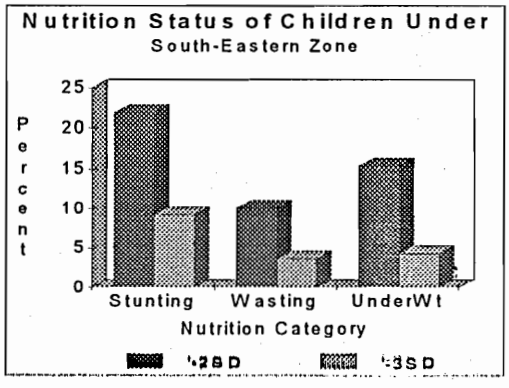

Figure 5.3: Nutrition Status of Children Under Age 5

Table 5.1: Fact Sheet on Cluster I (South eastern Zone)

Socio-Economic Characteristics-N(1937)

Region of Residence

Urban	50.5
Peri-urban	19.2
Rural	30.3

Education:

No Schooling	13.7
Koranic Primary	0.5
Formal Primary	30.1
Koranic Secondary	0.1
Formal Secondary	41.5
Beyond Secondary	10.1
Education Unknown	0.5
Others	3.5

Age:

15-19	19.6
20-24	20.9
25-29	21.1
30-34	15.7
35-39	11.4
40-44	6.6
45-49	4.7

Marital Status

Single	29.6
Married	65.6
Living together	0.3
Divorced	0.5
Separated	1.4
Widowed	2.4
Others	0.2

Number of Children

0	31.9
1	11.3
2	11.3
3	8.9
4	8.0
5 and above	28.6

Type of Work

Housewife	16.0
Trader	30.6
Farming/Fishing	9.8
Office Work(Clerical)	2.7
Office Work (Admin/Managerial)	1.2
Teacher	4.0
Professional)Doctor, Nurse, Lawyer)	1.7
Professional(Hairdressing, seamstress	8.8
Housemaid	1.0
Others	23.4
No response	0.8

Employment Status(of women working)

Employer	1.7
Employee	12.0
Self employed	52.3
Unpaid family work	4.0
Others	20.1

Fertility, Knowledge & Use of Contraception
(Currently married).

Ever Pregnant

Yes	70.7
No	29.3

Ever given live birth

Yes	68.1
No	31.9

Number of Children

0	31.9
1	11.3
2	11.3
3	8.9
4	8.0
5 and above	28.6

Knows at least one (1937)

One modern method	87.0
One traditional method	75.4
Knows no method	9.2

Method Currently used -All Women(1925)

Any method	**22.5**
Modern method	**9.2**
F. Ster	01.0
M. Ster	0.0
Norplant	0.1
Injections	0.8
IUD	2.5
Pill	1.8
Condom	2.9
D/Foam/Jelly	0.0
Foaming tablets	0.1
Traditional	**12.0**
No response to method used	**1.4**
Not using	**76.1**
No response to contraceptive use	**1.4**

Post partum Counseling and Impact(1307)

Counseled postpartum	38.5
Not counseled	60.1
No response	1.5
Used modern FP after counseling	35.4
Used modern FP without " "	13.0
No response	10.5

Fertility Desire (as at last birth)..(1275)

Wishing to space	20.2
Wishing to stop	8.3
Not wishing to space or limit	71.5

Table 5.1

Table 5.1

MATERNAL AND CHILD HEALTH

Source of Antenatal Care - (1030)

Public hospital or clinic 43.3
Private hospital or clinic 50.0
Other places 3.5
None/Not stated..... 3.2

Type of assistance during delivery - (1030)

Trained attendant (incl trained TBA) 86.6
Others 12.4
No response..... 1.0

Percent of Women delivering within the last 12 mon. who received TT2 (Card only)617

Percent of women 7.6

Percent of children 12-23 months receiving specific vaccines -Cards Only -406

BCG..... 46.1
DPT3 ..... 38.9
OPV3 ..... 39.7
Measles 32.5
No vaccines received..... 53.4
Fully immunized 27.3

MORBIDITY STATUS

Percentage reporting disease two wks before survey (1671)

Fever 29.1
Diarrhea 8.2
ARI 10.8

TREATMENT

Fever -481

Percent who received Antimalarials 23.9
Percent received increased fluids/food 0.4
Percent received correct home treatment..... 0.2
Percent " " correct home management 36.1

Diarrhea - 137

Percent received SSS 24.8
Percent received ORS 16.1
Percent " increased fluids 23.4
Percent being continually fed 16.1
Correct home treatment 13.9
Correct home management 27.7

ARI -181 percent received**

Increased fluids/Breast-feeding 17.1
Increased feeding 17.1
Correct home treatment 11.6
Correct home management 24.9

NUTRITION

Duration of Breast-feeding-(1030)

Less than 1 month 23.3
1-3 months 3.8
4 months and above 0.6
Duration unknown 0.6
No response 70.6

Nutrition Status

Percent under 5 yrs -1591
Stunted moderate 21.9
Stunted -severe 9.2
Wasted : moderate..... 10.1
Wasted: severe 3.6
Underweight moderate 15.4
Underweight - severe 4.3

AIDS/HIV STD -1937

Percent heard of any STD 73.3
Percent heard of HIV/AIDS 86.2
Percent able to identify 2 correct Symptoms of first or second STD mentioned 14.7
Percent able to identify 1 or 2 ways by which transmission of STDs is transmitted 56.5

Percent " " " " HIV is transmitted 63.9
Percent able to identify 1 or 2 ways by which STD can be prevented 43.8
Percent able to identify 1 or 2 ways by which HIV/AIDs is transmitted 54.2

ACCESSING INFORMATION

Percent receiving new information
Politics 31.4
Education..... 19.9
Health 18.6
Business 6.5
Religion 6.2
Agriculture 6.1
Sports 5.1
Others 9.2
None 42.8

Source of information

Radio 61.4
Television 30.1
"Friends & Relations 46.6
Newspapers 8.8
Town Criers 3.8
Organization meeting 4.2
Other Sources 7.8

Cluster II: North

1. Background Information of Respondents

A sample of 1717 of an estimated 1.8 million women from Sokoto, Kebbi , Jigawa , Kano and Katsina form the basis of analysis. The Sixty(66%) six percent of the women are from an urban locations; 25% of them have not been exposed to any form of schooling whilst 40% had attended a Koranic school. A fifth of them are adolescents aged (15-19 years) and a quarter are aged 35-years and above.

Fertility Behavior: Knowledge of and Use of Contraception and Future Desires

Eighty-three percent are married, 82% have been pregnant before and 78% have given birth before. A third of them have had more than five children . Thirteen percent desire to space and 4.8% desire to stop leaving a big 82% not wanting to either space or limit their future births.

Nine((9%) per cent are currently using a method of contraception, 6% are using modern which is two thirds of total usage. The three commonest methods being used are Pills (2.7%); Injections 1.4% and Traditional methods 1.2%, Condoms constitute 0.7 percent of usage among the sampled women.

Postpartum Contraceptive Use:

Even though the public hospitals and clinics are the sources of antenatal care, the percentage receiving assistance by trained hands at delivery is small (40%). However of those counseled for family planning post partum, almost 40% of them used modern methods compared to 4.2% that used Family Planning services without any counseling. The role of post partum counseling would be observed when one compares these two roles. It could be observed that only a very low percentage of the post partum women received counseling (21.3%). This could be an area to be addressed in the program being planned for the cluster. This low used rate calls for more investigation on the factor for the disparity between knowledge and use of Family planning methods. A very few women are using the long lasting method (2.4%), and the traditional methods (2.9%), while a relatively higher proportion of women are using the other modern methods (3.6%) in the cluster only injection and pills are of any significant uses (1.4% and 2.7% respectively).

Maternal And Child Health: Immunization, Home management of Cases

Immunization: 1020 women were analyzed on this variable. Review of entry in cards revealed that 2% of the women who attended antenatal clinics were fully immunized with anti-tetanus toxoid. Cards from 367 children were analyzed for the immunization pattern in the 12-23 months cohort. Immunization rates are generally low with only 3 percent being fully immunized with all the vaccines (*cf* Figure 5.4).

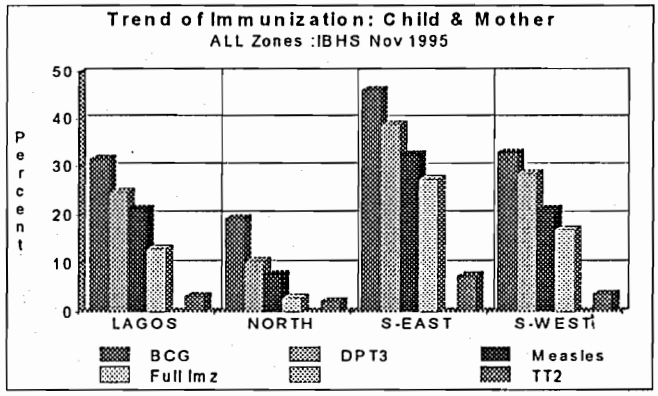

Figure 5.4: Trend of Child & Mother Immunization

Antenatal, Delivery and Post Partum Care

The public hospitals and clinics are the sources of antenatal cared for 68.2% of the women, while a low proportion of them (6.0%)

uses the private hospitals and clinics. A quarter of the women possibly did not go to attend any facility or sought any assistance for antenatal care.

Assistance from trained attendants (including trained TBAs) during delivery was sought for by 40.2% of the women . About 60% of the women were not helped at all or they were not helped by trained assistants.

Morbidity Status Of The Children

Frequency Data on 1623 children were analyzed. Two of every five child reported fever in the last two weeks preceding the survey; 16.9% had diarrhea, and 12.8% reported having Acute Respiratory Infection (ARI).

Home Treatment Data on 639 children were available for analysis Correct home treatment for fever is very poor. 30% received anti-malarial drugs ; less than 1 % received any other supportive treatment in form of extra fluids or food. However about 40% will seek help from outside source of health care. Figure 5.5 shows the situation of home treatment in the zones.

Diarrhea Treatment A sizable proportion of the 275 children (11.3%) on whom information was available received a correct home treatment. Salt-Sugar-Solution (SSS) was received by 28.7% of the children, while 20% received the ORS . Lower proportion received increased fluids and continuous feeding (14.2% and 12.4% respectively).

Treatment of Acute Respiratory Infections Knowledge on the treatment of ARI seems better than for diarrhea. Out of the 208 children admitted for analysis, 21.6% of them received the correct home treatment, and 33.6% received a correct home management. Over 23% of them received both increased fluids/Breast-feeding and increased feeding.

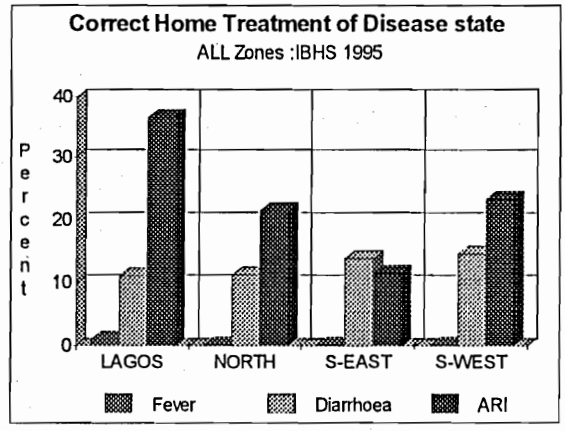

Figure 5.5: **Correct Home Treatment of Disease State**

Nutrition

The duration of Breast-feeding was examined for 1020 children. Three percent of those who were able to remember (75% did not answer the question) exclusively breasted-fed for the first month.

Nutrition status: **Two thirds** of the 1439 children on whom data was available were moderately stunted whilst almost half of the stunted were severely stunted. One out every ten children were found to be moderately wasted and half of those were severely wasted. A third were moderately underweight with half being of the severe type.

.Knowledge and Identification of AIDS/HIV and Sexually Transmitted Diseases (STD)

1717 women were analyzed for this variable. 58.5% of them have heard about HIV/AIDS , while only 45.2% have heard about STD. 4.7% of them are able to identify 2 correct symptoms of the first and second STD mentioned. A third could mention one or two ways by which STD or AIDS are transmitted. A third also could correctly mention ways of preventing HIV/AIDs with a little less than a third mentioning correct ways of preventing STDs.

Accessing Information
Health (43%), Politics (40%), and Education provided new bodies of information for the women interviewed in the six months that preceded this survey. The information came mainly through the radio (83%), Television(29.3%), and "Friends and Relations".

Summary of Findings

1.0 Early marriages and early pregnancies still account for a lot more births in this zone than in any of the others.

2.0 Enough have been exposed to information on family planning methods and possibly sources of supply. As a result of this use of any form of contraception is lowest compared to all the other zones . They don't also still have desire to limit or space their children. They are the second largest consumers of injectables. Use after counseling postpartum is higher than at other times which may indicate that time of counseling may be an important factor in getting a behavioral change.

3.0 Maternal and Child Health Care and its impact on the health status and immunization status of the child is worst in this zone compared to other zones. The graph below shows that immunization of both mother and child is at its lowest level in this zone.

4.0
The management of common childhood ailments is very comparably low among all the samples from various zones.

5.0
The nutritional status of the children in the north is worst compared to all the other zones Chronic undernutrition (Stunting) is at its highest in the north (*cf* Figure 5.6).

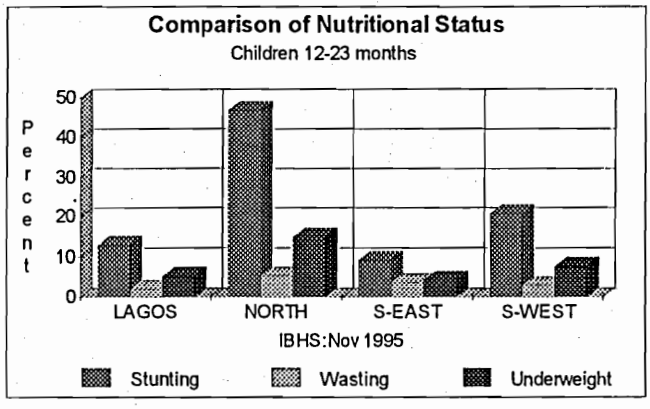

Figure 5.6
Comparison of Nutritional Status

6.0 ACCESSING INFORMATION

Even though the percentages accessing new bodies of information is about the same in all the zones, it is remarkable that women in the north are also accessing information even on contemporary issues such as Politics.

Program Implications
Maternal and Child care

1. **Exposure to family life education** early on in life should have given women in the North a good start -off on care of mother and child. This is more so when Koran is specific on issues like Breast-feeding and child spacing for the welfare of the mother. The opportunity provided by this acceptable type of education should be maximized. If the curriculum and the amount of time given to family life education are modified, early intervention might make the difference.

More over, if there is interaction with the Koranic schools, a window of opportunity to the Malams and the religious leaders may be created. This may benefit the program as a whole.

2. **A third of the women are housewives** (doing no other job), 80% of them are married which is an indication that they are at home more than others yet less than 3% of the women breast feed exclusively even for one month. This trend needs further study. In their communes there is supposed to be an elderly woman who should be in charge of these younger mothers. Why would so basic a service as Breast-feeding not be provided when the issue of mother going out to work is not a major issue in this part of the world.

3. **Utilization of Health facilities**

Women in this zone use public facilities (*cf* Figure 5.7) to deliver their babies more than in other zones. Program planning will have to devote some time to traditional birth attendants or others who provide domiciliary services through NGO to lay emphasis on Breast-feeding. If this strengthens whatever is being taught at the Koranic education level which is more regularly patronized by all adolescents, a concerted effort is possible to foster an increase in the Breast-feeding habit.

There is a lot of unsupervised deliveries. If the culture would allow traditional birth attendants then Implementing Partners who are providing assistance on community based delivery system should increase their effort and adjust training curriculum to respond to this need.

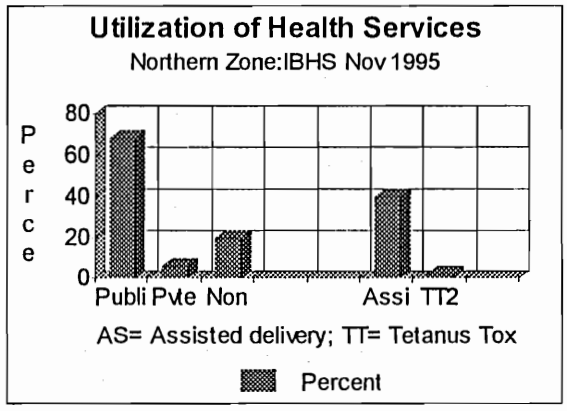

Figure 5.7

4. **There is an ample opportunity of influencing the women in the North** through the Koranic Schools in terms of teaching exclusive breast feeding and weaning diets. Even though Guinea Corn and Millets are grown in the North yet they are not made use of for weaning diets; the Koranic Schools which is found every where unlike the formal primary Schools can be made use of in disseminating such ideas.

5. **Women hardly make use of immunization services** both for mothers and children (*cf* Figure 5.8). This reflects in the low level of immunization for TT2 and the childhood antigens. The conflict between immunization and family planning is there. If indeed there is a conflict, the northern strategy may have to abide by not using family planning services as entry points to the community. Again the potential of the Koranic Schools can be explored to separate the two and to emphasize early the benefits of immunization. Sometime in-depth analysis may be required to find out if there are other causes of the low utilization. The men are responsible for providing transport money and money to cover the services. They

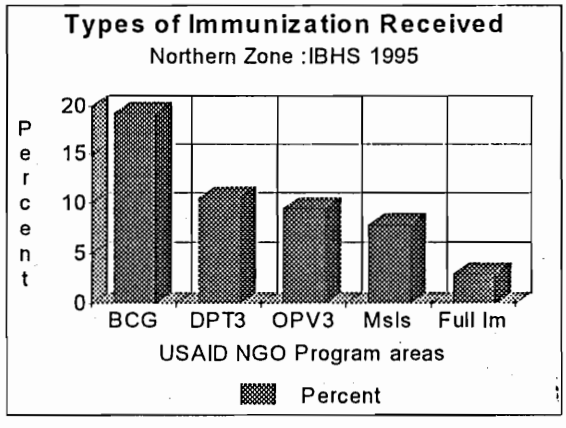

Figure 5.8

also have the responsibility for taking decisions. Access to the Koranic school becomes an important area of reaching them too.

6. Fertility Behavior, Knowledge and Use of Contraceptives

There are more married women among the sample than in any other zones reflecting the effect of early marriage which is to be expected in this zone. Whilst 82% have been pregnant among them for other zones the range of ever pregnant is 70-76%.. They have had more births than proportions of women from other zones. All these are not unexpected. Factors contributing to this state of affairs include low level of formal education, lower knowledge and use of contraceptives.

7. Maternal & Child Care in Islam: Women are married primarily to look after the children. The man is expected to look after the woman(women) for that primary purpose. **All the cost of receiving health care for both mother and child are supposed to be borne by him.**

Children are supposed to be breasted-fed for at least 2 years. While the man is supposed to take this responsibility, he also invariably has authority to take decisions for the family including on the wife. Early introduction to the tenets of Islam should make maternal and child health care an accepted factor. Therefore marriage should be for the advantage of the woman and her children.

8. Post Partum Counseling and Impact

It could be observed that only a very low percentage of the post partum women received counseling (21.3%). This could be an area to be addressed in the program being planned for the cluster. The role of post partum counseling would be observed when one compares the 39.6% that used modern Family Planning services after counseling and the only 4.2% that used without counseling. This low used rate calls for more investigation on the factor for the disparity between knowledge and use of Family planning methods. A very few women are using the long lasting method (2.4%), and the traditional methods (2.9%), while a relatively higher proportion of women are using the other modern methods (3.6%) in the cluster only injection and pills are of any significant uses (1.4% and 2.7% respectively)
the services without counseling.

It could be observed that only a very low percentage of the post partum women received counseling (21.3%). This could be an area to be addressed in the program being planned for the cluster. The role of post partum counseling would be observed when one compares the 39.6% that used modern Family Planning services after counseling and the only 4.2% that used .. This low used rate calls for more investigation on the factor for the disparity between knowledge and use of Family planning methods. A very few women are using the long lasting method (2.4%), and the traditional methods (2.9%), while a relatively higher proportion of women are using the other modern methods (3.6%) in the cluster only injection and pills are of any significant uses (1.4% and 2.7% respectively).

Table 5.2: Fact Sheet on Cluster II (North)

Socio-Economic Characteristics-N-(1717)

Region of Residence

Urban 65.6
Peri-urban 22.7
Rural 11.7

Education:

No Schooling 25.4
Koranic Primary 38.1
Formal Primary 12.7
Koranic Secondary 2.9
Formal Secondary 15.4
Beyond Secondary 3.6
Education Unknown 0.4
Others 1.5

Age:

15-19 ..... 20.4
20-24 ..... 18.5
25-29 ..... 18.9
30-34 ..... 16.2
35-39 ..... 11.1
40-44 ..... 9.0
45-49 ..... 5.9

Marital Status

Single 11.2
Married 83.0
Living together 0.0
Divorced 3.0
Separated 0.5
Widowed 2.0
Others 0.2

Number of Children

0 ..... 0.1
1 ..... 13.3
2 ..... 15.8
3 ..... 12.9
4 ..... 12.6
5 and above 45.3

Type of Work

Housewife 37.2
Trader 40.4
Farming/Fishing 0.9
Office Work(Clerical) 1.2
Office Work (Admin/Managerial) 0.6
Teacher 1.3
Professional)Doctor, Nurse, Lawyer) 0.8
Professional(Hairdressing, seamstress 3.8
Housemaid 2.1
Others 8.7
No response 3.0

Employment Status(of women working)

Employer 4.3
Employee 4.6
Self employed 67.7
Unpaid family work 4.7
Others 6.9

Fertility, Knowledge & Use of Contraception

(Currently married).

Ever Pregnant

Yes 82.0
No 18

Ever given birth

Yes 77.9
No 22.1

Number of Children

0 ..... 22.1
1 ..... 10.4
2 ..... 12.3
3 ..... 10.1
4 ..... 9.8
5 and above 35.3

Knows at least one (1425)

One modern method 69.5
One traditional method 70.2
Knows no method 19.4

Method Currently used -All Women(1717)

Any method 9.1
Modern methods 6.0
F. Ster 0.2
M. Ster 0.1
Norplant 0.1
Injections 1.4
IUD 0.6
Pill 2.7
Condom 0.7
D/Foam/Jelly O.1
Foaming tablets 0.1
Traditional 2.9
No response to method used 0.3
Not using 89.1
No response to contraceptive use 1.8

Post partum Counseling and Impact(1294)

Counseled postpartum 21.3
Not counseled 77.4
No response ..... 1.4.
Used modern FP after counseling 39.6
Used modern FP without " " 4.2

Fertility Desire (as at last birth)..(1425)

Wishing to space 12.8
Wishing to stop 4.8
Not wishing to space or limit 82.4

NORTH

NORTH

MATERNAL AND CHILD HEALTH

Source of Antenatal Care - (1020)

Public hospital or clinic 68.2
Private hospital or clinic 6.0
Other places 5.7
None/Not stated 20.1

Type of assistance during delivery - (1020)

Trained attendant (incl trained TBA) 40.2
Others..... 54.4
No response 5.4

Percent of Women delivering within the last 12 mon. who received TT2 (Card only) -522

Percent of women 2.3

Percent of children 12-23 months receiving specific vaccines -367

BCG 19.3
DPT3 .....10.6
OPV3 .....9.5
Measles 7.9
No vaccines 76.8
Fully Immunized 3.0

MORBIDITY STATUS

Percentage reporting disease two wks before survey (1623)

Fever 39.6
Diarrhea 16.9
ARI 12.8

TREATMENT

Fever 639

Percent who received Antimalarials 30.4
Percent received increased fluids/food 0.2
Percent received correct home treatment. 0.2
Percent " " correct home management ..39.2

Diarrhea - 275

Percent received SSS 28.7
Percent received ORS 20.0
Percent " increased fluids 14.2
Percent being continually fed 12.4
Correct home treatment 11.3
Correct home management 30.2

ARI -208 -Percent received
increased fluids/Breast-feeding 23.6
Increased feeding 24.5
Correct home treatment 21.6
Correct home management 33.6

NUTRITION

Duration of Breast-feeding-(1020)

Less than 1 month..... 2.7
1-3 months 4.7
4 months and above 8.9
Duration unknown 2.9
No response 74.8

Nutrition Status

Percent under 5 yrs -1439
Stunted moderate 63.5
Stunted Severe 46.8
Wasted moderate 11.6
Wasted Severe 5.3
Underweight moderate 31.2
Underweight severe 14.9

AIDS/HIV STD -1717

Percent heard of any STD 45.2
Percent heard of HIV/AIDS 58.5
Percent able to identify 2 correct Symptoms of first or second STD mentioned 4.7
Percent able to identify 1 or 2 ways by which STDs are transmitted 30.1
Percent " " " " HIV is transmitted 37.0
Percent able to identify 1 or 2 ways by which STD can be prevented 24.8
Percent able to identify 1 or 2 ways by which HIV/AIDs is transmitted 31.3

ACCESSING INFORMATION - 1717

Percent receiving new bodies of information

Politics..... 39.8
Health 43.2
Education 26.3
Agriculture 22.2
Religion 29.2
Others 10
None 36.1

Sources of Information

Radio 83.1
Television 29.3
"Friends & Relations" 29.2
Newspapers 7.6
Town Criers..... 8.4
Others 2.2

Cluster III: South-West

1. Background Information of respondents.

A sample of 1906 of an estimated 1,25 million women from Oyo , Osun , and Ondo were surveyed. . The sample is 80% urban, 75% of the women had received more than primary education, 44% of them received secondary education. The sample is made up of relatively young women - 60% of them are below 30 years of age. Seventeen percent (17%) are adolescents aged 15-19 years. Seventy percent (70%) are married.

Fertility Behavior

Seventy (70%) percent are married ; 76% had been pregnant before but 73.% had given birth before. Three percent of the pregnancies had been lost. Twenty-two (22%) have had 5 children or above. A third of the sample have had a child or two children.

2. Knowledge and Use of Contraception (Currently married) Fertility Desire

Knowledge of at least a modern method is high (84%), more than knowledge of a traditional method (70%). Seventeen (17%) percent are using some method of contraception .
A little more than half (9.8%) use modern method. Intrauterine devices constitute the largest preferred method in this zone. The proportion using Injectables is low (see Figure 5.9).

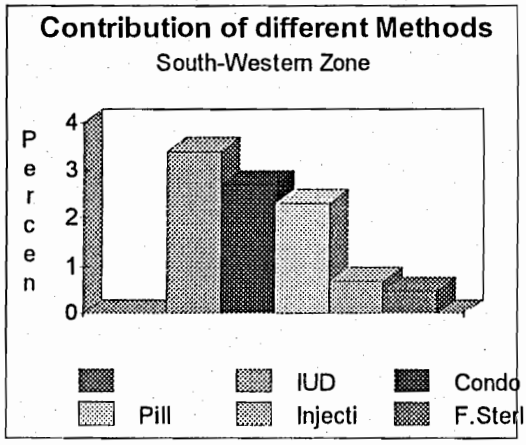

Figure 5.9

1389 were questioned on their fertility desire as at the last birth. While 10.9% were wishing to space birth, 5% wished to stop. Proportion that had tubal ligation constituted 0.5% of the sample in this zone.

3. Post partum Counseling and Impact

A total of 1387 women responded to the questions on post partum counseling. Of that total 43.2% reported that they received post partum counseling. From that total , 33.6% started using modern Family Planning after the counseling compared to 12% who started to use even without counseling. .

4. Maternal and Child Health: Immunization coverage

Information was available on 612 women. Even with the level of literacy only 3.8% received two doses of tetanus toxoid which protects both mother and newborn child from tetanus. Information on 1127 children born during the period covered by the survey showed that 97.4% of the mothers attended antenatal care. Half of these attended public sector hospitals or clinics. Another third received antenatal care from private clinics. This means in effect that only about 10% did not receive any type of antenatal care. Eighty-one percent (81%) of women were attended to by trained assistance at delivery .
Some information obtained from children (12-23 months) immunized showed that about a quarter received three doses of Triple antigen and Oral Polio. A fifth were immunized against measles. A third received BCG ; 17% were fully immunized (see Figure 5.10).

5. Morbidity Status

Childhood mortality and morbidity are sometimes linked with failure to accept family planning in the third world. Because the zone is pronatal like other parts of the country so much depends on the outcome of common diseases . The survey sought out and found the frequency of three common ailments -Fever, Diarrhea and Acute Respiratory Illness over a period of two weeks preceding the survey.

A total of 1470 children were admitted for analysis. A quarter of these had fever during the two weeks preceding the survey; 10.9% had Acute Respiratory Infection (ARI); while only 7.6% had diarrhea.

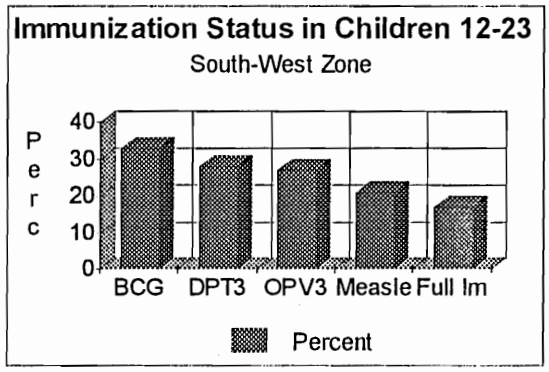

Figure 5.10

Fever Information on 401 children formed the basis for review. A quarter of these children received antimalarials but less than 5% gave the equally supportive treatment - either water or increased fluids.

Diarrhea, : One hundred and twenty three children had diarrhea in the two-weeks that preceded the survey. These form the basis of the observations made on the management of diarrhea. A third of the children were treated with Salt Sugar Solution (SSS- home prepared), 16% received Oral Rehydration Solution normally used for more severe cases. Less than 20% continued feeding during the bout of diarrhea. Overall adequacy of home treatment was satisfactory in 15%. A decision to seek further help with the child at a nearby hospital or clinic was taken in a third of the children. See a summary of the trend in Figure 5.11.

The chart shows that less than a third received increased fluids and less than that received some food during the episode of diarrhea. The graph also compares the trend with the figures for home management of diarrhea obtained during the National Demographic health- Survey 1990. The samples sizes are different and the urban rural differentials are not the same. NDHS is from women based in rural areas.

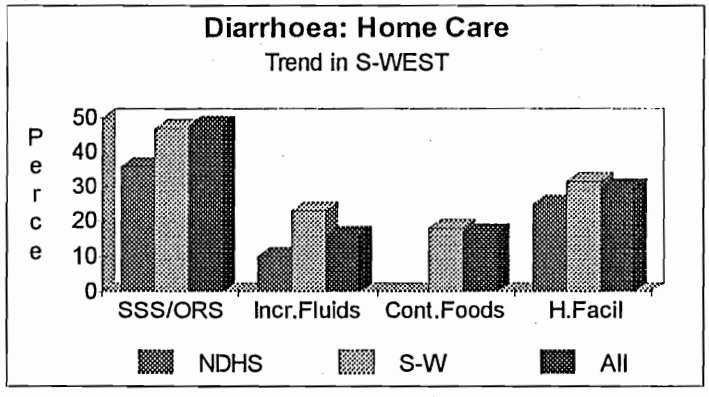

Figure 5.11

A Total of 176 children had ARI. Supportive treatment was more focused on than treatment with antibiotics. A third of the children **received** increased fluids/breast feeding;

27.8% received increased feeding; 23.3% and 28.4% received "correct home treatment" and 28% sought treatment in a health facility.

6. Nutrition

Breastfeeding

Thirty percent of the respondents who had given birth before were able to recall their breast-feeding history. Information was available on 1127 children. A fifth of the respondents breasted-fed exclusively for the first month. Exclusive Breast-feeding levels fell to below 5% for subsequent months.

Nutrition Status

Nutritional status of 1528 children under five years of age children were examined. Forty (40%) percentage of the children are moderately stunted (Height-for-Age, at minus 2 standard deviations) whilst 20.7% were severely stunted. The nutritionally wasted children are of very low magnitude Eight percent were moderately and 3% were severely wasted. A fifth of the children were moderately underweight (Weight-for-Age at minus 2 SD) whilst only 7.7% were severely underweight.

7. Knowledge and Identification of AIDs/HIV and STDs.

The current campaign against HIV/AIDs should have been yielding a positive result in the cluster. 77.4% of the 1906 women reported to have heard about HIV/AIDs while 62.8% have heard about any STD. While 33.4% of the Women could identify one or two ways by which STDs can be prevented, 41.5% of them could identify one or two ways by which HIV/AIDs is prevented. 49.4% of the women could identify 1 or 2 ways by which HIV/AIDs is transmitted, 45.9% of them know one or two ways by which STDs are transmitted.

8. Program Implications From the above analysis the following facts emerge:

a. The target women population we are dealing with are urban (82%), and are very literate (over 50% have Secondary education and beyond)

b. A larger proportion of the women are traders (47%) and artisans (e.g. hairdressers & seamstresses); they are therefore mostly self employed .

c. Even though the women are mostly literate, and over a 70% of them have a knowledge of at least one method of modern Family Planning, only a small proportion of them are currently using any method.
It is surprising that with the high literacy rate only 3.8% of them received TT2.

d. Only seventeen percent of the children are fully immunized. and the proportion of children that never got any immunization is very high (over 66%). Thirty percent had BCG

e. The level of literacy does not reflect in a knowledge of correct home treatment for any of the childhood diseases e. g. malaria, diarrhea and ARI.

f. A very low level of exclusive breast feeding is observed (3.5%); while the widespread malnutrition does not reflect the availability of locally grown protein-rich food crops.

g. The nutritional status calls for concern: almost 40% are stunted indicating a high proportion of the children have weights far below that expected for their age. This manifests early in life. This sometimes reflects birth weight trend as well as Breast-feeding status. The fact of age correlation with this degree of stunting is reflected in other studies. Wasting reflects recent weight loss due to an acute adverse experience.

What intervention programs could be suggested ?

1. The level of education of the sample should have encouraged a higher use of family planning. Those wishing to stop child births are not accessing the appropriate method to stop births. Because they are mobile women, more areas to access methods should be provided for them.
2. That suggestion one calls for a development of strong market-based organizations in order to catch the women at their appropriate working places.
3. A strong community mobilization through our various NGOs is advocated. The communities should be assisted to form CBOs as vehicles of mobilization so that the low level use of Family Planning and low coverage rates of immunization could be alleviated. A strong mobilization drive is also suggested for raising the awareness of mothers on the appropriate home treatment for those childhood diseases and for propagating the virtue of exclusive breast feeding for mothers.

Table 5.3: Fact sheet on Cluster III (South-West)

Socio-Economic Characteristics-(1906)
Region of Residence
Urban 82.1
Peri-urban 27.2
Rural 2.8

Education:
No Schooling..... 18.2
Koranic Primary..... 0.3
Formal Primary 27.0
Koranic Secondary 0.2
Formal Secondary..... 43.6
Beyond Secondary 7.9
Education Unknown 0.3
Others 2.6

Age:
15-19..... 17.0
20-24..... 19.7
25-29..... 21.9
30-34..... 16.8
35-39..... 12.7
40-44..... 7.2
45-49..... 4.6

Marital Status
Single..... 23.6
Married 72.6
Living together 0.3
Divorced..... 0.7
Separated..... 1.5
Widowed 0.9
Others 0.4

Number of Children
0..... 26.7
1..... 15.1
2..... 14.7
3..... 11.8
4..... 10.0
5 and above..... 21.9

Type of Work
Housewife..... 4.7
Trader 47.7
Farming/Fishing 5.6
Office Work(Clerical)..... 2.0
Office Work (Admin/Managerial)..... 0.9
Teacher 3.2
Professional)Doctor, Nurse, Lawyer)..... 1.1
Professional(Hairdressing, seamstress..... 17.6
Housemaid..... 0.1
Others 16.1
No response..... 1.1
Employment Status(of women working)
Employer 1.0
Employee 9.5
Self employed 62.5
Unpaid family work 4.2
Others 12.1

Fertility, Knowledge & Use of Contraception
(Currently married).
Ever Pregnant
Yes 76.1
No 23.9

Ever given live birth
Yes 73.4
No 26.6
Number of Children ever born
0 ..... 26.7
1 ..... 15.1
2 ..... 14.7
3 ..... 11.8
4 ..... 10.0
5 and above 21.9

Knows at least one (1906)
One modern method 84.1
One traditional method 70.1
Knows no method 13.4

Method Currently used -All Women(1906)
Any method 16.9
Modern Method..... 9.8
F. Ster 0.5
M. Ster 0.0
Norplant..... 0.0
Injections 0.7
IUD 3.4
Pill 2.3
Condom 2.7
D/Foam/Jelly O.0
Foaming tablets 0.1
Traditional 6.4
No response 0.8
Not using 82.2
No response to contraceptive use..... 0.9

Post partum Counseling and Impact(1387)
Counseled postpartum 43.2
Not counseled 55.7
No response 1.1
Used modern FP after counseling 33.6
Used modern FP without " " 12.4
No response..... 6.7
Fertility Desire (as at last birth)..(1389)
Wishing to space 10.9
Wishing to stop..... 5.3
Not wishing to space or limit 83.8

SOUTH-WEST

MATERNAL AND CHILD HEALTH

Source of Antenatal Care - (1127)

Public hospital or clinic 54.2
Private hospital or clinic 36.3
Other places 6.9
None/Not stated 2.6

Type of assistance during delivery - (1127)

Trained attendant (incl trained TBA) 81.6
Others 17.8
No response 0.5

Percent of Women delivering within the last 12 mon. who received TT2 (Card only) -612

Percent of women 3.8

Percent of children 12-23 months receiving specific vaccines -Cards Only -368

BCG 32.9
DPT3 .....28.5
OPV3 .....27.2
Measles 21.2
No vaccines 66.8
Fully Immunized 17.1

MORBIDITY STATUS

Percentage reporting disease two wks before survey (1470)

Fever 24.8
Diarrhea 7.6
ARI 10.9

TREATMENT

Fever -401

Percent who received Antimalarials 25.9
Percent received increased fluids/food 0.5
Percent received correct home treatment..... 0.2
Percent " " correct home management 22.7

Diarrhea - 123

Percent received SSS 32.5
Percent received ORS 14.6
Percent " increased fluids 26.2
Percent being continually fed 17.9
Correct home treatment 14.6
Correct home management 31.7

ARI -176

Increased fluids/Breast-feeding 34.7
Increased feeding 27.8
Correct home treatment 23.3
Correct home management 28.4

NUTRITION

Duration of Breast-feeding-(1127)

Less than 1 month 20.8
1-3 months 3.5
4 months and above 2.8
Duration unknown 0.4
No response 70.6

Nutrition Status

Percent under 5 yrs -1528
Stunted: moderate..... 39.0
Stunted: Severe 20.7
Wasted :moderate 8.5
Wasted: severe 2.8
Underweight moderate 21.9
Underweight - severe..... 7.7

AIDS/HIV STD -1906

Percent heard of any STD 62.8
Percent heard of HIV/AIDS 77.4
Percent able to identify 2 correct Symptoms of first or second STD mentioned 4.0
Percent able to identify 1 or 2 ways by which transmission of STDs is transmitted 45.9
Percent " " " " HIV is transmitted 49.4
Percent able to identify 1 or 2 ways by which STD can be prevented 33.4
Percent able to identify 1 or 2 ways by which HIV/AIDs is preventable 41.5

ACCESSING INFORMATION -1906

Percent receiving new bodies of information
Politics 34.3
Education..... 10.4
Health..... 8.7
Business..... 4.6
Sports..... 2.8
Religion 2.4
None..... 49.3
Others..... 2.2

Sources of Information

Radio..... 69.6
Television 34.0
Friends & Relations 20.9
Newspapers 5.4
Others..... 5.1

SOUTH-WEST

Cluster IV: Lagos

Background Characteristics of Women Surveyed

A sample of 1925 women of childbearing age were interviewed. The sample is 99.6 % urban; three quarters were exposed to primary and secondary level formal education. Sixteen (16%) percent were adolescents aged 15-19. Half of the women are traders, only tenth of them confine themselves to being housewives only. 16.5% are trained and practicing hairdressers, and seamstresses. 64% of them are self- employed.

Fertility behavior

Seventy (70%) percent are married; 76% of them have been pregnant ; 71% have had a live birth-(5% less than the proportion of those who got pregnant). This picture is not surprising.

Knowledge, Use of Contraception(Currently Married), Fertility desire A good majority (94.8%) have a knowledge of at least a modern contraceptive method whilst 87% know about a traditional method. A quarter of the women are currently using at least a method of family planning; Half of these use modern method.. Condom is the most prevalent modern method used (4.1%), followed by IUD (3%) and then Pill (2.9%). Injectables do not seem to be popular in this group.

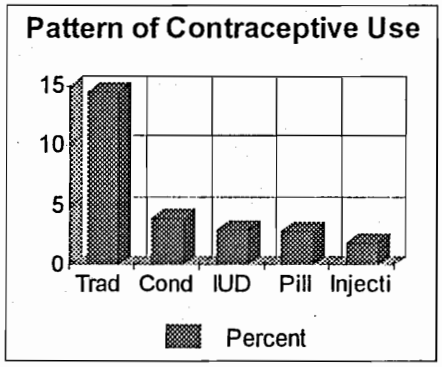

Figure 5.12

Figure 5.12 shows the commonest five methods. Surgical contraception has not reached any significant level (0.2%). A substantial percentage (8%) of those who practice family planning still use periodic abstinence as a method.

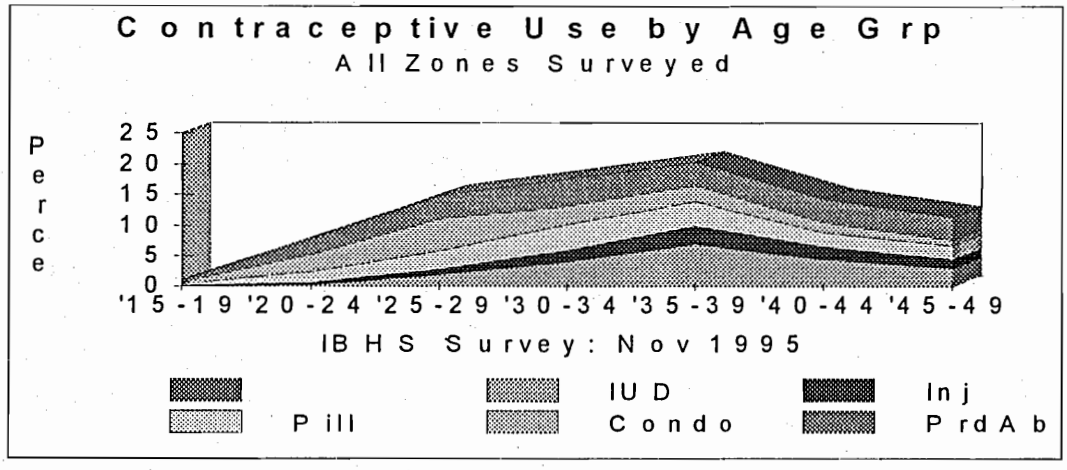

***Figure 5.13:* Contraceptive use (by age group, all clusters)**

Lagos sample is made up of women 60% of whom are aged 20-34 years. When is this extrapolated over the pattern of use in the entire sample for the country as Figure 5.13 shows, it is found that the pattern is Lagos is as expected . Even though 6.7 % wish to stop child bearing , 0.2% have access surgical contraceptive methods.

Maternal and Child Health: Immunization Coverage and Case Management

Information was available on 652 women. Less than five percent of the mothers received tetanus toxoid during their antenatal care. Clients preferred to use private clinics (70%) more than in any part of the country.

Immunization rates for the various antigens are low: About a tenth (23%) of these 12-23 months old got fully immunized. The range for the other antigens vary only narrowly between 21-27% (see Figure 5.14).

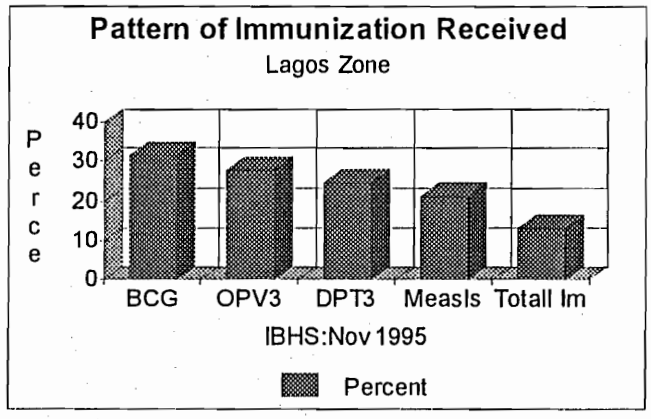

Figure 5.14

Frequency of Diseases and Adequacy of Management.

Information was available on 1470 children. The frequencies obtained for Fever, (18%, Diarrhea (9%) and ARI(3.3%) are lower than the averages for the overall sample - Fever (28%), Diarrhea(10%) and ARI (9.6%).

Management:

Fever Only 1% received home treatment that was considered correct. However in a quarter, right decisions were taken to seek further help in health facilities outside the home. A third of them received antimalarials as first line of management. Fluid and food management were not routinely given as supportive therapy.

Diarrhea Whilst almost 45% used SSS (Salt Sugar Solution) at home , 10% used Oral rehydration solutions(ORS) A quarter of the children had more food and fluids. This was the zone in which the proportion of mothers giving more food and fluids was highest.

Acute Respiratory Infections

It is very difficult to analyze the data here because only 49 children were found within the data set. This may explain why the figures were excessively high.

NUTRITIONAL STATUS

Breastfeeding

In this sample 28% of children are exclusively breasted-fed in the first month of life. Exclusive breast-feeding rates drop below 1% beyond that month.

Nutrition Status: 28% of children are moderately stunted(have a height for age ratio of -2SD a standard solution). . Wasting reflecting an acute loss of weight was recorded in 8% of the children weighed and 16% were found to be undernourished.

The severe states of the above nutritional unacceptable status is equally disturbing: Thirteen percent are stunted - a condition reflecting chronic undernutrition, , only 2% are wasted whilst 5% are severely undernourished.

Knowledge and Identification of AIDS/HIV and STD.

A quarter of the 1925 women interviewed have heard about AIDs, only 1% can give two possible presenting symptoms.(two-thirds of the women claim to have heard about STD. Less than a tenth of them can give 2 correct symptoms of Gonorrhea.

Improved Participation of Women in Decision Making

As Figure 5.15 shows, New bodies of information accessed during the six months that preceded this time of survey were mainly in the field of politics, health, education and business.

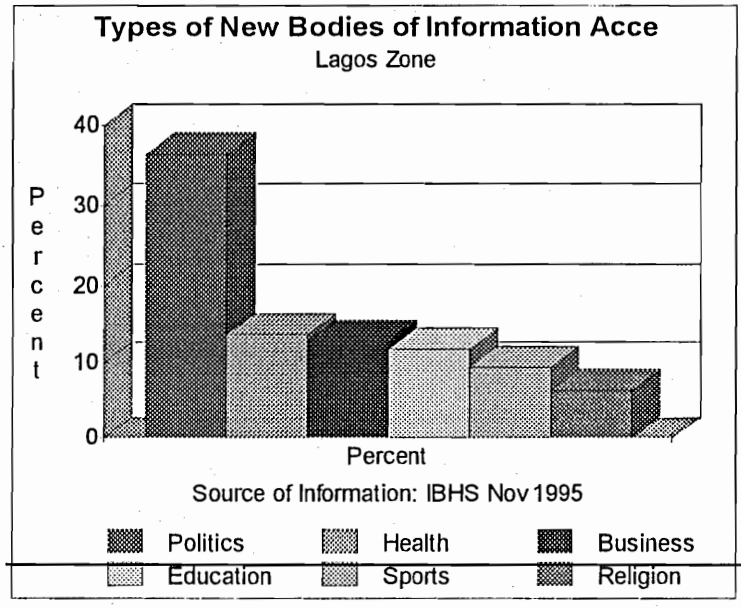

Figure 5.15

In the overall sample , married women seem to have picked up new bodies of information more than all women put together. 60% considered accessing new bodies of information in the six months that preceded the survey. A third picked up new information on Politics with information on health and education constituting the next most prominent of the new bodies of information. The pattern in Lagos was not different from others. Business information however was the 4th commonest source of information to them.

Source of Information: Television(TV) is the predominant(57.5%) source of information in Lagos . This trend is only peculiar to Lagos. The other two most common methods are Radio(50%) and "Friends and Relations" 29%). The younger age group ages 15-19 years and those with level of education above secondary seem to have a higher viewing rate than others.

Program Implications

Accessing Information: Without accessing information, attitudes cannot change and many of the risky health habits cannot cease. Radio and television remain , unsurprisingly, the major sources of information. The role of "Friends and Relations" is assuming significant proportion. When quality of service is satisfactory, current clients will be a source of help to potential clients in the utilization of available services. It thus means that program interventions which are targeted at youths should bear the higher listening and viewing rates of teenagers into consideration, those targeted at increasing women participation in decision making on matters concerning them both health -wise and in other fields should consider using those opportunities of market cooperatives, age-grade meetings to package information for women. Noticeably less than 10% access information through the print media. The reason is not far - fetched, economic prohibitions are biting on the resources of every home. Most families would rather wish to feed than buy newspapers. Use of market place viewing centers and community viewing centers will help to provide information on the various risk behaviors .

Fertility behavior, Knowledge & Use of Contraceptives

The pattern observed in the women surveyed still shows that pregnancies outside wedlock occurs; some of these will be in the teenagers. Such people would like to use private clinics when they decide to use any clinics at all. Pregnancy wastage will not be unexpected in such people. Private sector will be preferable as a source of service than public sector. The role of the private sector is further heightened by the relatively higher quality of service in some of them. The private facilities are also willing to receive help which would assist them to draw more clientele to their various facilities.

A recent survey in Lagos showed that 38% of family planning services in Lagos are provided by chemists and patent medicine shops whilst hospitals, health centers and maternity centers provide 23%; other private clinics provide 13% of the services. In that survey carried out in 1994, condoms (89%), Pills (86%), IUD 31% and injections (39%) were the commonest methods provided. Sterilization services were only available in 8.6% of the service sites as reported by that survey. Whilst the latter figures show higher usage rates but the trend of IUD and injectables suggest that quality issues will have to be given serious consideration in future assistance initiatives. Proper information on these products must be made available to ensure that clients will stay on these and iatrogenic problems will not discredit these methods. Condom is the most common method. All efforts must therefore be made to ensure that this is available in the market. Source of and quality of what is available should also be focused on. Shortages where there are great demands will be calamitous for both the family planning and the HIV/AIDs program. The latter is probably responsible for Condoms occupying the lead method position.

The study referred to above gave a trend analysis of facilities reporting problems of getting FP supplies. 33% of Private/NGO/Voluntary organizations reported experiencing problems getting supplies.

It is therefore recommended that the issue of logistics assumes a particularly important dimension in Lagos to sustain the program momentum. Lagos is very important to the entire national program. It is very likely that looking over quality and logistics will drastically increase current level of 12% usage of modern methods. These prerequisites are necessary because the age range of i.e. 25-35 years cohort are probably substantial in the population as a whole. So demand is likely to increase over the next couple of years.

Surgical contraception services require a lot of both institutional development and training. Lagos should still be a recipient of intensified private sector institutional development to be able to make an impact on the needs of the people of the state in matters of stopping further child births.

Maternal and Child Health

Immunization: Immunization for the various antigens are low. This can be explained by the difficulties usually experienced by the private sector getting vaccines. Since they are supposed to source their vaccines from government, availability of vaccines will be dependent on the source, i.e. local governments depots being stocked and the release process being made efficient. This is the major obstacle in this state. Since the survey is pointing to clients wishing to use private sector as major source of health service, the source of vaccines must be guaranteed by government for any continuing donor support. The issue of storage and quality in keeping the vaccines potent is another major constraint that may face the private sector but with the networks that can be developed in Lagos common depots for the private sector could

be considered which will be run by the private sector. Focus group discussion as to utilization pattern of people for immunizations might also be needed.

Case Management at Home of Common Diseases

As the survey showed only 1% offered adequate home treatment for fever, 10% for diarrhea. If the figures on management of Acute respiratory diseases could be analyzed, they will also indicate low figures. The stage of introduction of major actions, i.e. use of SSS or ORS for diarrhea should be built quickly upon by information on how to supplement with extra foods and extra fluids during sickness. It will also be necessary since the pattern of behavior is to go to hospital more readily than what is expected it should be ensured that the facilities themselves know how to manage adequately these three major disease elements.

Nutrition and nutritional status of children

The Mission should direct a lot more attention to supporting nutrition of children in the first five years as a major thrust of its assistance to Nigeria. The high stunting rate within the first few months of life requires further in-depth study of birth weights and feeding trend and practice. Breast-feeding is no longer popular and this should be quickly turned around all over the areas of Mission's intervention areas. Nutrition rehabilitation clinics which was the only avenue for managing nutrition anomalies are not longer functional in most places. Many mothers have no time to look at their babies. Baby-Friendly initiatives strategy should be adopted . Providers of service at the health care level should undergo orientation to change their attitudes about nutrition and help to the mothers in the first month of life.

HIV/AIDS/STD

Whilst 78% have heard about AIDs but recalling the symptoms creates a problem. This is still a critical factor in controlling these diseases. It is therefore recommended that learning AIDs in a format that will communicate in a friendly mode should be added to whatever strategy is in place to control the spread of the diseases. There is more to changing attitudes than just picking up the information. One good thing that this survey has done is to highlight that use of information must have other supporting measures and facilitatory factors before they can be maximally utilized for attitudinal and behavioral changes.

Table 5.4: Fact Sheet on Cluster IV (Lagos)

Socio-Economic Characteristics-N-(1717)

Region of Residence

Urban 99.6
Peri-urban 0.4
Rural 0.00

Education:

No Schooling 14.6
Koranic Primary 0.6
Formal Primary 32.3
Koranic Secondary 0.1
Formal Secondary 44.3
Beyond Secondary 6.4
Education Unknown 0.1
Others 1.6

Age:

15-19 ..... 16.1
20-24 ..... 21.5
25-29 ..... 24.2
30-34 ..... 16.9
35-39 ..... 9.9
40-44 ..... 6.8
45-49 ..... 4.6

Marital Status

Single 26.1
Married 69.1
Living together 1.5
Divorced 0.4
Separated 1.3
Widowed 1.2
Others 0.5

Number of Children

0 ..... 29.1
1 ..... 14.7
2 ..... 12.5
3 ..... 10.9
4 ..... 10.0
5 and above 22.9

Type of Work

Housewife 9.7
Trader 49.0
Farming/Fishing 0.8
Office Work(Clerical) 1.9
Office Work (Admin/Managerial) 1.4
Teacher 1.0
Professional)Doctor, Nurse, Lawyer) 1.4
Professional(Hairdressing, seamstress 16.5
Housemaid 0.4
Others 15.9
No response 2.0

Employment Status(of women working)

Employer 0.4
Employee 11.1
Self employed 64.4
Unpaid family work 5.6
Others 13.9

Fertility, Knowledge & Use of Contraception
(Currently married).

Ever Pregnant

Yes 76.2
No 23.8

Ever given live birth

Yes 71.0
No 29.0

Number of Children ever born

0 ..... 29.0
1 ..... 14.7
2 ..... 12.5
3 ..... 10.9
4 ..... 10.0
5 and above 22.9

Knows at least one (1925)

One modern method 94.1
One traditional method 83.6
Knows no method 4.2

Method Currently used -All Women(1925)

Any method 27.6
Modern Method 12.2
F. Ster ..... 0..2
M. Ster 0.0
Norplant 0.0
Injections 1.9
IUD 3.0
Pill 2.9
Condom 4.1
D/Foam/Jelly O.1
Foaming tablets 0.0
Traditional 14.5
No response to method used 0.9
Not using 70.9
No response to contraceptive use 1.5

Post partum Counseling and Impact(1348)

Counseled postpartum 35.8
Not counseled 63.1
No response 1.2
Used modern FP after counseling 39.2
Used modern FP without " " 19.9
No response 6.3

Fertility Desire (as at last birth)..(1338)

Wishing to space 14.7
Wishing to stop 6.7
Not wishing to space or limit 78.6

LAGOS

MATERNAL AND CHILD HEALTH

Source of Antenatal Care - (990)

Public hospital or clinic 17.2
Private hospital or clinic 70.7
Other places 10.7
None/Not stated 1.4

Type of assistance during delivery - (990)

Trained attendant (incl trained TBA) 84.3
Others 15.4
No response 0.3

Percent of Women delivering within the last 12 mon. who received TT2 (Card only) -652

Percent of women 3.4

Percent of children 12-23 months receiving specific vaccines -Cards Only -346

BCG 31.5
DPT3 ..... 24.7
OPV3 ..... 27.7
Measles 21.4
No vaccines received 67.6
Totally Immunized 13.3

MORBIDITY STATUS

Percentage reporting disease two wks before survey (1470)

Fever 18.2
Diarrhea 8.6
ARI 3.3

TREATMENT

Fever -266

Percent who received Antimalarials 30.8
Percent received increased fluids/food 2.3
Percent received correct home treatment 1.1
Percent " " correct home management 21.3

Diarrhea - 126

Percent received SSS 42.9
Percent received ORS 10.3
Percent " increased fluids 26.2
Percent being continually fed 24.6
Correct home treatment 11.1
Correct home management 29.4

ARI -49 percent received**

Increased fluids/Breast-feeding 44.9
Increased feeding 49.0
Correct home treatment 36.7
Correct home management 53.1

NUTRITION

Duration of Breast-feeding-(990)

Less than 1 month 28.2
1-3 months 1.7
4 months and above 0.5
Duration unknown 0.4
No response 68.7

Nutrition Status

Percent under 5 yrs -1344
Stunted: moderate 27.7
Stunted: Severe 12.9
Wasted: moderate 7.7
Wasted: severe 1.9
Underweight: moderate 16.7
Underweight: severe 5.2

AIDS/HIV STD -1925

Percent heard of any STD 62.7
Percent heard of HIV/AIDS 77.8
Percent able to identify 2 correct Symptoms of first or second STD mentioned 5.5
Percent able to identify 1 or 2 ways by which STDs are transmitted 39.5

Percent " " " " HIV is transmitted 42.7
Percent able to identify 1 or 2 ways by which STD can be prevented 31.0
Percent able to identify 1 or 2 ways by which HIV/AIDs is transmitted 36.4

ACCESSING INFORMATION

Percent receiving new information on
Politics 36.4
Education 11.8
Health 13.7
Business 12.9
Religion 6.4
Agriculture 4.2
Sports 9.4
Others 5.5
None 41.0

Source of Information

Radio 50.7
Television 57.5
"Friends & Relations" 28.8
Newspapers 7.5
Town Criers 0.1
Organization meeting 1.2
Other Sources 3.9

CHAPTER 6

Adolescence

Background information on the adolescents

In the four clusters where the survey was conducted, data on 1364 adolescents were analyzed. These constitute about 16% of the total sample size. Like their older cohorts, the adolescents are mostly (70.3%) from urban locations and they are very literate as over 60% of them have a formal secondary education and beyond. Another one fifth of them have a formal primary education. Less than 8% of them that did not go to any school at all.

Marital Status and Birth History

Among these adolescents about 21% are married; while almost the same proportion as those married had ever been pregnant (20.8%). But it is curious to note that only 16.6% had ever have a live birth. That situation shows a sizable proportion (4%) of wasted pregnancies among these youths. Even though it is only a small percent of the adolescents that answered questions on "uncompleted pregnancies" (just 31 persons, thus results should be taken with caution), as high as 61% of them have had one uncompleted pregnancy, while about 29% had have two. That results signal a heavy load of pregnancy wastage among the adolescents. It is not surprising that about 68% of these people have had at least one live birth ,while 23% have had two.

Family Planning Knowledge and Use

In order to gain an insight into the knowledge and use of Family Planning services 1364 adolescents were admitted for analysis. It is pleasing to note that over 72% of the adolescents know at least one modern method of Family Planning, even though as expected the rate is lower than for their adult counterparts among whom over 80% know. Also lower than among the adult women, 53% of them know at least one traditional method. There is still a great need for a mobilization drive among the adolescents so that the proportion (over 24%) of them that do not know any method may be reduced.

It is alarming that despite a very good knowledge about Family Planning among the youths , only an infinitesimal fraction (1.8%) of them reported a current use of any method. One of the factors that might have been responsible for that type of situation is the low level of post partum counseling reported among the "ever-given-birth" adolescents (35.8%). The strategy of giving postpartum counseling might yield a good dividend among the adolescents who are giving births, as 39% of those counseled postpartum reported the use of Family Planning services after such counseling in contrast to about 20% that used the services without counseling.

Accessing Information

The same 1364 adolescents were admitted for analysis on the questions on the type and sources of new bodies of information received. A generally low proportion of them received at all any new bodies of information. It is only on three types of information (Politics 32.8%; and Education 23.5%, Health 16%) that any appreciable proportion of the adolescents received new bodies of messages. This pattern is also similar to the general picture for all women, but while health is the second most important body of information for the adult women, education ranks second for the adolescents.(see. Figure 6.1).

The most utilized source of information among this group of people is the radio (65%). This situation is like with any other cohort of women interviewed. The television as a source of information follows in term of importance (40.7%); while " Friends and Relations " rank third in terms of sources of information (31.7%). Other sources are of very low utilization.

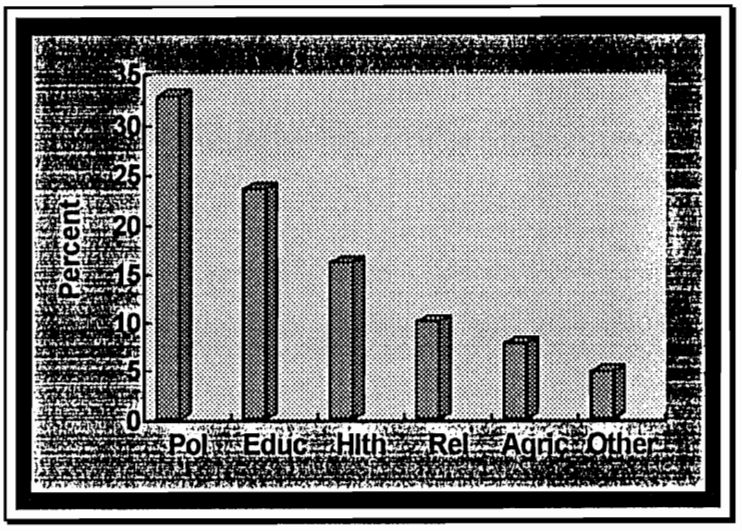

Figure 6.1: **New Bodies of Information for Adolescents**

Decision Taking

It is potentially beneficial for the "Women empowerment program" that a very high proportion (72-88%) of the adolescents feel that they are entitled to take decisions on all the parameters they are questioned upon (i.e. decision on how income is spent, on health care needs, how work is done, how time is used and on education/training needs). There is only a little variation on the proportion of those that feel entitled and those that reported actually contributing in those areas mentioned above; these are 69-73% of the adolescents.

Planning Implication

The following conclusions can be summarized from the above analysis.

a. The sampled adolescents are highly urban and very literate
b. A fifth of them are married That signals teenage mothers' problems.
c. There is an appreciable level of wasted pregnancies, as shown by a high rate of uncompleted pregnancies.
d. Even though a high percentage of the adolescents have a knowledge of at least one Family Planning method (modern or traditional),only a handful of them make use of such a knowledge.
e. There is a low level of post partum counseling among those that have given birth, but it is discovered that such a strategy could lead to higher rate of adoption of Family Planning services.
f. Politics and Education constitute the highest new bodies of knowledge among the youths and the two commonest sources of information are the radio and the television.

g. The adolescents feel entitled to take decision concerning their lives and a high proportion do actually contribute to those decisions.

What Implications Have All These To Project Planning?

1. In order to catch a majority of these adolescents there is a need for the development and use of urban-based and thought-provoking IEC materials in both maternal/child health and Family Planning.

2. A great need arises to include Family Life education into the curricula of the secondary and tertiary schools; and into the types of free reading Literature being published for these adolescents, if the problems of wasted pregnancies and non-utilization of Family Planning services outside wedlock is to be reduced. The need for a very strong post partum counseling can not be over emphasized.

3. The women empowerment program should be extended to cover the adolescents so that they could be less dependent when they become adults.

4. The program of Democracy and Governance should also be made to address the youths as a recognized entity, in order to make the program have a deep prop in the Nigerian society of today.

Table 6.1: Fact Sheet on Adolescence (15-19 yrs)

Socio-Economic Characteristics-(1364)

Region of Residence
Urban 70.3
Peri-urban 16.6
Rural 13.1

Education:
No Schooling 7.6
Koranic Primary 8.0
Formal Primary 19.3
Koranic Secondary 1.0
Formal Secondary 60.0
Beyond Secondary 1.5
Education Unknown 0.1
Others 2.5

Age:
15-19 ..... 16.1

Marital Status[1364]
Married 21.3
Others 78.7

Percent ever pregnant 20.8
Percent with uncompleted pregnancy who have experienced:
1 uncompleted pregnancy[31] 61.3
Two uncompleted pregnancy [31] 29.3

Percent ever had a live birth 16.6 .....
Type of Work
Housewife .....
Trader .....
Farming/Fishing .....
Office Work(Clerical) .....
Office Work (Admin/Managerial) .....
Teacher .....
Professional)Doctor, Nurse, Lawyer)
Professional(Hairdressing, seamstress
Housemaid .....
Others .....
No response .....
Employment Status(of women working)
Employer .....
Employee .....
Self employed .....
Unpaid family work .....
Others .....

Fertility, Knowledge & Use of Contraception
(Currently married).
Ever Pregnant - 1364
Yes 20.8
No 79.2

Ever had a live birth
Yes 16.6
No 83.4

Number of live births [229]
1 ..... 68.1
2 ..... 23.1
3 ..... 5.7

Knows at least (1364)
One modern method 72.7
One traditional method 53.1
Knows no method 24.4

Currently uses a method 1.8

Method Currently used -All Women(1364)
Any method ..... 1.8{7.2}
Long lasting ..... 0.1{0.3}
F. Ster ..... 0..0
Norplant 0.0
Injections 0.0
IUD ..... 0.1{0.3}
Other Modern methods ..... 0.5{2.4}
Pill ..... 0.3{1.4}
Condom ..... 0.2{1.0}
D/Foam/Jelly O.0
Foaming tablets 0.0
Traditional ..... 1.1{4.0}
No response to method used ..... 0.1{0.3}
Not using ..... 95.9{91.1}
No response to contraceptive use ..... 2.3{1.7}
{} currently married -N=292.
Post partum Counseling and Impact(226)
Counseled postpartum 35.8
Not counseled 63.1
No response 1.2
Used modern FP after counseling 39.2
Used modern FP without " " 19.9
No response 6.3
Fertility Desire (as at last birth)..(1338)
Wishing to space 14.7
Wishing to stop 6.7

Not wishing to space or limit 78.6

ACCESSING INFORMATION-1364

Percent receiving new bodies of information

Politics 32.8
Health 16.1
Education 23.5
Agriculture 7.7
Religion 10.0
Others 4.8
None 44.4

Sources of Information

How Work is Done 76.7
How Time is Used 76.2
Educ/Training Needs 72.6

Actually Contribute to:

Health Care Needs 73.4
How Work is Done 73.6

Radio 65.0
Television 40.7
"Friends & Relations 31.7
Newspapers 7.8
Town Criers 3.2
Others 2.8

Entitlement To Take Decision on:

How Income is Spent 88.8
Health Care Needs 77.1

How Time is Used 72.8
Educ/Training Needs 69.2

* Data subset on immunization status of children of the adolescents is too small for any meaningful analysis.

CHAPTER 7

Summary and Conclusions

Using the data available on 7,481 women interviewed in this survey, we analyzed the status of fertility, contraceptive use and preferences, maternal and child health status, and the determinants of women decision-making and empowerment. The purpose being to have a baseline against which to measure the impact of future USAID interventions. The survey also provided opportunity for assessing how the private sector can respond to the role it may have to play by the shift of patronage from public sector. There is no doubt that for a country of this size and the natural history of public health sector delivery system, a larger role becomes inevitable for the private sector if the people of Nigeria stand the chance of having their health needs met. The replicates of women sampled here - urban, literate, employed and income-earning will occur in the transition from a totally dependent women folk towards women that know they have the right to be part of decision-making on matters relating to them.

This analysis has shown that:

Fertility is still high and the use of effective modern contraception remains low. Whilst the adolescent are still contributing to the number of "ever pregnant" women there are 3-4% of uncompleted pregnancies. Women wishing to stop childbearing are not using the appropriate methods. This survey showed that counseling women postpartum increases the probability of use but only few are being so counseled.

Antenatal care is low and the quality of such care in those that care to seek it is questionable. Up to 40 percent of people depend on private sector for safe deliveries but there is no guarantee that the private sector is ready for those that may not be able to pay for all the services received.

Management of common childhood diseases is poor and health facilities are receiving children that are better managed from home .

By the age of a year almost half (in some parts almost 60%) of the children have become stunted from chronic malnutrition with its consequent effect on their brain development.

Almost three quarters have heard about HIV/AIDS but knowledge about this dreaded disease and other sexually transmitted diseases is low.

Answers to all these problems are not easy to come by as the survey did not set out to determine primary causes of this almost total collapse of health care services. It seems appropriate that still solutions should be proffered:

- Focusing on Private Sector and developing the capability of the Non governmental organizations may be the best option to improving the health of the 'Nigerian mother and Child."

- Identifying segments of the population for specific interventions would be a better way to impact on health where resources are limited. The adolescents in particular should receive more attention than has so far been paid to them.

- The north is truly disadvantaged in so many respects and they need to be reached. This may require innovative methods rather than the usual strategies of changing behavior towards utilization of available health resources. The deplorable level of maternal and child health in such places should provide ample opportunity of a point of entry.

- The economic situation is providing a good environment for increased demand of services and investment in IEC should yield good dividend.

- The private sector as a source of services has its problems. The government is the custodian of vaccines for immunization, they have the potential of getting them to the people in a good state. The "cold chain" logistics is critical and technical and requires a lot of dedication and overhead which the private sector may not be able t o provide. However a carefully worked out interaction when monitored will allow the private sector to play a vital role in stemming tetanus and the scourges of childhood diseases.

- A bigger investment in women participating in decision making in matters relating to them is vital as it will pay its dividend in the long run. Women even in the north are accessing information , more of them will invariably get educated as with this sample frame. When quality of service is available they will demand for it and use it since they will earn their income.

- This survey has also demonstrated that having heard about a disease does not mean that people become knowledgeable about it. People heard about HIV/AIDs but cannot recognize the symptoms associated with the disease as well as those of other sexually transmitted diseases. If people will change their behaviors they have to have a thorough knowledge of the disease, its transmission and how to prevent contact with it . Where such diseases are treatable, basic information on the source and the regimen appropriate for it will have to be made available and taught to them.

- Integration of service delivery seems to be the most cost-effective strategy when the different modalities for integrating services are carefully worked out.
- Further analysis of the data set will bring out other issues which will have to be brought into the implementation of the various subprojects.

ANNEX

Tables

Table 2.1.

Percentange distribution of women in the four zones according to selected background characteristics

Socio-Economic Characteristics	Lagos N=1925	North N=1717	S-East N=1937	S-West N=1906	All Women N=7485
1. AGE					
15-19	16.1	20.4	19.6	17.0	18.2
20-24	21.5	18.5	20.9	19.7	20.2
25-29	24.2	18.9	21.1	21.9	21.6
30-34	16.9	16.2	15.7	16.8	16.4
35-39	9.9	11.1	11.4	12.7	11.3
40-44	6.8	9.0	6.6	7.2	7.3
45-49	4.6	5.9	4.7	4.6	4.8
2. RESIDENCE					
Urban	99.6	65.6	50.5	82.1	74.6
Peri-Urban	0.4	22.7	19.2	27.2	14.1
Rural	0.0	11.7	30.3	2.8	11.2
3. EDUCATION					
No Schooling	14.6	25.4	13.7	18.2	17.8
Koranic Primary	0.6	38.1	0.5	0.3	9.1
Formal Primary	32.3	12.7	30.1	27.0	25.9
Koranic Secondary	0.1	2.9	0.1	0.2	0.7
Formal Secondary	44.3	15.4	41.5	43.6	36.8
Beyond Secondary	6.4	3.6	10.1	7.9	7.1
Education Unknown	0.1	0.4	0.5	0.3	0.3
Others	1.6	1.5	3.5	2.6	2.3
3. Type of Work					
Hosewife	9.7	37.2	16.0	4.7	16.4
Trader	49.0	40.4	30.6	47.7	41.9
Farming/Fishing	0.8	0.9	9.8	5.6	4.4
Office Work (Clerical)	1.9	1.2	2.7	2.0	2.0
Office Work (Admin/Managerial)	1.4	0.6	1.2	0.9	1.0
Teacher	1.0	1.3	4.0	3.2	2.4
Professional (Doctor, Nurse, Lawyer, etc.)	1.4	0.8	1.7	1.1	1.3

Professional (Hairdresser, Seamstress, etc.)	16.5	3.8	8.8	17.6	11.9
Housemaid	0.4	2.1	1.0	0.1	0.9
Others	15.9	8.7	23.4	16.1	16.2
No Response	2.0	3.0	0.8	1.1	1.7
5. EMPLOYMENT STATUS (of women working) ; N=6261					
Employer	0.4	4.3	1.7	1.0	1.6
Employee	11.1	4.6	12.0	9.5	9.8
Self-employed	64.4	67.7	52.3	62.5	61.3
Apprentice	5.6	0.8	4.0	7.3	4.8
Unpaid family worker	1.7	4.7	3.6	4.2	3.4
Other	8.3	6.1	20.1	12.1	12.1
No Respones	8.4	11.7	6.2	3.5	7.0

Table 3.1.a.

Percentage of all women and currently married women who know at least ast one method of contraception, modern or traditional, according to region of residence

A. All women					
Contraceptive Knowledge	**Lagos**	**North**	**South-East**	**South-West**	**All women**
Knows at least a modern method	94.1	68.0	87.0	84.9	83.9
Knows at least a traditional method	83.6	66.3	75.4	70.1	74.1
Knows no method	4.2	22.4	9.3	13.4	12.0
No of women	**1925**	**1717**	**1937**	**1906**	**7485**
B. Currently Married Women					
Contraceptive Knowledge	Lagos	North	South-East	South-West	All women
Knows at least a modern method	94.8	69.5	89.3	87.5	85.0
Knows at least a traditional method	87.1	70.2	80.3	74.6	77.9
Knows no method	3.5	19.4	6.3	10.9	10.2
No of women	**1338**	**1425**	**1275**	**1389**	**5447**

Table 3.1.b.

Percentage of all women and currently married women who know at least ast one method of contraception, modern or traditional, according to education

A. All women								
Contraceptive Knowledge	**None**	**Kor. Pry**	**Formal Pry**	**Kor. Sec**	**Formal Sec**	**Beyond Sec**	**Educ unkn.**	**Other**
Knows at least a modern method	72.7	63.8	86.6	85.7	89.7	96.4	75.0	90.8
Knows at least a traditional method	66.7	68.8	75.0	87.5	74.7	90.1	62.5	78.6
Knows no method	18.9	23.7	10.4	5.4	9.0	2.6	20.8	8.7
No of women	**1330**	**680**	**1937**	**56**	**2752**	**533**	**24**	**173**
B. Currently Married Women								
Contraceptive Knowledge	None	Kor. Pry	Formal Pry	Kor. Sec	Formal Sec	Beyond Sec	Educ. unkn.	Other
Knows at least a modern method	73.9	64.9	89.1	86.0	94.0	97.6	71.4	96.7
Knows at least a traditional method	67.7	70.3	78.8	90.0	83.3	92.0	61.9	90.0
Knows no method	17.9	22.1	7.9	4.0	4.6	1.1	23.8	3.3
No of women	**1183**	**630**	**1531**	**50**	**1535**	**377**	**21**	**120**

Table 3.2.a

Percentage distribution of all women by contraceptive method currently used and region of residence

Method currently being used	Lagos	North	South-East	South-West	All women
Any Method	27.6	9.1	22.5	16.9	19.3
Long Lasting Modern Method	5.1	2.4	4.4	4.6	4.1
Female sterilization	0.2	0.2	1.0	0.5	0.5
Male sterilization	0.0	0.1	0.0	0.0	0.0
Norplant	0.0	0.1	0.1	0.0	0.0
Injection	1.9	1.4	0.8	0.7	1.2
IUD	3.0	0.6	2.5	3.4	2.4
Other Modern Methods	7.1	3.6	4.8	5.2	5.2
Pill	2.9	2.7	1.8	2.3	2.4
Condom	4.1	0.7	2.9	2.7	2.7
Diaphragm/foam/jelly	0.1	0.1	0.0	0.0	0.0
Foaming tablets	0.0	0.1	0.1	0.2	0.1
Traditional Methods	14.5	2.9	12.0	6.4	9.0
Rythm	3.7	0.3	4.5	1.4	2.5
Withdrawal	2.5	0.2	3.5	1.0	1.8
Periodic abstinence	6.0	0.5	2.5	3.0	3.1
Traditional practices (herbs, wasit band, rings etc)	0.7	1.2	0.1	0.6	0.6
Lactational amenorrhoea	1.1	0.5	1.0	0.3	0.7
Other	0.5	0.2	0.4	0.1	0.3
No response to method used	0.9	0.3	1.4	0.8	0.9
Not Using any Method	70.9	89.1	76.1	82.2	79.3
No response to contraceptive use	1.5	1.8	1.4	0.9	1.4
Number of women	**1925**	**1717**	**1937**	**1906**	**7485**

Table 3.2.b.

Percentage distribution of currently marriedl women by contraceptive method currently used and region of residence

Method currently being used	Lagos	North	South-East	South-West	All women
Any Method	36.7	10.5	31.4	22.0	24.8
Long Lasting Modern Method	6.9	2.6	6.1	6.0	5.5
Female sterilization	0.2	0.2	1.3	0.4	0.6
Male sterilization	0.0	0.1	0.0	0.0	0.0
Norplant	0.0	0.1	0.1	0.0	0.1
Injection	2.7	1.4	1.2	0.9	1.6
IUD	4.0	0.8	3.5	4.7	3.2
Other Modern Methods	9.3	4.2	6.5	6.8	6.6
Pill	3.9	3.2	2.4	3.0	3.1
Condom	5.3	0.8	4.0	3.7	3.4
Diaphragm/foam/jelly	0.1	0.1	0.0	0.0	0.0
Foaming tablets	0.0	0.1	0.1	0.1	0.1
Traditional Methods	19.3	3.2	17.1	8.0	11.6
Rythm	4.9	0.3	6.3	1.7	3.2
Withdrawal	3.4	0.2	5.2	1.3	2.4
Periodic abstinence	8.1	0.6	3.4	3.9	3.9
Traditional practices (herbs, wasit band, rings etc)	1.0	1.4	0.1	0.6	0.8
Lactational amenorrhoea	1.5	0.6	1.6	0.4	1.0
Other	0.4	0.1	0.5	0.1	0.3
No response to method used	1.2	0.4	1.9	0.9	1.1
Not Using any Method	61.7	88.4	67,1	77.4	73.9
No response to contraceptive use	1.6	1.2	1.5	0.6	1.2
Number of women	**1358**	**1425**	**1275**	**1389**	**5447**

Table 3.2.c.

Percentage distribution of all women by contraceptive method currently used and age

Method currently being used	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Any Method	1.8	13.0	24.3	28.4	31.9	24.7	21.1
Long Lasting Modern Method	0.1	0.8	3.1	6.7	11.5	7.8	7.9
Female sterilization	0.0	0.0	0.1	0.5	1.4	0.9	3.3
Male sterilization	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Norplant	0.0	0.1	0.1	0.1	0.1	0.0	0.0
Injection	0.0	0.4	1.0	2.0	3.0	2.2	1.6
IUD	0.1	0.3	1.9	4.1	7.0	4.5	3.0
Other Modern Methods	0.5	4.6	8.3	7.1	6.7	3.8	3.0
Pill	0.3	1.7	3.0	4.1	3.9	2.2	2.2
Condom	0.2	2.8	5.1	2.9	2.6	1.6	0.8
Diaphragm/foam/jelly	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Foaming tablets	0.0	0.0	0.1	0.1	0.2	0.0	0.0
Traditional Methods	1.1	7.1	12.0	12.5	13.2	11.6	9.6
Rythm	0.1	1.7	3.8	3.5	4.3	2.5	2.2
Withdrawal	0.4	1.5	2.4	2.4	3.2	1.8	1.4
Periodic abstinence	0.4	2.7	3.8	4.5	3.9	3.8	3.8
Traditional practices (herbs, wasit band, rings etc)	0.1	0.0	0.8	0.7	0.7	2.4	1.4
Lactational amenorrhoea	0.1	0.9	1.0	1.2	0.7	0.7	0.0
Other	0.0	0.3	0.2	0.2	0.4	0.4	0.8
No response to method used	**0.1**	**0.7**	**1.1**	**1.8**	**0.5**	**1.5**	**0.8**
Not Using any Method	**95.9**	**85.7**	**74.4**	**70.6**	**67.3**	**73.7**	**77.8**
No response to contraceptive use	**2.3**	**1.3**	**1.2**	**1.0**	**0.8**	**1.6**	**1.1**
Number of women	**1364**	**1512**	**1616**	**1229**	**844**	**551**	**369**

Table 3.2.d.

Percentage distribution of currently married women by contraceptive method currently used and age

Method currently being used	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Any Method	7.2	17.8	26.5	28.6	32.5	25.3	21.7
Long Lasting Modern Method	0.3	1.0	3.4	6.9	11.8	7.3	8.9
Female sterilization	0.0	0.0	0.1	0.5	1.3	0.8	3.5
Male sterilization	0.0	0.0	0.0	0.0	0.0	0.2	0.0
Norplant	0.0	0.1	0.0	0.1	0.1	0.0	0.0
Injection	0.0	0.5	1.1	2.1	3.2	1.9	1.9
IUD	0.3	0.4	2.2	4.2	7.2	4.4	3.5
Other Modern Methods	2.4	6.3	8.9	7.1	6.9	4.2	3.2
Pill	1.4	2.3	3.2	4.1	4.1	2.3	2.2
Condom	1.0	3.9	5.5	2.9	2.5	1.9	1.0
Diaphragm/foam/jelly	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Foaming tablets	0.0	0.0	0.1	0.1	0.3	0.0	0.0
Traditional Methods	4.0	9.5	13.1	12.9	13.7	12.0	8.9
Rythm	0.3	2.0	4.1	3.4	4.3	2.7	2.5
Withdrawal	1.7	2.0	2.7	2.5	3.3	2.1	1.6
Periodic abstinence	1.4	3.8	4.1	4.6	4.2	3.8	3.5
Traditional practices (herbs, wasit band, rings etc)	0.3	0.0	0.9	0.8	0.8	2.3	1.0
Lactational amenorrhoea	0.3	1.3	1.1	1.3	0.8	0.8	0.0
Other	0.0	0.4	0.2	0.3	0.3	0.4	0.3
No response to method used	0.3	0.9	1.1	1.7	0.4	1.7	0.6
Not Using any Method	91.1	80.7	72.2	70.4	66.7	73.4	77.1
No response to contraceptive use	1.7	1.4	1.3	1.0	0.8	1.3	1.3
Number of women	**292**	**981**	**1431**	**1161**	**790**	**478**	**314**

Table 3.2.e.

Percentage distribution of all women and currently married women by current contraceptive use status and education

A. All women								
Contraceptive use status	None	Kor. Pry	Formal Pry	Kor. Sec	Formal Sec	Beyond Sec	Educ unkn.	Other
Currently using	17.3	4.7	23.0	19.6	18.1	33.4	29.2	26.0
Not using	81.3	94.1	75.8	78.6	80.5	64.7	70.8	72.3
No response	1.4	1.2	1.2	1.8	1.5	1.9	0.0	1.7
No of women	**1330**	**680**	**1937**	**56**	**2752**	**533**	**24**	**173**
B. Currently Married Women								
Contraceptive use status	None	Kor. Pry	Formal Pry	Kor. Sec	Formal Sec	Beyond Sec	Educ. unkn.	Other
Currently using	18.3	4.8	27.0	22.0	30.4	44.3	33.3	35.0
Not using	80.6	94.1	71.7	76.0	68.5	53.6	66.7	65.0
No response	1.2	1.1	1.2	2.0	1.1	2.1	0.0	0.0
No of women	**1183**	**630**	**1531**	**50**	**1535**	**377**	**21**	**120**

Table 3.3.a.

Percentage distribution of post partum women by whether they were counselled about family planning according to selected background characteristics

	COUNSELING STATUS			
	Counseled	Not counseled	No response	No of women
Region of residence				
Lagos	35.8	63.1	1.2	1348
North	21.3	77.4	1.4	1294
South-East	38.5	60.1	1.5	1307
South-West	43.2	55.7	1.1	1387
Place of Residence				
Urban	37.3	61.3	1.4	4004
Peri-urban	30.0	68.9	1.1	749
Rural	23.8	75.5	5.9	583
Education of mother				
No schooling	29.4	69.4	1.2	1174
Koranic Primary	13.0	85.8	1.2	571
Formal Primary	36.5	62.1	1.4	1543
Koranic Secondary	26.7	73.3	0.0	45
Formal Secondary	43.0	55.7	1.3	1507
Beyond Secondary	44.8	54.6	0.6	359
Education unknown	28.6	71.4	0.0	21
Other	43.1	53.4	3.4	116
Age of mother				
15 - 19	21.2	74.8	4.0	226
20-24	32.1	66.7	1.2	904
25-29	37.6	61.3	1.2	1387
30-34	38.8	59.9	1.2	1151
35-39	36.0	62.8	1.2	806
40-44	33.5	65.3	1.2	516
45-49	26.0	73.4	0.6	346
All women	**34.8**	**63.9**	**1.3**	**5336**

Table 3.3.b.

Percentage of post partum women that have used modern contraception (after last birth) by whether they were counseled about family planning, according to selected background characteristics

Background characteristics	PERCENTAGE THAT USED MODERN CONTRACEPTION AMONG THOSE			
	Counseled N=1859	Not counseled N=3409	No response N=68	All women N=5336
Region of residence				
Lagos	39.2	19.9	6.3	26.6
North	39.6	4.2	0.0	11.7
South-East	35.4	13.0	10.5	21.6
South-West	33.6	12.4	6.7	21.5
Place of Residence				
Urban	38.2	14.2	5.4	23.1
Peri-urban	29.3	7.2	12.5	13.9
Rural	28.8	5.2	0.0	10.8
Education of mother				
No schooling	30.1	7.9	7.1	14.4
Koranic Primary	24.3	1.2	0.0	4.2
Formal Primary	37.8	12.1	4.5	21.4
Koranic Secondary	41.7	9.1	0.0	17.8
Formal Secondary	36.7	18.1	5.3	25.9
Beyond Secondary	50.3	25.0	0.0	36.2
Education unknown	16.7	20.0	0.0	19.0
Other	34.0	25.8	25.0	29.3
Age of mother				
15 - 19	12.5	3.0	0.0	4.9
20-24	26.2	7.8	9.1	13.7
25-29	30.1	14.0	6.3	20.0
30-34	40.0	13.6	7.1	23.8
35-39	46.9	16.2	10.0	27.2
40-44	43.9	10.1	0.0	21.3
45-49	52.2	11.0	0.0	21.7
All women	**36.4**	**12.0**	**5.9**	**20.4**

Table 3.4.

Percentage of currently married women wishing to space or limit births by region of residence

Fertility Desires (as at last birth)	Lagos	North	South-East	South-West	All women
Wishing to space	14.7	12.8	20.2	10.9	14.5
Wishing to stop	6.7	4.8	8.3	5.3	6.2
Not wishing to space or limit	78.6	82.4	71.5	83.8	79.3
No of women	**1338**	**1425**	**1275**	**1389**	**5447**

Table 4.1.

Percentage of women delivering who have received TT2 (using immunization card only) within the last 12 months according to background characteristics

Background Characteristic	Percentage of women	No of women
Region of Residence:		
Lagos	3.4	652
North	2.3	522
South-East	7.6	617
South-West	3.8	612
Place of Residence:		
Urban	4.7	1847
Peri-urban	3.5	313
Rural	2.9	243
Age of Mother:		
15 - 19	5.2	116
20 - 24	6.1	410
25 - 29	4.7	635
30 - 34	5.3	586
35 - 39	2.1	382
40 - 44	1.6	185
45 - 49	1.1	89
Mothers Education:		
No Education	2.8	471
Koranic Primary	3.2	252
Formal Primary	4.4	699
Koranic Secondary	0.0	20
Formal Secondary	6.1	724
Beyond Secondary	2.4	169
All women	**4.3**	**2403**

Table 4.2.

Percentage distribution of last births under five years of age by source of antenatal care during pregnancy according to selected background characteristics

Background characteristics	SOURCE OF ANTENATAL CARE				
	Public Hospital or Clinic	PrivateHospital or clinic	Other places	None/Not stated	Number of children
Region of residence					
Lagos	17.2	70.7	10.7	1.4	990
North	68.2	6.0	5.7	20.1	1020
South-East	43.3	50.0	3.5	3.2	1030
South-West	54.2	36.3	6.9	2.6	1127
Place of Residence					
Urban	44.7	43.6	6.8	4.9	3132
Peri-urban	48.3	35.3	3.8	12.7	601
Rural	53.7	25.1	9.4	11.7	434
Education of mother					
No schooling	49.0	32.4	9.5	9.0	817
Koranic Primary	64.4	5.4	6.5	23.7	464
Formal Primary	42.3	45.4	7.5	4.8	1170
Koranic Secondary	71.1	18.4	0.0	10.5	38
Formal Secondary	41.0	51.5	5.5	2.1	1294
Beyond Secondary	45.7	49.6	2.5	2.1	280
Education unknown	43.8	56.3	0.0	0.0	16
Other	42.0	48.9	4.5	4.5	88
Age of mother					
15 - 19	55.3	26.0	3.8	14.9	208
20-24	44.7	40.1	7.5	7.6	838
25-29	45.8	43.6	5.8	4.8	1260
30-34	43.6	42.5	7.6	6.2	972
35-39	48.9	39.1	5.5	6.4	562
40-44	47.1	36.4	9.5	7.0	242
45-49	50.6	29.4	7.1	12.9	85
All children	**46.1**	**40.4**	**6.7**	**6.7**	**4167**

Table 4.3.

Percentage distribution of last births under five years of age by type of assistance during delivery according to selected background characteristics

Background characteristics	TYPE OF ASSISTANCE DURING DELIVERY			
	Trained attendant	Others	No response	No of children
Region of residence				
Lagos	84.3	15.4	0.3	990
North	40.2	54.4	5.4	1020
South-East	86.6	12.4	1.0	1030
South-West	81.6	17.8	0.5	1127
Place of Residence				
Urban	76.9	21.6	1.5	3132
Peri-urban	61.4	35.3	3.3	601
Rural	64.5	34.1	1.4	434
Education of mother				
No schooling	62.8	35.7	1.5	817
Koranic Primary	30.8	63.4	5.8	464
Formal Primary	78.5	20.2	1.4	1170
Koranic Secondary	42.1	55.3	2.6	38
Formal Secondary	86.6	12.5	0.9	1294
Beyond Secondary	93.6	5.0	1.4	280
Education unknown	68.8	25.0	6.3	16
Other	83.0	14.8	2.3	88
Age of mother				
15 - 19	53.4	45.2	1.4	208
20-24	68.3	30.0	1.8	838
25-29	79.0	19.4	1.5	1260
30-34	77.3	21.1	1.6	972
35-39	72.4	25.8	1.8	562
40-44	69.8	26.9	3.3	242
45-49	60.0	36.5	3.5	85
All children	**73.4**	**24.9**	**1.8**	**4167**

Table 4.4.

Percentage of children 12-23 months who had received specific vaccines by the time of survey according to background characteristics

Background characteristics	DPT 3		OPV 3		MEASLES		No of children
	CARD	RECALL	CARD	RECALL	CARD	RECALL	
Region of Resdence:							
Lagos	24.7	29.8	27.7	29.5	21.4	27.5	346
North	10.6	12.0	9.5	9.8	7.9	10.1	367
South-East	38.9	16.5	39.7	17.2	32.5	13.3	406
South-West	28.5	24.2	27.2	22.6	21.2	18.2	368
Place of Residence:							
Urban	27.6	23.2	26.5	22.7	20.8	19.5	1084
Periurban	18.5	12.2	19.8	9.9	16.2	10.4	222
Rural	33.5	13.7	33.5	12.6	28.0	10.4	182
Age of mother							
15 - 19	18.5	9.9	18.5	9.9	17.3	8.6	81
20 - 24	25.7	17.3	24.3	15.3	19.4	13.3	346
25 - 29	29.4	25.0	28.8	24.8	23	21.8	500
30 - 34	25.6	22.0	26.2	21.1	20.1	17.6	313
35 - 39	26.8	17.1	26.8	16.5	22.6	14.0	164
40 - 44	35.9	14.1	31.3	14.1	23.4	15.6	64
45 - 49	15.0	20.0	15.0	20.0	10.0	15.0	20
Education of Mother							
No Schl.	19.2	16.0	18.1	16.4	14.6	12.9	287
Formal Pry	30.8	21.3	30.5	20.3	25.4	17.7	413
Formal Sec	33.5	23.7	32.9	22.3	24.5	19.8	489
Beyond Sec	32.6	31.6	32.6	31.6	29.5	29.5	95
Koranic Pry	6.7	12.0	6.0	10.0	6.7	8.7	150
Koranic Sec	7.1**	7.1	7.1	7.1	7.1	7.1	14**
Educ unkn	42.9**	14.3	28.6	28.6	42.9	14.3	7**
Others	28.6	10.7	28.6	10.7	14.3	10.7	28
All	**26.9**	**20.4**	**26.3**	**19.6**	**21.0**	**17.0**	**1488**

Table 4.5.

Percentage of Children Under 5 with Fever, Diarrhea and ARI during the two week preceding Survey, IBHS, 1995, according to selected socio-economic characteristics

Socio-economic Background	Fever	Diarrhea	ARI	All Children
Region of residence				
Lagos	18.2	8.6	3.3	1470
North	39.6	16.9	12.8	1623
South-East	29.1	8.2	10.8	1671
South-West	24.8	7.6	10.9	1616
Place of residence				
Urban	26.0	10.2	9.4	4738
Periurban	32.9	12.1	12.6 %	936
Rural	36.5	9.2	7.2	704
Mother's Educ.				
No Schooling	30.1	10.6	8.4	1211
Formal Primary	28.4	10.5	9.9	1754
Formal Secondary	23.0	7.8	9.1	1971
Beyond Sec.	21.7	7.5	10.9	414
Koranic Primary	41.2	19.0	12.4	716
Koranic Sec.	57.1	28.6 %	10.2	49
Educ. unknown	23.1	7.7	7.7	26
Others	29.0	7.2	9.4	138
Age of Child. (Mth)				
0 - 5	18.0	6.9	9.6	815
6 - 11	35.2	16.6	13.3	739
12 - 23	36.6	17.2	11.4	1259
24 - 35	30.2	9.9	8.8	1208
36 - 47	26.0	6.6	9.2	1204
48 - 59	21.9	6.0	6.7	1158
All	**28.2**	**10.4**	**9.6**	**6383**

Table 4.6.

Percentage of children with fever in the two weeks preceding survey who received certain types of treatment by selected background characteristics

Background Characteristics	PERCENTAGE OF CHILDREN WITH FEVER WHO RECEIVED:				
	Anti malaria	Increased feeding/fluids	Correct home treatment	Correct home management	Number of children
Region of residence					
Lagos	30.8	2.3	1.1	21.3	266
North	30.4	0.2	0.2	39.2	639
South-East	23.9	0.4	0.2	36.1	481
South-West	25.9	0.5	0.2	22.7	401
Place of residence					
Urban	29.2	0.9	0.5	29.1	1224
Peri-Urban	30.6	0.0	0.0	39.0	307
Rural	16.9	0.0	0.0	38.1	254
Education of mother					
No schooling	19.2	0.5	0.3	36.0	364
Koranic Pry	28.8	0.3	0.3	39.0	295
Formal Pry	28.9	0.8	0.0	29.3	499
Koranic Sec	57.1	0.0	0.0	64.3	28
Formal Sec	30.2	0.9	0.9	29.5	454
Post-Sec	36.7	0.0	0.0	23.3	90
Educ unknown	16.7	0.0	0.0	33.3	6
Other	22.5	0.0	0.0	15.0	40
Age of mother:					
15-49	21.7	0.0	0.0	39.1	92
20-24	23.8	0.6	0.3	34.0	344
25-29	29.6	0.6	0.4	31.4	530
30-34	28.5	0.9	0.7	31.9	424
35-39	29.1	0.4	0.0	28.1	251
40-44	29.5	1.0	0.0	37.1	105
45-49	26.2	0.0	0.0	21.4	42
All	**27.7**	**0.6**	**0.3**	**32.1**	**1799**

Table 4.7.

Percentage of children with diarrhea in the two weeks preceding survey who received certain types of treatment by selected background characteristics

Background Characteristics	PERCENTAGE OF CHILDREN WITH DIARRHEA WHO RECEIVED:						
	Sugar Salt Solution	ORS	Increased fluids	Continued feeding	Correct Home Treatment	Correct Home Management	Number of Children
Region of residence							
Lagos	42.9	10.3	26.2	24.6	11.1	29.4	126
North	28.7	20.0	14.2	12.4	11.3	30.2	275
South-East	24.8	16.1	23.4	16.1	13.9	27.7	137
South-West	32.5	14.6	26.2	17.9	14.6	31.7	123
Place of Residence							
Urban	32.1	16.6	21.5	17.2	12.2	30.0	483
Peri-Urban	25.7	13.3	12.4	10.6	9.5	24.8	113
Rural	35.4	20.0	23.1	21.5	18.5	36.9	65
Education of Mother							
No schooling	28.9	18.8	20.3	16.4	14.8	32.8	128
Koranic Pry	25.7	14.7	10.3	8.8	8.1	26.5	136
Formal Pry	31.5	14.7	22.3	18.5	13.6	29.9	184
Koranic Sec	14.3	28.6	14.3	7.1	7.1	14.3	14
Formal Sec	39.6	14.3	24.0	22.1	13.6	31.2	154
Post-Sec	35.5	25.8	32.3	22.6	16.1	35.5	31
Educ unknown	0.0**	0.0	0.0	0.0	0.0	0.0	2
Other	20.0**	20.0	20.0	0.0	10.0	20.0	10
Age of Mother							
15-49	31.9	17.0	21.3	14.9	12.8	31.9	47
20-24	32.5	15.9	22.5	16.6	11.9	29.8	151
25-29	30.6	15.5	19.9	15.5	13.1	30.1	206
30-34	28.0	14.7	16.0	15.3	9.3	22.0	150
35-39	32.3	18.5	15.4	16.9	10.8	35.4	65
40-44	38.2	26.5	29.4	23.5	23.5	44.1	34
45-49	44.4**	11.1**	44.4**	33.3**	22.2	44.4**	9
All	**31.3**	**16.3**	**20.1**	**16.5**	**12.4**	**29.8**	**661**

Table 4.8.

Percentage of children who were ill with a cough accompanied by rapid breathing during the two weeks preceding survey who received certain types of treatment by selected background characteristics

Background Characteristics	PERCENTAGE OF CHILDREN WITH FEVER WHO RECEIVED:				
	Increased fluids/breast milk	Increased feeding	Correct home treatment	Correct home management	Number of children
Region of residence					
Lagos	44.9	49.0	36.7	53.1	49
North	23.6	24.5	21.6	33.2	208
South-East	17.1	17.1	11.6	24.9	181
South-West	34.7	27.8	23.3	28.4	176
Place of Residence					
Urban	28.1	27.6	21.3	29.7	445
Peri-Urban	19.5	16.9	16.1	33.9	118
Rural	29.4	23.5	21.6	35.3	51
Education of Mother					
No schooling	25.5	25.5	20.6	36.3	102
Koranic Pry	24.7	25.8	21.3	32.6	89
Formal Pry	28.3	26.0	21.4	32.4	173
Koranic Sec	40.0**	40.0	40.0	40.0**	5
Formal Sec	25.6	24.4	17.8	26.7	180
Post-Sec	24.4	22.2	20.0	24.4	45
Educ unknown	50.0**	50.0	50.0	50.0**	2
Other	38.5**	23.1	23.1	30.8**	13
Age of Mother					
15-19	14.7	14.7	11.8	26.5	34
20-24	24.4	19.1	15.3	25.2	131
25-29	28.3	26.8	23.2	34.3	198
30-34	29.2	28.5	20.8	32.3	130
35-39	29.3	31.7	24.4	31.7	82
40-44	20.0	22.9	20.0	31.4	35
45-49	25.0**	25.0**	25.0	25.0	4
All	**26.5**	**25.2**	**20.4**	**30.9**	**614**

Table 4.9.a.

Percentage distribution of last births under five years by duration of exclusive breastfeeding according to selected background characteristics

Background characteristics	DURATION OF EXCLUSIVE BREASTFEEDING						
	Less than 1 month	1-3 months	4 months and above	Still being exclusively breastfed	Duration unknown	No response	No of children
Region of residence							
Lagos	28.2	1.7	0.5	0.5	0.4	68.7	990
North	2.7	4.7	8.9	5.9	2.9	74.8	1020
South-East	23.3	3.8	0.6	1.2	0.6	70.6	1030
South-West	20.8	3.5	2.8	2.0	0.4	70.6	1127
Place of Residene							
Urban	19.5	4.0	3.0	2.3	0.9	70.3	3132
Peri-urban	13.8	2.2	5.2	2.8	1.8	74.2	601
Rural	20.0	1.4	2.1	2.3	0.9	73.3	434
Eduation of mother							
No schooling	15.7	1.5	2.6	1.7	1.7	76.9	817
Koranic Primary	3.9	4.5	9.7	6.5	3.0	72.4	464
Formal Primary	21.8	3.4	1:4	1.4	0.7	71.4	1170
Koranic Sec	0.0	2.6	7.9	5.3	0.0	84.2	38
Formal Secondary	23.4	4.5	3.1	2.2	0.5	66.3	1294
Beyond Secondary	20.7	2.9	2.5	2.1	0.0	71.8	280
Education DK	6.3	0.0	0.0	0.0	0.0	93.7	16
Other	20.5	3.4	2.3	2.3	2.3	69.3	88
Age of mother							
15 - 19	20.7	4.8	6.3	5.3	4.3	58.7	208
20-24	23.3	4.1	4.1	3.7	1.3	63.6	838
25-29	22.1	3.5	3.0	1.7	0.5	69.3	1260
30-34	18.1	3.4	3.2	1.7	1.0	72.5	972
35-39	12.5	2.8	1.6	1.1	0.9	81.1	562
40-44	6.2	1.2	2.5	4.1	0.8	85.1	242
45-49	4.7	3.5	3.5	3.5	1.2	83.5	85
All children	**18.7**	**3.4**	**3.2**	**2.4**	**1.1**	**71.2**	**4167**

Table 4.9.b.

Percentage age distribution of last births still being exclusively breastfed according to selected background characteristics

Background characteristics	AGE OF LAST CHILD STILL BEING EXCLUSIVELY BREASTFED			
	Less than 1 month	1-3 months	4- 11 months	No of children
Region of residence				
Lagos	40.0	20.0	40.0	5
North	18.3	35.0	46.7	60
South-East	8.3	75.0	16.7	12
South-West	18.2	59.1	22.7	22
Place of Residene				
Urban	13.9	43.1	43.1	72
Peri-urban	23.5	52.9	23.5	17
Rural	40.0	40.0	20.0	10
Eduation of mother				
No schooling	21.4	50.0	28.6	14
Koranic Primary	13.3	40.0	46.7	30
Formal Primary	18.8	50.0	31.2	16
Koranic Secondary	50.0	0.0	50.0	2
Formal Secondary	17.2	44.8	37.9	29
Beyond Secondary	33.3	50.0	16.7	6
Education unknown	-	-	-	-
Other	0.0	50.0	50.0	2
Age of mother				
15 - 19	9.1	45.5	45.5	11
20-24	29.0	32.3	38.7	31
25-29	14.3	61.9	23.8	21
30-34	11.8	58.8	29.4	17
35-39	33.3	33.3	33.3	6
40-44	10.0	30.0	60.0	10
45-49	0.0	33.3	66.7	3
All children	**18.2**	**44.4**	**37.4**	**99**

Table 4. 10.

Percentage of children under five years classified as undernourished according to height for age index of nutritional status by selected socioeconomic characteristics

Socioeconomic Characteristics	HEIGHT-FOR AGE		No of children
	Percentage below - 2SD	Percentage below -SD	
Age of Children < 5			
0 - 5 months	20.9	13.0	748
6 - 11 months	32.3	16.9	706
12 - 22 months	44.5	26.1	1203
24 - 35 months	38.1	22.8	1134
36 - 47 months	42.4	26.1	1089
48 - 59 months	40.9	23.1	1018
Sex of children			
Male	38.8	22.3	3054
Female	36.8	22.2	2848
Region of Residence			
Lagos	27.7	12.9	1344
North	63.5	46.8	1439
South-East	21.9	9.2	1591
South-West	39.0	20.7	1528
Place of Residence:			
Urban	35.9	20.4	4386
Periurban	46.8	31.6	847
Rural	39.5	22.6	669
All children	**37.8**	**22.2**	**5902**

Table 4.11.

Percentage of children under five years classified as undernourished according to weight for height index of nutritional status by selected socioeconomic characteristics

Socioeconomic Characteristics	WEIGHT-FOR HEIGHT		No of children
	Percentage below - 2SD	Percentage below -3SD	
Age of Children < 5			
0 - 5 months	4.5	2.4	748
6 - 11 months	9.6	2.8	706
12 - 23 months	12.8	4.7	1203
24 - 35 months	8.7	3.1	1134
36 - 47 months	9.5	2.8	1089
48 - 59 months	10.0	4.0	1018
Sex of children			
Male	9.8	4.1	3054
Female	9.2	2.7	2848
Region of Residence			
Lagos	7.7	1.9	1344
North	11.6	5.3	1439
South-East	10.1	3.6	1591
South-West	8.5	2.8	1528
Place of Residence:			
Urban	9.4	3.3	4386
Periurban	10.1	4.0	847
Rural	10.4	3.4	669
All children	9.5	3.4	5902

Table 4. 12.

Percentage of children under five years classified as undernourished according to weight for age index of nutritional status by selected socioeconomic characteristics

Socioeconomic Characteristics	WEIGHT-FOR AGE		No of children
	Percentage below -2SD	Percentage below -3SD	
Age of Children < 5			
0 - 5 months	2.9	1.6	748
6 - 11 months	13.8	5.9	706
12 - 22 months	23.8	10.7	1203
24 - 35 months	27.0	8.1	1134
36 - 47 months	26.2	9.7	1089
48 - 59 months	24.8	8.6	1018
Sex of children			
Male	22.6	8.4	3054
Female	19.8	7.5	2848
Region of Residence			
Lagos	16.7	5.2	1344
North	31.2	14.9	1439
South-East	15.4	4.3	1591
South-West	21.9	7.7	1528
Place of Residence:			
Urban	20.4	7.2	4386
Periurban	24.2	11.0	847
Rural	23.5	9.6	669
All children	**21.3**	**8.0**	**5902**